

Chapter 1800 Patent Cooperation Treaty

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This chapter is designed to be a guide for patent examiners in searching and examining applications filed under the Patent Cooperation Treaty (PCT). Applicants desiring additional information for filing international applications should obtain a copy of the PCT Applicant's Guide from the World Intellectual Property Organization (WIPO) in Geneva, Switzerland.

The Articles and Regulations under the PCT are reproduced in Appendix T of this Manual and the Administrative Instructions are reproduced in Appendix AI of this Manual. The text of the *PCT Applicant's Guide*, the monthly *PCT Newsletter*, the weekly *PCT Gazette*, downloadable PCT forms, and additional information about the processing of international applications are available from WIPO's website (www.wipo.int/pct).

PCT applications are processed by the International Application Processing Division within the U.S. Patent and Trademark Office.

1801 Basic Patent Cooperation Treaty (PCT) Principles**MAJOR CONCEPTS OF THE PCT**

The Patent Cooperation Treaty (PCT) enables the U.S. applicant to file one application, "an international application," in a standardized format in English in the U.S. Receiving Office (the U.S. Patent and Trademark Office), and have that application acknowledged as a regular national filing in as many member countries to the PCT as the applicant "designates" or "elects," that is, names, as countries in

which patent protection is desired. In the same manner, the PCT enables foreign applicants to file a PCT international application, designating the United States of America, in their home language in their home patent office and have the application acknowledged as a regular U.S. national filing. The PCT also provides for a search and publication after 18 months from the priority date. Upon payment of national fees and the furnishing of any required translation, usually 20 months after the filing of any priority application for the invention, or the international filing date if no priority is claimed, the application will be subjected to national procedures for granting of patents in each of the designated countries. If a demand for an international preliminary examination is filed within 19 months from the priority date, the period for entering the national stage is extended to 30 months from the priority date.

The PCT offers an alternative route to filing patent applications directly in the patent offices of those countries which are members of the PCT. It does not preclude taking advantage of the priority rights and other advantages provided under the Paris Convention and the WTO administered Agreement on Trade-Related Aspects of Intellectual Property (TRIPS Agreement). The PCT provides an additional and optional foreign filing route to patent applicants.

The filing, search and publication procedures are provided for in Chapter I of the PCT. Additional procedures for a preliminary examination of PCT international applications are provided for in optional PCT Chapter II.

In most instances a national U.S. application (NA) is filed first. An international application for the same subject matter will then be filed subsequently within the priority year provided by the Paris Convention and the priority benefit of the U.S. national application filing date will be claimed.

RECEIVING OFFICE (RO)

The international application (IA) must be filed in the prescribed receiving Office (RO)(PCT Article 10). The United States Patent and Trademark Office will act as a receiving Office for United States residents and nationals (35 U.S.C. 361(a)). Under PCT Rule 19.1(a)(iii), the International Bureau of the World Intellectual Property Organization will also act as a Receiving Office for U.S. residents and nationals. The

receiving Office functions as the filing and formalities review organization for international applications. International applications must contain upon filing the designation of at least one country in which patent protection is desired and must meet certain standards for completeness and formality (PCT Articles 11(1) and 14(1)).

Where a priority claim is made, the date of the earlier filed national application is used as the date for determining the timing of international processing, including the various transmittals, the payment of certain international and national fees, and publication of the application. Where no priority claim is made, the international filing date will be considered to be the "priority date" for timing purposes (PCT Article 2(xi)).

The international application is subject to the payment of certain fees upon filing, or within 1 month thereafter, and at the expiration of 12 months from the priority date or within 1 month thereafter. The receiving Office will grant an international filing date to the application, collect fees, handle informalities by direct communication with the applicant, and monitor all corrections (35 U.S.C. 361(d)). By 13 months from the priority date, the receiving Office should prepare and transmit a copy of the international application, called the search copy (SC), to the International Searching Authority (ISA); and forward the original, called the record copy (RC), to the International Bureau (IB) (PCT Rules 22.1 and 23). A second copy of the international application, the home copy (HC), remains in the receiving Office (PCT Article 12(1)). Once the receiving Office has transmitted copies of the application, the International Searching Authority becomes the focus of international processing.

INTERNATIONAL SEARCHING AUTHORITY (ISA)

The basic function of the International Searching Authority (ISA) is to conduct a prior art search of inventions claimed in international applications; it does this by searching in at least the minimum documentation defined by the Treaty (PCT Articles 15 and 16 and PCT Rule 34). At the option of the applicant, either the U.S. Patent and Trademark Office or the European Patent Office will act as an International Searching Authority for international applications filed in the United States Receiving

Office. The International Searching Authority is also responsible for checking the content of the title and abstract (PCT Rules 37.2 and 38.2). An international search report (SR) will normally be issued by the International Searching Authority within 3 months from the receipt of the search copy (usually about 16 months after the priority date) (PCT Rule 42). Copies of the International Search Report and prior art cited will be sent to the applicant by the ISA/US (PCT Rules 43 and 44.1). The search report will contain a listing of documents found to be relevant and will identify the claims in the application to which they are pertinent. However, no judgments or statements as to patentability will be made (PCT Rule 43.9). Once the international search report has been completed and transmitted, international processing continues before the International Bureau.

INTERNATIONAL BUREAU (IB)

The basic functions of the International Bureau (IB) are to maintain the master file of all international applications and to act as the publisher and central coordinating body under the Treaty. The World Intellectual Property Organization (WIPO) in Geneva, Switzerland performs the duties of the International Bureau.

If the applicant has not filed a certified copy of the priority document in the receiving Office with the international application, or requested upon filing that the receiving Office prepare and transmit to the International Bureau a copy of the prior U.S. national application, the priority of which is claimed, the applicant must submit such a document directly to the International Bureau or the receiving Office not later than 16 months after the priority date (PCT Rule 17). The Request form contains a box which can be checked requesting that the receiving Office prepare the certified copy. This is only possible, of course, if the receiving Office is a part of the same national Office where the priority application was filed.

The applicant has normally 2 months from the date of transmittal of the International Search Report to amend the claims by filing an amendment directly with the International Bureau (PCT Article 19 and PCT Rule 46). The International Bureau will then normally publish the international application along with the search report and any amended claims (Amdt) at the expiration of 18 months from the priority date

(PCT Article 21). The international publication is in pamphlet form with a front page containing bibliographical data, the abstract, and a figure of the drawing (PCT Rule 48). The pamphlet also contains the search report and any amendments to the claims submitted by the applicant. If the application is published in a language other than English, the search report and abstract are also published in English. The International Bureau publishes a *PCT Gazette* in the French and English languages which contains information similar to that on the front pages of published international applications, as well as various indexes and announcements (PCT Rule 86). The International Bureau also transmits copies of the international application to all the designated Offices (PCT Article 20 and PCT Rule 47).

DESIGNATED OFFICE (DO) and ELECTED OFFICE (EO)

The designated Office is the national Office (for example, the USPTO) acting for the state or region designated under Chapter I. Similarly, the elected Office is the national Office acting for the state or region elected under Chapter II.

If no "Demand" for international preliminary examination has been filed within 19 months of the priority date, the applicant must complete the requirements for entering the national stage within 20 months from the priority date of the international application, unless the individual designated Office grants additional time. The applicant also has the right to amend the application within 1 month from the fulfillment of the requirements under PCT Article 22. After this month has expired (PCT Article 28 and PCT Rule 52), each designated Office will make its own determination as to the patentability of the application based upon its own specific national or regional laws (PCT Article 27(5)).

If the applicant desires to obtain the benefit of delaying the entry into the national stage until 30 months from the priority date, a Demand for international preliminary examination must be filed with an appropriate International Preliminary Examining Authority within 19 months of the priority date. Those states in which the Chapter II procedure is desired must be "elected" in the Demand.

The original Demand is forwarded to the International Bureau by the International Preliminary Exam-

ining Authority. The International Bureau then notifies the various elected Offices that the applicant has entered Chapter II and that the application should not be considered withdrawn for failure to enter the national stage within 20 months from the priority date.

The examiner of the International Preliminary Examining Authority may comment on lack of unity of invention, note errors, and issue a written “opinion” as to whether each claim is “novel,” involves “inventive step,” and is “industrially applicable.” If a written “opinion” is issued by the examiner, the applicant may reply to the opinion by arguments and amendments within the time period set for reply. The examiner will then issue the international preliminary examination report which presents the examiner’s final position as to whether each claim is “novel,” involves “inventive step,” and is “industrially applicable” by 28 months from the priority date. A copy of the international preliminary examination report is sent to the applicant and to the International Bureau. The International Bureau then communicates a copy of the international preliminary examination report to each elected Office.

The applicant must complete the requirements for entering the national stage by the expiration of 30 months from the priority date to avoid any question of withdrawal of the application as to that elected Office.

1802 PCT Definitions

The PCT contains definitions in PCT Article 2 and in PCT Rule 2, which are found in MPEP Appendix T. Additional definitions are found in 35 U.S.C. 351, MPEP Appendix L, 37 CFR 1.401, MPEP Appendix R, Section 101 of the PCT Administrative Instructions and MPEP Appendix AI.

1803 Reservations Under the PCT Taken by the United States of America

The United States of America had originally declared that it was not bound by Chapter II (PCT Article 64 (1)), but withdrew that reservation on July 1, 1987.

It has also declared that, as far as the United States of America is concerned, international publication is not required (PCT Article 64 (3)). Accordingly, under

PCT Article 64(3)(b), if the United States is the only PCT Contracting State designated in an international application, the international application will not be published by the International Bureau (IB) at 18 months. Even though the United States Patent and Trademark Office has begun pre-grant publication under 35 U.S.C. 122(b), the United States has not removed its reservation under PCT Article 64(3) because not all United States patent applications are published. See 35 U.S.C. 122(b)(2). The application will, however, be published under 35 U.S.C. 122(b) if it enters the national stage in the United States. It will be published again if it is allowed to issue as a United States patent.

The United States of America also made a reservation under PCT Article 64(4) which relates to the prior art effective date of a U.S. patent issuing from an international application. See 35 U.S.C. 102(e) and 363.

The above reservations under PCT Article 64(3) and (4) are still in effect.

The U.S. Receiving Office continues to accept applications only in English. See 35 U.S.C. 361(c). PCT Rules 20.4(c), 26.3^{ter}(a) and 26.3^{ter}(c) permit an international filing date to be accorded even though portions of an international application are in a language not acceptable to the Receiving Office. PCT Rules 20.4(c), 26.3^{ter}(a) and 26.3^{ter}(c) are not compatible with the national law applied by the United States Patent and Trademark Office (USPTO) as Receiving Office. Thus, the USPTO has taken a reservation on adherence to these Rules pursuant to PCT Rules 20.4(d), 26.3^{ter}(b) and 26.3^{ter}(d). As a result, PCT Rules 20.4(c), 26.3^{ter}(a) and 26.3^{ter}(c) shall not apply to the USPTO as Receiving Office for as long as the aforementioned incompatibility exists.

Also, PCT Rules 49.5(c^{bis}) and 49.5(k) continue not to be compatible with the national law applied by the USPTO as a Designated Office. See 35 U.S.C. 371(c)(2). As a result, PCT Rules 49.5(c^{bis}) and 49.5(k) shall not apply to the USPTO as Designated Office for as long as the aforementioned incompatibility exists. See the International Bureau’s notice published in *PCT Gazette* No. 07/1992.

1805 Where to File an International Application

35 U.S.C. 361. *Receiving Office.*

(a) The Patent and Trademark Office shall act as a Receiving Office for international applications filed by nationals or residents of the United States. In accordance with any agreement made between the United States and another country, the Patent and Trademark Office may also act as a Receiving Office for international applications filed by residents or nationals of such country who are entitled to file international applications.

See 37 CFR 1.421 - 1.425 as to who can file an international application.

Only if at least one of the applicants is a resident or national of the United States of America may an international application be filed in the United States Receiving Office (PCT Article 9(1) and (3), PCT Rules 19.1 and 19.2, 35 U.S.C. 361(a) and 37 CFR 1.412(a), 1.421). The concepts of residence and nationality are defined in PCT Rule 18.1. For the purpose of filing an international application, the applicant may be either the inventor or the successor in title of the inventor (assignee or owner). However, the laws of the various designated States regarding the requirements for applicants must also be considered when filing an international application. For example, the patent law of the United States of America requires that, for the purposes of designating the United States of America, the applicant(s) must be the inventor(s) (35 U.S.C. 373, PCT Article 27(3)).

The United States Receiving Office is located in Crystal Plaza, Building 2, 8th floor, 2011 South Clark Place, Arlington, Virginia. International applications and related papers may be deposited directly with the United States Receiving Office or be mailed to: Assistant Commissioner for Patents, Box PCT, Washington, DC 20231. It should be noted that the "Express Mail" provisions of 37 CFR 1.10 apply to the filing of all applications and papers filed in the U.S. Patent and Trademark Office, including PCT international applications and related papers and fees. It should be further noted, however, that PCT international applications and papers relating to international applications are specifically excluded from the Certificate of Mailing or Transmission procedures under 37 CFR 1.8. This means, for example, that a Demand for international preliminary examination cannot be filed using the Certificate of Mailing or Transmission prac-

tice under 37 CFR 1.8 if the date of mailing is the date needed for official purposes. If 37 CFR 1.8 is improperly used, the date to be accorded the paper will be the date of actual receipt in the Office unless the receipt date falls on a Saturday, Sunday, or Federal holiday in which case the date of receipt will be the next succeeding day which is not a Saturday, Sunday, or Federal holiday (37 CFR 1.6).

Irrespective of the Certification practice under 37 CFR 1.8(a), facsimile transmission (without the benefit of the certificate under 37 CFR 1.8(a)) may be used to submit certain papers in international applications. However, facsimile transmission may not be used for the filing of an international application, the filing of drawings under 37 CFR 1.437, or the filing of a copy of the international application, and the basic national fee to enter the U.S. national stage under 35 U.S.C. 371. See 37 CFR 1.6(d)(3) and (4), 1.8(a)(2)(i)(D), and 1.8(a)(2)(i)(F). The Demand for international preliminary examination may be filed by facsimile transmission. See MPEP § 1834.01.

The United States Receiving Office staff is available to offer guidance on PCT requirements and procedures. See MPEP § 1730 for information on contacting the staff and other available means for obtaining information.

WARNING - although the United States patent law at 35 U.S.C. 21(a) authorizes the Commissioner to prescribe by rule that any paper or fee required to be filed in the Patent and Trademark Office will be considered filed in the Office on the date on which it was deposited with the United States Postal Service, PCT Rule 20.1(a) provides for marking the "date of actual receipt on the request." Although the "Express Mail" provisions under 37 CFR 1.10 have not been contested to date regarding PCT applications, applicants should be aware of a possible different interpretation by foreign authorities.

PCT Rule 19.4 provides for transmittal of an international application to the International Bureau as Receiving Office in certain instances. For example, when the international application is filed with the United States Receiving Office and the language in which the international application is filed is not accepted by the United States Receiving Office, or if the applicant does not have the requisite residence or nationality, the application may be forwarded to the International Bureau for processing in its capacity as a

Receiving Office. See 37 CFR 1.412(c)(6). The Receiving Office of the International Bureau will consider the international application to be received as of the date accorded by the United States Receiving Office. This practice will avoid the loss of a filing date in those instances where the United States Receiving Office is not competent to act, but where the international application indicates an applicant to be a national or resident of a PCT Contracting state or is in a language accepted under PCT Rule 12.1(a) by the International Bureau as a Receiving Office. Of course, where questions arise regarding residence or nationality, i.e., the U.S. is not clearly competent, the application will be forwarded to the International Bureau as Receiving Office. Note, where no residence or nationality is indicated, the U.S. is not competent, and the application will be forwarded to the International Bureau as Receiving Office so long as the necessary fee is paid. The fee is an amount equal to the transmittal fee.

If all of the applicants are indicated to be residents or nationals of non-PCT Contracting States, PCT Rule 19.4 does not apply, and the application is denied an international filing date.

1807 Agent or Common Representative and General Power of Attorney

37 CFR 1.455. Representation in international applications.

(a) Applicants of international applications may be represented by attorneys or agents registered to practice before the Patent and Trademark Office or by an applicant appointed as a common representative (PCT Art. 49, Rules 4, 8 and 90 and § 10.10). If applicants have not appointed an attorney or agent or one of the applicants to represent them, and there is more than one applicant, the applicant first named in the request and who is entitled to file in the U.S. Receiving Office shall be considered to be the common representative of all the applicants. An attorney or agent having the right to practice before a national office with which an international application is filed and for which the United States is an International Searching Authority or International Preliminary Examining Authority may be appointed to represent the applicants in the international application before that authority. An attorney or agent may appoint an associate attorney or agent who shall also then be of record (PCT Rule 90.1(d)). The appointment of an attorney or agent, or of a common representative, revokes any earlier appointment unless otherwise indicated (PCT Rule 90.6(b) and (c)).

(b) Appointment of an agent, attorney or common representative (PCT Rule 4.8) must be effected either in the Request form, signed by all applicants, or in a separate power of attorney submit-

ted either to the United States Receiving Office or to the International Bureau.

(c) Powers of attorney and revocations thereof should be submitted to the United States Receiving Office until the issuance of the international search report.

(d) The addressee for correspondence will be as indicated in section 108 of the Administrative Instructions.

Where an appointment of an agent or common representative is effected by a separate power of attorney, that power of attorney must be submitted to either the receiving Office or the International Bureau. However, a power of attorney appointing an agent or sub-agent to represent the applicant specifically before the International Searching Authority or the International Preliminary Examining Authority must be submitted directly to that Authority.

“GENERAL” POWER OF ATTORNEY

“General” powers of attorney are recognized for the purpose of filing and prosecuting an international application before the international authorities. The original general power of attorney should be deposited with the International Application Processing Division which is the central focus for PCT matters throughout the Office. Any applications relying thereon must include a copy thereof. A general power of attorney form is provided in the annex to the PCT Applicant’s Guide.

Any general power of attorney must be filed with the receiving Office if the appointment was for the purposes of the international phase generally, or with the International Searching Authority or International Preliminary Examining Authority if the appointment was specifically to represent the applicant before that Authority. The appointment will then be effective in relation to any particular application filed by that applicant provided that the general power of attorney is referred to in the request, the Demand or a separate notice, and that a copy of the general power of attorney is attached to that request, Demand or separate notice. That copy of the signed original need not, itself, be separately signed. See Annex Z of the PCT Applicant’s Guide for a suitable model form for a general power of attorney. The PCT Applicant’s Guide is available from the International Bureau in Geneva, Switzerland. It can be viewed or ordered online from WIPO’s website (<http://www.wipo.int/pct/en/>).

1808 Change in or Revocation of the Appointment of an Agent or a Common Representative

PCT Rule 90.

Agents and Common Representatives

90.6. Revocation and Renunciation

(a) Any appointment of an agent or common representative may be revoked by the persons who made the appointment or by their successors in title, in which case any appointment of a sub-agent under Rule 90.1(d) by that agent shall also be considered as revoked. Any appointment of a subagent under Rule 90.1(d) may also be revoked by the applicant concerned.

(b) The appointment of an agent under Rule 90.1(a) shall, unless otherwise indicated, have the effect of revoking any earlier appointment of an agent made under that Rule.

(c) The appointment of a common representative shall, unless otherwise indicated, have the effect of revoking any earlier appointment of a common representative.

(d) An agent or a common representative may renounce his appointment by a notification signed by him.

(e) Rule 90.4(b) and (c) shall apply, *mutatis mutandis*, to a document containing a revocation or renunciation under this Rule.

37 CFR 1.455. Representation in international applications.

(a) Applicants of international applications may be represented by attorneys or agents registered to practice before the Patent and Trademark Office or by an applicant appointed as a common representative (PCT Art. 49, Rules 4, 8 and 90 and § 10.10). If applicants have not appointed an attorney or agent or one of the applicants to represent them, and there is more than one applicant, the applicant first named in the request and who is entitled to file in the U.S. Receiving Office shall be considered to be the common representative of all the applicants. An attorney or agent having the right to practice before a national office with which an international application is filed and for which the United States is an International Searching Authority or International Preliminary Examining Authority may be appointed to represent the applicants in the international application before that authority. An attorney or agent may appoint an associate attorney or agent who shall also then be of record (PCT Rule 90.1(d)). The appointment of an attorney or agent, or of a common representative, revokes any earlier appointment unless otherwise indicated (PCT Rule 90.6(b) and (c)).

(b) Appointment of an agent, attorney or common representative (PCT Rule 4.8) must be effected either in the Request form, signed by all applicants, or in a separate power of attorney submitted either to the United States Receiving Office or to the International Bureau.

(c) Powers of attorney and revocations thereof should be submitted to the United States Receiving Office until the issuance of the international search report.

(d) The addressee for correspondence will be as indicated in section 108 of the Administrative Instructions.

The appointment of an agent or a common representative can be revoked. The document containing the revocation must be signed by the persons who made the appointment or by their successors in title. The appointment of a sub-agent may also be revoked by the applicant concerned. If the appointment of an agent is revoked, any appointment of a sub-agent by that agent is also considered revoked.

The appointment of an agent for the international phase in general automatically has the effect, unless otherwise indicated, of revoking any earlier appointment of an agent. The appointment of a common representative similarly has the effect, unless otherwise indicated, of revoking any earlier appointment of a common representative.

The rules for signing and submission of a power of attorney also apply to a revocation of an appointment.

Renunciation of an appointment may be made by means of a notification signed by the agent or common representative. The rules for signing and submission of a power of attorney apply also to a renunciation. The applicant is informed of the renunciation by the International Bureau.

U.S. attorneys or agents wishing to withdraw from representation in international applications may request to do so. To expedite the handling of requests for permission to withdraw as attorney, the request should be submitted in triplicate (original and two copies) to Box PCT and should indicate the present mailing addresses of the attorney who is withdrawing and of the applicant. Because the United States Patent and Trademark Office (USPTO) does not recognize law firms, each attorney of record must sign the notice of withdrawal, or the notice of withdrawal must contain a clear indication of one attorney signing on behalf of another.

The USPTO usually requires that there be at least 30 days between approval of withdrawal and the expiration date of a time response period so that the applicant will have sufficient time to obtain other representation or take other action. If less than 30 days remains in a running response period, a request to withdraw is normally disapproved.

For withdrawal of attorney or agent in the national stage, see MPEP § 402.06.

1810 Filing Date Requirements

PCT Article 11.

Filing Date and Effects of the International Application

(1) The receiving Office shall accord as the international filing date the date of receipt of the international application, provided that that Office has found that, at the time of receipt:

(i) the applicant does not obviously lack, for reasons of residence or nationality, the right to file an international application with the receiving Office,

(ii) the international application is in the prescribed language,

(iii) the international application contains at least the following elements:

(a) an indication that it is intended as an international application,

(b) the designation of at least one Contracting State,

(c) the name of the applicant, as prescribed,

(d) a part which on the face of it appears to be a description,

(e) a part which on the face of it appears to be a claim or claims.

35 U.S.C. 363. International application designating the United States: Effect.

An international application designating the United States shall have the effect, from its international filing date under article 11 of the treaty, of a national application for patent regularly filed in the Patent and Trademark Office except as otherwise provided in section 102(e) of this title.

35 U.S.C. 373. Improper Applicant.

An international application designating the United States, shall not be accepted by the Patent and Trademark Office for the national stage if it was filed by anyone not qualified under chapter 11 of this title to be an applicant for the purpose of filing a national application in the United States. Such international applications shall not serve as the basis for the benefit of an earlier filing date under section 120 of this title in a subsequently filed application, but may serve as the basis for a claim of the right of priority under subsections (a) through (d) of section 119 of this title, if the United States was not the sole country designated in such international application.

37 CFR 1.431. International application requirements.

(a) An international application shall contain, as specified in the Treaty and the Regulations, a Request, a description, one or more claims, an abstract, and one or more drawings (where required). (PCT Art. 3(2) and Section 207 of the Administrative Instructions.)

(b) An international filing date will be accorded by the United States Receiving Office, at the time of receipt of the international application, provided that:

(1) At least one applicant is a United States resident or national and the papers filed at the time of receipt of the international application so indicate (35 U.S.C. 361(a), PCT Art. 11(1)(i)).

(2) The international application is in the English language (35 U.S.C. 361(c), PCT Art. 11(1)(ii)).

(3) The international application contains at least the following elements (PCT Art. 11(1)(iii)):

(i) An indication that it is intended as an international application (PCT Rule 4.2);

(ii) The designation of at least one Contracting State of the International Patent Cooperation Union (§ 1.432);

(iii) The name of the applicant, as prescribed (note §§1.421-1.424);

(iv) A part which on the face of it appears to be a description; and

(v) A part which on the face of it appears to be a claim.

(c) Payment of the basic portion of the international fee (PCT Rule 15.2) and the transmittal and search fees (§ 1.445) may be made in full at the time the international application papers required by paragraph (b) of this section are deposited or within one month thereafter. The basic, transmittal, and search fee payable is the basic, transmittal, and search fee in effect on the receipt date of the international application.

(1) If the basic, transmittal and search fees are not paid within one month from the date of receipt of the international application and prior to the sending of a notice of deficiency, applicant will be notified and given one month within which to pay the deficient fees plus a late payment fee equal to the greater of:

(i) Fifty percent of the amount of the deficient fees up to a maximum amount equal to the basic fee; or

(ii) An amount equal to the transmittal fee (PCT Rule 16^{bis}).

(2) The one-month time limit set pursuant to this paragraph to pay deficient fees may not be extended.

(d) If the payment needed to cover the transmittal fee, the basic fee, the search fee, one designation fee and the late payment fee pursuant to paragraph (c) of this section is not timely made in accordance with PCT Rule 16^{bis}.1(e), the Receiving Office will declare the international application withdrawn under PCT Article 14(3)(a).

THE “INTERNATIONAL FILING DATE”

An international filing date is accorded on the date on which the international application was received by the receiving Office or pursuant to the correction of defects on a later date (PCT Articles 11(1) and 11(2)(b) and PCT Rules 20.1, 20.3, 20.4(a), 20.5, and 20.6): in the former case, the international filing date will be the date on which the international application was received by the receiving Office; in the latter case, the international filing date will be the date on

which the correction was received by the receiving Office. Any correction must be submitted by the applicant within certain time limits. Where all the sheets pertaining to the same international application are not received on the same day by the receiving Office, in most instances, the date of receipt of the application will be amended to reflect the date on which the last missing sheets were received. As an amended date of receipt may cause the priority claim to be forfeited, applicants should assure that all sheets of the application are deposited with the receiving Office on the same day. For particulars see PCT Rule 20.2.

An all too common occurrence is that applicants will file an international application in the U.S. Receiving Office and no applicant has a U.S. residence or nationality. Applicants are cautioned to be sure that at least one applicant is a resident or national of the U.S. before filing in the U.S. Receiving Office. Where no applicant indicated on the request papers is a resident or national of the United States, the USPTO is not a competent receiving Office for the international application under PCT Rule 19.1(a). Nonetheless, the date the international application was filed in the USPTO will not be lost as a filing date for the international application if at least one applicant is a resident or national of any PCT Contracting State. Under PCT Rule 19.4, the USPTO will receive the application on behalf of the International Bureau as receiving Office (PCT Rule 19.4(a)) and the USPTO will promptly transmit the international application to the International Bureau under PCT Rule 19.4(b). (See also MPEP § 1805.)

1812 Elements of the International Application

PCT Article 3.

The International Application

(1) Applications for the protection of inventions in any of the Contracting States may be filed as international applications under this Treaty.

(2) An international application shall contain, as specified in this Treaty and the Regulations, a request, a description, one or

more claims, one or more drawings (where required), and an abstract.

(3) The abstract merely serves the purpose of technical information and cannot be taken into account for any other purpose, particularly not for the purpose of interpreting the scope of the protection sought.

(4) The international application shall:

- (i) be in a prescribed language;
- (ii) comply with the prescribed physical requirements;
- (iii) comply with the prescribed requirement of unity of invention;
- (iv) be subject to the payment of the prescribed fees.

Any international application must contain the following elements: request, description, claim or claims, abstract and one or more drawings (where drawings are necessary for the understanding of the invention (PCT Article 3(2) and PCT Article 7(2)). The elements of the international application are to be arranged in the following order: the request, the description (other than any sequence listing part thereof), the claims, the abstract, the drawings, and the sequence listing part of the description (where applicable) (Administrative Instructions Section 207(a)). All the sheets contained in the international application must be numbered in consecutive Arabic numerals by using the following separate series of numbers: a first series applying to the request; a second series to the description, claims and abstract; a third series to the drawings (where applicable); and a further series to the sequence listing part of the description (where applicable) (PCT Rule 11.7 and Administrative Instructions Section 207(b)). Only one copy of the international application need be filed in the United States Receiving Office (37 CFR 1.433(a)). The request is made on a standardized form (Form PCT/RO/101), copies of which can be obtained from the USPTO. Letters requesting forms should be addressed to "Box PCT." The "Request" form can now be presented as a computer printout prepared using the PCT-EASY software. The details of a computer generated Request form are provided in Administrative Instructions Section 102^{bis}.

1817 PCT Member States

The following is a list of PCT Member States:

State	Ratification, Accession or Declaration	Date of Ratification, Accession or Declaration	Date From Which State May Be Designated
(1)Central African Republic ^o	Accession	15 September 1971	01 June 1978
(2)Senegal ^o	Ratification	08 March 1972	01 June 1978
(3)Madagascar	Ratification	27 March 1972	01 June 1978
(4)Malawi	Accession	16 May 1972	01 June 1978
(5)Cameroon ^o	Accession	15 March 1973	01 June 1978
(6)Chad ^o	Accession	12 February 1974	01 June 1978
(7)Togo ^o	Ratification	28 January 1975	01 June 1978
(8)Gabon ^o	Accession	06 March 1975	01 June 1978
(9)United States of America	Ratification	26 November 1975	01 June 1978
(10)Germany ^{oo}	Ratification	19 July 1976	01 June 1978
(11)Congo ^o	Accession	08 August 1977	01 June 1978
(12)Switzerland ^{oo}	Ratification	14 September 1977	01 June 1978
(13)United Kingdom ^{oo}	Ratification	24 October 1977	01 June 1978
(14)France ^{oo}	Ratification	25 November 1977	01 June 1978
(15)Russian Federation	Ratification	29 December 1977	01 June 1978
(16)Brazil	Ratification	09 January 1978	01 June 1978
(17)Luxembourg ^{oo}	Ratification	31 January 1978	01 June 1978
(18)Sweden ^{oo}	Ratification	17 February 1978	01 June 1978
(19)Japan	Ratification	01 July 1978	01 October 1978
(20)Denmark ^{oo}	Ratification	01 September 1978	01 December 1978
(21)Austria ^{oo}	Ratification	23 January 1979	23 April 1979
(22)Monaco ^{oo}	Ratification	22 March 1979	22 June 1979
(23)Netherlands ^{oo}	Ratification	10 April 1979	10 July 1979
(24)Romania	Ratification	23 April 1979	23 July 1979
(25)Norway	Ratification	01 October 1979	01 January 1980
(26)Liechtenstein ^{oo}	Accession	19 December 1979	19 March 1980

State	Ratification, Accession or Declaration	Date of Ratification, Accession or Declaration	Date From Which State May Be Designated
(27)Australia	Accession	31 December 1979	31 March 1980
(28)Hungary	Ratification	27 March 1980	27 June 1980
(29)Democratic People's Republic of Korea (North Korea)	Accession	08 April 1980	08 July 1980
(30)Finland ^{oo}	Ratification	01 July 1980	01 October 1980
(31)Belgium ^{oo}	Ratification	14 September 1981	14 December 1981
(32)Sri Lanka	Accession	26 November 1981	26 February 1982
(33)Mauritania ^o	Accession	13 January 1983	13 April 1983
(34)Sudan	Accession	16 January 1984	16 April 1984
(35)Bulgaria	Accession	21 February 1984	21 May 1984
(36)Republic of Korea (South Korea)	Accession	10 May 1984	10 August 1984
(37)Mali ^o	Accession	19 July 1984	19 October 1984
(38)Barbados	Accession	12 December 1984	12 March 1985
(39)Italy ^{oo}	Ratification	28 December 1984	28 March 1985
(40)Benin ^o	Accession	26 November 1986	26 February 1987
(41)Burkina Faso ^o	Accession	21 December 1988	21 March 1989
(42)Spain ^{oo}	Accession	16 August 1989	16 November 1989
(43)Canada	Ratification	02 October 1989	02 January 1990
(44)Greece ^{oo}	Accession	09 July 1990	09 October 1990
(45)Poland	Accession	25 September 1990	25 December 1990
(46)Côte d'Ivoire ^o	Ratification	31 January 1991	30 April 1991
(47)Guinea ^o	Accession	27 February 1991	27 May 1991
(48)Mongolia	Accession	27 February 1991	27 May 1991
(49)Czech Republic	Declaration	18 December 1992	01 January 1993
(50)Ireland ^{oo}	Ratification	01 May 1992	01 August 1992
(51)Portugal ^{oo}	Accession	24 August 1992	24 November 1992
(52)New Zealand	Accession	01 September 1992	01 December 1992

State	Ratification, Accession or Declaration	Date of Ratification, Accession or Declaration	Date From Which State May Be Designated
(53)Ukraine	Declaration	21 September 1992	25 December 1991
(54)Viet Nam	Accession	10 December 1992	10 March 1993
(55)Slovakia	Declaration	30 December 1992	01 January 1993
(56)Niger ^o	Accession	21 December 1992	21 March 1993
(57)Kazakstan	Declaration	16 February 1993	25 December 1991
(58)Belarus	Declaration	14 April 1993	25 December 1991
(59)Latvia	Accession	07 June 1993	07 September 1993
(60)Uzbekistan	Declaration	18 August 1993	25 December 1991
(61)China	Accession	01 October 1993	01 January 1994
(62)Slovenia	Accession	01 December 1993	01 March 1994
(63)Trinidad and Tobago	Accession	10 December 1993	10 March 1994
(64)Georgia	Declaration	18 January 1994	25 December 1991
(65)Kyrgyzstan	Declaration	14 February 1994	25 December 1991
(66)Republic of Moldova	Declaration	14 February 1994	25 December 1991
(67)Tajikistan	Declaration	14 February 1994	25 December 1991
(68) Kenya	Accession	08 March 1994	08 June 1994
(69)Lithuania	Accession	05 April 1994	05 July 1994
(70)Armenia	Declaration	17 May 1994	25 December 1991
(71)Estonia	Accession	24 May 1994	24 August 1994
(72)Liberia	Accession	27 May 1994	27 August 1994
(73)Swaziland	Accession	20 June 1994	20 September 1994
(74)Mexico	Accession	01 October 1994	01 January 1995
(75)Uganda	Accession	09 November 1994	09 February 1995
(76)Singapore	Accession	23 November 1994	23 February 1995
(77)Iceland	Accession	23 December 1994	23 March 1995
(78)Turkmenistan	Declaration	01 March 1995	25 December 1991
(79)The former Yugoslov Republic of Macedonia	Accession	10 May 1995	10 August 1995

State	Ratification, Accession or Declaration	Date of Ratification, Accession or Declaration	Date From Which State May Be Designated
(80)Albania	Accession	04 July 1995	04 October 1995
(81)Lesotho	Accession	21 July 1995	21 October 1995
(82)Azerbaijan	Accession	25 September 1995	25 December 1995
(83)Turkey ^{oo}	Accession	01 October 1995	01 January 1996
(84)Israel	Ratification	01 March 1996	01 June 1996
(85)Cuba	Accession	16 April 1996	16 July 1996
(86)Saint Lucia	Accession	30 May 1996	30 August 1996
(87)Bosnia and Herzegovina	Accession	07 June 1996	07 September 1996
(88) Yugoslavia	Ratification	01 November 1996	01 February 1997
(89)Ghana	Accession	26 November 1996	16 February 1997
(90)Zimbabwe	Accession	11 March 1997	11 June 1997
(91)Sierra Leone	Accession	17 March 1997	17 June 1997
(92)Indonesia	Accession	05 June 1997	05 September 1997
(93)Gambia	Accession	09 September 1997	09 December 1997
(94)Guinea-Bissau ^o	Accession	12 September 1997	12 December 1997
(95) Cyprus ^{oo}	Accession	01 January 1998	01 April 1998
(96) Croatia	Accession	01 April 1998	01 July 1998
(97) Grenada	Accession	22 June 1998	22 September 1998
(98) India	Accession	07 September 1998	07 December 1998
(99) United Arab Emirates	Accession	10 December 1998	10 March 1999
(100) South Africa	Accession	16 December 1998	16 March 1999
(101) Costa Rica	Accession	03 May 1999	03 August 1999
(102) Dominica	Accession	07 May 1999	07 August 1999
(103) United Republic of Tanzania	Accession	14 June 1999	14 September 1999
(104) Morocco	Accession	08 July 1999	08 October 1999
(105) Algeria	Ratification	08 December 1999	08 March 2000
(106) Antigua and Barbuda	Accession	17 December 1999	17 March 2000

State	Ratification, Accession or Declaration	Date of Ratification, Accession or Declaration	Date From Which State May Be Designated
(107) Mozambique	Accession	18 February 2000	18 May 2000
(108) Belize	Accession	17 March 2000	17 June 2000
(109) Colombia	Accession	29 November 2000	28 February 2001
(110) Ecuador	Accession	07 February 2001	07 May 2001
(111) Equatorial Guinea ^o	Accession	17 April 2001	17 July 2001
(112) Phillipines	Ratification	17 May 2001	17 August 2001
(113) Oman	Accession	26 July 2001	26 October 2001
(114) Zambia	Accession	15 August 2001	15 November 2001
<p>^oMembers of Africa Intellectual Property Organization (OAPI) regional patent system. Only regional patent protection is available for OAPI member states. A designation of any state is an indication that all OAPI states have been designated. Note: only one designation fee is due regardless of the number of OAPI member states designated.</p>			
<p>^oMembers of European Patent Convention (EPC) regional patent system. Either national patents or European patents for member States are available through PCT, except for Belgium, France, Greece, Ireland, Italy, Monaco, and Netherlands, for which only European patents are available if the PCT is used. Note: only one PCT designation fee is due if European patent protection is sought for one, several, or all EPC member countries.</p>			
<p>The following states are members of African Regional Industrial Property Organization (ARIPO) regional patent system: (4) Malawi, (34) Sudan, (68) Kenya, (73) Swaziland, (75) Uganda, (81) Lesotho, (89) Ghana, (90) Zimbabwe, and (93) Gambia.</p>			
<p>The following states are members of the Eurasian Patent Organization (EAPO) regional patent system: (15) Russian Federation, (57) Kazakstan, (58) Belarus, (65) Kyrgyzstan, (66) Republic of Moldova, (67) Tajikistan, (70) Armenia, (78) Turkmenistan, and (82) Azerbaijan. Yugoslavia is comprised of the Republics of Serbia and Montenegro. The World Intellectual Property Organization has utilized the two-letter code "YU" to refer to the Yugoslavia becoming a party to the Patent Cooperation Treaty. The United States understands that the scope of the territory covered by the designation encompasses only the Republics of Serbia and Montenegro.</p>			

1817.01 Designation of States and Precautionary Designations

37 CFR 1.432. *Designation of States and payment of designation and confirmation fees.*

(a) The designation of States including an indication that applicant wishes to obtain a regional patent, where applicable, shall appear in the Request upon filing and must be indicated as set forth in PCT Rule 4.9 and section 115 of the Administrative

Instructions. Applicant must specify at least one national or regional designation on filing of the international application for a filing date to be granted.

(b) If the fees necessary to cover all the national and regional designations specified in the Request are not paid by the applicant within one year from the priority date or within one month from the date of receipt of the international application if that month expires after the expiration of one year from the priority date, applicant will be notified and given one month within which to pay the deficient designation fees plus a late payment fee. The late

payment fee shall be equal to the greater of fifty percent of the amount of the deficient fees up to a maximum amount equal to the basic fee, or an amount equal to the transmittal fee (PCT Rule 16^{bis}). The one-month time limit set in the notification of deficient designation fees may not be extended. Failure to timely pay at least one designation fee will result in the withdrawal of the international application.

(1) The one designation fee must be paid:

(i) Within one year from the priority date;

(ii) Within one month from the date of receipt of the international application if that month expires after the expiration of one year from the priority date; or

(iii) With the late payment fee defined in this paragraph within the time set in the notification of the deficient designation fees or in accordance with PCT Rule 16^{bis}.1(e).

(2) If after a notification of deficient designation fees the applicant makes timely payment, but the amount paid is not sufficient to cover the late payment fee and all designation fees, the Receiving Office will, after allocating payment for the basic, search, transmittal and late payment fees, allocate the amount paid in accordance with PCT Rule 16^{bis}.1(c) and withdraw the unpaid designations. The notification of deficient designation fees pursuant to this paragraph may be made simultaneously with any notification pursuant to § 1.431(c).

(c) The amount payable for the designation fee set forth in paragraph (b) is:

(1) The designation fee in effect on the filing date of the international application, if such fee is paid in full within one month from the date of receipt of the international application;

(2) The designation fee in effect on the date such fee is paid in full, if such fee is paid in full later than one month from the date of receipt of the international application but within one year from the priority date;

(3) The designation fee in effect on the date one year from the priority date, if the fee was due one year from the priority date, and such fee is paid in full later than one month from the date of receipt of the international application and later than one year from the priority date; or

(4) The designation fee in effect on the international filing date, if the fee was due one month from the international filing date and after one year from the priority date, and such fee is paid in full later than one month from the date of receipt of the international application and later than one year from the priority date.

(d) On filing the international application, in addition to specifying at least one national or regional designation under PCT Rule 4.9(a), applicant may also indicate under PCT Rule 4.9(b) that all other designations permitted under the Treaty are made.

(1) Indication of other designations permitted by the Treaty under PCT Rule 4.9(b) must be made in a statement on the Request that any designation made under this paragraph is subject to confirmation (PCT Rule 4.9(c)) not later than the expiration of 15 months from the priority date by:

(i) Filing a written notice with the United States Receiving Office specifying the national and/or regional designations being confirmed;

(ii) Paying the designation fee for each designation being confirmed; and

(iii) Paying the confirmation fee specified in § 1.445(a)(4).

(2) Unconfirmed designations will be considered withdrawn. If the amount submitted is not sufficient to cover the designation fee and the confirmation fee for each designation being confirmed, the Receiving Office will allocate the amount paid in accordance with any priority of designations specified by applicant. If applicant does not specify any priority of designations, the allocation of the amount paid will be made in accordance with PCT Rule 16^{bis}.1(c).

The designation of States is the indication, in Box No. V of the request (except in the last sub-box of that Box), of the specific regional patents, national patents, and/or other kinds of protection the applicant is seeking. Specific designations for the purpose of obtaining national and regional patents are effected by indicating each Contracting State or region concerned. On the printed form, this is accomplished by marking the appropriate check-boxes next to the names of the States or regions. For detailed instructions regarding “specific” designations, see the “Notes to the Request Form (PCT/RO/101),” available from WIPO’s website at www.wipo.int/pct/en/index.html.

All designations must be made in the international application on filing; none may be added later. However, there is a safety net designed to protect applicants who make mistakes or omissions among the specific designations, by way of making a precautionary designation of all other States which have not been specifically designated in the Request whose designation would be permitted under the Treaty.

In addition to specific designations described above, the applicant may, under PCT Rule 4.9(b), indicate in the request that all designations which would be permitted under the PCT are also made, provided that at least one specific designation is made and that the request also contains a statement relating to the confirmation of any precautionary designations so made. That statement must declare that any such designation is subject to confirmation (as provided in Rule 4.9(c)), and that any such designation which is not so confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit.

Precautionary designations are effected in practice by including the necessary statement in the last sub-box of Box No. V of the request (the statement is set out in the printed request form). Since the precaution-

ary designations are designed particularly to enable applicants to correct omissions and mistakes in the original list of specific designations, it is strongly recommended that applicants make the precautionary designations indication (by leaving the pre-printed statement in the printed form, if that form is used) unless there is a particular reason for doing otherwise. The request form makes provision for the applicant to omit designations if that is desired. It should be noted that no fees are payable in respect of precautionary designations except where the applicant later decides to confirm them.

Precautionary designations will be regarded as withdrawn by the applicant unless they are confirmed, but the applicant is not obliged to confirm them. The precautionary designation procedure enables the applicant to make, in the request, all designations permitted by the PCT in addition to those made specifically. For this purpose, the request must also contain a statement that any precautionary designations so made are subject to confirmation as provided in Rule 4.9(c) and that any designation which is not so confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. Noting that the confirmation of designations is entirely at the applicant's discretion, no notification is sent to the applicant reminding him or her that the time limit for confirming precautionary designations is about to expire. Applicants are cautioned that in order for the confirmation of a designation of the U.S. to be valid, the inventor must have been named in the application papers as filed, 37 CFR 1.421(b).

APPLICANT FOR PURPOSES OF EACH DESIGNATION

Where there is but a single applicant, the right to file an international application and to designate contracting states or regions (EP or OAPI) exists if the applicant is a resident or national of a contracting state. The applicant can be an individual, corporate entity or other concern. If the United States is to be designated, it is particularly important to note that the applicant must also be the inventor.

In the case where there are several applicants who are different for different designated states, the right to file an international application and to designate contracting states or regions (EP or OAPI) exists if at

least one of them is a resident or national of a contracting state. If the United States is to be designated, it is important to note that the applicant must also be the inventor. If the inventor is not also the applicant, the designation of the United States is invalid.

1817.02 Continuation or Continuation-in-Part Indication in the Request

*PCT Rule 4.
The Request (Contents)*

4.14. Continuation or Continuation-in-Part

If the applicant wishes his international application to be treated, in any designated State, as an application for a continuation or a continuation-in-part of an earlier application, he shall so indicate in the request and shall identify the parent application involved.

Box No. V and the Supplemental Box of the Request form should be used where the applicant has an earlier application in a country designated in the international application and where special title or treatment of the international application is desired. For example, if the applicant has a pending United States application, the international application could contain additional subject matter and be treated as a continuation-in-part in the United States, if the United States is designated in the international application (PCT Rule 4.14). In this example, the entries to be placed in Box No. V would be as follows: "United States of America; continuation-in-part;" and in the Supplemental Box, an entry such as "Continuation of Box No. V, Parent application for U.S. designation: United States of America, 20 May 1981, 222,222" identifying the earlier pending application should be inserted.

1819 Earlier International or International-Type Search

*PCT Rule 4.
Request (Contents)*

4.11. Reference to Earlier Search

If an international or international-type search has been requested on an application under Article 15(5) or if the applicant wishes the International Searching Authority to base the interna-

tional search report wholly or in part on the results of a search, other than an international or international-type search, made by the national Office or intergovernmental organization which is the International Searching Authority competent for the international application, the request shall contain a reference to that fact. Such reference shall either identify the application (or its translation, as the case may be) in respect of which the earlier search was made by indicating country, date and number, or the said search by indicating, where applicable, date and number of the request for such search.

Certain International Searching Authorities refund part or all of the international search fee or reduce the amount of the international search fee where the international search can be based wholly or partly on an earlier search (whether an international, international-type, or other search) made by them. The United States provides for a reduced search fee where there is a corresponding prior U.S. national nonprovisional application.

Where the earlier search by the International Searching Authority was made in relation to a national, regional (for instance, European) or international application, that application must be identified in Box No. VII of the request by an indication of the country of filing (or the European Patent Office), and the number and filing date of that application. Note that, if the earlier search was made on the basis of a translation of that application into a language other than that in which the application was filed, that translation must also be identified in Box No. VII. Where the earlier search was made independently of a patent granting procedure (for instance, a standard search by the European Patent Office), a reference must be made to the date of the request for that search and the number given to the request by the International Searching Authority.

The United States Patent and Trademark Office performs an international-type search on all U.S. national applications filed on and after 01 June 1978. No specific request by the applicant is required and no number identifying the international-type search is assigned by the Office. All earlier U.S. applications referred to in Box No. VI and Box No. VII as well as all U.S. applications referred to in separate transmittal letters will be considered by the Office. See 37 CFR 1.104(a)(3) and (a)(4). The forms to be used for recording an international-type search can be obtained

from the International Application Processing Division.

Box No. VII should be used to identify related international applications whether or not priority of that application is claimed.

1820 Signature of Applicant

*PCT Rule 4.
Request (Contents)*

4.15. Signature

(a) Subject to paragraph (b), the request shall be signed by the applicant or, if there is more than one applicant, by all of them.

(b) Where two or more applicants file an international application which designates a State whose national law requires that national applications be filed by the inventor and where an applicant for that designated State who is an inventor refused to sign the request or could not be found or reached after diligent effort, the request need not be signed by that applicant if it is signed by at least one applicant and a statement is furnished explaining, to the satisfaction of the receiving Office, the lack of the signature concerned.

SIGNATURE OF APPLICANT OR AGENT

The international application must be signed in Box No. IX of the request by the applicant, or, where there are two or more applicants, by all of them. Subject to certain conditions, the request may be signed by the agent instead of the applicant(s). Pursuant to 37 CFR 1.4(d), the request filed may be either an original, or a copy thereof. Certain papers may be filed by facsimile transmission. See 37 CFR 1.6(d) and the discussion in MPEP § 1805.

The international application may be signed by an agent, but in that case the agent must be appointed as such by the applicant in a separate power of attorney signed by the applicant. If there are two or more applicants, the request may be signed by an agent on behalf of all or only some of them; in that case the agent must be appointed as such in one or more powers of attorney signed by the applicants on whose behalf the agent signs the application. Where a power of attorney appointing an agent who signs an international application is missing, the signature is treated as missing until the power of attorney is submitted.

The signature should be executed in black indelible ink. The name of each person signing the international

application should be indicated (preferably typewritten) next to the signature. Where a person signs on behalf of a legal entity (an organization such as a corporation, university, nonprofit organization, or governmental agency), his or her name and the capacity in which he or she signs should be indicated. Proof of the person's authority to sign on behalf of the legal entity will be required if that person does not possess apparent authority to sign on behalf of the legal entity. An officer (President, Vice-President, Secretary, Treasurer, Chief Executive Officer, Chief Operating Officer or Chief Financial Officer) of an organization is presumed to have authority to sign on behalf of that organization. The signature of the chairman of the board is also acceptable, but not the signature of an individual director. Variations of these titles (such as vice-president for sales, executive vice-president, assistant treasurer, vice-chairman of the board of directors) are acceptable. A person having a title (manager, director, administrator, general counsel) that does not clearly set forth that person as an officer of the organization is not presumed to be an officer or to have the authority to sign on behalf of the organization. An attorney does not generally have apparent authority to sign on behalf of an organization.

Proof that a person has the authority to sign on behalf of a legal entity may take the form of a copy of a resolution of the board of directors, a provision of the bylaws, or a copy of a paper properly delegating authority to that person to sign the international application on behalf of the legal entity.

It is also acceptable to have a person sign the international application on behalf of a legal entity if that person submits a statement that the person has the authority to sign the international application on behalf of the legal entity. This statement should be on a separate paper and must not appear on the Request (or Demand) form itself. The statement must include a clause such as "The undersigned (whose title is supplied below) is empowered to sign the Request on behalf of the applicant."

A power of attorney or authorization of agent from a person signing on behalf of a legal entity to a registered patent attorney or agent will be required if the attorney or agent signs the international application. Additional proof of authority may be required by the USPTO in any international application.

Where an applicant is temporarily unavailable, the international application can be filed without his or her signature. The lack of an applicant's signature or of a signed power of attorney is a correctable defect under PCT Article 14(1)(a)(i) and (b), and can be remedied by filing a copy of the request (or, where the request has been signed by an agent, of a power of attorney) duly signed by the applicant within the time limit fixed by the receiving Office for the correction of this defect.

APPLICANT INVENTOR UNAVAILABLE OR UNWILLING TO SIGN THE INTERNATIONAL APPLICATION OR OTHER DOCUMENTS

The PCT provides a special procedure, where two or more applicants file an international application designating the United States of America, which enables the international application to proceed if an applicant inventor for the United States of America refuses to sign or cannot be found or reached after diligent effort. This procedure makes an exception to the general rule that all applicants must sign the request (or a separate power of attorney appointing an agent who then signs the request). Its operation is limited to signature of the request by applicants for the purposes of the designation of a State whose national law requires that national applications be filed by the inventor (the United States of America is the only Contracting State to have such a requirement in its national law).

It is provided by PCT Rule 4.15(b) that, where an applicant inventor for the designation of the United States of America refused to sign the request or could not be found or reached after diligent effort, the request need not be signed by that applicant inventor if it is signed by at least one applicant and a statement is furnished explaining, to the satisfaction of the receiving Office, the lack of the signature concerned. If such a statement is furnished to the satisfaction of the receiving Office, the international application complies with the requirements of PCT Article 14(1)(a)(i) for the purposes of all designated States (including the United States of America) without adverse consequences in the international phase. However, additional proofs may be required by the United States Patent and Trademark Office after entry into the national phase if the required oath or declara-

tion by the inventor is not signed by all the applicant inventors.

The lack of a signature constitutes a defect under PCT Article 14(1)(a)(i), and the statement must thus be filed within the time limit set by the receiving Office for correction of such defects in accordance with PCT Article 14(1)(b) and PCT Rule 26.2. That time limit is fixed, in each case, in the invitation by the receiving Office to correct any defects under PCT Article 14(1)(a); the time limit must be reasonable under the circumstances, must be not less than 1 month from the date of the invitation, and may be extended by the receiving Office at any time before a decision is taken under PCT Rule 26.

If the request lacks the signature of an applicant inventor for the United States of America and a satisfactory statement cannot be furnished for the purposes of PCT Rule 4.15(b), the international application will be considered withdrawn. The Receiving Office will issue a declaration of withdrawal.

Provisions similar to PCT Rule 4.15(b) apply to excuse a lack of signature by an applicant inventor for the United States of America of certain other documents connected with the international application, provided that a similar statement is furnished explaining the lack of signature to the Office or Authority concerned. These documents are the Demand, any notice of a later election, and a notice of withdrawal of the international application, a designation, a priority claim, or an election. Note, however, that the signatures of all the applicants are not required for all of those documents for example, the Demand may be signed by the common representative (including an applicant who is considered to be the common representative).

PCT Rule 4.15(b) is implemented in the United States through 37 CFR 1.425, which provides:

37 CFR 1.425. Filing by other than inventor.

Where an international application which designates the United States of America is filed and where one or more inventors refuse to sign the Request for the international application or cannot be found or reached after diligent effort, the Request need not be signed by such inventor if it is signed by another applicant. Such international application must be accompanied by a statement explaining to the satisfaction of the Commissioner the lack of the signature concerned.

Where there are joint inventors other than the non-signing applicant inventor, the available joint inven-

tors should sign the request form on behalf of themselves and the nonsigning inventor. Where a sole inventor or all of the joint inventors refuse to sign the request or can not be located, another applicant may make the application on behalf of the nonsigning inventor(s). In both instances, the application must be accompanied by a statement explaining the facts that the nonsigning inventor(s) either refuse to sign or cannot be located after diligent effort. Such proof should take the form of statements by persons with first hand knowledge of the pertinent facts.

APPLICANT INVENTOR DECEASED

37 CFR 1.422. When the inventor is dead.

In case of the death of the inventor, the legal representative (executor, administrator, etc.) of the deceased inventor may file an international application which designates the United States of America.

The Office no longer requires proof of authority of the legal representative of a deceased inventor. However, any person acting as a legal representative of a deceased inventor should ensure that he or she is properly acting in such a capacity. See MPEP § 409.01(b).

1821 The Request

A general overview of certain aspects of the request follows.

37 CFR 1.434. The request.

(a) The request shall be made on a standardized form (PCT Rules 3 and 4). Copies of printed Request forms are available from the Patent and Trademark Office. Letters requesting printed forms should be marked "Box PCT."

(b) The Check List portion of the Request form should indicate each document accompanying the international application on filing.

(c) All information, for example, addresses, names of States and dates, shall be indicated in the Request as required by PCT Rule 4 and Administrative Instructions 110 and 201.

(d) International applications which designate the United States of America:

(1) Shall include the name, address and signature of the inventor, except as provided by §§ 1.421(d), 1.422, 1.423 and 1.425;

(2) Shall include a reference to any copending national application or international application designating the United States of America, if the benefit of the filing date for the prior copending application is to be claimed; and

(3) May include in the Request a declaration of the inventors as provided for in PCT Rule 4.17(iv).

The request must either be made on a printed form to be filled in with the required indications or be presented as a computer printout complying with the Administrative Instructions. Any prospective applicant may obtain copies of the printed request form, free of charge, from the receiving Office with which he/she plans to file his/her international application, or from the International Bureau. Details of the requirements for the request if presented as a computer printout are set out in Administrative Instructions Section 102^{bis}.

As provided in Administrative Instructions Section 102^{bis}(c), reduced fees are payable in respect of an international application containing the request in PCT-EASY format filed, together with a PCT-EASY diskette, with a receiving Office which, under paragraph (a), accepts the filing of such international applications. The World Intellectual Property Organization (WIPO) maintains a PCT-EASY Help Desk for helping applicants with the PCT-EASY software.

The request contains a petition for the international application to be processed according to the PCT and must also contain certain indications. It must contain the title of the invention. It must identify the applicant (normally the inventor if the United States of America is designated), and the agent (if any), and must contain the designation of at least one Contracting State. The request must contain an indication of any wish of the applicants to obtain a European patent rather than, or in addition to, a national patent in respect of a designated State.

DATES

Each date appearing in the international application or in any correspondence must be indicated by the Arabic number of the day, the name of the month and the Arabic number of the year, in that order. In the request, after, below or above that indication, the date should be repeated in parentheses with a two-digit Arabic numeral each for the number of the day, the number of the month and the last two figures of the year, in that order and separated by periods, slashes or hyphens, for example, 10 June 1986 (10.06.86); (10/06/86) or (10-06-86).

Any prospective applicant may obtain English language Request forms free of charge from the United States Patent and Trademark Office, Box PCT, Washington, DC 20231. The request forms are also avail-

able from WIPO's web site. The Request may not contain any matter that is not specified in PCT Rules 4.1 to 4.17 or permitted under PCT Rule 4.18(a) by the Administrative Instructions. Any additional material will be deleted *ex officio* (Administrative Instructions Section 303).

SUPPLEMENTAL BOX

This box is used for any material which cannot be placed in one of the previous boxes because of space limitations. The supplemental information placed in this box should be clearly entitled with the Box number from which it is continued, e.g., "Continuation of Box No. IV."

FILE REFERENCE

The applicant or his/her agent may indicate a file reference in the box provided for the purpose on the first sheet of the request form, on each page of the other elements of the international application, on the first sheet of the demand form, and in any other correspondence relating to the international application. PCT Rule 11.6(f) indicates that the file reference may be included in the top margin of the sheets of the international application. As provided in Administrative Instructions Section 109, the file reference may be composed either of letters of the Latin alphabet or Arabic numerals, or both. It may not exceed 12 characters. The receiving Office, the International Bureau, the International Searching Authority and the International Preliminary Examining Authority (International Authorities) will use the file reference in correspondence with the applicant. According to the guidelines published by WIPO, and available from its web site, the applicant is to be notified if the file reference used by the applicant is corrected by one of the International Authorities. See *Helfgott & Karas P.C. v. Dickinson*, 209 F.3d 1328, 1336, 54 USPQ2d 1425, 1431 (Fed. Cir. 2000), where the Federal Circuit indicated that Section 10.1 of the PCT International Preliminary Examination Guidelines instructs the International Preliminary Examining Authority to send the applicant a copy of the corrected sheet of the Demand or a separate notification if the file reference specified by the applicant on the Demand is corrected by the International Preliminary Examining Authority.

TITLE OF INVENTION

The Request must contain the title of the invention; the title must be short (preferably 2 to 7 words) and precise (PCT Rule 4.3). The title in Box No. I of the Request is considered to be the title of the application. The title appearing on the first page of the description (PCT Rule 5.1(a)) and on the page containing the abstract should be consistent with the title indicated in Box No. I of the Request form.

A title should not be changed by the examiner merely because it contains words which are not considered descriptive of the invention. Words, for example, such as “improved” or “improvement of” are acceptable. If the title is otherwise not descriptive of the invention, a change to a more descriptive title should be made and the applicant informed thereof in the search report.

Where the title is missing or is inconsistent with the title in the description, the receiving Office invites the applicant to correct the missing or inconsistent title.

APPLICANT

Any resident or national of a Contracting State may file an international application. Where there are two or more applicants, at least one of them must be a national or a resident of a PCT Contracting State.

The question whether an applicant is a resident or national of a Contracting State depends on the national law of that State and is decided by the receiving Office. Also, possession of a real and effective industrial or commercial establishment in a Contracting State may be considered residence in that State, and a legal entity constituted according to the national law of a Contracting State is considered a national of that State.

The applicant must be identified by the indication of his/her name and address and by marking next to that indication, the check-box “This person is also inventor” in Box No. II, or “applicant and inventor” in Box No. III, where the applicant is also the inventor or one of the inventors, or the check-box “applicant only” where the applicant is not the inventor or one of the inventors. Where the applicant is a corporation or other legal entity (that is, not a natural person), the check-box “applicant only” must be marked. The applicant’s nationality and residence must also be indicated.

NAMES

The names of a natural person must be indicated by the family name followed by the given name(s). Academic degrees or titles or other indications which are not part of the person’s name must be omitted. The family name should preferably be written in capital letters.

The name of a legal entity must be indicated by its full official designation (preferably in capital letters).

ADDRESSES

Addresses must be indicated in such a way as to satisfy the requirements for prompt postal delivery at the address indicated and must consist of all the relevant administrative units up to and including the house number (if any). The address must also include the country.

1823 The Description

*PCT Article 5.
The Description*

The description shall disclose the invention in a manner sufficiently clear and complete for the invention to be carried out by a person skilled in the art.

*PCT Rule 5.
The Description*

5.1.Manner of the Description

(a) The description shall first state the title of the invention as appearing in the request and shall:

(i) specify the technical field to which the invention relates;

(ii) indicate the background art which, as far as known to the applicant, can be regarded as useful for the understanding, searching and examination of the invention, and, preferably, cite the documents reflecting such art;

(iii) disclose the invention, as claimed, in such terms that the technical problem (even if not expressly stated as such) and its solution can be understood, and state the advantageous effects, if any, of the invention with reference to the background art;

(iv) briefly describe the figures in the drawings, if any;

(v) set forth at least the best mode contemplated by the applicant for carrying out the invention claimed; this shall be done in terms of examples, where appropriate, and with reference to the drawings, if any; where the national law of the designated State does not require the description of the best mode but is satisfied with the description of any mode (whether it is the best contemplated or not), failure to describe the best mode contemplated shall have no effect in that State;

(vi) indicate explicitly, when it is not obvious from the description or nature of the invention, the way in which the invention is capable of exploitation in industry and the way in which it can be made and used, or, if it can only be used, the way in which it can be used; the term *industry* is to be understood in its broadest sense as in the Paris Convention for the Protection of Industrial Property.

(b) The manner and order specified in paragraph (a) shall be followed except when, because of the nature of the invention, a different manner or a different order would result in a better understanding and a more economic presentation.

(c) Subject to the provisions of paragraph (b), each of the parts referred to in paragraph (a) shall preferably be preceded by an appropriate heading as suggested in the Administrative Instructions.

*PCT Administrative Instruction Section 204.
Headings of the Parts of the Description*

The headings of the parts of the description should be as follows:

- (i) for matter referred to in Rule 5.1(a)(i), “Technical Field”;
- (ii) for matter referred to in Rule 5.1(a)(ii), “Background Art”;
- (iii) for matter referred to in Rule 5.1(a)(iii), “Disclosure of Invention”;
- (iv) for matter referred to in Rule 5.1(a)(iv), “Brief Description of Drawings”;
- (v) for matter referred to in Rule 5.1(a)(v), “Best Mode for Carrying Out the Invention,” or, where appropriate, “Mode(s) for Carrying Out the Invention”;
- (vi) for matter referred to in Rule 5.1(a)(vi), “Industrial Applicability”;
- (vii) for matter referred to in Rule 5.2(a), “Sequence Listing”;
- (viii) for matter referred to in Rule 5.2(b), “Sequence Listing Free Text.”

*PCT Administrative Instruction Section 209.
Indications as to Deposited Biological Material
on a Separate Sheet*

(a) To the extent that any indication with respect to deposited biological material is not contained in the description, it may be given on a separate sheet. Where any such indication is so given, it shall preferably be on Form PCT/RO/134 and, if furnished at the time of filing, the said Form shall, subject to paragraph (b), preferably be attached to the request and referred to in the check list referred to in Rule 3.3 (a)(ii).

(b) For the purposes of the Japanese Patent Office when Japan is designated, paragraph (a) applies only to the extent that the said Form or sheet is included as one of the sheets of the description of the international application at the time of filing.

37 CFR 1.435. The description.

(a) The application must meet the requirements as to the content and form of the description set forth in PCT Rules 5, 9, 10, and 11 and sections 204 and 208 of the Administrative Instructions.

(b) In international applications designating the United States the description must contain upon filing an indication of the best mode contemplated by the inventor for carrying out the claimed invention.

The description must disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art. It must start with the title of the invention as appearing in Box No. I of the request. PCT Rule 5 contains detailed requirements as to the manner and order of the description, which, generally, should be in six parts. Those parts should have the following headings: “Technical Field,” “Background Art,” “Disclosure of Invention,” “Brief Description of Drawings,” “Best Mode for Carrying Out the Invention” or, where appropriate, “Mode(s) for Carrying Out the Invention,” “Industrial Applicability,” “Sequence Listing,” and “Sequence Listing Free Text,” where applicable.

The details required for the disclosure of the invention so that it can be carried out by a person skilled in the art depend on the practice of the national Offices. It is therefore recommended that due account be taken of national practice in the United States of America when the description is drafted.

The need to amend the description during the national phase may thus be avoided.

This applies likewise to the need to indicate the “best mode for carrying out the invention.” If at least one of the designated Offices requires the indication of the best mode (for instance, the United States Patent and Trademark Office), that best mode must be indicated in the description.

A description drafted with due regard to what is said in these provisions will be accepted by all the designated Offices. It might require more care than the drafting of a national patent application, but certainly much less effort than the drafting of multiple applications, which is necessary where the PCT route is not used for filing in several countries.

1823.01 Reference to Deposited Biological Material

PCT Rule 13^{bis}.

Inventions Relating to Biological Material

13^{bis}.1. Definition

For the purposes of this Rule, “reference to deposited biological material” means particulars given in an international applica-

tion with respect to the deposit of a biological material with a depositary institution or to the biological material so deposited.

13^{bis}.2.References (General)

Any reference to deposited biological material shall be made in accordance with this Rule and, if so made, shall be considered as satisfying the requirements of the national law of each designated State.

13^{bis}.3.References: Contents; Failure to Include Reference or Indication

(a) A reference to deposited biological material shall indicate:

- (i) the name and address of the depositary institution with which the deposit was made;
- (ii) the date of deposit of the biological material with that institution;
- (iii) the accession number given to the deposit by that institution; and
- (iv) any additional matter of which the International Bureau has been notified pursuant to Rule 13^{bis}.7(a)(i), provided that the requirement to indicate that matter was published in the Gazette in accordance with Rule 13^{bis}.7(c) at least two months before the filing of the international application.

(b) Failure to include a reference to deposited biological material or failure to include, in a reference to deposited biological material, an indication in accordance with paragraph (a), shall have no consequence in any designated State whose national law does not require such reference or such indication in a national application.

13^{bis}.4.References: Time Limit for Furnishing Indications

(a) Subject to paragraphs (b) and (c), if any of the indications referred to in Rule 13^{bis}.3(a) is not included in a reference to deposited biological material in the international application as filed but is furnished to the International Bureau:

- (i) within 16 months from the priority date, the indication shall be considered by any designated Office to have been furnished in time;
- (ii) after the expiration of 16 months from the priority date, the indication shall be considered by any designated Office to have been furnished on the last day of that time limit if it reaches the International Bureau before the technical preparations for international publication have been completed.

(b) If the national law applicable by a designated Office so requires in respect of national applications, that Office may require that any of the indications referred to in Rule 13^{bis}.3(a) be furnished earlier than 16 months from the priority date, provided that the International Bureau has been notified of such requirement pursuant to Rule 13^{bis}.7(a)(ii) and has published such requirement in the Gazette in accordance with Rule 13^{bis}.7(c) at least two months before the filing of the international application.

(c) Where the applicant makes a request for early publication under Article 21(2)(b), any designated Office may consider

any indication not furnished before the technical preparations for international publication have been completed as not having been furnished in time.

(d) The International Bureau shall notify the applicant of the date on which it received any indication furnished under paragraph (a), and

(i) if the indication was received before the technical preparations for international publication have been completed, indicate that date, and include the relevant data from the indication, in the pamphlet published under Rule 48;

(ii) if the indication was received after the technical preparations for international publication have been completed, notify that date and the relevant data from the indication to the designated Offices.

13^{bis}.5.References and Indications for the Purposes of One or More Designated States; Different Deposits for Different Designated States; Deposits with Depositary Institutions Other Than Those Notified

(a) A reference to deposited biological material shall be considered to be made for the purposes of all designated States, unless it is expressly made for the purposes of certain of the designated States only; the same applies to the indications included in the reference.

(b) References to different deposits of the biological material may be made for different designated States.

(c) Any designated Office may disregard a deposit made with a depositary institution other than one notified by it under Rule 13^{bis}.7(b).

13^{bis}.6.Furnishing of Samples

Pursuant to Articles 23 and 40, no furnishing of samples of the deposited biological material to which a reference is made in an international application shall, except with the authorization of the applicant, take place before the expiration of the applicable time limits after which national processing may start under the said Articles. However, where the applicant performs the acts referred to in Articles 22 or 39 after international publication but before the expiration of the said time limits, the furnishing of samples of the deposited biological material may take place, once the said acts have been performed. Notwithstanding the previous provision, the furnishing of samples of the deposited biological material may take place under the national law applicable by any designated Office as soon as, under that law, the international publication has the effects of the compulsory national publication of an unexamined national application.

13^{bis}.7.National Requirements: Notification and Publication

(a) Any national Office may notify the International Bureau of any requirement of the national law:

- (i) that any matter specified in the notification, in addition to those referred to in Rule 13^{bis}.3(a)(i), (ii) and (iii), is required to be included in a reference to deposited biological material in a national application;

(ii) that one or more of the indications referred to in Rule 13^{bis}.3(a) are required to be included in a national application as filed or are required to be furnished at a time specified in the notification which is earlier than 16 months after the priority date.

(b) Each national Office shall notify the International Bureau of the depositary institutions with which the national law permits deposits of biological materials to be made for the purposes of patent procedure before that Office or, if the national law does not provide for or permit such deposits, of that fact.

(c) The International Bureau shall promptly publish in the Gazette requirements notified to it under paragraph (a) and information notified to it under paragraph (b).

*PCT Administrative Instruction Section 209.
Indications as to Deposited Biological Material
on a Separate Sheet*

(a) To the extent that any indication with respect to deposited biological material is not contained in the description, it may be given on a separate sheet. Where any such indication is so given, it shall preferably be on Form PCT/RO/134 and, if furnished at the time of filing, the said Form shall, subject to paragraph (b), preferably be attached to the request and referred to in the check list referred to in Rule 3.3 (a)(ii).

(b) For the purposes of the Japanese Patent Office when Japan is designated, paragraph (a) applies only to the extent that the said Form or sheet is included as one of the sheets of the description of the international application at the time of filing.

REFERENCES TO DEPOSITED BIOLOGICAL MATERIAL IN THE CASE OF MICROBIOLOGICAL INVENTIONS

The PCT does not require the inclusion of a reference to a biological material and/or to its deposit with a depositary institution in an international application; it merely prescribes the contents of any “reference to deposited biological material” (defined as “particulars given ... with respect to the deposit of biological material ... or to the biological material so deposited”) which is included in an international application, and when such a reference must be furnished. It follows that the applicant may see a need to make such a reference only when it is required for the purpose of disclosing the invention claimed in the international application in a manner sufficient for the invention to be carried out by a person skilled in the art that is, when the law of at least one of the designated States provides for the making, for this purpose, of a reference to a deposited biological material if the invention involves the use of a biological material that is not available to the public. Any reference to a deposited biological material furnished separately from the

description will be included in the pamphlet containing the published international application.

A reference to a deposited biological material made in accordance with the requirements of the PCT must be regarded by each of the designated Offices as satisfying the requirements of the national law applicable in that Office with regard to the contents of such references and the time for furnishing them.

A reference may be made for the purposes of all designated States or for one or only some of the designated States. A reference is considered to be made for the purpose of all designated States unless it is expressly made for certain designated States only. References to different deposits may be made for the purposes of different designated States.

There are two kinds of indication which may have to be given with regard to the deposit of the biological material, namely:

(A) indications specified in the PCT Regulations themselves; and

(B) additional indications by the national (or regional) Office of (or acting for) a State designated in the international application and which have been published in the PCT Gazette; these additional indications may relate not only to the deposit of the biological material but also to the biological material itself.

The indications in the first category are:

(1) the name and address of the depositary institution with which the deposit was made;

(2) the date of the deposit with that institution; and

(3) the accession number given to the deposit by that institution.

U.S. requirements include the name and address of the depositary institution at the time of filing, the date of the deposit or a statement that the deposit was made on or before the priority date of the international application and, to the extent possible, a taxonomic description of the biological material. See Annex L of the PCT Applicant's Guide.

The national laws of some of the national (or regional) Offices require that, besides indications concerning the deposit of a biological material, an indication be given concerning the biological material itself, such as, for example, a short description of its characteristics, at least to the extent that this information is available to the applicant. These requirements must be met in the case of international applications for which

any such Office is a designated Office, provided that the requirements have been published in the PCT Gazette. Annex L of the PCT Applicant's Guide indicates, for each of the national (or regional) Offices, the requirements (if any) of this kind which have been published.

If any indication is not included in a reference to a deposited biological material contained in the international application as filed, it may be furnished to the International Bureau within 16 months after the priority date unless the International Bureau has been notified (and, at least 2 months prior to the filing of the international application, it has published in the PCT Gazette) that the national law requires the indication to be furnished earlier. However, if the applicant makes a request for early publication, all indications should be furnished by the time the request is made, since any designated Office may regard any indication not furnished when the request is made as not having been furnished in time.

No check is made in the international phase to determine whether a reference has been furnished within the prescribed time limit. However, the International Bureau notifies the designated Offices of the date(s) on which indications, not included in the international application as filed, were furnished to it. Those dates are also mentioned in the pamphlet containing the published international application. Failure to include a reference to a deposited biological material (or any indication required in such a reference) in the international application as filed, or failure to furnish it (or the indication) within the prescribed time limit, has no consequence if the national law does not require the reference (or indication) to be furnished in a national application. Where there is a consequence, it is the same as that which applies under the national law.

To the extent that indications relating to the deposit of a biological material are not given in the description, because they are furnished later, they may be given in the "optional sheet" provided for that purpose. If the sheet is submitted when the international application is filed, a reference to it should be made in the check list contained on the last sheet of the request form. Should Japan be designated, such a sheet must, if used, be included as one of the sheets of the description at the time of filing; otherwise the indications given in it will not be taken into account by the Japa-

nese Patent Office in the national phase. If the sheet is furnished to the International Bureau later, it must be enclosed with a letter.

Each national (or regional) Office whose national law provides for deposits of biological material for the purposes of patent procedure notifies the International Bureau of the depositary institutions with which the national law permits such deposits to be made. Information on the institutions notified by each of those Offices is published by the International Bureau in the PCT Gazette.

A reference to a deposit cannot be disregarded by a designated Office for reasons pertaining to the institution with which the biological material was deposited if the deposit referred to is one made with a depositary institution notified by that Office. Thus, by consulting the PCT Gazette or Annex L of the PCT Applicant's Guide, the applicant can be sure that he has deposited the biological material with an institution which will be accepted by the designated Office.

International Searching Authorities and International Preliminary Examining Authorities are not expected to request access to deposited biological material. However, in order to retain the possibility of access to a deposited biological material referred to in an international application which is being searched or examined by such an Authority, the PCT provides that the Authorities may, if they fulfill certain conditions, ask for samples. Thus, an Authority may only ask for samples if it has notified the International Bureau (in a general notification) that it may require samples and the International Bureau has published the notification in the PCT Gazette. The only Authority which has made such a notification (and thus the only Authority which may request samples) is the Japanese Patent Office. If a sample is asked for, the request is directed to the applicant, who then becomes responsible for making the necessary arrangements for the sample to be provided.

The furnishing of samples of a deposit of a biological material to third persons is governed by the national laws applicable in the designated Offices. PCT Rule 13^{bis}.6(b), however, provides for the delaying of any furnishing of samples under the national law applicable in each of the designated (or elected) Offices until the start of the national phase, subject to the ending of this "delaying effect" brought about by the occurrence of either of the following two events:

(A) the applicant has, after international publication of the international application, taken the steps necessary to enter the national phase before the designated Office.

(B) international publication of the international application has been effected, and that publication has the same effects, under the national law applicable in the designated Office, as the compulsory national publication of an unexamined national application (in other words, the international application has qualified for the grant of “provisional protection”).

1823.02 Nucleotide and/or Amino Acid Sequence Listings

PCT Rule 5. The Description

5.2.Nucleotide and/or Amino Acid Sequence Disclosure

(a) Where the international application contains disclosure of one or more nucleotide and/or amino acid sequences, the description shall contain a sequence listing complying with the standard prescribed by the Administrative Instructions and presented as a separate part of the description in accordance with that standard.

(b) Where the sequence listing part of the description contains any free text as defined in the standard provided for in the Administrative Instructions, that free text shall also appear in the main part of the description in the language thereof.

PCT Rule 13^{ter}. Nucleotide and/or Amino Acid Sequence Listings

13^{ter}.1.Sequence Listing for International Authorities

(a) Where the International Searching Authority finds that the international application contains disclosure of one or more nucleotide and/or amino acid sequences but:

(i) the international application does not contain a sequence listing complying with the standard provided for in the Administrative Instructions, that Authority may invite the applicant to furnish to it, within a time limit fixed in the invitation, a sequence listing complying with that standard;

(ii) the applicant has not already furnished a sequence listing in computer readable form complying with the standard provided for in the Administrative Instructions, that Authority may invite the applicant to furnish to it, within a time limit fixed in the invitation, a sequence listing in such a form complying with that standard.

(b) *[Deleted]*

(c) If the applicant does not comply with an invitation under paragraph (a) within the time limit fixed in the invitation, the International Searching Authority shall not be required to search

the international application to the extent that such noncompliance has the result that a meaningful search cannot be carried out.

(d) Where the International Searching Authority finds that the description does not comply with Rule 5.2(b), it shall invite the applicant to file the required correction. Rule 26.4 shall apply *mutatis mutandis* to any correction offered by the applicant. The International Searching Authority shall transmit the correction to the receiving Office and to the International Bureau.

(e) Paragraphs (a) and (c) shall apply *mutatis mutandis* to the procedure before the International Preliminary Examining Authority.

(f) Any sequence listing not contained in the international application as filed shall not, subject to Article 34, form part of the international application.

13^{ter}.2.Sequence Listing for Designated Office

Once the processing of the international application has started before a designated Office, Rule 13^{ter}.1(a) shall apply *mutatis mutandis* to the procedure before that Office. No designated Office shall require the applicant to furnish to it a sequence listing other than a sequence listing complying with the standard provided for in the Administrative Instructions.

PCT Administrative Instruction Section 208. Sequence Listings

Any nucleotide and/or amino acid sequence listing (“sequence listing”) filed as part of the international application, or furnished together with the international application or subsequently (whether in printed form or computer readable form), shall comply with Annex C.

I. REQUIREMENTS FOR SEQUENCE LISTINGS

Where an international application discloses one or more nucleotide and/or amino acid sequences, the description must contain a sequence listing complying with the standard specified in the Administrative Instructions. The standard is set forth in detail in Annex C - Standard for the Presentation of Nucleotide and Amino Acid Sequence Listings in International Patent Applications Under the PCT. The standard allows the applicant to draw up a single sequence listing which is acceptable to all receiving Offices, International Searching and Preliminary Examining Authorities for the purposes of the international phase, and to all designated and elected Offices for the purposes of the national phase. The International Searching Authority and the International Preliminary Examining Authority may, in some cases, invite the applicant to furnish a listing complying with that standard. The applicant may also be invited to furnish a listing in a computer readable form provided for in the

PCT Administrative Instructions. It is advisable for the applicant to submit a listing of the sequence in computer readable form, if such a listing is required by the competent International Searching Authority or International Preliminary Examining Authority, together with the international application rather than to wait for an invitation by the International Searching Authority or International Preliminary Examining Authority.

The computer readable form is not mandatory in international applications to be searched by the United States International Searching Authority or examined by the United States International Preliminary Examining Authority. However, if a computer readable form of a sequence listing is not provided, a search or examination will be performed only to the extent possible in the absence of the computer readable form. The U.S. sequence rules (37 CFR 1.821 - 1.825) and the PCT sequence requirements are substantively consistent. In this regard, full compliance with the requirements of the U.S. rules will ensure compliance with the applicable PCT requirements. The European Patent Office (EPO), since January 1, 1993, requires nucleotide and amino acid sequences to be in computer readable form. Applicants should be cognizant of this requirement and ensure compliance with EPO requirements if the EPO is to be the search or examination authority. See also MPEP § 1848. For a detailed discussion of the U.S. sequence rules, see MPEP § 2420 - § 2421.04.

II. QUALIFYING FOR REDUCED BASIC FEE BY FILING SEQUENCE LISTING ON COMPACT DISC RATHER THAN ON PAPER

PCT Administrative Instruction Section 801.

Filing of International Applications Containing Sequence Listings

(a) Pursuant to Rules 89^{bis} and 89^{ter}, where an international application contains disclosure of one or more nucleotide and/or amino acid sequence listings ("sequence listings"), the receiving Office may, if it is prepared to do so, accept that the sequence listing part of the description, as referred to in Rule 5.2(a), be filed, at the option of the applicant:

(i) only on an electronic medium in the computer readable form referred to in Annex C; or

(ii) both on an electronic medium in that computer readable form and on paper in the written form referred to in Annex C; provided that the other elements of the international application

are filed as otherwise provided for under the Regulations and these Instructions.

(b) Any receiving Office which is prepared to accept the filing in computer readable form of the sequence listing part of international applications under paragraph (a) shall notify the International Bureau accordingly. The notification shall specify the electronic media on which the receiving Office will accept such filings. The International Bureau shall promptly publish any such information in the Gazette.

(c) A receiving Office which has not made a notification under paragraph (b) may nevertheless decide in a particular case to accept an international application the sequence listing part of which is filed with it under paragraph (a).

(d) Where the sequence listing part is filed in computer readable form under paragraph (a) but not on an electronic medium specified by the receiving Office under paragraph (b), that Office shall, under Article 14(1)(a)(v), invite the applicant to furnish to it a replacement sequence listing part on an electronic medium specified under paragraph (b).

(e) Where an international application containing a sequence listing part in computer readable form is filed under paragraph (a) with a receiving Office which is not prepared, under paragraph (b) or (c), to accept such filings, Section 333(b) and (c) shall apply.

New Part 8 of the Administration Instructions became effective January 11, 2001. Under Administrative Instructions Section 801(a), applicants may file the nucleotide and/or amino acid sequence listing part of the description of an international application on an electronic medium in computer readable form with certain receiving Offices. At the present time, the United States Receiving Office (RO/US) has not notified the International Bureau (IB) under Administrative Instructions Section 801(b) that it will be generally accepting the filing of international applications under Administrative Instructions Section 801(a). The RO/US will, however, accept such applications in a particular case pursuant to Administrative Instructions Section 801(c), provided that applicant follows the Guidelines set forth below in subsection II. A.

PCT Administrative Instruction Section 803.

Calculation of Basic Fee for International Applications Containing Sequence Listings

Where the sequence listing part of an international application is filed in electronic form under Section 801(a), the basic fee payable in respect of that application shall comprise the following two components:

(i) a basic component calculated as provided in the Schedule of Fees in respect of all pages filed on paper (that is, all pages of the request, description (excluding the sequence listing part if also filed on paper), claims, abstract and drawings), and

(ii) an additional component, in respect of the sequence listing part, equal to 400 times the fee per sheet as referred to in item 1(b) of the Schedule of Fees, regardless of the actual length of the sequence listing part filed in computer readable form and regardless of the fact that the sequence listing part may have been filed both in written form and in computer readable form.

Applicants will usually achieve a significant fee savings by filing international applications with sequence listings over four hundred (400) pages long under Administrative Instructions Section 801(a). The potentially reduced basic fee described in Administrative Instructions Section 803 is available to applications filed pursuant to the Guidelines below. Applicants who do not wish to file under Administrative Instructions Section 801(a) may submit the sequence listing part under conventional filing procedures but will not be eligible for the potentially reduced basic fee described in Administrative Instructions Section 803.

When filing an international application under Administrative Instructions Section 801(a), applicant should not submit a paper copy of the Sequence Listing part. To address potential concerns regarding electronic media reliability, the RO/US will test the readability of sequence listing parts submitted on compact disc media and notify applicant of the results. As detailed in the Guidelines below, applicant may elect to have the readability testing and notification performed on an expedited basis.

A. *Guidelines on Qualifying for Reduced Basic Fee Under PCT Administrative Instructions Section 803*

1. What to Submit

The applicant is required to submit a complete copy of the international application, wherein the sequence listing part of the application is submitted on electronic media rather than on paper. The application is to be accompanied by a transmittal letter entitled "Compact Disc Transmittal Form For Submission Of Sequence Listing To The United States Receiving Office Under PCT Administrative Instructions - Part 8."

(a) Complete International Application with Sequence Listing Part on Electronic Media

Applicant shall submit a paper copy of the complete international application, with the exception that

the sequence listing part is provided on electronic media rather than on paper. Four (4) copies of the sequence listing part are to be included with the application, each copy on an electronic medium or set of electronic media if additional capacity is needed. One copy, called the "computer readable form" (CRF) copy required by the Administrative Instructions (see Annex C of the Administrative Instructions, paragraphs 39-46), may be submitted on any acceptable medium under 37 CFR 1.824(c), although compact disc (CD) media is preferred. The remaining three copies must be submitted only on one of the following types of CD media:

(1) CD-R

Type: 120mm Compact Disc Recordable

Specification: ISO 9660, 650MB; or

(2) CD-ROM

Type: ISO/IEC 10149:1995, 120mm Compact Disc Read Only Memory

Specification: ISO 9660, 650MB

Each electronic medium shall be enclosed in a hard protective case within a padded envelope, and the four (4) copies shall be labeled as follows:

- (1) "COPY 1 – SEQUENCE LISTING PART;"
- (2) "COPY 2 – SEQUENCE LISTING PART;"
- (3) "COPY 3 – SEQUENCE LISTING PART;"

and

- (4) "CRF"

Additionally, the labeling shall contain the following information:

- (1) Name of Applicant
- (2) Title of Invention
- (3) Applicant's or Agent's File Reference Number
- (4) Date of Recording
- (5) Computer Operating System Used
- (6) Name of the Competent Authority (i.e. the RO/US)
- (7) Indication that the Sequence Listing part is being filed under Administrative Instructions Section 801(a)

(8) If the Sequence Listing file consumes more than one CD, an indication such as “DISK 1/3”, “DISK 2/3”, and “DISK 3/3”

An example of a properly labeled electronic medium appears below.



The electronic medium itself must be neatly labeled with the required information. Labeling of the protective case is recommended, but not required. Sequence listings submitted for correction, rectification, or amendment must satisfy the additional labeling requirements of Administrative Instructions Section 802(b).

The CDs shall contain only the sequence listing part. No tables, programs, or explanatory files shall appear on the same CD as the sequence listing. The sequence listing file must be in compliance with the American Standard Code for Information Interchange (ASCII) and formatted in accordance with Administrative Instructions Annex C, paragraph 41. No file compression, copy protection, or encryption techniques are permitted.

(b) Compact Disc Transmittal Form for Submission of Sequence Listing to the United States Receiving Office Under PCT Administrative Instructions - Part 8.

If applicant desires for an application to be accepted pursuant to Administrative Instructions Section 801(c), the application must be submitted with a document entitled “Compact Disc Transmittal Form For Submission Of Sequence Listing To The United States Receiving Office Under PCT Administrative Instructions - Part 8.” This document must be separate and apart from any other transmittal letter or form, and include the following information:

- (1) Name of Applicant
- (2) Applicant’s or Agent’s File Reference Number
- (3) Title of Invention
- (4) Name of Sequence Listing File (as per CD directory)
- (5) Size of Sequence Listing File (in bytes or kilobytes as per CD directory)
- (6) Date of Sequence Listing File (as per CD directory)
- (7) Statement that the four (4) submitted copies of the Sequence Listing are identical
- (8) Contact information for CD readability testing
 - (a) Name of Contact
 - (b) Telephone Number
 - (c) Facsimile Number
- (9) Signature of Applicant, Agent, or Common Representative

The requirement for a separate transmittal form cannot be satisfied by incorporating the above information into any other document. A sample copy of a “Compact Disc Transmittal Form For Submission Of Sequence Listing To The United States Receiving Office Under PCT Administrative Instructions - Part 8” is reproduced on the following page.

COMPACT DISC TRANSMITTAL FORM FOR SUBMISSION OF SEQUENCE LISTING TO THE UNITED STATES RECEIVING OFFICE UNDER PCT ADMINISTRATIVE INSTRUCTIONS - PART 8	<i>For Receiving Office Use Only</i>	
	International Application Number	<i>For Receiving Office Use Only</i>
<i>For Receiving Office Use Only</i>	Date of receipt in RO/US	CDs received
Date of transmission back to applicant		

INTERNATIONAL APPLICATION DATA	
Name of Applicant: _____	
Applicant's or Agent's File Reference Number: _____	
Title of Invention: _____	

APPLICANT'S CONTACT INFORMATION	SEQUENCE LISTING FILE ON CD
Name of Contact: _____	Name of File (as per CD directory): _____
Telephone Number: _____	Size of File (in bytes or kilobytes): _____
Facsimile Number: _____	Date of File (as per CD directory): _____

STATEMENT
I hereby certify that the four copies of the Sequence Listing submitted herewith are identical.
Signature of Applicant, Agent, or Common Representative: _____
Name of Person Signing: _____

<i>For Receiving Office Use Only</i>	
ACKNOWLEDGEMENT OF RECEIPT OF FILES ON COMPACT DISC	
The Sequence Listing file identified on this Compact Disc Transmittal Form was received by the RO/US and tested on a USPTO computer with the following results.	
COPY 1:	<input type="checkbox"/> READABLE <input type="checkbox"/> UNREADABLE <input type="checkbox"/> MISSING
COPY 2:	<input type="checkbox"/> READABLE <input type="checkbox"/> UNREADABLE <input type="checkbox"/> MISSING
COPY 3:	<input type="checkbox"/> READABLE <input type="checkbox"/> UNREADABLE <input type="checkbox"/> MISSING
CRF:	<input type="checkbox"/> READABLE <input type="checkbox"/> UNREADABLE <input type="checkbox"/> MISSING
_____	_____
(name of tester)	(date)
If one or more copies of the Sequence Listing file is indicated as "UNREADABLE" or "MISSING" above:	
<input type="checkbox"/> Applicant must file _____ replacement copies along with a statement that the replacement copies contain no new matter within _____ days from the transmission date of this Acknowledgement.	
<input type="checkbox"/> The RO/US will produce the necessary replacement copies. Applicant must pay a service charge of \$_____ within _____ month(s) from the transmission date of this Acknowledgement.	

2. Where to Submit

The manner of submission of the application depends on whether or not the applicant wishes to have readability testing of the CD expedited. The RO/US will test the readability of the sequence listing part submitted on CD media irrespective of whether or not expedited service (see subsection (b) below) is requested. The test will verify the “readability” of the data on the CD, but it will not verify compliance with other requirements of the international application, which will be evaluated by the RO/US in due course. After the readability test has been performed, the RO/US will transmit an “Acknowledgement of Receipt of Files on Compact Disc” to applicant via facsimile.

(a) Submission Without Request for Expedited Readability Testing and Notification

When expedited readability testing and notification is not being requested (see subsection (b) below), the entire international application, including the items set forth in subsection II.A.1.(a) and (b) above, should be mailed to:

Assistant Commissioner of Patents

Box PCT

Washington, DC 20231

(b) Requesting Expedited Readability Testing and Notification

To encourage use of CD media for submission, the RO/US will expedite the testing and notification procedure upon request by the applicant. Under the expedited procedure, the RO/US will perform a readability test and transmit the “Acknowledgement of Receipt of Files on Compact Disc” to applicant via facsimile within 3 working days. There is no charge for the expedited service.

To request the expedited service, applicant must schedule hand delivery of the entire international application, including the CDs and transmittal letter set forth in subsection II.A.1.(a) and (b) above, by contacting the PCT Operations Receptionist on (703) 305-3165. Once applicant has scheduled delivery with the PCT Operations Receptionist, the entire international application, including the items set forth in sub-

section II.A.1.(a) and (b) above, are to be hand delivered to:

PCT Operations Receptionist

Crystal Plaza 2 - 8th Floor

2011 South Clark Place

Arlington, VA 22202

1824 The Claims

PCT Article 6.

The Claims

The claim or claims shall define the matter for which protection is sought. Claims shall be clear and concise. They shall be fully supported by the description.

PCT Rule 6.

The Claims

6.1. Number and Numbering of Claims

(a) The number of the claims shall be reasonable in consideration of the nature of the invention claimed.

(b) If there are several claims, they shall be numbered consecutively in Arabic numerals.

(c) The method of numbering in the case of the amendment of claims shall be governed by the Administrative Instructions.

6.2. References to Other Parts of the International Application

(a) Claims shall not, except where absolutely necessary, rely, in respect of the technical features of the invention, on references to the description or drawings. In particular, they shall not rely on such references as: “as described in part ... of the description,” or “as illustrated in figure ... of the drawings.”

(b) Where the international application contains drawings, the technical features mentioned in the claims shall preferably be followed by the reference signs relating to such features. When used, the reference signs shall preferably be placed between parentheses. If inclusion of reference signs does not particularly facilitate quicker understanding of a claim, it should not be made. Reference signs may be removed by a designated Office for the purposes of publication by such Office.

6.3. Manner of Claiming

(a) The definition of the matter for which protection is sought shall be in terms of the technical features of the invention.

(b) Whenever appropriate, claims shall contain:

(i) a statement indicating those technical features of the invention which are necessary for the definition of the claimed subject matter but which, in combination, are part of the prior art,

(ii) a characterizing portion - preceded by the words “characterized in that,” “characterized by,” “wherein the improvement comprises,” or any other words to the same effect - stating concisely the technical features which, in combination with the features stated under (i), it is desired to protect.

(c) Where the national law of the designated State does not require the manner of claiming provided for in paragraph (b), failure to use that manner of claiming shall have no effect in that State provided the manner of claiming actually used satisfies the national law of that State.

6.4. *Dependent Claims*

(a) Any claim which includes all the features of one or more other claims (claim in dependent form, hereinafter referred to as “dependent claim”) shall do so by a reference, if possible at the beginning, to the other claim or claims and shall then state the additional features claimed. Any dependent claim which refers to more than one other claim (“multiple dependent claim”) shall refer to such claims in the alternative only. Multiple dependent claims shall not serve as a basis for any other multiple dependent claim. Where the national law of the national Office acting as International Searching Authority does not allow multiple dependent claims to be drafted in a manner different from that provided for in the preceding two sentences, failure to use that manner of claiming may result in an indication under Article 17(2)(b) in the international search report. Failure to use the said manner of claiming shall have no effect in a designated State if the manner of claiming actually used satisfies the national law of that State.

(b) Any dependent claim shall be construed as including all the limitations contained in the claim to which it refers or, if the dependent claim is a multiple dependent claim, all the limitations contained in the particular claim in relation to which it is considered.

(c) All dependent claims referring back to a single previous claim, and all dependent claims referring back to several previous claims, shall be grouped together to the extent and in the most practical way possible.

6.5. *Utility Models*

Any designated State in which the grant of a utility model is sought on the basis of an international application may, instead of Rules 6.1 to 6.4, apply in respect of the matters regulated in those Rules the provisions of its national law concerning utility models once the processing of the international application has started in that State, provided that the applicant shall be allowed at least two months from the expiration of the time limit applicable under Article 22 to adapt his application to the requirements of the said provisions of the national law.

PCT Administrative Instruction Section 205.

Numbering and Identification of Claims Upon Amendment

(a) Amendments to the claims under Article 19 or Article 34(2)(b) may be made either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed. All the claims appearing on a replacement sheet shall be numbered in Arabic numerals. Where a

claim is cancelled, no renumbering of the other claims shall be required. In all cases where claims are renumbered, they shall be renumbered consecutively.

(b) The applicant shall, in the letter referred to in the second and third sentences of Rule 46.5(a) or in the second and fourth sentences of Rule 66.8(a), indicate the differences between the claims as filed and the claims as amended. He shall, in particular, indicate in the said letter, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether:

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as

filed.

37 CFR 1.436. The claims.

The requirements as to the content and format of claims are set forth in PCT Art. 6 and PCT Rules 6, 9, 10 and 11 and shall be adhered to. The number of the claims shall be reasonable, considering the nature of the invention claimed.

The claim or claims must “define the matter for which protection is sought.” Claims must be clear and concise. They must be fully supported by the description. PCT Rule 6 contains detailed requirements as to the number and numbering of claims, the extent to which any claim may refer to other parts of the international application, the manner of claiming, and dependent claims. As to the manner of claiming, the claims must, whenever appropriate, be in two distinct parts; namely, the statement of the prior art and the statement of the features for which protection is sought (“the characterizing portion”).

The physical requirements for the claims are the same as those for the description. Note that the claims must commence on a new sheet.

The procedure for rectification of obvious errors is explained in MPEP § 1836. The omission of an entire sheet of the claims cannot be rectified without affecting the international filing date. It is recommended that a request for rectification of obvious errors in the claims be made only if the error is liable to affect the international search; otherwise, the rectification should be made by amending the claims.

The claims can be amended during the international phase under PCT Article 19 on receipt of the international search report, during international preliminary examination if the applicant has filed a Demand, and during the national phase.

Multiple dependent claims are permitted in international applications before the United States Patent and Trademark Office as an International Searching and International Preliminary Examining Authority or as a Designated or Elected Office, if they are in the alternative only and do not serve as a basis for any other multiple dependent claim (PCT Rule 6.4(a), 35 U.S.C. 112). The claims, being an element of the application, should start on a new page (PCT Rule 11.4). Page numbers and line numbers must not be placed in the margins (PCT Rule 11.6(e)).

The number of claims shall be reasonable, considering the nature of the invention claimed (37 CFR 1.436).

1825 The Drawings

PCT Article 7. The Drawings

(1) Subject to the provisions of paragraph (2)(ii), drawings shall be required when they are necessary for the understanding of the invention.

(2) Where, without being necessary for the understanding of the invention, the nature of the invention admits of illustration by drawings:

(i) the applicant may include such drawings in the international application when filed.

(ii) any designated Office may require that the applicant file such drawings with it within the prescribed time limit.

PCT Rule 7. The Drawings

7.1. Flow Sheets and Diagrams

Flow sheets and diagrams are considered drawings.

7.2. Time Limit

The time limit referred to in Article 7(2)(ii) shall be reasonable under the circumstances of the case and shall, in no case, be shorter than two months from the date of the written invitation requiring the filing of drawings or additional drawings under the said provision.

PCT Rule 11.

Physical Requirements of the International Application

11.5. Size of Sheets

The size of the sheets shall be A4 (29.7 cm x 21 cm). However, any receiving Office may accept international applications on sheets of other sizes provided that the record copy, as transmitted to the International Bureau, and, if the competent International Searching Authority so desires, the search copy, shall be of A4 size.

11.6. Margins

(c) On sheets containing drawings, the surface usable shall not exceed 26.2 cm x 17.0 cm. The sheets shall not contain frames around the usable or used surface. The minimum margins shall be as follows:

- top: 2.5 cm
- left side: 2.5 cm
- right side: 1.5 cm
- bottom: 1.0 cm

11.11. Words in Drawings

(a) The drawings shall not contain text matter, except a single word or words, when absolutely indispensable, such as "water," "steam," "open," "closed," "section on AB," and, in the case of electric circuits and block schematic or flow sheet diagrams, a few short catchwords indispensable for understanding.

(b) Any words used shall be so placed that, if translated, they may be pasted over without interfering with any lines of the drawings.

11.13. Special Requirements for Drawings

(a) Drawings shall be executed in durable, black, sufficiently dense and dark, uniformly thick and well-defined, lines and strokes without colorings.

(b) Cross-sections shall be indicated by oblique hatching which should not impede the clear reading of the reference signs and leading lines.

(c) The scale of the drawings and the distinctness of their graphical execution shall be such that a photographic reproduction with a linear reduction in size to two-thirds would enable all details to be distinguished without difficulty.

(d) When, in exceptional cases, the scale is given on a drawing, it shall be represented graphically.

(e) All numbers, letters and reference lines, appearing on the drawings, shall be simple and clear. Brackets, circles or inverted commas shall not be used in association with numbers and letters.

(f) All lines in the drawings shall, ordinarily, be drawn with the aid of drafting instruments.

(g) Each element of each figure shall be in proper proportion to each of the other elements in the figure, except where the use of a different proportion is indispensable for the clarity of the figure.

(h) The height of the numbers and letters shall not be less than 0.32 cm. For the lettering of drawings, the Latin and, where customary, the Greek alphabets shall be used.

(i) The same sheet of drawings may contain several figures. Where figures on two or more sheets form in effect a single complete figure, the figures on the several sheets shall be so arranged that the complete figure can be assembled without concealing any part of any of the figures appearing on the various sheets.

(j) The different figures shall be arranged on a sheet or sheets without wasting space, preferably in an upright position, clearly separated from one another. Where the figures are not

arranged in an upright position, they shall be presented sideways with the top of the figures at the left side of the sheet.

(k) The different figures shall be numbered in Arabic numerals consecutively and independently of the numbering of the sheets.

(l) Reference signs not mentioned in the description shall not appear in the drawings, and vice versa.

(m) The same features, when denoted by reference signs, shall, throughout the international application, be denoted by the same signs.

(n) If the drawings contain a large number of reference signs, it is strongly recommended to attach a separate sheet listing all reference signs and the features denoted by them.

37 CFR 1.437. The drawings.

(a) Subject to paragraph (b) of this section, when drawings are necessary for the understanding of the invention, or are mentioned in the description, they must be part of an international application as originally filed in the United States Receiving Office in order to maintain the international filing date during the national stage (PCT Art. 7).

(b) Drawings missing from the application upon filing will be accepted if such drawings are received within 30 days of the date of first receipt of the incomplete papers. If the missing drawings are received within the 30-day period, the international filing date shall be the date on which such drawings are received. If such drawings are not timely received, all references to drawings in the international application shall be considered non-existent (PCT Art. 14(2), Administrative Instruction 310).

(c) The physical requirements for drawings are set forth in PCT Rule 11 and shall be adhered to.

The international application must contain drawings when they are necessary for the understanding of the invention. Moreover where, without drawings being actually necessary for the understanding of the invention, its nature admits of illustration by drawings, the applicant may include such drawings and any designated Office may require the applicant to file such drawings during the national phase. Flow sheets and diagrams are considered drawings. "Guidelines for Drawings Under the Patent Cooperation Treaty," published in the *PCT Gazette* (No. 7/1978), may be obtained, in English and French, from the International Bureau.

Drawings must be presented on one or more separate sheets. They may not be included in the description, the claims or the abstract. They may not contain text matter, except a single word or words when absolutely indispensable. Note that if the drawings contain text matter not in English but in a language accepted under PCT Rule 12.1(a) by the International Bureau as a Receiving Office, the international application

will be transmitted to the International Bureau for processing in its capacity as a Receiving Office. See 37 CFR 1.412(c)(6)(ii). If the drawings contain text matter not in a language accepted under PCT Rule 12.1(a) by the International Bureau as a Receiving Office, the application will be denied an international filing date.

All lines in the drawings must, ordinarily, be drawn with the aid of a drafting instrument and must be executed in black, uniformly thick and well-defined lines. PCT Rules 11.10 to 11.13 contain detailed requirements as to further physical requirements of drawings. Drawings newly executed according to national standards may not be required during the national phase if the drawings filed with the international application comply with PCT Rule 11. The examiner may require new drawings where the drawings which were accepted during the international phase did not comply with PCT Rule 11. A file reference may be indicated in the upper left corner on each sheet of the drawings as for the description.

All of the figures constituting the drawings must be grouped together on a sheet or sheets without waste of space, preferably in an upright position and clearly separated from each other. Where the drawings or tables cannot be presented satisfactorily in an upright position, they may be placed sideways, with the tops of the drawings or tables on the left-hand side of the sheet.

The usable surface of sheets (which must be of A4 size) must not exceed 26.2 cm x 17.0 cm. The sheets must not contain frames around the usable surface. The minimum margins which must be observed are: top and left side: 2.5 cm; right side: 1.5 cm; bottom: 1.0 cm.

All sheets of drawings must be numbered in the center of either the top or the bottom of each sheet but not in the margin in numbers larger than those used as reference signs in order to avoid confusion with the latter. For drawings, a separate series of page numbers is to be used. The number of each sheet of the drawings must consist of two Arabic numerals separated by an oblique stroke, the first being the sheet number and the second being the total number of sheets of drawings. For example, "2/5" would be used for the second sheet of drawings where there are five in all.

Different figures on the sheets of drawings must be numbered in Arabic numerals consecutively and independently of the numbering of the sheets and, if possible, in the order in which they appear. This numbering should be preceded by the expression "Fig."

The PCT makes no provision for photographs. Nevertheless, they are allowed by the International Bureau where it is impossible to present in a drawing what is to be shown (for instance, crystalline structures). Where, exceptionally, photographs are submitted, they must be on sheets of A4 size, they must be black and white, and they must respect the minimum margins and admit of direct reproduction. Color photographs are not accepted.

The procedure for rectification of obvious errors in the drawings is explained in MPEP § 1836. The omission of an entire sheet of drawings cannot be rectified without affecting the international filing date. Changes other than the rectification of obvious errors are considered amendments.

The drawings can be amended during the international phase only if the applicant files a Demand for international preliminary examination. The drawings can also be amended during the national phase.

If drawings are referred to in an international application and are not found in the search copy file, the examiner should refer the application to a Special Program Examiner in his or her Technology Center. See Administrative Instructions Section 310.

1826 The Abstract

PCT Rule 8. The Abstract

8.1. Contents and Form of the Abstract

(a) The abstract shall consist of the following:

(i) a summary of the disclosure as contained in the description, the claims, and any drawings; the summary shall indicate the technical field to which the invention pertains and shall be drafted in a way which allows the clear understanding of the technical problem, the gist of the solution of that problem through the invention, and the principal use or uses of the invention;

(ii) where applicable, the chemical formula which, among all the formulae contained in the international application, best characterizes the invention.

(b) The abstract shall be as concise as the disclosure permits (preferably 50 to 150 words if it is in English or when translated into English).

(c) The abstract shall not contain statements on the alleged merits or value of the claimed invention or on its speculative application.

(d) Each main technical feature mentioned in the abstract and illustrated by a drawing in the international application shall be followed by a reference sign, placed between parentheses.

8.2. Figure

(a) If the applicant fails to make the indication referred to in Rule 3.3(a)(iii), or if the International Searching Authority finds that a figure or figures other than that figure or those figures suggested by the applicant would, among all the figures of all the drawings, better characterize the invention, it shall, subject to paragraph (b), indicate the figure or figures which should accompany the abstract when the latter is published by the International Bureau. In such case, the abstract shall be accompanied by the figure or figures so indicated by the International Searching Authority. Otherwise, the abstract shall, subject to paragraph (b), be accompanied by the figure or figures suggested by the applicant.

(b) If the International Searching Authority finds that none of the figures of the drawings is useful for the understanding of the abstract, it shall notify the International Bureau accordingly. In such case, the abstract, when published by the International Bureau, shall not be accompanied by any figure of the drawings even where the applicant has made a suggestion under Rule 3.3(a)(iii).

8.3. Guiding Principles in Drafting

The abstract shall be so drafted that it can efficiently serve as a scanning tool for purposes of searching in the particular art, especially by assisting the scientist, engineer or researcher in formulating an opinion on whether there is a need for consulting the international application itself.

37 CFR 1.438. The abstract.

(a) Requirements as to the content and form of the abstract are set forth in PCT Rule 8, and shall be adhered to.

(b) Lack of an abstract upon filing of an international application will not affect the granting of a filing date. However, failure to furnish an abstract within one month from the date of the notification by the Receiving Office will result in the international application being declared withdrawn.

The abstract must consist of a summary of the disclosure as contained in the description, the claims and any drawings. Where applicable, it must also contain the most characteristic chemical formula. The abstract must be as concise as the disclosure permits (preferably 50 to 150 words if it is in English or when translated into English). National practice (see MPEP § 608.01(b)) also provides a maximum of 150 words for the abstract. See 37 CFR 1.72(b). The PCT range of 50 - 150 words is not absolute but publication problems could result when the PCT limit is increased beyond the 150 word limit. Maintaining the PCT upper limit is encouraged. As a rule of thumb, it can be said that the volume of the text of the abstract, including one of the figures from the drawings (if

any), should not exceed what can be accommodated on an A4 sheet of typewritten matter, 1 1/2 spaced. The abstract of the international application as filed must begin on a new sheet following the claims (Administrative Instructions Section 207). The other physical requirements must correspond to those for the description. The abstract must be so drafted that it can efficiently serve as a scanning tool for the purposes of searching in the particular art. These and other requirements concerning the abstract are spelled out in detail in PCT Rule 8. Useful guidance can be obtained from the “Guidelines for the Preparation of Abstracts Under the Patent Cooperation Treaty,” published in the PCT Gazette (No. 5/1978). Those Guidelines may be obtained, in English and French, from the International Bureau.

The abstract should be primarily related to what is new in the art to which the invention pertains. Phrases should not be used which are implicit, (for instance, “the invention relates to ...”), and statements on the alleged merits or value of the invention are not allowed.

Where the receiving Office finds that the abstract is missing, it invites the applicant to furnish it within a time limit fixed in the invitation. The international application is considered withdrawn if no abstract is furnished to the receiving Office within the time limit fixed. Where the receiving Office has not invited the applicant to furnish an abstract, the International Searching Authority establishes one. The same applies where the abstract does not comply with the requirements outlined in the preceding paragraphs. Where the abstract is established by the International Searching Authority, the applicant may submit comments on it within 1 month from the date of mailing of the international search report, (PCT Rule 38.2(b)).

SUMMARY OF ABSTRACT REQUIREMENTS

Preferably 50-150 words. Should contain:

- (A) Indication of field of invention.
- (B) Clear indication of the technical problem.
- (C) Gist of invention’s solution of the problem.
- (D) Principal use or uses of the invention.
- (E) Reference numbers of the main technical features placed between parentheses.
- (F) Where applicable, chemical formula which best characterizes the invention.

Should not contain:

- (A) Superfluous language.
- (B) Legal phraseology such as “said” and “means.”
- (C) Statements of alleged merit or speculative application.
- (D) Prohibited items as defined in PCT Rule 9.

1827 Fees

A complete list of Patent Cooperation Treaty fee amounts which are to be paid to the United States Patent and Trademark Office, for both the national and international stages, can be found at the beginning of each weekly issue of the *Official Gazette* of the United States Patent and Trademark Office and on the PCT Legal Office page of the USPTO web site (see MPEP § 1730). Applicants are urged to refer to this list before submitting any fees to the USPTO.

Pursuant to PCT Rules 14.1(c), 15.4(a), and 16.1(f), the basic, transmittal, and search fee payable is the basic, transmittal, and search fee in effect on the filing date of the international application. See 37 CFR 1.431(c).

1828 Priority Claim and Document

An applicant who claims the priority of one or more earlier national or international applications for the same invention must indicate on the Request, at the time of filing, the country in or for which it was filed, the date of filing, and the application number. See PCT Article 8 and PCT Rule 4.10 for priority claim particulars and PCT Rule 90^{bis}.3 for withdrawal of priority claims. Note that under PCT Rule 4.10, an applicant may claim the priority of an application filed in or for a State which is a Member of the World Trade Organization (WTO), even if that State is not party to the Paris Convention for the Protection of Industrial Property (Paris Convention). However, a PCT Contracting State that is not a Member of the WTO would not be obliged to recognize the effects of such a priority claim.

Effective July 1, 1998, applicant may correct or add a priority claim by a notice submitted to the Receiving Office or the International Bureau within 16 months from the priority date, or where the priority date is changed, within 16 months from the priority date so changed, whichever period expires first. All priority

claim additions or changes must, however, be submitted no later than 4 months from the international filing date. PCT Rule 26^{bis}.1 and 37 CFR 1.451 and 1.465.

Under the PCT procedure, the applicant may file the certified copy of the earlier filed national application together with the international application in the receiving Office for transmittal with the record copy, or alternatively the certified copy may be submitted by the applicant to the International Bureau or the receiving Office not later than 16 months from the priority date or, if the applicant has requested early processing in any designated Office, not later than the time such processing or examination is requested. The International Bureau will normally furnish copies of the certified copy to the various designated Offices so that the applicant will not normally be required to submit certified copies to each designated Office.

For use of the priority document in national stage applications filed under 35 U.S.C. 371, see MPEP §1893.03(c).

1830 International Application Transmittal Letter

A PCT international application transmittal letter, Form PTO-1382, is available free of charge for applicants to use when filing PCT international applications with the United States Receiving Office. The form is intended to simplify the filing of PCT international applications by providing a one-page letter which covers the most common requests and concerns of applicants. Specifically covered are:

(A) Requests under 37 CFR 1.451 for preparation and transmittal to the International Bureau of certified copies of the U.S. national applications, the priority of which is claimed in international application;

(B) Choice of Searching Authority to conduct the international search. Applicants may choose either the U.S. Patent and Trademark Office or the European Patent Office as the International Searching Authority.

(C) Authorizations for any required additional search fees requested by the United States International Searching Authority to be charged to a Deposit Account subject to oral confirmation of the authorization. It should be noted that if the European Patent Office is chosen as the Searching Authority, any supplemental search fees requested by that Office are payable directly to the European Patent Office.

(D) Indications of information concerning differences in disclosure, if any, between the international application and related applications to assist in determining any foreign transmittal licensing requirements as well as for other purposes; and

(E) Requests for foreign transmittal license.

1832 License Request for Foreign Filing Under the PCT

A license for foreign filing is not required to file an international application in the United States Receiving Office but may be required before the applicant or the U.S. Receiving Office can forward a copy of the international application to a foreign patent office, the International Bureau or other foreign authority (35 U.S.C. 368, 37 CFR 5.1 and 5.11). A foreign filing license to permit transmittal to a foreign office or international authority is not required if the international application does not disclose subject matter in addition to that disclosed in a prior U.S. national application filed more than 6 months prior to the filing of the international application (37 CFR 5.11(a)). In all other instances (direct foreign filings outside the PCT or filings in a foreign receiving Office), the applicant should petition for a license for foreign filing (37 CFR 5.12) and if appropriate, identify any additional subject matter in the international application which was not in the earlier U.S. national application (37 CFR 5.14 (c)). This request and disclosure information may be supplied on the PCT international application transmittal letter, Form PTO-1382.

If no petition or request for a foreign filing license is included in the international application, and it is clear that a license is required because of the designation of foreign countries and the time at which the Record Copy must be transmitted, it is current Office practice to construe the filing of such an international application to include a request for a foreign filing license. If the license can be granted, it will be issued without further correspondence. If no license can be issued, or further information is required, applicant will be contacted. The automatic request for a foreign filing license does not apply to the filing of a foreign application outside the PCT.

EFFECT OF SECRECY ORDER

If a secrecy order is applied to an international application, the application will not be forwarded

to the International Bureau as long as the secrecy order remains in effect (PCT Article 27(8) and 35 U.S.C. 368). If the secrecy order remains in effect, the international application will be declared withdrawn (abandoned) because the Record Copy of the international application was not received in time by the International Bureau (37 CFR 5.3(d), PCT Article 12(3), and PCT Rule 22.3). It is, however, possible to prevent abandonment as to the United States of America if it has been designated, by fulfilling the requirements of 35 U.S.C. 371(c).

1834 Correspondence

PCT Rule 92. Correspondence

92.1. Need for Letter and for Signature

(a) Any paper submitted by the applicant in the course of the international procedure provided for in the Treaty and these Regulations, other than the international application itself, shall, if not itself in the form of a letter, be accompanied by a letter identifying the international application to which it relates. The letter shall be signed by the applicant.

(b) If the requirements provided for in paragraph (a) are not complied with, the applicant shall be informed as to the non-compliance and invited to remedy the omission within a time limit fixed in the invitation. The time limit so fixed shall be reasonable in the circumstances; even where the time limit so fixed expires later than the time limit applying to the furnishing of the paper (or even if the latter time limit has already expired), it shall not be less than 10 days and not more than one month from the mailing of the invitation. If the omission is remedied within the time limit fixed in the invitation, the omission shall be disregarded; otherwise, the applicant shall be informed that the paper has been disregarded.

(c) Where non-compliance with the requirements provided for in paragraph (a) has been overlooked and the paper taken into account in the international procedure, the non-compliance shall be disregarded.

92.2. Languages

(a) Subject to Rules 55.1 and 66.9 and to paragraph (b) of this Rule, any letter or document submitted by the applicant to the International Searching Authority or the International Preliminary Examining Authority shall be in the same language as the international application to which it relates. However, where a translation of the international application has been transmitted under Rule 23.1(b) or furnished under Rule 55.2, the language of such translation shall be used.

(b) Any letter from the applicant to the International Searching Authority or the International Preliminary Examining Authority may be in a language other than that of the international application, provided the said Authority authorizes the use of such language.

(c) *[Deleted]*

(d) Any letter from the applicant to the International Bureau shall be in English or French.

(e) Any letter or notification from the International Bureau to the applicant or to any national Office shall be in English or French.

PCT Administrative Instruction Section 105. Identification of International Application With Two or More Applicants

Where any international application indicates two or more applicants, it shall be sufficient, for the purpose of identifying that application, to indicate, in any Form or correspondence relating to such application, the name of the applicant first named in the request. The provisions of the first sentence of this Section do not apply to the demand or to a notice effecting later elections.

NOTIFICATION UNDER PCT RULE 92.1(b) OF DEFECTS WITH REGARD TO CORRESPONDENCE

If the Office finds that papers, other than the international application itself, are not accompanied by a letter identifying the international application to which they relate, or are accompanied by an unsigned letter, or are furnished in the form of an unsigned letter, it notifies the applicant and invites him or her to remedy the omission. The Office disregards the said papers or letter if the omission is not remedied within the time limit fixed in the invitation (PCT Rule 92.1(b)). If the omission has been overlooked and the paper taken into account, the omission is disregarded.

CORRESPONDENCE ADDRESS

Where there is a sole applicant without an agent in an international application, correspondence will be sent to the applicant at his or her indicated address; or, if he or she has appointed one or more agents, to that agent or the first-mentioned of those agents; or, if he or she has not appointed an agent but has indicated a special address for notifications, at that special address.

Where there are two or more applicants who have appointed one or more common agents, correspondence will be addressed to that agent or the first-mentioned of those agents. Where no common agent has been appointed, correspondence will be addressed to the common representative (either the appointed common representative or the applicant who is considered to be the common representative (PCT Rule 90.2) at

the indicated address; or, if the common representative has appointed one or more agents, to that agent or the first-mentioned of those agents; or, if the common representative has not appointed an agent but has indicated a special address for notifications, at that address.

FILING OF CORRESPONDENCE BY MAIL

The “Express Mail” procedure set forth at 37 CFR 1.10 applies to “[a]ny correspondence received by the Patent and Trademark Office.” Accordingly, papers filed with the USPTO in international applications will be accorded by the U.S. Patent and Trademark Office the date of deposit with the United States Postal Service as shown on the “date-in” on the “Express Mail” mailing label as the date of filing in the USPTO if the provisions of 37 CFR 1.10 are complied with. See MPEP § 513.

If there is a question regarding the date of deposit, the Express Mail provisions of 37 CFR 1.10(c)-(e) require, in addition to using the “Express Mail Post Office to Addressee” service, an indication of the “Express Mail” mailing label number on each paper or fee. In situations wherein the correspondence includes several papers directed to the same application (for example, Request, description, claims, abstract, drawings, and other papers) the correspondence may be submitted with a cover or transmittal letter, which should itemize the papers. The cover or transmittal letter must have the “Express Mail” mailing label number thereon.

The certificate of mailing by first class mail procedure set forth at 37 CFR 1.8 differs from the 37 CFR 1.10 Express Mail procedure. See 37 CFR 1.8(a)(2)(i)(D) and (E). It is important to understand that the 37 CFR 1.8 certificate of mailing procedure CANNOT be used for filing any papers during the international stage if the date of deposit is desired. If the 37 CFR 1.8 certificate of mailing procedure is used, the paper and/or fee will be accorded the date of receipt in the USPTO unless the receipt date falls on a Saturday, Sunday, or Federal holiday in which case the date of receipt will be the next succeeding day which is not a Saturday, Sunday, or Federal holiday (37 CFR 1.6(a)(3)). Accordingly, the certificate of mailing procedures of 37 CFR 1.8 are not available to have a submission during the international stage con-

sidered as timely filed if the submission is not physically received at the USPTO on or before the due date.

1834.01 Use of Telegraph, Teleprinter, Facsimile Machine

PCT Rule 92.4 provides that a national Office may receive documents by telegraph, teleprinter, or facsimile machine. However, the United States Patent and Trademark Office has not informed the International Bureau that it accepts such submissions other than facsimile transmissions. Accordingly, applicants may not currently file papers in international applications with the United States Patent and Trademark Office via telegraph or teleprinter.

Generally, any paper may be filed by facsimile transmission with certain exceptions which are identified in 37 CFR 1.6(d). It should be noted that a facsimile transmission of a document is not permitted and, if submitted, will not be accorded a date of receipt if the document is:

- (A) Required by statute to be certified;
- (B) A drawing submitted under 37 CFR 1.437;
- (C) An international application for patent; or
- (D) A copy of the international application and the basic national fee necessary to enter the national stage, as specified in 37 CFR 1.494(b) or 37 CFR 1.495(b).

Facsimile transmission may be used to submit substitute sheets (other than drawings), extensions of time, power of attorney, fee authorizations (other than the basic national fee), confirmation of precautionary designations, Demands, response to written opinions, oaths or declarations, petitions, and translations in international applications.

A Certificate of Transmission may be used as provided in 37 CFR 1.8(a)(1) except in the instances specifically excluded in 37 CFR 1.8(a)(2). Note particularly that the Certificate of Transmission cannot be used for the filing of an international application for patent or correspondence in an international application before the U.S. Receiving Office, the U.S. International Searching Authority, or the U.S. International Preliminary Examining Authority. Guidelines for facsimile transmission are clearly set forth in 37 CFR 1.6(d) and should be read before transmitting by facsimile machine.

A signature on a document received via facsimile in a permitted situation is acceptable as a proper signature. See PCT Rule 92.4(b) and 37 CFR 1.4(d)(1)(ii).

The receipt date of a document transmitted via facsimile is the date in the USPTO on which the transmission is completed, unless the receipt date is a Saturday, Sunday, or Federal holiday in which case the date of receipt will be the next succeeding day which is not a Saturday, Sunday, or Federal holiday (37 CFR 1.6(a)(3)). See 37 CFR 1.6(d). Where a document is illegible or part of the document is not received, the document will be treated as not received to the extent that it is illegible or the transmission failed. See PCT Rule 92.4(c).

1834.02 Irregularities in the Mail Service

PCT Rule 82.

Irregularities in the Mail Service

82.1. Delay or Loss in Mail

(a) Any interested party may offer evidence that he has mailed the document or letter five days prior to the expiration of the time limit. Except in cases where surface mail normally arrives at its destination within two days of mailing, or where no airmail service is available, such evidence may be offered only if the mailing was by airmail. In any case, evidence may be offered only if the mailing was by mail registered by the postal authorities.

(b) If the mailing, in accordance with paragraph (a), of a document or letter is proven to the satisfaction of the national Office or intergovernmental organization which is the addressee, delay in arrival shall be excused, or, if the document or letter is lost in the mail, substitution for it of a new copy shall be permitted, provided that the interested party proves to the satisfaction of the said Office or organization that the document or letter offered in substitution is identical with the document or letter lost.

(c) In the cases provided for in paragraph (b), evidence of mailing within the prescribed time limit, and, where the document or letter was lost, the substitute document or letter as well as the evidence concerning its identity with the document or letter lost shall be submitted within one month after the date on which the interested party noticed or with due diligence should have noticed the delay or the loss, and in no case later than six months after the expiration of the time limit applicable in the given case.

(d) Any national Office or intergovernmental organization which has notified the International Bureau that it will do so shall, where a delivery service other than the postal authorities is used to mail a document or letter, apply the provisions of paragraphs (a) to (c) as if the delivery service was a postal authority. In such a case, the last sentence of paragraph (a) shall not apply but evidence may be offered only if details of the mailing were recorded by the delivery service at the time of mailing. The notification may contain an indication that it applies only to mailings using

specified delivery services or delivery services which satisfy specified criteria. The International Bureau shall publish the information so notified in the Gazette.

(e) Any national Office or intergovernmental organization may proceed under paragraph (d):

(i) even if, where applicable, the delivery service used was not one of those specified, or did not satisfy the criteria specified, in the relevant notification under paragraph (d), or

(ii) even if that Office or organization has not sent to the International Bureau a notification under paragraph (d).

82.2. Interruption in the Mail Service

(a) Any interested party may offer evidence that on any of the 10 days preceding the day of expiration of the time limit the postal service was interrupted on account of war, revolution, civil disorder, strike, natural calamity, or other like reason, in the locality where the interested party resides or has his place of business or is staying.

(b) If such circumstances are proven to the satisfaction of the national Office or intergovernmental organization which is the addressee, delay in arrival shall be excused, provided that the interested party proves to the satisfaction of the said Office or organization that he effected the mailing within five days after the mail service was resumed. The provisions of Rule 82.1(c) shall apply *mutatis mutandis*.

DELAY OR LOSS IN MAIL

Delay or loss in the mail shall be excused when it is proven to the satisfaction of the receiving Office that the concerned letter or document was mailed at least five days before the expiration of the time limit. The mailing must have been by registered air mail or, where surface mail would normally arrive at the destination concerned within two days of mailing, by registered surface mail (PCT Rule 82.1(a) to (c)). PCT Rule 82 contains detailed provisions governing the situation where a letter arrives late or gets lost due to irregularities in the mail service, for example, because the mail service was interrupted due to a strike. The provisions operate to excuse failure to meet a time limit for filing a document for up to six months after the expiration of the time limit concerned, provided that the document was mailed at least five days before the expiration of the time limit. In order to take advantage of these provisions, the mailing must have been by registered airmail or, where surface mail would normally arrive at the destination concerned within two days of mailing, by registered surface mail. Evidence is required to satisfy the Office, and a substitute document must be filed promptly—see PCT Rule 82.1(b) and (c) for details.

INTERRUPTION IN MAIL SERVICE

The provisions of PCT Rule 82.1(c) apply *mutatis mutandis* for interruptions in the mail service caused by war, revolution, civil disorder, strike, natural calamity or other like reasons (PCT Rule 82.2).

Special provisions also apply to mail interruptions caused by war, revolution, civil disorder, strike, natural calamity or other like reasons—see PCT Rule 82.2 for details.

See PCT Rule 80.5 for guidance on periods which expire on a non-working day.

1836 Rectification of Obvious Errors

PCT Rule 91.

Obvious Errors in Documents

91.1. Rectification

(a) Subject to paragraphs (b) to (g^{quater}), obvious errors in the international application or other papers submitted by the applicant may be rectified.

(b) Errors which are due to the fact that something other than what was obviously intended was written in the international application or other paper shall be regarded as obvious errors. The rectification itself shall be obvious in the sense that anyone would immediately realize that nothing else could have been intended than what is offered as rectification.

(c) Omissions of entire elements or sheets of the international application, even if clearly resulting from inattention, at the stage, for example, of copying or assembling sheets, shall not be rectifiable.

(d) Rectification may be made on the request of the applicant. The authority having discovered what appears to be an obvious error may invite the applicant to present a request for rectification as provided in paragraphs (e) to (g^{quater}). Rule 26.4 shall apply *mutatis mutandis* to the manner in which rectifications shall be requested.

(e) No rectification shall be made except with the express authorization:

(i) of the receiving Office if the error is in the request,
(ii) of the International Searching Authority if the error is in any part of the international application other than the request or in any paper submitted to that Authority,

(iii) of the International Preliminary Examining Authority if the error is in any part of the international application other than the request or in any paper submitted to that Authority, and

(iv) of the International Bureau if the error is in any paper, other than the international application or amendments or corrections to that application, submitted to the International Bureau.

(f) Any authority which authorizes or refuses any rectification shall promptly notify the applicant of the authorization or refusal and, in the case of refusal, of the reasons therefor. The authority which authorizes a rectification shall promptly notify the International Bureau accordingly. Where the authorization of the

rectification was refused, the International Bureau shall, upon request made by the applicant prior to the time relevant under paragraph (g^{bis}), (g^{ter}), or (g^{quater}) and subject to the payment of a special fee whose amount shall be fixed in the Administrative Instructions, publish the request for rectification together with the international application. A copy of the request for rectification shall be included in the communication under Article 20 where a copy of the pamphlet is not used for that communication or where the international application is not published by virtue of Article 64(3).

(g) The authorization for rectification referred to in paragraph (e) shall, subject to paragraphs (g^{bis}), (g^{ter}), and (g^{quater}), be effective:

(i) where it is given by the receiving Office or by the International Searching Authority, if its notification to the International Bureau reaches that Bureau before the expiration of 17 months from the priority date;

(ii) where it is given by the International Preliminary Examining Authority, if it is given before the establishment of the international preliminary examination report;

(iii) where it is given by the International Bureau, if it is given before the expiration of 17 months from the priority date.

(g^{bis}) If the notification made under paragraph (g)(i) reaches the International Bureau, or if the rectification made under paragraph (g)(iii) is authorized by the International Bureau, after the expiration of 17 months from the priority date but before the technical preparations for international publication have been completed, the authorization shall be effective and the rectification shall be incorporated in the said publication.

(g^{ter}) Where the applicant has asked the International Bureau to publish his international application before the expiration of 18 months from the priority date, any notification made under paragraph (g)(i) must reach, and any rectification made under paragraph (g)(iii) must be authorized by, the International Bureau, in order for the authorization to be effective, not later than at the time of the completion of the technical preparations for international publication.

(g^{quater}) Where the international application is not published by virtue of Article 64(3), any notification made under paragraph (g)(i) must reach, and any rectification made under paragraph (g)(iii) must be authorized by, the International Bureau, in order for the authorization to be effective, not later than at the time of the communication of the international application under Article 20.

Obvious errors in the international application or other papers submitted by the applicant may generally be rectified under PCT Rule 91, if the rectification is authorized, as required, within the applicable time limit. Any such rectification is free of charge. The omission of entire sheets of the description cannot be rectified, even if resulting from inattention at the stage of copying or assembling sheets.

Applicants often attempt to rely upon the priority application to establish a basis for obvious error. The

priority document (application) cannot be used to support obvious error corrections. The rectification is obvious only in the sense that anyone would immediately realize that nothing else could have been intended than what is offered as rectification. For example, a misspelled word could be considered an obvious error subject to rectification. A missing chemical formula or missing line of text would not be considered obvious error subject to rectification. However, improper identification of the application number of the file in which a paper is to be entered has been held to be an obvious error subject to rectification when the applicant did include the proper agent's file reference and other information properly identifying the application file. See *Helfgott & Karas P.C. v. Dickinson*, 209 F.3d 1328, 54 USPQ2d 1425 (Fed. Cir. 2000).

Rectifications must be authorized:

(A) If the error is in the request by the Receiving Office;

(B) If the error is in the description, the claims, the drawings or the abstract by the International Searching Authority, or by the International Preliminary Examining Authority where the international application is pending before the latter Authority;

(C) If the error is in any paper other than the international application or amendments or corrections to it by the International Bureau.

The request for rectification must be addressed to the authority competent to authorize the rectification. It must be filed in time for the rectification to be authorized and for notification of the authorization to reach the International Bureau before the expiration of the applicable time limit, namely:

(A) Where the authorization is given by the Receiving Office or the International Searching Authority its notification must reach the International Bureau before the expiration of 17 months from the priority date (or later, before the technical preparations for international publication have been completed);

(B) Where the authorization is given by the International Preliminary Examining Authority it must be given before the establishment of the international preliminary examination report;

(C) Where the authorization is given by the International Bureau it must be given before the expiration

of 17 months from the priority date (or later, before the technical preparations for international publication have been completed)

The patent examiner, in his or her capacity as an officer of either the International Searching Authority or International Preliminary Examining Authority, informs the applicant of the authorization or refusal to authorize the rectification of obvious errors. The International Searching Authority informs the applicant of the decision by use of Form PCT/ISA/217, while the International Preliminary Examining Authority informs the applicant of the decision by use of Form PCT/IPEA/412.

Where the examiner discovers what might be considered an obvious error, an invitation to request rectification (Form PCT/ISA/216 or PCT/IPEA/411) should be mailed to applicant.

1840 The International Searching Authority

35 U.S.C. 362. International Searching Authority and International Preliminary Examining Authority.

(a) The Patent and Trademark Office may act as an International Searching Authority and International Preliminary Examining Authority with respect to international applications in accordance with the terms and conditions of an agreement which may be concluded with the International Bureau, and may discharge all duties required of such Authorities, including the collection of handling fees and their transmittal to the International Bureau.

(b) The handling fee, preliminary examination fee, and any additional fees due for international preliminary examination shall be paid within such time as may be fixed by the Director.

37 CFR 1.413. The United States International Searching Authority.

(a) Pursuant to appointment by the Assembly, the United States Patent and Trademark Office will act as an International Searching Authority for international applications filed in the United States Receiving Office and in other Receiving Offices as may be agreed upon by the Commissioner, in accordance with agreement between the Patent and Trademark Office and the International Bureau (PCT Art. 16(3)(b)).

(b) The Patent and Trademark Office, when acting as an International Searching Authority, will be identified by the full title "United States International Searching Authority" or by the abbreviation "ISA/US."

(c) The major functions of the International Searching Authority include:

- (1) Approving or establishing the title and abstract;
- (2) Considering the matter of unity of invention;

(3) Conducting international and international-type searches and preparing international and international-type search reports (PCT Art. 15, 17 and 18, and PCT Rules 25, 33 to 45 and 47); and

(4) Transmitting the international search report to the applicant and the International Bureau.

The United States Patent and Trademark Office agreed to and was appointed by the PCT Assembly, to act as an International Searching Authority. As such an authority, a primary function is to establish documentary search reports on prior art with respect to inventions which are the subject of applications. See PCT Article 16.

Pursuant to an agreement concluded with the International Bureau, the USPTO, as an International Searching Authority, agreed to conduct international searches and prepare international search reports, for, in addition to the United States of America, Barbados, Brazil, India, Israel, Mexico, New Zealand, South Africa, and Trinidad and Tobago. The agreement stipulated the English language and specified that the subject matter to be searched is that which is searched or examined in United States national applications.

TRANSMITTAL OF THE SEARCH COPY TO THE INTERNATIONAL SEARCHING AUTHORITY

The "search copy" is transmitted by the Receiving Office to the International Searching Authority (PCT Article 12(1)), the details of the transmittal are provided in PCT Rule 23.

THE MAIN PROCEDURAL STEPS IN THE INTERNATIONAL SEARCHING AUTHORITY

The main procedural steps that any international application goes through in the International Searching Authority are (1) the making of the international search (PCT Article 15), and (2) the preparing of the international search report (PCT Article 18 and PCT Rule 43).

COMPETENT INTERNATIONAL SEARCHING AUTHORITY

In respect of international applications filed with the U.S. Receiving Office, the United States International Searching Authority, which is the Examining Corps of the United States Patent and Trademark Office, and the European Patent Office are competent

to carry out the international search (PCT Article 16, PCT Rules 35 and 36, 35 U.S.C. 362 and 37 CFR 1.413).

The United States Patent and Trademark Office has informed the International Bureau that in addition to the United States Patent and Trademark Office, the European Patent Office is competent as an International Searching Authority for searching all kinds of international applications filed in the United States Receiving Office on and after October 1, 1982. (PCT Article 16(2) and PCT Rule 35.2(a)(i).

MATTERS TO BE CONSIDERED WHEN CHOOSING AN INTERNATIONAL SEARCHING AUTHORITY

Choosing The European Patent Office (EPO) as an International Searching Authority could be advantageous to United States applicants who designate countries for European Regional patent protection in PCT International applications for the following reasons:

(A) Claims may be amended according to EPO search results before entering the European Office as a designated Office.

(B) The EPO search fee need not be paid upon entering the European Office as a designated Office.

(C) The EPO search results may be available for use in a U.S. priority application.

(D) The EPO international search may be obtained without the need for a European professional representative.

(E) The European Patent Office search could provide the U.S. applicant with the benefit of a European art search (which may be different from applicant's own or the USPTO's search) before it is necessary to enter the European Patent Office or other designated Offices.

Some of the disadvantages that may occur due to the European Patent Office making the international search are the following:

(A) Additional mailing time to and from the EPO Searching Authority may shorten the time for applicants to respond to various invitations from the EPO such as for comments on abstracts and payments of additional search fees as well as for PCT Article 19 amendments to the claims after issuance of the International Search Report.

(B) There may be more difficulty in solving any procedural problems between the applicant and the EPO than with the USPTO due to physical distance and time differences.

The PCT Applicant's Guide provides helpful information for communications with the European Patent Office.

1840.01 The European Patent Office as an International Searching Authority

Since October 1, 1982, the European Patent Office (EPO) has been available as a Searching Authority for PCT applications filed in the United States Receiving Office. The choice of Searching Authority, either the EPO or the United States Patent and Trademark Office, must be made by the applicant on filing the international application. The choice of Searching Authority may also be indicated on Form PTO-1382, the Transmittal Letter to the United States Receiving Office.

It should be noted that the European Patent Office will not search, by virtue of PCT Article 17(2)(a)(i), any international application to the extent that it considers that the international application relates to subject matter set forth in PCT Rule 39.1. Furthermore,

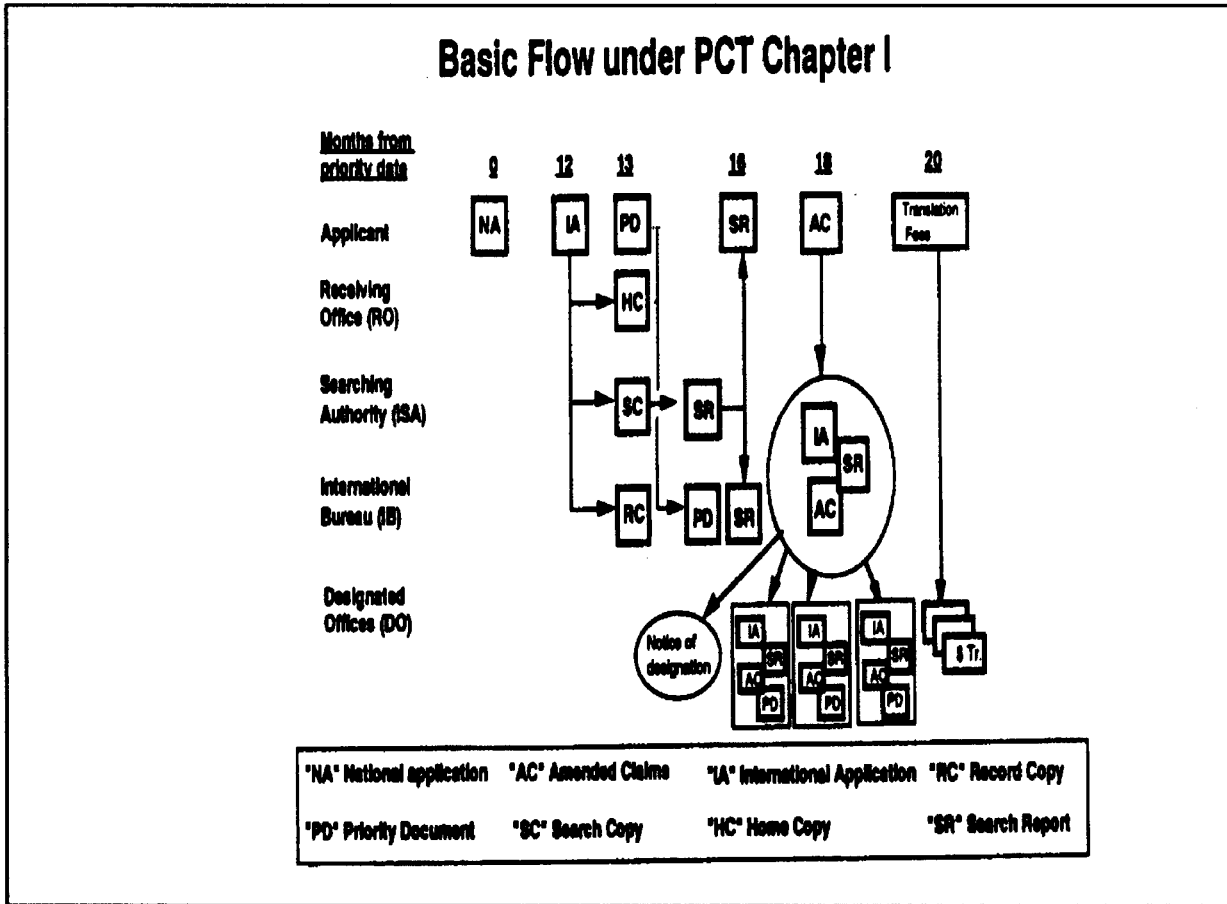
the European Patent Office is not equipped to search computer programs.

The international search fee for the European Patent Office must be paid to the United States Patent and Trademark Office (USPTO) as a Receiving Office at the time of filing the international application. The search fee for the European Patent Office is announced weekly in the *Official Gazette* in United States dollars. The search fee will change as costs and exchange rates require. If exchange rates fluctuate significantly, the fee may change frequently. Notice of changes will be published in the *Official Gazette* shortly before the effective date of any change.

If the European Patent Office as the International Searching Authority considers that the international application does not comply with the requirement of unity of invention as set forth in PCT Rule 13, the European Patent Office will invite applicants to timely pay directly to it an additional search fee in Deutsche Marks for each additional invention.

A revised fee calculation sheet (Form PCT/RO/101, Annex) having appropriate spaces to indicate the choice of International Searching Authority has been developed so that applicants may indicate which International Searching Authority is to make the search.

1842 Chapter I Basic Flow



1843 The International Search

PCT Article 17.

Procedure before the International Searching Authority

(1) Procedure before the International Searching Authority shall be governed by the provisions of this Treaty, the Regulations, and the agreement which the International Bureau shall conclude, subject to this Treaty and the Regulations, with the said Authority.

(2)(a) If the International Searching Authority considers:

(i) that the international application relates to a subject matter which the International Searching Authority is not required, under the Regulations, to search, and in the particular case decides not to search, or

(ii) that the description, the claims, or the drawings, fail to comply with the prescribed requirements to such an extent that a meaningful search could not be carried out, the said Authority shall so declare and shall notify the applicant and the International Bureau that no international search report will be established.

(b) If any of the situations referred to in subparagraph (a) is found to exist in connection with certain claims only, the inter-

national search report shall so indicate in respect of such claims, whereas, for the other claims, the said report shall be established as provided in Article 18.

(3)(a) If the International Searching Authority considers that the international application does not comply with the requirement of unity of invention as set forth in the Regulations, it shall invite the applicant to pay additional fees. The International Searching Authority shall establish the international search report on those parts of the international application which relate to the invention first mentioned in the claims (main invention) and, provided the required additional fees have been paid within the prescribed time limit, on those parts of the international application which relate to inventions in respect of which the said fees were paid.

(b) The national law of any designated State may provide that, where the national Office of the State finds the invitation, referred to in subparagraph (a), of the International Searching Authority justified and where the applicant has not paid all additional fees, those parts of the international application which consequently have not been searched shall, as far as effects in the State are concerned, be considered withdrawn unless a special fee is paid by the applicant to the national Office of that State.

*PCT Rule 33.**Relevant Prior Art for the International Search**33.1. Relevant Prior Art for the International Search*

(a) For the purposes of Article 15(2), relevant prior art shall consist of everything which has been made available to the public anywhere in the world by means of written disclosure (including drawings and other illustrations) and which is capable of being of assistance in determining that the claimed invention is or is not new and that it does or does not involve an inventive step (i.e., that it is or is not obvious), provided that the making available to the public occurred prior to the international filing date.

(b) When any written disclosure refers to an oral disclosure, use, exhibition, or other means whereby the contents of the written disclosure were made available to the public, and such making available to the public occurred on a date prior to the international filing date, the international search report shall separately mention that fact and the date on which it occurred if the making available to the public of the written disclosure occurred on a date which is the same as, or later than, the international filing date.

(c) Any published application or any patent whose publication date is the same as, or later than, but whose filing date, or, where applicable, claimed priority date, is earlier than the international filing date of the international application searched, and which would constitute relevant prior art for the purposes of Article 15(2) had it been published prior to the international filing date, shall be specially mentioned in the international search report.

33.2. Fields to Be Covered by the International Search

(a) The international search shall cover all those technical fields, and shall be carried out on the basis of all those search files, which may contain material pertinent to the invention.

(b) Consequently, not only shall the art in which the invention is classifiable be searched but also analogous arts regardless of where classified.

(c) The question what arts are, in any given case, to be regarded as analogous shall be considered in the light of what appears to be the necessary essential function or use of the invention and not only the specific functions expressly indicated in the international application.

(d) The international search shall embrace all subject matter that is generally recognized as equivalent to the subject matter of the claimed invention for all or certain of its features, even though, in its specifics, the invention as described in the international application is different.

33.3. Orientation of the International Search

(a) International search shall be made on the basis of the claims, with due regard to the description and the drawings (if any) and with particular emphasis on the inventive concept towards which the claims are directed.

(b) In so far as possible and reasonable, the international search shall cover the entire subject matter to which the claims are

directed or to which they might reasonably be expected to be directed after they have been amended.

*PCT Rule 39.**Subject Matter under Article 17(2)(a)(i)**39.1. Definition*

No International Searching Authority shall be required to search an international application if, and to the extent to which, its subject matter is any of the following:

- (i) scientific and mathematical theories,
- (ii) plant or animal varieties or essentially biological processes for the production of plants and animals, other than micro-biological processes and the products of such processes,
- (iii) schemes, rules or methods of doing business, performing purely mental acts or playing games,
- (iv) methods for treatment of the human or animal body by surgery or therapy, as well as diagnostic methods,
- (v) mere presentations of information,
- (vi) computer programs to the extent that the International Searching Authority is not equipped to search prior art concerning such programs.

PCT Article 15 describes the objective of the international search, i.e., to uncover relevant prior art, and also describes the international-type search. It should be noted generally that an international-type search is performed on all U.S. national applications filed after June 1, 1978.

There are several benefits to applicants who use the PCT. One of the three most commonly mentioned benefits is the international search (and consequently the international search report). The others are the time delay gained before having to enter the national phase and the monetary savings since filing and translation fees are also deferred or indeed, may not be necessary depending upon the search results. The international search gives applicants the benefit of knowing the status of the prior art with respect to their invention before time for entry into the national stage. This affords applicants the time to make economic decisions whether to perfect their national stage filings.

The objective of the international search is to discover relevant prior art (PCT Article 15(2)). "Prior art" consists of everything which has been made available to the public anywhere in the world by means of written disclosure (including drawings and other illustrations); it is relevant in respect of the international application if it is capable of being of assistance in determining that the claimed invention is or is not new and that the claimed invention does or

does not involve an inventive step (i.e., that it is or is not obvious), and if the making available to the public occurred prior to the international filing date. For further details, see PCT Rule 33. The international search is made on the basis of the claims, with due regard to the description and the drawings (if any) contained in the international application (PCT Article 15(3)). Categories of relevant prior art as described in PCT Rule 33.1 are indicated in the search report under the section "Documents Considered To Be Relevant." The various letter designations are defined on the search report form (see PCT/ISA/210).

It is pointed out, for example, that:

(A) A category X reference defeats novelty or defeats inventive step when the reference is considered alone;

(B) A category Y reference is said to defeat or refute inventive step when combined with one or more other such references - the combination being obvious to a person skilled in the art;

(C) A category A reference is one showing the general state of the art but would not be considered to be of particular relevance;

(D) A category E reference is an earlier document which is published on or after the international filing date;

(E) A category P reference is a document published prior to the international filing date but later than the claimed priority date (commonly called an intervening reference).

These are the most commonly used categories of references.

The examiner should not view these categories strictly in the sense that they have a direct comparison to U.S. application of prior art references, for example, a category X reference defeats novelty and in that sense, it is closely analogous to U.S. consideration of 35 U.S.C. 102 prior art. However, a category X reference can also defeat inventive step which is analogous to U.S. consideration of 35 U.S.C. 103 prior art.

DOCUMENTS SEARCHED BY THE INTERNATIONAL SEARCHING AUTHORITY

The International Searching Authority must endeavor to discover as much of the relevant prior art as its facilities permit (PCT Article 15(4)), and, in any

case, must consult the so-called "minimum documentation" (PCT Rule 34).

CERTAIN SUBJECT MATTER NEED NOT BE SEARCHED

The USPTO has declared that it will search and examine, in international applications, all subject matter searched and examined in U.S. national applications. However under PCT Rule 39, no International Searching Authority is required to perform an international search where the international application relates to any of the following subject matters:

(A) Scientific and mathematical theories;

(B) Plant or animal varieties or essentially biological processes for the production of plants and animals, other than microbiological processes and the products of such processes;

(C) Schemes, rules or methods of doing business, performing purely mental acts or playing games;

(D) Methods for treatment of the human or animal body by surgery or therapy, as well as diagnostic methods;

(E) Mere presentation of information; and

(F) Computer programs to the extent that it, the said Authority is not equipped to search prior art (PCT Article 17(2)(a)(i) and PCT Rule 39).

The applicant considering the filing of an international application may be well advised not to file one if the subject matter of the application falls into one of the above mentioned areas. If he or she still does file, the International Searching Authority may declare that it will not establish an international search report. Accordingly, applicant should take into consideration which International Searching Authority (e.g., European Patent Office) he or she selects to conduct the international search. It is to be noted, nevertheless, that the lack of the international search report in such case will not have, in itself, any influence on the validity of the international application and the latter's processing will continue, including its communication to the designated Offices.

The USPTO has declared that it will search and examine, in international applications, all subject matter searched and examined in U.S. national applications.

NO SEARCH REQUIRED IF CLAIMS ARE UNCLEAR

If the International Searching Authority considers that the description, the claims, or the drawings fail to comply with the prescribed requirements to such an extent that a meaningful search could not be carried out, it may declare that it will not establish a search report (PCT Article 17(2)(a)(ii)). Such declaration may also be made in respect of some of the claims only. The lack of the international search report will not, in itself, have any influence on the validity of the international application and the latter's processing will continue, including its communication to the designated Offices. Where only some of the claims are found to be unsearchable, the International Searching Authority will not search them, but will search the rest of the international application. Any unsearched claims will be indicated in the international search report.

1844 The International Search Report

PCT Article 18.

The International Search Report

(1) The international search report shall be established within the prescribed time limit and in the prescribed form.

(2) The international search report shall, as soon as it has been established, be transmitted by the International Searching Authority to the applicant and the International Bureau.

(3) The international search report or the declaration referred to in Article 17(2)(a) shall be translated as provided in the Regulations. The translations shall be prepared by or under the responsibility of the International Bureau.

The results of the international search will be recorded in the international search report (Form PCT/ISA/210), which is transmitted with Form PCT/ISA/220 to the applicant and with Form PCT/ISA/219 to the International Bureau. The search report will be published by the International Bureau and will serve as a basis for examination of the international application by the designated Offices and the International Preliminary Examination Authority.

The time limit for establishing the international search report or the declaration under Article 17(2)(a) that no search report will be established is 3 months from receipt of the search copy by the searching authority or 9 months from the priority date, whichever time limit expires later. To ensure timeliness, Office policy is to set a shorter period for the search

by the examiner so that any corrections to the report can be made timely and also to allow for review and mailing to the International Bureau. The Office strives to get all search reports to the International Bureau by 16 months from the priority date or, where there is no priority date, 9 months from the international filing date. See PCT Rule 42.1.

The search report should not contain any expressions of opinion, reasoning, argument or explanation as to any cited prior art. Any such comments would be inappropriate and should be used only if preliminary examination is or becomes a part of the international proceeding. The search report is only for the purpose of identifying prior art and not for commenting thereupon.

The printed international search report form (Form PCT/ISA/210) to be transmitted to the applicant and to the International Bureau contains two main sheets ("first sheet" and "second sheet") to be used for all searches. These two main sheets are intended for recording the important features of the search such as the fields searched and for citing documents revealed by the search. The printed international search report form also contains four optional continuation sheets for use where necessary. There are two continuation sheets for each of the "first sheet" and the "second sheet": "continuation of first sheet (1)" and "continuation of first sheet (2)", and "continuation of second sheet" and "patent family annex", respectively. The patent family annex sheet is not currently used by the United States International Searching Authority since patent family information is not readily available to the examiner. The "continuation of first sheet (1)" is to be used only where an indication is made on the first sheet that claims were found unsearchable (item 1) and/or unity of invention is lacking (item 2). The relevant indications must then be made on that continuation sheet. The "continuation of first sheet (2)" is to contain the text of the abstract where an abstract or an amended abstract has been established by the International Searching Authority (item 5) and an indication to that effect is made on the first sheet. The "continuation of second sheet" is to be used where the space on the second sheet is insufficient for the citation of documents. Lastly, the "extra sheet" may be used whenever additional space is required to complete information from the other sheets.

It is to be noted that only the “second sheet”, the “continuation of second sheet” (if any) and the “continuation of first sheet (1)” (if any), will be the subject of international publication, as the “first sheet” and the “continuation of first sheet (2)” (if any) contain only information which will already appear on the front page of the pamphlet.

The international search report must list the classification identification of the fields searched using the IPC.

Where the international search report is entirely or partly based on a previous search made for an application relating to a similar subject, the relevant search files consulted for this previous search must also be identified in the report as having been consulted for the international application in question.

RESTRICTION OF THE SUBJECT OF THE INTERNATIONAL SEARCH

The report must indicate whether the search was restricted or not for any of the reasons indicated below.

If any such restrictions were applied, the claims in respect of which a search has not been carried out must be identified and the reasons of this should be indicated.

The three categories where such restrictions may arise are:

- (A) Lack of unity of invention;
- (B) Claims drawn to subject matter excluded from the search;
- (C) Claims in respect of which a meaningful search cannot be carried out.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference APG-001	FOR FURTHER ACTION	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. PCT/US00/00123	International filing date (<i>day/month/year</i>) 05 January 2000 (05.01.2000)	(Earliest) Priority Date (<i>day/month/year</i>) 05 January 1999 (05.01.1999)
Applicant Applegate, Inc.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of ____ sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the Report**

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:

contained in the international application in written form.

filed together with the international application in computer readable form.

furnished subsequently to this Authority in written form.

furnished subsequently to this Authority in computer readable form.

the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. **Certain claims were found unsearchable** (See Box I).

3. **Unity of invention is lacking** (See Box II).

4. With regard to the **title**,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No. 1

as suggested by the applicant.

None of the figures

because the applicant failed to suggest a figure.

because this figure better characterizes the invention.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/00123

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claim Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claim Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claim Nos.: 6-9
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)This International Searching Authority found multiple inventions in this international application, as follows:
Please See Continuation Sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

- Remark on Protest**
- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet(1)) (July 1998)

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/00123

Box III TEXT OF THE ABSTRACT (Continuation of Item 5 of the first sheet)

The technical features mentioned in the abstract do not include a reference sign between parentheses (PCT Rule 8.1(d)).

The abstract is too long (PCT Rule 8.1(b)). The abstract must be less than 150 words, or 200 words when no figure is to be published.

NEW ABSTRACT

Olefin (1) and methyl methacrylate copolymers (2) are disclosed which are particularly useful in manufacturing molded automotive parts.

INTERNATIONAL SEARCH REPORT		International application No. PCT/US00/00123										
A. CLASSIFICATION OF SUBJECT MATTER												
IPC(7) : C08F 8/14 US CL : 525/384, 422, 260; 524/225 According to International Patent Classification (IPC) or to both national classification and IPC												
B. FIELDS SEARCHED												
Minimum documentation searched (classification system followed by classification symbols) U.S. : 525/384, 422, 260, 265, 288, 300; 524/225, 233, 245												
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Grant & Hachk's Chemical Dictionary (Fifth Edition)												
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet												
C. DOCUMENTS CONSIDERED TO BE RELEVANT												
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.										
X --- Y	US 4,069,001 A (LOOK) 19 July 1980 (19.07.80), column 2, lines 43-58, column 4, lines 1-23.	1-3 ----- 4, 5										
Y	US 4,950,123 A (JOHNS et al) 03 March 1990 (03.03.90), column 2, lines 1-20	4, 5										
X, P	MILLER et al, Polymeric Composites, J. poly. chem. June 1999, Vol. 61, No. 6, pages 1261-1273, especially page 1268, third paragraph.	1-5										
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.												
* Special categories of cited documents: <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">"A" document defining the general state of the art which is not considered to be of particular relevance</td> <td style="width: 50%;">"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>"E" earlier application or patent published on or after the international filing date</td> <td>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td> </tr> <tr> <td>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>"O" document referring to an oral disclosure, use, exhibition or other means</td> <td>"&" document member of the same patent family</td> </tr> <tr> <td>"P" document published prior to the international filing date but later than the priority date claimed</td> <td></td> </tr> </table>			"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family	"P" document published prior to the international filing date but later than the priority date claimed	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention											
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone											
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art											
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family											
"P" document published prior to the international filing date but later than the priority date claimed												
Date of the actual completion of the international search 13 July 2001 (13.07.2001)		Date of mailing of the international search report										
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230		Authorized officer Pat Examiner Telephone No. 703-305-0000										

Form PCT/ISA/210 (second sheet) (July 1998)

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/00123

BOX II. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claim(s) 1-3, drawn to an olefin polymer.

Group II, claim(s) 4 and 5, drawn to a copolymer of vinyl acetate and methyl methacrylate.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The special technical feature of the Group I invention is the specific olefin polymer claimed therein while the special technical feature of the Group II invention is the particular vinyl acetate and methyl methacrylate copolymers claimed therein. Since the special technical feature of the Group I invention is not present in the Group II claims and the special technical feature of the Group II invention is not present in the Group I claims, unity of invention is lacking.

Continuation of B. FIELDS SEARCHED Item 3:

CAS

search terms: olefin, methyl methacrylate

AUTHENTICATION AND DATES

The identification of the International Searching Authority which established the international search report and the date on which the report was drawn up should be indicated in the search report. This date should be that of the drafting of the report by the search examiner who carried out the search. In addition to the date of actual completion of the international search, the international search report shall also indicate the date on which it was mailed to the applicant, which is important for the computation of the time limit for filing amendments to the claims under PCT Article 19. See PCT Rules 43.1 and 43.2.

The international search report shall indicate the name of an authorized officer of the International Searching Authority which means the person who actually performed the search work and prepared the search report. See PCT Rule 43.8. Note that the name is required but not the signature.

CONTENTS OF THE INTERNATIONAL SEARCH REPORT

The international search report (PCT Rule 43) contains, among other things, the citations of the documents considered to be relevant (PCT Rule 43.5 and Administrative Instructions Section 503), the classification of the subject matter of the invention (PCT Rule 43.3 and Administrative Instructions Section 504) and an indication of the fields searched (PCT Rule 43.6). Citations of particular relevance must be specially indicated (Administrative Instructions Section 505); citations of certain specific categories of documents are also indicated (Administrative Instructions Section 507); citations which are not relevant to all the claims must be cited in relation to the claim or claims to which they are relevant (Administrative Instructions Section 508); if only certain passages of the cited document are particularly relevant, they must be identified, for example, by indicating the page, the column or the lines, where the passage appears.

1844.01 Time for the International Search Report

Publication of the international application occurs at 18 months from the earliest priority date or, where

there is no priority date, 18 months from the international application filing date. The Office goal is to have the search report mailed in sufficient time to reach the International Bureau by the end of 16 months from the priority date or 9 months from the filing date if no priority claim is made. This is necessary since the technical preparations for publication are completed by 17.5 months from the earliest priority date. In view of the treaty mandated publication and the time needed for technical preparation, the Office sets time periods for completion of the search report which will ensure sufficient time to complete internal processing and review and achieve receipt of search report at the International Bureau by the 16th month from the priority date. See PCT Rule 42.1 for time limit for the search.

Thus, as a matter of practice, each Technology Center tends to set its internal time period for completion of the search report to meet the time limits set by the International Application Processing Division. The International Application Processing Division sets its time for completion to ensure adequate time for review, corrections (where necessary) and mailing.

The date of transmittal of the search report becomes critical for applicants since it starts the 2 month period for submission of amendments to the claims under PCT Article 19. See PCT Rule 46.1.

The Patent Cooperation Treaty is extremely date sensitive and for that reason, examiners are encouraged to complete the international search and prepare the search report promptly after receipt. Monitoring and tracking procedures have been devised to minimize the risk of late search reports and/or date transmission thereof.

1846 Sections of the Articles, Regulations, and Administrative Instructions Under the PCT Relevant to the International Search

PCT Articles 15 - 20 (Appendix T);

PCT Rules 33 - 47 (Appendix T); and

Administrative Instructions Sections 501 - 516 (Appendix AI).

1847 Refund of International Search Fee

37 CFR 1.446. *Refund of international application filing and processing fees.*

(a) Money paid for international application fees, where paid by actual mistake or in excess, such as a payment not required by law or treaty and its regulations, may be refunded. A mere change of purpose after the payment of a fee will not entitle a party to a refund of such fee. The Office will not refund amounts of twenty-five dollars or less unless a refund is specifically requested and will not notify the payor of such amounts. If the payor or party requesting a refund does not provide the banking information necessary for making refunds by electronic funds transfer, the Office may use the banking information provided on the payment instrument to make any refund by electronic funds transfer.

(b) Any request for refund under paragraph (a) of this section must be filed within two years from the date the fee was paid. If the Office charges a deposit account by an amount other than an amount specifically indicated in an authorization under § 1.25(b), any request for refund based upon such charge must be filed within two years from the date of the deposit account statement indicating such charge and include a copy of that deposit account statement. The time periods set forth in this paragraph are not extendable.

(c) Refund of the supplemental search fees will be made if such refund is determined to be warranted by the Commissioner or the Commissioner's designee acting under PCT Rule 40.2(c).

(d) The international and search fees will be refunded if no international filing date is accorded or if the application is withdrawn before transmittal of the record copy to the International Bureau (PCT Rules 15.6 and 16.2). The search fee will be refunded if the application is withdrawn before transmittal of the search copy to the International Searching Authority. The transmittal fee will not be refunded.

(e) The handling fee (§ 1.482(b)) will be refunded (PCT Rule 57.6) only if:

(1) The Demand is withdrawn before the Demand has been sent by the International Preliminary Examining Authority to the International Bureau, or

(2) The Demand is considered not to have been submitted (PCT Rule 54.4(a)).

Although 37 CFR 1.446(a) indicates that a "mere change of purpose after the payment of a fee will not entitle a party to a refund of such fee," 37 CFR 1.446(d) and (e) contain exceptions to this general statement.

According to 37 CFR 1.446(d), the search fee will be refunded if no international filing date is accorded or if the application is withdrawn before the search copy is transmitted to the International Searching Authority. The transmittal fee will not be refunded.

According to 37 CFR 1.446(e), the handling fee will be refunded if the Demand is withdrawn before the Demand has been sent by the International Prelim-

inary Examining Authority to the International Bureau.

Refund of the supplemental search fee will be made if the applicant is successful in a protest (filed pursuant to 37 CFR 1.477) to a holding of lack of unity of invention. The supplemental search fee must be paid and be accompanied by (1) a protest and (2) a request for refund of the supplemental search fee.

Any request for refund of the search fee made after the search copy has been transmitted to the International Searching Authority must be directed to the International Searching Authority and not to the Receiving Office. This is clearly necessary where applicant has chosen the European Patent Office as the International Searching Authority.

1848 Sequence Listings

PCT Rule 13^{ter}.

Nucleotide and/or Amino Acid Sequence Listings

13^{ter}.1. Sequence Listing for International Authorities

(a) Where the International Searching Authority finds that the international application contains disclosure of one or more nucleotide and/or amino acid sequences but:

(i) the international application does not contain a sequence listing complying with the standard provided for in the Administrative Instructions, that Authority may invite the applicant to furnish to it, within a time limit fixed in the invitation, a sequence listing complying with that standard;

(ii) the applicant has not already furnished a sequence listing in computer readable form complying with the standard provided for in the Administrative Instructions, that Authority may invite the applicant to furnish to it, within a time limit fixed in the invitation, a sequence listing in such a form complying with that standard.

(b) *[Deleted]*

(c) If the applicant does not comply with an invitation under paragraph (a) within the time limit fixed in the invitation, the International Searching Authority shall not be required to search the international application to the extent that such noncompliance has the result that a meaningful search cannot be carried out.

(d) Where the International Searching Authority finds that the description does not comply with Rule 5.2(b), it shall invite the applicant to file the required correction. Rule 26.4 shall apply *mutatis mutandis* to any correction offered by the applicant. The International Searching Authority shall transmit the correction to the receiving Office and to the International Bureau.

(e) Paragraphs (a) and (c) shall apply *mutatis mutandis* to the procedure before the International Preliminary Examining Authority.

(f) Any sequence listing not contained in the international application as filed shall not, subject to Article 34, form part of the international application.

*PCT Administrative Instruction Section 513.
Sequence Listings*

(a) Where the International Searching Authority receives a correction of a defect under Rule 13^{ter}.1(d), it shall:

(i) indelibly mark, in the upper right-hand corner of each replacement sheet, the international application number and the date on which that sheet was received;

(ii) indelibly mark, in the middle of the bottom margin of each replacement sheet, the words "SUBSTITUTE SHEET (RULE 13^{ter}.1(d))" or their equivalent in the language of publication of the international application;

(iii) indelibly mark on the letter containing the correction, or accompanying any replacement sheet, the date on which that letter was received;

(iv) keep in its files a copy of the letter containing the correction or, when the correction is contained in a replacement sheet, the replaced sheet, a copy of the letter accompanying the replacement sheet, and a copy of the replacement sheet;

(v) promptly transmit any letter and any replacement sheet to the International Bureau, and a copy thereof to the receiving Office.

(b) Where the international search report is based on a sequence listing that was not contained in the international application as filed but was furnished subsequently to the International Searching Authority, the international search report shall so indicate.

(c) Where a meaningful international search cannot be carried out because a sequence listing is not available to the International Searching Authority in the required form, that Authority shall so state in the international search report.

(d) The International Searching Authority shall indelibly mark, in the upper right-hand corner of the first sheet of any sequence listing in printed form which was not contained in the international application as filed but was furnished subsequently to that Authority, the words "SUBSEQUENTLY FURNISHED SEQUENCE LISTING" or their equivalent in the language of publication of the international application.

(e) The International Searching Authority shall keep in its files:

(i) any sequence listing in printed form which was not contained in the international application as filed but was furnished subsequently to that Authority; and

(ii) any sequence listing in computer readable form.

Where an international application contains disclosure of a nucleotide and/or amino acid sequence, the description must contain a listing of the sequence complying with the standard specified in the Administrative Instructions. See MPEP § 1823.02. If the International Searching Authority finds that an international application contains such a disclosure but that the description does not include such a listing or that the listing included does not comply with that standard, the International Searching Authority may

invite the applicant to furnish a listing complying with that standard.

If the International Searching Authority finds that a sequence listing is not in a computer readable form provided for in the Administrative Instructions, it may invite the applicant to furnish a listing to it in such a form. Again, the International Searching Authority would invite the applicant to supply the computer readable diskette or other acceptable electronic medium.

An invitation from the International Searching Authority to furnish a sequence listing complying with the standard specified in the Administrative Instructions, will specify a time limit for complying with the invitation. Any sequence listing furnished by the applicant must be accompanied by a statement to the effect that the listing does not include matter which goes beyond the disclosure in the international application as filed. If the applicant does not comply within that time limit, the search undertaken by the International Searching Authority may be restricted.

If the applicant wishes to include such a listing in the text of the description itself, appropriate amendments may be made later under PCT Article 34, provided that the applicant files a Demand for international preliminary examination.

The United States Receiving Office has not notified the International Bureau under Administrative Instructions Section 801(b) that it is prepared to accept the filing in computer readable form (CRF) of the sequence listing part of international applications under Administrative Instructions Section 801(a). However, Administrative Instructions Section 801(c) permits a receiving Office that has not notified the IB under Administrative Instructions Section 801(b) to decide in a particular case to accept such sequence listing filings. The RO/US will accept applications where the sequence listing is filed using CD-R or CD-ROM as the electronic medium, and where no paper copy of the sequence listing part is submitted. The application must be filed in accordance with the Guidelines set forth in MPEP § 1823.02, subsection II. A in order to be accepted. Under Administrative Instructions Section 803, there is a significant cost savings if such a submission is accepted. In such a case, the electronic submission counts as 400 sheets in addition to the actual number of sheets of the Request, description excluding the sequence listing part

thereof, claims, abstract and drawings. In such a case, four copies of the electronic submission are required. One copy goes to the IB as part of the Record copy; the second copy becomes part of the Home copy; the third copy becomes part of the Search copy; and the fourth copy goes to the Scientific and Technical Information Center (STIC) as the CRF. See MPEP § 1823.02.

1849 Subject Matter Excluded from International Search

The examiner is not required to perform an international search on claims which relate to any of the following subject matter:

- (A) Scientific and mathematical theories;
- (B) Plant or animal varieties or essentially biological processes for the production of plants and animals, other than microbiological processes and the products of such processes;
- (C) Schemes, rules or methods of doing business, performing purely mental acts or playing games;
- (D) Methods for treatment of the human or animal body by surgery or therapy, as well as diagnostic methods;
- (E) Mere presentation of information; and
- (F) Computer programs to the extent that the Authority is not equipped to search prior art concerning such programs.

See PCT Rule 39. In addition, the examiner is not required to search the international application, to the extent that a meaningful search cannot be carried out, in certain cases where a nucleotide and/or amino acid sequence listing is not furnished in accordance with the prescribed standard or in a computer readable form. See PCT Administrative Instructions Section 513(c). However, the U.S. Patent and Trademark Office has declared that it will search and examine all subject matter searched and examined in U.S. national applications. If none of the claims are required to be searched, the examiner will declare that no search report will be established using form PCT/ISA/203. It should, nevertheless, be noted that the lack of an international search report in such a case does not, in itself, have any influence on the validity of the international application, the processing of which, including its communication to the designated Offices, continues.

1850 Unity of Invention Before the International Searching Authority

PCT Rule 40.

Lack of Unity of Invention (International Search)

40.1. Invitation to Pay

The invitation to pay additional fees provided for in Article 17(3)(a) shall specify the reasons for which the international application is not considered as complying with the requirement of unity of invention and shall indicate the amount to be paid.

40.2. Additional Fees

(a) The amount of the additional fee due for searching under Article 17(3)(a) shall be determined by the competent International Searching Authority.

(b) The additional fee due for searching under Article 17(3)(a) shall be payable direct to the International Searching Authority.

(c) Any applicant may pay the additional fee under protest, that is, accompanied by a reasoned statement to the effect that the international application complies with the requirement of unity of invention or that the amount of the required additional fee is excessive. Such protest shall be examined by a three-member board or other special instance of the International Searching Authority or any competent higher authority, which, to the extent that it finds the protest justified, shall order the total or partial reimbursement to the applicant of the additional fee. On the request of the applicant, the text of both the protest and the decision thereon shall be notified to the designated Offices together with the international search report. The applicant shall submit any translation thereof with the furnishing of the translation of the international application required under Article 22.

(d) The three-member board, special instance or competent higher authority, referred to in paragraph (c), shall not comprise any person who made the decision which is the subject of the protest.

(e) Where the applicant has, under paragraph (c), paid an additional fee under protest, the International Searching Authority may, after a prior review of the justification for the invitation to pay an additional fee, require that the applicant pay a fee for the examination of the protest ("protest fee"). The protest fee shall be paid within one month from the date of the notification to the applicant of the result of the review. If the protest fee is not so paid, the protest shall be considered withdrawn. The protest fee shall be refunded to the applicant where the three-member board, special instance or higher authority referred to in paragraph (c) finds that the protest was entirely justified.

40.3. Time Limit

The time limit provided for in Article 17(3)(a) shall be fixed, in each case, according to the circumstances of the case, by the International Searching Authority; it shall not be shorter than 15 or 30 days, respectively, depending on whether the applicant's address is in the same country as or in a different country from that in

which the International Searching Authority is located, and it shall not be longer than 45 days, from the date of the invitation.

*PCT Administrative Instruction Section 502.
Transmittal of Protest Against Payment of Additional Fee
and Decision Thereon Where International Application Is
Considered to Lack Unity of Invention*

The International Searching Authority shall transmit to the applicant, preferably at the latest together with the international search report, any decision which it has taken under Rule 40.2(c) on the protest of the applicant against payment of an additional fee where the international application is considered to lack unity of invention. At the same time, it shall transmit to the International Bureau a copy of both the protest and the decision thereon, as well as any request by the applicant to forward the texts of both the protest and the decision thereon to the designated Offices.

37 CFR 1.475. Unity of invention before the International Searching Authority, the International Preliminary Examining Authority and during the national stage.

(a) An international and a national stage application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept (“requirement of unity of invention”). Where a group of inventions is claimed in an application, the requirement of unity of invention shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression “special technical features” shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art.

(b) An international or a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn only to one of the following combinations of categories:

- (1) A product and a process specially adapted for the manufacture of said product; or
- (2) A product and a process of use of said product; or
- (3) A product, a process specially adapted for the manufacture of the said product, and a use of the said product; or
- (4) A process and an apparatus or means specifically designed for carrying out the said process; or
- (5) A product, a process specially adapted for the manufacture of the said product, and an apparatus or means specifically designed for carrying out the said process.

(c) If an application contains claims to more or less than one of the combinations of categories of invention set forth in paragraph (b) of this section, unity of invention might not be present.

(d) If multiple products, processes of manufacture or uses are claimed, the first invention of the category first mentioned in the claims of the application and the first recited invention of each of the other categories related thereto will be considered as the main invention in the claims, see PCT Article 17(3)(a) and § 1.476(c).

(e) The determination whether a group of inventions is so linked as to form a single general inventive concept shall be made

without regard to whether the inventions are claimed in separate claims or as alternatives within a single claim.

37 CFR 1.477. Protest to lack of unity of invention before the International Searching Authority.

(a) If the applicant disagrees with the holding of lack of unity of invention by the International Searching Authority, additional fees may be paid under protest, accompanied by a request for refund and a statement setting forth reasons for disagreement or why the required additional fees are considered excessive, or both (PCT Rule 40.2(c)).

(b) Protest under paragraph (a) of this section will be examined by the Commissioner or the Commissioner’s designee. In the event that the applicant’s protest is determined to be justified, the additional fees or a portion thereof will be refunded.

(c) An applicant who desires that a copy of the protest and the decision thereon accompany the international search report when forwarded to the Designated Offices may notify the International Searching Authority to that effect any time prior to the issuance of the international search report. Thereafter, such notification should be directed to the International Bureau (PCT Rule 40.2(c)).

THE REQUIREMENT FOR “UNITY OF INVENTION”

Any international application must relate to one invention only or to a group of inventions so linked as to form a single general inventive concept (PCT Article 3(4)(iii) and 17(3)(a), PCT Rule 3.1, and 37 CFR 1.475). Observance of this requirement is checked by the International Searching Authority and may be relevant in the national (or regional) phase.

The decision in *Caterpillar Tractor Co. v. Commissioner of Patents and Trademarks*, 231 USPQ 590 (E.D. Va. 1986) held that the Patent and Trademark Office interpretation of 37 CFR 1.141(b)(2) as applied to unity of invention determinations in international applications was not in accordance with the Patent Cooperation Treaty and its implementing regulations. In the Caterpillar international application, the USPTO acting as an International Searching Authority, had held lack of unity of invention between a set of claims directed to a process for forming a sprocket and a set of claims drawn to an apparatus (die) for forging a sprocket. The court stated that it was an unreasonable interpretation to say that the expression “specifically designed” as found in former PCT Rule 13.2(ii) means that the process and apparatus have unity of invention if they can only be used with each other, as was set forth in MPEP § 806.05(e).

Therefore, when the Office considers international applications as an International Searching Authority, as an International Preliminary Examining Authority, and during the national stage as a Designated or Elected Office under 35 U.S.C. 371, PCT Rule 13.1 and 13.2 will be followed when considering unity of invention of claims of different categories without regard to the practice in national applications filed under 35 U.S.C. 111. No change was made in restriction practice in United States national applications filed under 35 U.S.C. 111 outside the PCT.

In applying PCT Rule 13.2 to international applications as an International Searching Authority, an International Preliminary Examining Authority and to national stage applications under 35 U.S.C. 371, examiners should consider for unity of invention all the claims to different categories of invention in the application and permit retention in the same application for searching and/or preliminary examination, claims to the categories which meet the requirements of PCT Rule 13.2.

PCT Rule 13.2, as it was modified effective July 1, 1992, no longer specifies the combinations of categories of invention which are considered to have unity of invention. Those categories, which now appear as a part of Annex B to the Administrative Instructions, has been substituted with a statement describing the method for determining whether the requirement of unity of invention is satisfied. Unity of invention exists only when there is a technical relationship among the claimed inventions involving one or more special technical features. The term “special technical features” is defined as meaning those technical features that define a contribution which each of the inventions considered as a whole, makes over the prior art. The determination is made based on the contents of the claims as interpreted in light of the description and drawings. Annex B also contains examples concerning unity of invention.

A. *Independent and Dependent Claims*

Unity of invention has to be considered in the first place only in relation to the independent claims in an international application and not the dependent claims. By “dependent” claim is meant a claim which contains all the features of another claim and is in the same category of claim as that other claim (the expression “category of claim” referring to the classi-

fication of claims according to the subject matter of the invention claimed, for example, product, process, use or apparatus or means, etc.).

If the independent claims avoid the prior art and satisfy the requirement of unity of invention, no problem of lack of unity arises in respect of any claims that depend on the independent claims. In particular, it does not matter if a dependent claim itself contains a further invention. Equally, no problem arises in the case of a genus/species situation where the genus claim avoids the prior art. Moreover, no problem arises in the case of a combination/subcombination situation where the subcombination claim avoids the prior art and the combination claim includes all the features of the subcombination.

If, however, an independent claim does not avoid the prior art, then the question whether there is still an inventive link between all the claims dependent on that claim needs to be carefully considered. If there is no link remaining, an objection of lack of unity (that is, arising only after assessment of the prior art) may be raised. Similar considerations apply in the case of a genus/species or combination/subcombination situation.

This method for determining whether unity of invention exists is intended to be applied even before the commencement of the international search. Where a search of the prior art is made, an initial determination of unity of invention, based on the assumption that the claims avoid the prior art, may be reconsidered on the basis of the results of the search of the prior art.

B. *Illustrations of Particular Situations*

There are three particular situations for which the method for determining unity of invention contained in PCT Rule 13.2 is explained in greater detail:

- (A) Combinations of different categories of claims;
- (B) So-called “Markush practice”; and
- (C) Intermediate and final products.

Principles for the interpretation of the method contained in PCT Rule 13.2, in the context of each of those situations are set out below. It is understood that the principles set out below are, in all instances, interpretations of and not exceptions to the requirements of PCT Rule 13.2.

Examples to assist in understanding the interpretation on the three areas of special concern referred to in the preceding paragraph are set out below.

C. Combinations of Different Categories of Claims

The method for determining unity of invention under PCT Rule 13 shall be construed as permitting, in particular, the inclusion of any one of the following combinations of claims of different categories in the same international application:

(A) In addition to an independent claim for a given product, an independent claim for a process specially adapted for the manufacture of the said product, and an independent claim for a use of the said product; or

(B) In addition to an independent claim for a given process, an independent claim for an apparatus or means specifically designed for carrying out the said process; or

(C) In addition to an independent claim for a given product, an independent claim for a process specially adapted for the manufacture of the said product and an independent claim for an apparatus or means specifically designed for carrying out the said process, it being understood that a process is specially adapted for the manufacture of a product if it inherently results in the product and that an apparatus or means is specifically designed for carrying out a process if the contribution over the prior art of the apparatus or means corresponds to the contribution the process makes over the prior art.

Thus, a process shall be considered to be specially adapted for the manufacture of a product if the claimed process inherently results in the claimed product with the technical relationship being present between the claimed product and claimed process. The words “specially adapted” are not intended to imply that the product could not also be manufactured by a different process.

Also an apparatus or means shall be considered to be specifically designed for carrying out a claimed process if the contribution over the prior art of the apparatus or means corresponds to the contribution the process makes over the prior art. Consequently, it would not be sufficient that the apparatus or means is merely capable of being used in carrying out the

claimed process. However, the expression specifically designed does not imply that the apparatus or means could not be used for carrying out another process, nor that the process could not be carried out using an alternative apparatus or means.

D. “Markush Practice”

The situation involving the so-called Markush practice wherein a single claim defines alternatives (chemical or non-chemical) is also governed by PCT Rule 13.2. In this special situation, the requirement of a technical interrelationship and the same or corresponding special technical features as defined in PCT Rule 13.2, shall be considered to be met when the alternatives are of a similar nature.

When the Markush grouping is for alternatives of chemical compounds, they shall be regarded as being of a similar nature where the following criteria are fulfilled:

(A) All alternatives have a common property or activity; and

(B)(1) A common structure is present, i.e., a significant structural element is shared by all of the alternatives; or

(C)(2) In cases where the common structure cannot be the unifying criteria, all alternatives belong to a recognized class of chemical compounds in the art to which the invention pertains.

In paragraph (B)(1), above, the words “significant structural element is shared by all of the alternatives” refer to cases where the compounds share a common chemical structure which occupies a large portion of their structures, or in case the compounds have in common only a small portion of their structures, the commonly shared structure constitutes a structurally distinctive portion in view of existing prior art. The structural element may be a single component or a combination of individual components linked together.

In paragraph (C)(2), above, the words “recognized class of chemical compounds” mean that there is an expectation from the knowledge in the art that members of the class will behave in the same way in the context of the claimed invention. In other words, each member could be substituted one for the other, with the expectation that the same intended result would be achieved.

The fact that the alternatives of a Markush grouping can be differently classified shall not, taken alone, be considered to be justification for a finding of a lack of unity of invention.

When dealing with alternatives, if it can be shown that at least one Markush alternative is not novel over the prior art, the question of unity of invention shall be reconsidered by the examiner. Reconsideration does not necessarily imply that an objection of lack of unity shall be raised.

E. Intermediate and Final Products

The situation involving intermediate and final products is also governed by PCT Rule 13.2.

The term *intermediate* is intended to mean intermediate or starting products. Such products have the ability to be used to produce final products through a physical or chemical change in which the intermediate loses its identity.

Unity of invention shall be considered to be present in the context of intermediate and final products where the following two conditions are fulfilled:

(A) The intermediate and final products have the same essential structural element, in that:

(1) The basic chemical structures of the intermediate and the final products are the same, or

(2) The chemical structures of the two products are technically closely interrelated, the intermediate incorporating an essential structural element into the final product; and

(B) The intermediate and final products are technically interrelated, this meaning that the final product is manufactured directly from the intermediate or is separated from it by a small number of intermediates all containing the same essential structural element.

Unity of invention may also be considered to be present between intermediate and final products of which the structures are not known, for example, as between an intermediate having a known structure and a final product the structure of which is not known, or as between an intermediate of unknown structure and a final product of unknown structure. In order to satisfy unity in such cases, there shall be sufficient evidence to lead one to conclude that the intermediate and final products are technically closely interrelated as, for example, when the intermediate contains the same essential element as the final prod-

uct or incorporates an essential element into the final product.

It is possible to accept in a single international application different intermediate products used in different processes for the preparation of the final product, provided that they have the same essential structural element.

The intermediate and final products shall not be separated, in the process leading from one to the other, by an intermediate which is not new.

If the same international application claims different intermediates for different structural parts of the final product, unity shall not be regarded as being present between the intermediates.

If the intermediate and final products are families of compounds, each intermediate compound shall correspond to a compound claimed in the family of the final products. However, some of the final products may have no corresponding compound in the family of the intermediate products so that the two families need not be absolutely congruent.

As long as unity of invention can be recognized applying the above interpretations, the fact that, besides the ability to be used to produce final products, the intermediates also exhibit other possible effects or activities shall not affect the decision on unity of invention.

PCT Rule 13.3 requires that the determination of the existence of unity of invention be made without regard to whether the inventions are claimed in separate claims or as alternatives within a single claim.

PCT Rule 13.3 is not intended to constitute an encouragement to the use of alternatives within a single claim, but is intended to clarify that the criterion for the determination of unity of invention (namely, the method contained in PCT Rule 13.2) remains the same regardless of the form of claim used.

PCT Rule 13.3 does not prevent an International Searching or Preliminary Examining Authority or an Office from objecting to alternatives being contained within a single claim on the basis of considerations such as clarity, the conciseness of claims or the claims fee system applicable in that Authority or Office.

LACK OF UNITY OF INVENTION

See Annex B of the Administrative Instructions for examples of unity of invention.

The search fee which the applicant is required to pay is intended to compensate the International Searching Authority for carrying out an international search on the international application, but only where the international application meets the “requirement of unity of invention”. That means that the international application must relate to only one invention or must relate to a group of inventions which are so linked as to form a single general inventive concept (PCT Articles 3(4)(iii) and 17(3)(a)).

If the International Searching Authority finds that the international application does not comply with the requirement of unity of invention, the applicant will be invited to pay additional search fees. The International Searching Authority will specify the reasons for its findings and indicate the number of additional fees to be paid (PCT Rules 40.1, 40.2(a) and (b)). Such additional fees are payable directly to the International Searching Authority which is conducting the search, either the United States Patent and Trademark Office or European Patent Office, within the time limit fixed, which must not be shorter than 15 days, if the applicant’s address is in the same country as the International Searching Authority; or 30 days, if applicant’s address is in a country different than the country of the International Searching Authority; and not longer than 45 days from the date of the invitation (PCT Rule 40.3). The search fee amounts for the U.S. and the European Patent Office are found in each weekly edition of the *Official Gazette*.

The International Searching Authority will establish the international search report on those parts of international application which relate to the “main invention,” that is, the invention or the group of inventions so linked as to form a single general inventive concept first mentioned in the claims (PCT Article 17(3)(a)). Moreover, the international search report will be established also on those parts of the international application which relate to any invention (or any group of inventions so linked as to form a single general inventive concept) in respect of which the applicant has paid any additional fee within the prescribed time limits.

Any applicant may pay the additional fee under protest, that is, accompanied by a reasoned statement to the effect that the international application complies with the requirement of unity of invention or that the amount of the required additional fee is excessive

(PCT Rule 40.2(c)). Any such protest filed with the U.S. International Searching Authority will be examined and decided by a Technology Center Director (37 CFR 1.477). To the extent that the applicant’s protest is found to be justified, total or partial reimbursement of the additional fee will be made. On the request of the applicant, the text of both the protest and the decision thereon is sent to the designated Offices together with the international search report (37 CFR 1.477).

Where, within the prescribed time limit, the applicant does not pay any additional fees or only pays some of the additional fees indicated, certain parts of the international application will consequently not be searched. The lack of an international search report in respect of such parts of the international application will, in itself, have no influence on the validity of the international application and processing of the international application will continue, both in the international and in the national (regional) phases. The unsearched claims, upon entry into the national stage, will be considered by the examiner and may be the subject of a holding of lack of unity of invention.

See MPEP § 1875.01 for telephone unity practice. It applies in the same manner under Chapter I.

UNITY OF INVENTION - NUCLEOTIDE SEQUENCES

Under 37 CFR 1.475 and 1.499 *et seq.*, when claims do not comply with the requirement of unity of invention, i.e., when the claimed subject matter does not involve “one or more of the same or corresponding special technical features,” 37 CFR 1.475(a), an additional fee is required to maintain the claims in the same application. 37 CFR 1.476 (b).

The Commissioner has decided *sua sponte* to partially waive 37 CFR 1.475 and 1.499 *et seq.* to permit applicants to claim up to ten (10) nucleotide sequences that do not have the same or corresponding special technical feature without the payment of an additional fee. The PCT permits inventions that lack unity of invention to be maintained in the same international application for payment of additional fees. Thus, in international applications, for each group for which applicant has paid additional international search and/or preliminary examination fees, the USPTO has determined that up to four (4) such additional sequences per group is a reasonable number for examination. Further, claims directed to the selected

sequences will be examined with claims drawn to any sequence combinations which have a common technical feature with the selected sequences. Nucleotide sequences encoding the same protein are considered to satisfy the unity of invention standard and will continue to be examined together.

See MPEP § 803.04 for examples of nucleotide sequence claims impacted by this partial waiver of 37 CFR 1.475 and 1.499 *et seq.*

1851 Identification of Patent Documents

The examiner, in completing the international search report as well as the Chapter II written opinion and final report, is required to cite the references in accordance with the provisions of Administrative Instructions 503 and 611. These sections of the Administrative Instructions require reference citations to include, in addition to other information which is apparent from the forms which the examiner fills out, an indication of the two-letter country code of the country or entity issuing or publishing the document and the standard code for identifying the kind of patent document. The discussion which follows is limited to the identification of patent documents (and nonpatent publications) and a listing of the two-letter country codes for countries or other entities which issue or publish industrial property information.

The standard codes for identifying different kinds of patent documents are found in the “WIPO Handbook on Industrial Property Information and Documentation” - WIPO Standard ST.16 which is published by the World Intellectual Property Organization. The listing is extensive. The Special Program Examiners in each Technology Center (TC) have a complete copy of Standard ST.16. It is also accessible on WIPO’s web site (<http://www.wipo.int/scit/en/>) under the heading “WIPO Standards and Other Documentation.” Provided herein is an abbreviated version representing the countries and codes commonly used by the examiner in preparing search reports.

U.S. patents published before January 2, 2001 are Code A documents generally. Beginning with patents published on January 2, 2001, U.S. patents are Code B documents. Patent Application Publications, first published on March 15, 2001, are Code A documents. Reexamination certificates published before January 2, 2001 are Code B documents. Reexamination certificates published on or after January 2, 2001 are Code

C documents. Tables providing a complete list of the kind codes of patents and other documents published by the USPTO are included in MPEP § 901.04(a). All nonpatent literature documents are Code N. Numerical designations are sometimes found on published documents along with the letter code designation. These should be used by the examiner only if such numerical designation is on the document. Numerical codes along with letter codes can be found, for example, on certain published patent documents such as the German Offenlegungsschrift and published international applications. If numerical designations are not provided, the examiner should use only the letter code designation.

The most commonly cited documents are patents and published patent applications. A guideline for the citation of such documents is listed below. The listing is indicated in the order in which the elements should be listed.

In the case of a patent or published patent application:

(A) The Office that issued the document, by the two letter code (WIPO Standard ST.3);

(B) The number of the document as given to it by the Office that issued it (for Japanese patent documents the indication of the year of the reign of the Emperor must precede the serial number of the patent document);

(C) The kind of document, by the appropriate symbols as indicated on the original document or as given in Appendix II to WIPO Standard ST.16;

(D) The name of the patentee or applicant (in capital letters, where appropriate, abbreviated);

(E) The date of publication of the cited patent document indicated thereon;

(F) Where applicable, the pages, columns or lines where the relevant passages appear, or the relevant figures of the drawings.

The following examples illustrate the citation of a patent document as indicated above:

JP 50-14535 B (NCR CORP.) 28 May 1975 (28.05.75), see column 4, lines 3 to 27.

DE 3744403 A1 (A. JOSEF) 29 August 1991 (29-08-91), page 1, abstract.

US 4,540,573 A (NEURATH et al.) 10 September 1985 (10/09/85), see entire document, especially column 1, lines 10-23.

STANDARD CODE FOR THE IDENTIFICATION OF DIFFERENT KINDS OF PATENT DOCUMENTS

The Code is subdivided into mutually exclusive groups of letters. The groups characterize patent doc-

uments, nonpatent literature documents (N), and restricted documents (X). Groups 1-7 comprise letters enabling identification of documents pertaining to different publication levels.

<u>Group 1</u>	Use for the primary or major series of patent documents (excluding the utility model documents of Group 2 and the special series of patent documents of Group 3, below)
A	First publication level
B	Second publication level
C	Third publication level
<u>Group 2</u>	Use for utility model documents having a numbering series other than the documents of Group 1
U	First publication level
Y	Second publication level
Z	Third publication level
<u>Group 3</u>	Use for major special types of patent documents
M	Medicament patent documents
P	Plant patent documents
S	Design patent documents
<u>Group 4</u>	Use for special types of patent documents or documents derived from/relating to patent applications and not covered by Groups 1 to 3 above:
L	Documents, not covered by letter code W, relating to patent documents and containing bibliographic information and only the text of an abstract and/or claim(s) and, where appropriate, a drawing.
R	Separately published search reports

T	Publication, for information or other purposes, of the translation of the whole or part of a patent document already published by another office or organization
W	Documents relating to utility model documents falling in Group 2 and containing bibliographic information and only the text of an abstract and/or claim(s) and, where appropriate, a drawing
<u>Group 5</u>	Use for series of patent documents not covered by Groups 1 to 4, above
E	First publications level
F	Second publication level
G	Third publication level
<u>Group 6</u>	Use for series of patent documents or documents derived from/relating to patent applications not covered by Groups 1 to 5 above, according to the special requirements of each industrial property office
H	
I	
<u>Group 7</u>	Other
N	Non-patent literature documents
X	Documents restricted to the internal use of industrial property offices

List of Examples of Patent Documents, Previously and Currently Published, or Intended To Be Published, Divided According to Code

CODE: A	Patent Documents Identified as Primary or Major Series — First Publication Level	China	Patent application published before the examination
EXAMPLES:		Cuba	Patent application
Australia	Standard or petty patent application	Czechoslovakia	Patent application
Austria	Patent application (Aufgebot)	Czechoslovakia	Inventor's certificate application
Belgium	Brevet d'invention/ Uitvindingsoctrooi	Czech Republic	Přihláška Vynálezu (Application for the protection of an invention — patent)
Belgium	Brevet de perfectionnement/ Verbeteringsoctrooi	Denmark	Almindeligt tilgaengelig patentansøgning
Belgium	Demande de brevet d'invention/ Uitvindingsoctrooiaanvraag	Egypt	Patent specification
Brazil	Pedido de privilégio (Unexamined patent application for invention)	European Patent Office	Patent application published with search report
Bulgaria	Patentna zjavka predostavena za publicna inspektzija (Patent application made available to the public)	European Patent Office	Patent application published without search report
Canada	Patent (prior to October 1, 1989, under previous Patent Act)	European Patent Office	Separate publication of the search report
Canada	Patent application laid open to public inspection under amended Patent Act, as of October 1, 1989)	Finland	Julkiseksi tullut patenttihakemus-Allmänt tillgänglig patentansökan
		France	Brevet d'invention (old law)
		France	Brevet d'invention première et unique publication
		France	Certificat d'addition à un brevet d'invention, première et unique publication
		France	Certificat d'utilité, première et unique publication

France	Certificat d'addition à un certificat d'utilité, première et unique publication	India	Patent specification
France	Demande de brevet d'invention, première publication	Ireland	Patent specification
France	Demande de certificat d'addition à un brevet d'invention, première publication	Israel	Bakashal lepatent (Application of patent for invention)
France	Demande de certificat d'utilité, première publication	Italy	Domanda di brevetto publicata
France	Demande de certificat d'addition à un certificat d'utilité, première publication	Japan	Kôkai tokkyo kôhō
Germany	Offenlegungsschrift	Japan	Kôhyo tokkyo kôhō
Germany (document published by the Patent Office of the former GDR)	Patentschrift (Ausschlusspatent), patent granted in accordance with paragraph 17.1 of the Patent Law of the former German Democratic Republic of October 27, 1983	Luxembourg	Brevet d'invention
Germany (document published by the Patent Office of the former GDR)	Patentschrift (Wirtschaftspatent), patent granted in accordance with paragraph 17.1 of the Patent Law of the former German Democratic Republic of October 27, 1983	Luxembourg	Certificat d'addition à un brevet d'invention
Greece	Diploma evresitechnias	Malawi	Patent application
Greece	Etisi gia Diploma evresitechnias	Mexico	Patent (Granted patent — according to old law)
Greece	Etisi gia Diploma tropopiisis	Mexico	Patent application (according to new law)
Hungary	Patent application	Mongolia	Patent
		Morocco	Brevet d'invention
		Netherlands	Terinzagegelegging
		New Zealand	Patent application
		Norway	Alment tilgjengelige patentsôknader
		OAPI	Brevet d'invention
		Pakistan	Patent specification
		Peru	Patente de invención
		Philippines	Patent for invention
		Poland	Opis zgłoszeniowy wynalazku
		Portugal	Pedido de patente de invenção
		Republic of Korea	Konggae t'ukho kongbo

Romania	Descrierea inventiei	Switzerland	Auslegeschrift/Fascicule de la demande/Fascicolo della domanda (Patent Application published and pertaining to the technical fields for which search and examination as to novelty are made)
Romania	Cerere de brevet de invente	Switzerland	Patentschrift/Fascicule du brevet/Fascicolo del brevetto (Patent published and pertaining to the technical fields for which neither search nor examination as to novelty are made)
Russian Federation	Zayavka na izobreniye (Published application for invention)	Tunisia	Talab Baraat Ekhtiraâ
Slovakia	Prihláska vynálezu (Published application for invention)	Turkey	Patent tarifnamesi
Slovenia	Patent	United Kingdom	Patent specification (old Law; not printed on documents)
Slovenia	Patent s skraj ³ anim trajanjem (Short-term patent)	United Kingdom	Patent application (new Law)
Soviet Union	Opisanie izobreniya k patentu	United States of America	Patent (published before January 2, 2001)
Soviet Union	Opisanie izobreniya k avtorskomu svidetelstvu	United States of America	Patent application publication (published beginning March 15, 2001)
Spain	Patente de invención	World Intellectual Property Organization	International application published with or without the international search report
Spain	Solicitud de patente con informe sobre el estado de la técnica (Patent application published with search report)	Yugoslavia	Patenta prijava koja se moze razgledati
Spain	Solicitud de patente sin informe sobre el estado de la técnica (Patent application published without search report)		
Sweden	Allmant tillgänglig patentansokan		

CODE: B	Patent Documents Identified as Primary or Major Series -Second Publication Level	France	Certificat d'utilité, deuxième publication de l'invention
EXAMPLES:		France	Certificat d'addition à un certificat d'utilité, deuxième publication de l'invention
Australia	Accepted standard or petty patent	Germany	Auslegeschrift
Austria	Patentschrift	Germany (document published by the Patent Office of the former GDR)	Patentschrift (Ausschliessungspatent), patent granted in accordance with paragraph 18.1 of the Patent Law of the former German Democratic Republic of October 27, 1983
Belgium	Brevet d'invention/ Uitvindingsoctrooi	Germany (document published by the Patent Office of the former GDR)	Patentschrift (Wirtschaftspatent), patent granted in accordance with paragraph 18.1 of the Patent Law of the former German Democratic Republic of October 27, 1983
Brazil	Patente (granted patent of invention)	Greece	Diploma evresitechnias (Patent of invention)
Canada	Reissue patent (prior to October 1, 1989, under previous Patent Act)	Greece	Diploma tropopiisis (Patent of addition)
Cuba	Patente de invención	Hungary	Szabadalmi leiras
Czechoslovakia	Popis vynalezu k patentu	Indonesia	Patent granted in accordance with article 61 of the Patent Law, Number 6 of 1989 Concerning Patents
Czechoslovakia	Popis vynalezu k autor-skemu osvedceni	Japan	Tokkyo kôhô
Czech Republic	Patentovy spis (patent specification)	Netherlands	Openbaar gemaakte octrooiaanvrage
Denmark	Fremlaeggelseskraft (old Law)	Norway	Utlegningskraft
Denmark	Patentskraft	Poland	Opis patentowy
Denmark	Patentskraft (amended)		
Finland	Kuulutusjulkaisu - Utläggningsskraft		
France	Brevet d'invention, deuxième publication de l'invention		
France	Certificat d'addition à un brevet d'invention, deuxième publication de l'invention		

Portugal	Patente de invenção (Granted patent of published application)	CODE: C	Patent Documents Identified as Primary or Major Series - Third Publication Level
Republic of Korea	T'ukho kongbo		
Spain	Patente de invención con informe sobre el estado de la técnica (Patent specification with search report)	EXAMPLES:	
Spain	Patente de invención con examen previo (Patent specification published after examination)	Argentina	Patente de invención (Patent)
Sweden	Utlägningskrift	Australia	Standard or petty patent, amended after acceptance
Switzerland	Patentschrift/Fascicule du brevet/Fascicolo del brevetto (Patent published and pertaining to the technical fields for which search and examination as to novelty are made)	Canada	Patent (under amended Patent Act, as of October 1, 1989)
United Kingdom	Amended patent specification (old Law)	Denmark	Patentskrift (old Law)
United Kingdom	Patent specification (new Law)	Finland	Patentti (Patent)
United States of America	Reexamination certificate (published prior to January 2, 2001)	Germany	Patentschrift
United States of America	Patent (published on or after January 2, 2001)	Germany (document published by the Patent Office of the former GDR)	Patentschrift (Ausschlusspatent), Patent granted in accordance with paragraph 19 of the Patent Law of the former German Democratic Republic of October 27, 1983
		Netherlands	Octrooi
		Norway	Patent
		Poland	Opis patentowy
		Republic of Moldova	Patent specification
		Romania	Brevet de inventie
		Russian Federation	Patent na izobreteniye (Patent for invention)
		Sweden	Patentskrift
		United Kingdom	Amended patent specification (new Law)

United States of America	Reexamination certificate (published on or after January 2, 2001)
Yugoslavia	Patentni spis (Patent specification)
CODE: E	Patent Documents Identified as Series Other Than the Documents Coded A, B, C, U, Y, Z, M, P, S, T, W, L or R - First Publication Level
EXAMPLES:	
Canada	Reissue patent (under amended Patent Act, as of October 1, 1989)
France	Certificat d'addition à brevet d'invention (old Law)
Sweden	Patentskrift i ändrad lydelse (Amended patent specification)
United States of America	Reissue patent
CODE: H	Patent Documents Identified in Series According to Special Requirements of Individual Industrial Property Offices
EXAMPLE:	
United States of America	Statutory invention registration

CODE: M	Medicament Patent Documents
EXAMPLES:	
France	Brevet spécial de médicament
France	Addition à un brevet spécial de médicament
CODE: P	Plant Patent Documents
EXAMPLE:	
United States of America	Plant patent
United States of America	Plant patent application publication
CODE: S	Design Patent Documents
EXAMPLES:	
Brazil	Pedido de privilégio (unexamined patent application for industrial model)
Russian Federation	Patent na promishlenniy obrazets (Design patent)
United States of America	Design patent

CODE: U	Utility Model Documents Having a Numbering Series Other Than the Documents Coded A, B or C— First Publication Level	Japan	Kôkai jitsuyô shin-an kôhô (Published unexamined utility model application)
EXAMPLES:		Japan	Tôroku jitsuyô shin-an kôhô (Published registered utility model application) (without substantive examination)
Austria	Gebrauchsmusterschrift (published with or without a search report)	Mexico	Utility model
Brazil	Pedido de privilégio (unexamined patent application for industrial model)	Poland	Opis zgłoszeniowy wzoru użytkowego
Bulgaria	Zajavka za polezni modeli predostavena za publicna inspektzija (Utility model application made available to the public)	Portugal	Pedido de modelo de utilidade (Published application for a utility model)
Czech Republic	Užitný vzor (Utility model)	Republic of Korea	Konggae shilyong shin-an kongbo
Denmark	Almindeligt tilgaengelig brugsmødelansøgning	Russian Federation	Svidetelstvo na poleznuyu model (Certificate for utility model)
Denmark	Brugsmødelskrift	Slovakia	Úžitkový vzor (Utility model)
Finland	Hyödyllisyysmalli-Nyt-tiğhetsmodell (Utility model)	Spain	Solicitud de modelo de utilidad
Germany	Gebrauchsmuster	CODE: Y	Utility Model Documents Having a Numbering Series Other Than the Documents Coded A, B or C— Second Publication Level
Greece	Etisi gia Pistopiitiko Ipodigmatos Chrisimotitas (Utility model application)	EXAMPLES:	
Hungary	Hasznalati minta leiras (Utility model specification)	Brazil	Patente (granted patent of utility model)

Bulgaria	Opisanie na patent za polezen model (Description of a patent for utility model)
Denmark	Brugsmodelskrift
Denmark	Brugsmodelskrift (amended)
Greece	Pistopiitiko Ipodigmatos Chrisimotitas (Utility model)
Japan	Jitsuyô shin-an kôhô (Published examined utility model application)
Poland	Opis ochronny wzoru uzytkowego
Portugal	Modelo de utilidade (Granted utility model)
Republic of Korea	Shilyong shin-an kongbo (Utility model specification)
Spain	Modelo de utilidad
Spain	Model o de utilidad

Country Codes

The two-letter country codes listed below are set forth in WIPO Standard ST.3, which is published in the “WIPO Handbook on Industrial Property Information and Documentation” and is accessible via the internet at the WIPO website (www.wipo.org). WIPO Standard ST.3 provides, in Annex A, Section 1, a listing of two-letter country codes and/or organizational codes in alphabetic sequence of their short names for the states, other entities and intergovernmental organizations issuing or publishing industrial property documents. Codes for states or organizations that existed on January 1, 1978 but that no longer exist are provided in Annex B, Section 2. Annex B, Section 1 (not reproduced below) lists States for which the Codes have changed.

Annex A, Section 1

List of States, Other Entities and Intergovernmental Organizations, in Alphabetic Sequence of Their Short Names, and Their Corresponding Codes	
Afghanistan	AF
African Intellectual Property Organization (OAPI)	OA
African Regional Industrial Property Organization (ARIPO)	AP
Albania	AL
Algeria	DZ
Andorra	AD
Angola	AO
Anguilla	AI
Antigua and Barbuda	AG
Argentina	AR
Armenia	AM
Aruba	AW
Australia	AU
Austria	AT
Azerbaijan	AZ
Bahamas	BS
Bahrain	BH
Bangladesh	BD
Barbados	BB
Belarus	BY
Belgium	BE
Belize	BZ

Benelux Trademark Office (BBM) and Benelux Designs Office (BBDM)	BX	Croatia	HR
Benin	BJ	Cuba	CU
Bermuda	BM	Cyprus	CY
Bhutan	BT	Czech Republic	CZ
Bolivia	BO	Democratic People's Republic of Korea	KP
Bosnia and Herzegovina	BA	Democratic Republic of the Congo	CD
Botswana	BW	Denmark	DK
Bouvet Island	BV	Djibouti	DJ
Brazil	BR	Dominica	DM
Brunei Darussalam	BN	Dominican Republic	DO
Bulgaria	BG	East Timor	TP
Burkina Faso	BF	Ecuador	EC
Burundi	BI	Egypt	EG
Cambodia	KH	El Salvador	SV
Cameroon	CM	Equatorial Guinea	GQ
Canada	CA	Eritrea	ER
Cape Verde	CV	Estonia	EE
Cayman Islands	KY	Ethiopia	ET
Central African Republic	CF	Eurasian Patent Organization (EAPO)	EA
Chad	TD	European Community Trade-mark Office (See Office for Harmonization in the Internal Market)	EP
Chile	CL	European Patent Office (EPO)	EP
China	CN	Falkland Islands (Malvinas)	FK
Colombia	CO	Faroe Islands	FO
Comoros	KM	Fiji	FJ
Congo	CG	Finland	FI
Cook Islands	CK		
Costa Rica	CR		
Côte d'Ivoire	CI		

France	FR	Iraq	IQ
Gabon	GA	Ireland	IE
Gambia	GM	Israel	IL
Georgia	GE	Italy	IT
Germany	DE	Jamaica	JM
Ghana	GH	Japan	JP
Gibraltar	GI	Jordan	JO
Greece	GR	Kazakstan	KZ
Greenland	GL	Kenya	KE
Grenada	GD	Kiribati	KI
Guatemala	GT	Korea (See Democratic People's Republic of Korea; Republic of Korea)	
Guinea	GN	Kuwait	KW
Guinea-Bissau	GW	Kyrgyzstan	KG
Gulf Cooperation Council (see Patent Office of the Cooperation Council for the Arab States of the Gulf)		Laos	LA
Guyana	GY	Latvia	LV
Haiti	HT	Lebanon	LB
Holy See	VA	Lesotho	LS
Honduras	HN	Liberia	LR
Hong Kong (See The Hong Kong Special Administrative Region of The People's Republic of China)		Libya	LY
Hungary	HU	Liechtenstein	LI
Iceland	IS	Lithuania	LT
India	IN	Luxembourg	LU
Indonesia	ID	Macau	MO
International Bureau of the World Intellectual Property Organization (WIPO)	IB, WO	Madagascar	MG
Iran (Islamic Republic of)	IR	Malawi	MW
		Malaysia	MY
		Maldives	MV
		Mali	ML

Malta	MT	Patent Office of the	GC
Mauritania	MR	Cooperation Council for	
Mauritius	MU	the Arab States of the Gulf	
Mexico	MX	(GCC)	
Monaco	MC	Peru	PE
Mongolia	MN	Philippines	PH
Montserrat	MS	Poland	PL
Morocco	MA	Portugal	PT
Mozambique	MZ	Qatar	QA
Myanmar	MM	Republic of Korea	KR
Namibia	NA	Republic of Moldova	MD
Nauru	NR	Romania	RO
Nepal	NP	Russian Federation	RU
Netherlands	NL	Rwanda	RW
Netherlands Antilles	AN	Saint Helena	SH
New Zealand	NZ	Saint Kitts and Nevis	KN
Nicaragua	NI	Saint Lucia	LC
Niger	NE	Saint Vincent and the Grenadines	VC
Nigeria	NG	Samoa	WS
Northern Mariana Islands	MP	San Marino	SM
Norway	NO	Sao Tome and Principe	ST
Office for Harmonization in the Internal Market (Trade-marks and Designs) (OHIM)	EM	Saudi Arabia	SA
Oman	OM	Senegal	SN
Pakistan	PK	Seychelles	SC
Palau	PW	Sierra Leone	SL
Panama	PA	Singapore	SG
Papua New Guinea	PG	Slovakia	SK
Paraguay	PY	Slovenia	SI
		Solomon Islands	SB
		Somalia	SO

South Africa	ZA
South Georgia and the South Sandwich Islands	GS
Spain	ES
Sri Lanka	LK
Sudan	SD
Suriname	SR
Swaziland	SZ
Sweden	SE
Switzerland	CH
Syria	SY
Taiwan, Province of China	TW
Tajikistan	TJ
Tanzania (see United Republic of Tanzania)	
Thailand	TH
The Former Yugoslav Republic of Macedonia	MK
The Hong Kong Special Administrative Region of The People's Republic of China	HK
Togo	TG
Tonga	TO
Trinidad and Tobago	TT
Tunisia	TN
Turkey	TR
Turkmenistan	TM
Turks and Caicos Islands	TC
Tuvalu	TV
Uganda	UG
Ukraine	UA
United Arab Emirates	AE

United Kingdom	GB
United Republic of Tanzania	TZ
United States of America	US
Uruguay	UY
Uzbekistan	UZ
Vanuatu	VU
Vatican City State (See Holy See)	
Venezuela	VE
Viet Nam	VN
Virgin Islands (British)	VG
Western Sahara	EH
World Intellectual Property Organization (WIPO) (International Bureau of)	WO, IB
Yemen	YE
Yugoslavia	YU
Zambia	ZM
Zimbabwe	ZW
Annex B, Section 2	
List of States or Organizations That Existed on January 1, 1978, But That No Longer Exist	
Czechoslovakia	CS
Democratic Yemen	SY/YD
German Democratic Republic	DL/DD
International Patent Institute	IB
Soviet Union	SU

1852 International-Type Search

PCT Rule 41.

Earlier Search Other Than International Search

41.1. Obligation to Use Results; Refund of Fee

If reference has been made in the request, in the form provided for in Rule 4.11, to an international-type search carried out under the conditions set out in Article 15(5) or to a search other than an international or international-type search, the International Searching Authority shall, to the extent possible, use the results of the said search in establishing the international search report on the international application. The International Searching Authority shall refund the search fee, to the extent and under the conditions provided for in the agreement under Article 16(3)(b) or in a communication addressed to and published in the Gazette by the International Bureau, if the international search report could wholly or partly be based on the results of the said search.

37 CFR 1.104. Nature of examination.

(a) Examiner's action.

(3) An international-type search will be made in all national applications filed on and after June 1, 1978.

(4) Any national application may also have an international-type search report prepared thereon at the time of the national examination on the merits, upon specific written request therefor and payment of the international-type search report fee set forth in § 1.21(e). The Patent and Trademark Office does not require that a formal report of an international-type search be prepared in order to obtain a search fee refund in a later filed international application.

PCT Rule 41 provides that the applicant may request in a later filed international application that the report of the results of the international-type search, i.e., a search similar to an international search, but carried out on a national application (37 CFR 1.104(a)(3) and (a)(4)), be used in establishing an international search report on such international application. An international-type search is conducted on all U.S. national nonprovisional applications filed after June 1, 1978. Upon specific request, at the time of the examination of a U.S. national nonprovisional application and provided that the payment of the appropriate international-type search report fee has been made (37 CFR 1.21(e)) an international-type search report Form PCT/ISA/201 will also be prepared.

1853 Amendment Under PCT Article 19

PCT Article 19.

Amendment of the Claims before the International Bureau

(1) The applicant shall, after having received the international search report, be entitled to one opportunity to amend the claims of the international application by filing amendments with the International Bureau within the prescribed time limit. He may, at the same time, file a brief statement, as provided in the Regulations, explaining the amendments and indicating any impact that such amendments might have on the description and the drawings.

(2) The amendments shall not go beyond the disclosure in the international application as filed.

(3) If the national law of any designated State permits amendments to go beyond the said disclosure, failure to comply with paragraph (2) shall have no consequence in that State.

PCT Rule 46.

Amendment of Claims Before the International Bureau

46.1. Time Limit

The time limit referred to in Article 19 shall be two months from the date of transmittal of the international search report to the International Bureau and to the applicant by the International Searching Authority or 16 months from the priority date, whichever time limit expires later, provided that any amendment made under Article 19 which is received by the International Bureau after the expiration of the applicable time limit shall be considered to have been received by that Bureau on the last day of that time limit if it reaches it before the technical preparations for international publication have been completed.

46.2. Where to File

Amendments made under Article 19 shall be filed directly with the International Bureau.

46.3. Language of Amendments

If the international application has been filed in a language other than the language in which it is published, any amendment made under Article 19 shall be in the language of publication.

46.4. Statement

(a) The statement referred to in Article 19(1) shall be in the language in which the international application is published and shall not exceed 500 words if in the English language or if translated into that language. The statement shall be identified as such by a heading, preferably by using the words "Statement under Article 19(1)" or their equivalent in the language of the statement.

(b) The statement shall contain no disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

46.5. Form of Amendments

The applicant shall be required to submit a replacement sheet for every sheet of the claims which, on account of an amendment or amendments under Article 19, differs from the sheet originally filed. The letter accompanying the replacement sheets shall draw attention to the differences between the replaced sheets and the replacement sheets. To the extent that any amendment results in the cancellation of an entire sheet, that amendment shall be communicated in a letter.

37 CFR 1.415. The International Bureau.

(a) The International Bureau is the World Intellectual Property Organization located at Geneva, Switzerland. It is the international intergovernmental organization which acts as the coordinating body under the Treaty and the Regulations (PCT Art. 2 (xix) and 35 U.S.C. 351(h)).

(b) The major functions of the International Bureau include:

- (1) Publishing of international applications and the International Gazette;
- (2) Transmitting copies of international applications to Designated Offices;
- (3) Storing and maintaining record copies; and
- (4) Transmitting information to authorities pertinent to the processing of specific international applications.

PCT Administrative Instruction Section 205.

Numbering and Identification of Claims Upon Amendment

(a) Amendments to the claims under Article 19 or Article 34(2)(b) may be made either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed. All the claims appearing on a replacement sheet shall be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims shall be required. In all cases where claims are renumbered, they shall be renumbered consecutively.

(b) The applicant shall, in the letter referred to in the second and third sentences of Rule 46.5(a) or in the second and fourth sentences of Rule 66.8(a), indicate the differences between the claims as filed and the claims as amended. He shall, in particular, indicate in the said letter, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether:

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The applicant has one opportunity to amend the claims only of the international application after issuance of the Search Report. The amendments to the claims must be filed directly with the International Bureau, usually within 2 months of the date of mailing of the Search Report. If the amendments to the claims are timely received by the International

Bureau, such amendments will be published as part of the pamphlet directly following the claims as filed. Article 19 offers applicants the opportunity to generally amend the claims before entering the designated Offices. The national laws of some designated Offices may grant provisional protection on the invention from the date of publication of the claims. Therefore, some applicants take advantage of the opportunity under Article 19 to polish the claims anticipating provisional protection. See PCT Rule 46.5.

1857 International Publication

PCT Article 21.

International Publication

(1) The International Bureau shall publish international applications.

(2)(a) Subject to the exceptions provided for in subparagraph (b) and in Article 64(3), the international publication of the international application shall be effected promptly after the expiration of 18 months from the priority date of that application.

(b) The applicant may ask the International Bureau to publish his international application any time before the expiration of the time limit referred to in subparagraph (a). The International Bureau shall proceed accordingly, as provided in the Regulations.

(3) The international search report or the declaration referred to in Article 17(2)(a) shall be published as prescribed in the Regulations.

(4) The language and form of the international publication and other details are governed by the Regulations.

(5) There shall be no international publication if the international application is withdrawn or is considered withdrawn before the technical preparations for publication have been completed.

(6) If the international application contains expressions or drawings which, in the opinion of the International Bureau, are contrary to morality or public order, or if, in its opinion, the international application contains disparaging statements as defined in the Regulations, it may omit such expressions, drawings, and statements, from its publications, indicating the place and number of words or drawings omitted, and furnishing, upon request, individual copies of the passages omitted.

PCT Article 29.

Effects of the International Publication

(1) As far as the protection of any rights of the applicant in a designated State is concerned, the effects, in that State, of the international publication of an international application shall, subject to the provisions of paragraphs (2) to (4), be the same as those which the national law of the designated State provides for the compulsory national publication of unexamined national applications as such.

(2) If the language in which the international publication has been effected is different from the language in which publications

under the national law are effected in the designated State, the said national law may provide that the effects provided for in paragraph (1) shall be applicable only from such time as:

(i) a translation into the latter language has been published as provided by the national law, or

(ii) a translation into the latter language has been made available to the public, by laying open for public inspection as provided by the national law, or

(iii) a translation into the latter language has been transmitted by the applicant to the actual or prospective unauthorized user of the invention claimed in the international application, or

(iv) both both the acts described in (i) and (iii), or both the acts described in (ii) and (iii), have taken place.

(3) The national law of any designated State may provide that, where the international publication has been effected, on the request of the applicant, before the expiration of 18 months from the priority date, the effects provided for in paragraph (1) shall be applicable only from the expiration of 18 months from the priority date.

(4) The national law of any designated State may provide that the effects provided for in paragraph (1) shall be applicable only from the date on which a copy of the international application as published under Article 21 has been received in the national Office of or acting for such State. The said Office shall publish the date of receipt in its gazette as soon as possible.

PCT Administrative Instruction Section 404.

International Publication Number of International Application

The International Bureau shall assign to each published international application an international publication number which shall be different from the international application number. The international publication number shall be used on the pamphlet and in the Gazette entry. It shall consist of the two-letter code WO followed by a two-digit designation of the last two numbers of the year of publication, a slant, and a serial number consisting of five digits (e.g., WO78/12345).

35 U.S.C. 374. Publication of international application.

The publication under the treaty defined in section 351(a) of this title, of an international application designating the United States shall confer the same rights and shall have the same effect under this title as an application for patent published under section 122(b), except as provided in sections 102(e) and 154(d) of this title.

The publication of international applications currently occurs every other Thursday. Under PCT Article 20 the International Bureau sends copies of published applications to each of the designated Offices on the day of publication. Until October 1, 1995, as a PCT member country, the U.S. Patent and Trademark Office received copies of all published international applications in printed form for inclusion in the examiner search files. The U.S. Patent and

Trademark Office now receives the published international applications on CD-ROM disks and in other electronic formats. For information on obtaining copies of these applications, see MPEP § 901.05(c). The applications are also published in the *PCT Gazette*, which can be accessed electronically through The Intellectual Property Digital Library Web site (<http://ipdl.wipo.int/>) of the World Intellectual Property Organization.

1857.01 Prior Art Effect of the International Publication

35 U.S.C. 374. Publication of international application.

The publication under the treaty defined in section 351(a) of this title, of an international application designating the United States shall confer the same rights and shall have the same effect under this title as an application for patent published under section 122(b), except as provided in sections 102(e) and 154(d) of this title.

35 U.S.C. 102. Conditions for patentability; novelty and loss of right to patent.

A person shall be entitled to a patent unless —

(e) the invention was described in—

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

In certain situations the publication of an international application under PCT Article 21(2)(a) may be used as prior art as of its international filing date under 35 U.S.C. 102(e). In order for such a publication to be eligible for use as prior art under 35 U.S.C. 102(e) as of its international filing date the following conditions must be met:

(A) The U.S. application being examined must have been filed on or after November 29, 2000 (or filed prior to November 29, 2000 and voluntarily published); and

(B) The international application must have:

- (1) been filed on or after November 29, 2000
- (2) designated the United States;

(3) been published under Article 21(2)(a) in English; and

(4) entered the national stage under 35 U.S.C. 371.

If any of the above conditions have not been satisfied, the publication of the international application may only be used as prior art as of its publication date under 35 U.S.C. 102(a) or (b).

1859 Withdrawal of International Application or Designations

PCT Administrative Instruction Section 326.

Withdrawal by Applicant Under Rule 90^{bis}.1, 90^{bis}.2 or 90^{bis}.3

(a) The receiving Office shall promptly transmit to the International Bureau any notice from the applicant effecting withdrawal of the international application under Rule 90^{bis}.1, of a designation under Rule 90^{bis}.2 or of a priority claim under Rule 90^{bis}.3 which has been filed with it together with an indication of the date of receipt of the notice. If the record copy has not yet been sent to the International Bureau, the receiving Office shall transmit the said notice together with the record copy.

(b) If the search copy has already been sent to the International Searching Authority and the international application is withdrawn under Rule 90^{bis}.1 or a priority claim is withdrawn under Rule 90^{bis}.3, the receiving Office shall promptly transmit a copy of the notice effecting withdrawal to the International Searching Authority.

(c) If the search copy has not yet been sent to the International Searching Authority and the international application is withdrawn under Rule 90^{bis}.1, the receiving Office shall not send the search copy to the International Searching Authority and shall, subject to Section 322, refund the search fee to the applicant unless it has already been transferred to the International Searching Authority. If the search fee has already been transferred to the International Searching Authority, the receiving Office shall send a copy of the request and of the notice effecting withdrawal to that Authority.

(d) If the search copy has not yet been sent to the International Searching Authority and a priority claim is withdrawn under Rule 90^{bis}.3, the receiving Office shall transmit a copy of the notice effecting withdrawal to the International Searching Authority together with the search copy.

PCT Administrative Instruction Section 414.

Notification to the International Preliminary Examining Authority Where the International Application or the Designations of All Elected States Are Considered Withdrawn

If a demand has been submitted and the international application or the designations of all designated States which have been

elected are considered withdrawn under Article 14(1), (3) or (4), the International Bureau shall promptly notify the International Preliminary Examining Authority, unless the international preliminary examination report has already issued.

The applicant may withdraw the international application by a notice addressed to the International Bureau or to the receiving Office and received before the expiration of 20 months from the priority date. Where a Demand for international preliminary examination has been filed before the expiration of 19 months from the priority date, the international application may be withdrawn by a notice addressed to the International Bureau or to the International Preliminary Examining Authority and received before the expiration of 30 months from the priority date. Any such withdrawal is free of charge. A notice of withdrawal must be signed by all the applicants. An appointed agent or appointed common representative may sign such a notice on behalf of the applicant or applicants who appointed him, but an applicant who is considered to be the common representative may not sign such a notice on behalf of the other applicants. As to the case where an applicant inventor for the United States of America refuses to sign or cannot be found or reached see PCT Rule 90^{bis}.5(b).

The applicant may prevent international publication by withdrawing the international application, provided that the notice of withdrawal reaches the International Bureau before the completion of technical preparations for that publication. The notice of withdrawal may state that the withdrawal is to be effective only on the condition that international publication can still be prevented. In such a case the withdrawal is not effective if the condition on which it was made cannot be met that is, if the technical preparations for international publication have already been completed. International publication may be postponed by withdrawing the priority claim.

The applicant may withdraw the designation of any State by a notice addressed to the International Bureau or to the receiving Office and received before the expiration of 20 months from the priority date. Where a Demand for international preliminary examination has been filed before the expiration of 19 months from the priority date, the designation of any elected State may be withdrawn by a notice addressed to the International Preliminary Examining Authority and received before the expiration of 30 months from the

priority date. Any such withdrawal is free of charge. A notice of withdrawal must be signed by all the applicants. An appointed agent or appointed common representative may sign such a notice on behalf of the applicant or applicants who appointed him, but an applicant who is considered to be the common representative may not sign such a notice on behalf of the other applicants. If all designations are withdrawn, the international application will be treated as withdrawn.

The applicant may withdraw a priority claim made in the international application by a notice addressed to the International Bureau or to the receiving Office and received before the expiration of 20 months from the priority date. Where a Demand for international preliminary examination has been filed before the expiration of 19 months from the priority date, the notice must be received before the expiration of 30 months from the priority date. In the latter case, the notice may also be addressed to the International Preliminary Examining Authority. Any or all of the priority claims may be so withdrawn. Any such withdrawal is free of charge. A notice of withdrawal must be signed by all the applicants. An appointed agent or appointed common representative may sign such a notice on behalf of the applicant or applicants who appointed him, but an applicant who is considered to be the common representative may not sign such a notice on behalf of the other applicants.

Where the withdrawal of a priority claim causes a change in the priority date of the international application, any time limit which is computed from the original priority date and which has not yet expired—for example, the time limit before which processing in the national phase cannot start—is computed from the priority date resulting from the change. (It is not possible to extend the time limit concerned if it has already expired when the priority claim is withdrawn.) However, if the notice of withdrawal reaches the International Bureau after the completion of the technical preparations for international publication, the International Bureau may proceed with the international publication on the basis of the time limit for international publication as computed from the original priority date.

1860 International Preliminary Examination

EXAMINATION PROCEDURE

The International Preliminary Examination is to be carried out in accordance with PCT Article 34 and PCT Rule 66. After the Demand is checked for compliance with PCT Rules 53 - 55, 57 and 58, the first step of the examiner is to study the description, the drawings (if any), and the claims of the international application and the documents describing the prior art as cited in the international search report.

A written opinion must be prepared if the examiner:

(A) Considers that the international application has any of the defects described in PCT Article 34(4) concerning subject matter which is not required to be examined or which is unclear or inadequately supported;

(B) Considers that the report should be negative with respect to any of the claims because of a lack of novelty, inventive step (non-obviousness) or industrial applicability as described in PCT Article 33(2) - (4);

(C) Notices any defects in the form or contents of the international application;

(D) Considers that any amendment goes beyond the disclosure in the international application as originally filed;

(E) Wishes to make an observation on the clarity of the claims, the description, the drawings or to the question whether the claims are fully supported by the description (PCT Rule 66.2);

(F) Decides not to carry out the international preliminary examination on a claim for which no International Search Report was issued; or

(G) Considers that no acceptable amino acid sequence listing is available in a form that would allow a meaningful international preliminary examination to be carried out.

The written opinion is prepared on form PCT/IPEA/408 to notify applicant of the defects found in the international application. The examiner is further required to fully state the reasons for his/her opinion (PCT Rule 66.2(b)) and invite a written reply, with amendments where appropriate (PCT Rule 66.2(c)), normally setting a 2 month time limit for the reply.

The applicant may reply to the invitation by making amendments or, if applicant disagrees with the opinion of the examiner, by submitting arguments, as the case may be, or both.

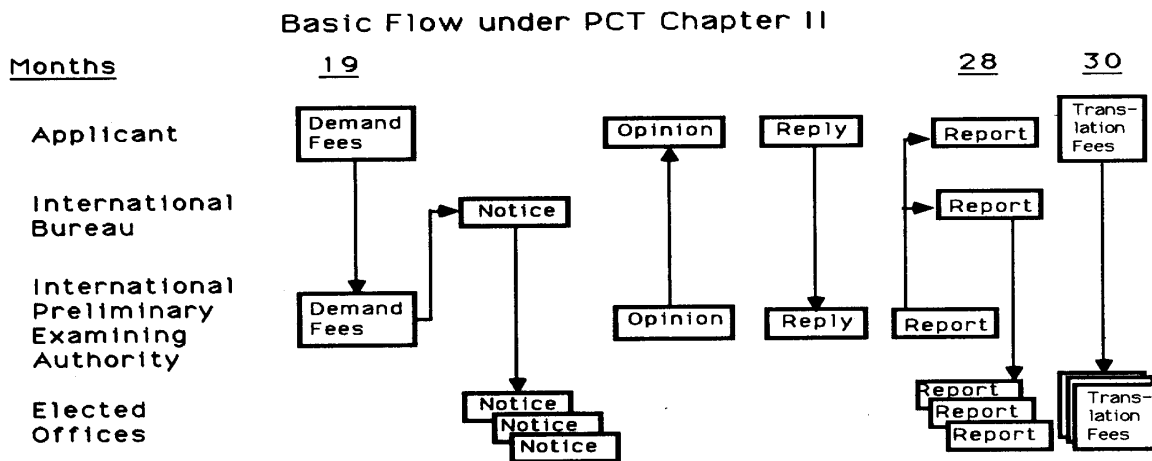
The U.S. Rules of Practice pertaining to international preliminary examination of international applications permit a second written opinion in those cases where sufficient time is available. Normally only one written opinion will be issued. Any reply received after the expiration of the set time limit will not normally be considered in preparing the international preliminary examination report. In situations, however, where the examiner has requested an amendment or where a later amendment places the application in

better condition for examination, the amendment may be considered by the examiner.

If the applicant does not reply to the written opinion within the set time period, the international preliminary examination report will be prepared after expiration of the time limit plus sufficient time to have any reply clear the Mail Center.

If, after initial examination of the international application, there is no negative statement or comment to be made, then only the international preliminary examination report will issue without a written opinion having been issued.

1861 Chapter II Basic Flow



1862 Agreement with the International Bureau To Serve as an International Preliminary Examination Authority

PCT Article 32.

The International Preliminary Examining Authority

(1) International preliminary examination shall be carried out by the International Preliminary Examining Authority

(2) In the case of demands referred to in Article 31(2)(a), the receiving Office, and, in the case of demands referred to in Article 31(2)(b), the Assembly, shall, in accordance with the applicable agreement between the interested International Preliminary Examining Authority or Authorities and the International Bureau,

specify the International Preliminary Examining Authority or Authorities competent for the preliminary examination.

(3) The provisions of Article 16(3) shall apply, *mutatis mutandis*, in respect of the International Preliminary Examining Authorities.

PCT Article 34.

Procedure before the International Preliminary Examining Authority

(1) Procedure before the International Preliminary Examining Authority shall be governed by the provisions of this Treaty, the Regulations, and the agreement which the International Bureau shall conclude, subject to this Treaty and the Regulations, with the said Authority.

37 CFR 1.416. The United States International Preliminary Examining Authority.

(a) Pursuant to appointment by the Assembly, the United States Patent and Trademark Office will act as an International Preliminary Examining Authority for international applications filed in the United States Receiving Office and in other Receiving Offices as may be agreed upon by the Commissioner, in accordance with agreement between the Patent and Trademark Office and the International Bureau.

(b) The United States Patent and Trademark Office, when acting as an International Preliminary Examining Authority, will be identified by the full title "United States International Preliminary Examining Authority" or by the abbreviation "IPEA/US."

(c) The major functions of the International Preliminary Examining Authority include:

- (1) Receiving and checking for defects in the Demand;
- (2) Forwarding Demands in accordance with PCT Rule 59.3;
- (3) Collecting the handling fee for the International Bureau and the preliminary examination fee for the United States International Preliminary Examining Authority;
- (4) Informing applicant of receipt of the Demand;
- (5) Considering the matter of unity of invention;
- (6) Providing an international preliminary examination report which is a nonbinding opinion on the questions whether the claimed invention appears to be novel, to involve inventive step (to be nonobvious), and to be industrially applicable; and
- (7) Transmitting the international preliminary examination report to applicant and the International Bureau.

An agreement was concluded between the United States Patent and Trademark Office (USPTO) and the International Bureau under which the USPTO agreed to serve as an International Preliminary Examining Authority for those applications filed in the USPTO as a Receiving Office and for those international applications filed in other receiving Offices for which the USPTO has served as an International Searching Authority.

The agreement is provided for in PCT Articles 32(2) & (3) and 34(1), and in PCT Rules 59.1, 63.1, 72.1, and 77.1(a). Authority is given in 35 U.S.C. 361(c), 362(a) & (b) and in 364(a). 37 CFR 1.416(a) and PCT Administrative Instructions Section 103(c) are also relevant.

1864 The Demand and Preparation for Filing of Demand

37 CFR 1.480. Demand for international preliminary examination.

(a) On the filing of a proper Demand in an application for which the United States International Preliminary Examining Authority is competent and for which the fees have been paid, the

international application shall be the subject of an international preliminary examination. The preliminary examination fee (§ 1.482(a)(1)) and the handling fee (§ 1.482(b)) shall be due at the time of filing the Demand.

(b) The Demand shall be made on a standardized form. Copies of the printed Demand forms are available from the Patent and Trademark Office. Letters requesting printed Demand forms should be marked "Box PCT."

(c) If the Demand is made prior to the expiration of the 19th month from the priority date and the United States of America is elected, the provisions of § 1.495 shall apply rather than § 1.494.

(d) Withdrawal of a proper Demand prior to the start of the international preliminary examination will entitle applicant to a refund of the preliminary examination fee minus the amount of the transmittal fee set forth in § 1.445(a)(1).

Once applicant has requested the filing of an international application under Chapter I which affords applicants the benefit of an international search, applicant has the right to file a Demand for preliminary examination. The use of the term "Demand" distinguishes Chapter II from the "Request" under Chapter I. Applicants who timely and properly file a Demand for preliminary examination are able to defer or delay the time for entry into the national stage from 20 months (under Chapter I) to 30 months from the earliest priority date. It is not possible to file a Demand unless a proper Chapter I "Request" for an international application has been filed.

The Demand should be filed on PCT Form PCT/IPEA/401 along with the fee transmittal sheet. For information on obtaining these forms free of charge, see MPEP § 1730.

1864.01 Amendments Filed with Demand

PCT Rule 66.

Procedure before the International Preliminary Examining Authority

66.8. Form of Amendments

(a) Subject to paragraph (b), the applicant shall be required to submit a replacement sheet for every sheet of the international application which, on account of an amendment, differs from the sheet previously filed. The letter accompanying the replacement sheets shall draw attention to the differences between the replaced sheets and the replacement sheets and shall preferably also explain the reasons for the amendment.

(b) Where the amendment consists in the deletion of passages or in minor alterations or additions, the replacement sheet referred to in paragraph (a) may be a copy of the relevant sheet of the international application containing the alterations or

additions, provided that the clarity and direct reproducibility of that sheet are not adversely affected. To the extent that any amendment results in the cancellation of an entire sheet, that amendment shall be communicated in a letter which shall preferably also explain the reasons for the amendment.

37 CFR 1.485. Amendments by applicant during international preliminary examination.

(a) The applicant may make amendments at the time of filing the Demand. The applicant may also make amendments within the time limit set by the International Preliminary Examining Authority for reply to any notification under § 1.484(b) or to any written opinion. Any such amendments must:

(1) Be made by submitting a replacement sheet in compliance with PCT Rules 10 and 11.1 to 11.13 for every sheet of the application which differs from the sheet it replaces unless an entire sheet is cancelled; and

(2) Include a description of how the replacement sheet differs from the replaced sheet. Amendments that do not comply with PCT Rules 10 and 11.1 to 11.13 may not be entered.

(b) If an amendment cancels an entire sheet of the international application, that amendment shall be communicated in a letter

Amendments may be filed with the Demand (PCT Article 34) if desired to place the application claims in better condition for international preliminary examination. Such amendments, however, may not include new matter and must be accompanied by a description of how the replacement sheet differs from the replaced sheet.

Amendments filed after the Demand cannot be assured of consideration since the examiner will be taking up the application to draft the written opinion rather promptly because of the short examination period.

1864.02 Applicant's Right to File a Demand

PCT Article 31.

Demand for International Preliminary Examination

(2)(a) Any applicant who is a resident or national, as defined in the Regulations, of a Contracting State bound by Chapter II, and whose international application has been filed with the receiving Office of or acting for such State, may make a demand for international preliminary examination.

PCT Rule 54.

The Applicant Entitled to Make a Demand

54.1. Residence and Nationality

(a) Subject to the provisions of paragraph (b), the residence or nationality of the applicant shall, for the purposes of Article 31(2), be determined according to Rule 18.1(a) and (b).

(b) The International Preliminary Examining Authority shall, in the circumstances specified in the Administrative Instructions, request the receiving Office or, where the international application was filed with the International Bureau as receiving Office, the national Office of, or acting for, the Contracting State concerned to decide the question whether the applicant is a resident or national of the Contracting State of which he claims to be a resident or national. The International Preliminary Examining Authority shall inform the applicant of any such request. The applicant shall have an opportunity to submit arguments directly to the Office concerned. The Office concerned shall decide the said question promptly.

54.2. Right to Make a Demand

The right to make a demand under Article 31(2) shall exist if the applicant making the demand or, if there are two or more applicants, at least one of them is a resident or national of a Contracting State bound by Chapter II and the international application has been filed with a receiving Office of or acting for a Contracting State bound by Chapter II.

(i) *[Deleted]*

(ii) *[Deleted]*

54.3 International Applications Filed with the International Bureau as Receiving Office

Where the international application is filed with the International Bureau as receiving Office under Rule 19.1(a)(iii), the International Bureau shall, for the purposes of Article 31(2)(a), be considered to be acting for the Contracting State of which the applicant is a resident or national.

54.4. Applicant Not Entitled to Make a Demand

If the applicant does not have the right to make a demand or, in the case of two or more applicants, if none of them has the right to make a demand under Rule 54.2, the demand shall be considered not to have been submitted.

If there is a sole applicant, he or she must be a resident or national of a Contracting State bound by Chapter II of the PCT. If there are two or more applicants, it is sufficient that one of them be a resident or national of a Contracting State bound by Chapter II, regardless of the elected State(s) for which each applicant is indicated. Only applicants for the elected States are required to be indicated in the Demand. The detailed requirements for the various indications required in connection with each applicant (name and address, telephone number, facsimile machine

number or teleprinter address, nationality and residence) are the same as those required under PCT Rule 4 in connection with the Request. Note that any inventor who is not also an applicant is not indicated in the Demand.

If the recording of a change in the name or person has been requested under PCT Rule 92^{bis}.1 before the Demand was filed, it is the applicant(s) of record at the time when the Demand is filed who must be indicated in the Demand.

1864.03 States Which May Be Elected

PCT Article 31.

Demand for International Preliminary Examination

(4)(a)The demand shall indicate the Contracting State or States in which the applicant intends to use the results of the international preliminary examination (“elected States”). Additional Contracting States may be elected later. Election may relate only to Contracting States already designated under Article 4.

(b) Applicants referred to in paragraph (2)(a) may elect any Contracting State bound by Chapter II. Applicants referred to in paragraph (2)(b) may elect only such Contracting States bound by Chapter II as have declared that they are prepared to be elected by such applicants.

Only PCT member states which have ratified or acceded to Chapter II and which were designated in the Request may be elected under Chapter II. The Assembly has taken no action to allow persons who are residents or nationals of a State not party to the PCT or not bound by Chapter II to make a Demand under Article 31(2)(b).

1864.04 Agent’s Right to Act

Any agent entitled to practice before the receiving Office where the international application was filed may represent the applicant before the international authorities (PCT Article 49).

If for any reason, the examiner needs to question the right of an attorney or agent to practice before the International Preliminary Examining Authority, the USPTO roster of registered attorneys and agents should be consulted. If the international application was filed with a receiving Office other than the United States, Form PCT/IPEA/410 may be used by the requesting IPEA to ask the receiving Office with

which the international application was filed, whether the agent named in the international application has the right to practice before that Office.

The PCT Article and Regulations governing the right to practice are PCT Article 49 and PCT Rule 83.

1865 Filing of Demand

PCT Article 31.

Demand for International Preliminary Examination

(1) On the demand of the applicant, his international application shall be the subject of an international preliminary examination as provided in the following provisions and the Regulations.

(3) The demand for international preliminary examination shall be made separately from the international application. The demand shall contain the prescribed particulars and shall be in the prescribed language and form.

(6)(a)The demand shall be submitted to the competent International Preliminary Examining Authority referred to in Article 32.

Applicants should mail the Demand and appropriate fees directly to the International Preliminary Examining Authority they desire to prepare the International Preliminary Examination Report. United States applicants who have had the international search prepared by the European Patent Office may also request the European Patent Office to act as the International Preliminary Examining Authority.

Demands filed in the European Patent Office should be addressed to:

European Patent Office
Erhardstrasse 27
D-80331 Munich
Federal Republic of Germany.

Demands directed to the United States Patent and Trademark Office should be addressed to:

Assistant Commissioner for Patents
Box PCT
Washington, DC 20231.

The “Express Mail” provisions of 37 CFR 1.10 may be used to file a Demand under Chapter II in the USPTO. Applicants are advised that failure to

comply with the provisions of 37 CFR 1.10 will result in the paper or fee being accorded the date of receipt and not the date of deposit. See MPEP § 513.

Demand for international preliminary examination may be submitted to the USPTO via facsimile. The Certificate of Mailing or Transmission practice under 37 CFR 1.8 CANNOT be used to file a Demand if the date of deposit is desired. If used, the date of the Demand will be the date of receipt in the USPTO. See MPEP § 513, § 1834, and § 1834.01.

All Demands filed in the USPTO must be in the English language.

PCT Rule 59.3 was amended July 1, 1998 to provide a safeguard in the case of a Demand filed with an International Preliminary Examining Authority which is not competent for the international preliminary examination of a particular international application. The USPTO may forward such a Demand to the International Bureau and the International Bureau will forward the Demand to a competent International Preliminary Examining Authority pursuant to PCT

Rule 59.3(c). The competent International Preliminary Examining Authority will process the Demand based on the date of receipt in the USPTO. See 37 CFR 1.416(c)(2).

CHOICE OF EXAMINING AUTHORITY

U.S. residents and nationals may choose to have the International Preliminary Examination done either by the IPEA/EP or the IPEA/US. The IPEA/EP has agreed that it would act as International Preliminary Examining Authority for any Chapter II case in which it served as the ISA. The IPEA/US will serve as International Preliminary Examining Authority for U.S. residents and nationals if the U.S. or EPO served as ISA.

The IPEA/US will also serve as International Preliminary Examining Authority for residents or nationals of Barbados, Brazil, India, Israel, Mexico, New Zealand, South Africa, and Trinidad and Tobago if the U.S. was the International Searching Authority.

The demand must be filed directly with the competent International Preliminary Examining Authority or, if two or more Authorities are competent, with the one chosen by the applicant. The full name or two-letter code of that Authority may be indicated by the applicant on the line below:
 IPEA/ US

PCT

CHAPTER II

DEMAND

under Article 31 of the Patent Cooperation Treaty:
 The undersigned requests that the international application specified below be the subject of international preliminary examination according to the Patent Cooperation Treaty and hereby elects all eligible States (except where otherwise indicated).

For International Preliminary Examining Authority use only	
Identification of IPEA	Date of receipt of DEMAND
Box No. I IDENTIFICATION OF THE INTERNATIONAL APPLICATION	
Applicant's or agent's file reference CMC-123-PCT	
International application No. PCT/US00/999999	International filing date (day/month/year) 11 January 2000 (11.01.00)
(Earliest) Priority date (day/month/year) 11 January 1999 (11.01.99)	
Title of invention SELF-STEERING GEAR FOR SAILBOATS	
Box No. II APPLICANT(S)	
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) COLUMBIA MARINE CORPORATION 100 Front Street Annapolis, Maryland 20726 United States of America	
Telephone No. 305-555-1122	Facsimile No. 305-555-1123
Teleprinter No.	Applicant's registration No. with the Office
State (that is, country) of nationality: US	State (that is, country) of residence: US
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) JONES, John Paul 200 Shady Grove Road Davidsonville, Maryland 20720 United States of America	
State (that is, country) of nationality: US	State (that is, country) of residence: US
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)	
State (that is, country) of nationality:	State (that is, country) of residence:
<input type="checkbox"/> Further applicants are indicated on a continuation sheet.	

Form PCT/IPEA/401 (first sheet) (March 2001; reprint July 2001)

See Notes to the demand form

Sheet No. 2

International application No.
PCT/US00/99999

Box No. III AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE	
The following person is <input checked="" type="checkbox"/> agent <input type="checkbox"/> common representative	
and <input checked="" type="checkbox"/> has been appointed earlier and represents the applicant(s) also for international preliminary examination.	
<input type="checkbox"/> is hereby appointed and any earlier appointment of (an) agent(s)/common representative is hereby revoked.	
<input type="checkbox"/> is hereby appointed, specifically for the procedure before the International Preliminary Examining Authority, in addition to the agent(s)/common representative appointed earlier.	
Name and address: <i>(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)</i> ADAMS, John 345 State Street Boston, MA 02110 United States of America	Telephone No. 617-577-7777
	Facsimile No. 617-577-7778
	Teleprinter No.
	Agent's registration No. with the Office 99,999
<input type="checkbox"/> Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.	
Box No. IV BASIS FOR INTERNATIONAL PRELIMINARY EXAMINATION	
Statement concerning amendments:*	
1. The applicant wishes the international preliminary examination to start on the basis of:	
<input type="checkbox"/> the international application as originally filed	
the description	<input checked="" type="checkbox"/> as originally filed
	<input type="checkbox"/> as amended under Article 34
the claims	<input type="checkbox"/> as originally filed
	<input type="checkbox"/> as amended under Article 19 (together with any accompanying statement)
	<input checked="" type="checkbox"/> as amended under Article 34
the drawings	<input checked="" type="checkbox"/> as originally filed
	<input type="checkbox"/> as amended under Article 34
2. <input type="checkbox"/> The applicant wishes any amendment to the claims under Article 19 to be considered as reversed.	
3. <input type="checkbox"/> The applicant wishes the start of the international preliminary examination to be postponed until the expiration of 20 months from the priority date unless the International Preliminary Examining Authority receives a copy of any amendments made under Article 19 or a notice from the applicant that he does not wish to make such amendments (Rule 69.1(d)). <i>(This check-box may be marked only where the time limit under Article 19 has not yet expired.)</i>	
* Where no check-box is marked, international preliminary examination will start on the basis of the international application as originally filed or, where a copy of amendments to the claims under Article 19 and/or amendments of the international application under Article 34 are received by the International Preliminary Examining Authority before it has begun to draw up a written opinion or the international preliminary examination report, as so amended.	
Language for the purposes of international preliminary examination: English.....	
<input checked="" type="checkbox"/> which is the language in which the international application was filed.	
<input type="checkbox"/> which is the language of a translation furnished for the purposes of international search.	
<input type="checkbox"/> which is the language of publication of the international application.	
<input type="checkbox"/> which is the language of the translation (to be) furnished for the purposes of international preliminary examination.	
Box No. V ELECTION OF STATES	
The applicant hereby elects all eligible States <i>(that is, all States which have been designated and which are bound by Chapter II of the PCT)</i>	
excluding the following States which the applicant wishes not to elect:	

Sheet No. .3.

International application No.
PCT/US00/99999

Box No. VI CHECK LIST

The demand is accompanied by the following elements, in the language referred to in Box No. IV, for the purposes of international preliminary examination:

- | | | | |
|--|---|-------|--------|
| 1. translation of international application | : | _____ | sheets |
| 2. amendments under Article 34 | : | 2 | sheets |
| 3. copy (or, where required, translation) of amendments under Article 19 | : | _____ | sheets |
| 4. copy (or, where required, translation) of statement under Article 19 | : | _____ | sheets |
| 5. letter | : | 1 | sheets |
| 6. other (<i>specify</i>) | : | _____ | sheets |

For International Preliminary Examining Authority use only
received not received

- | | |
|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> |

The demand is also accompanied by the item(s) marked below:

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> fee calculation sheet | 5. <input type="checkbox"/> statement explaining lack of signature |
| 2. <input type="checkbox"/> original separate power of attorney | 6. <input type="checkbox"/> sequence listing in computer readable form |
| 3. <input type="checkbox"/> original general power of attorney | 7. <input type="checkbox"/> other (<i>specify</i>): |
| 4. <input type="checkbox"/> copy of general power of attorney; reference number, if any: | |

Box No. VII SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the demand).

John Adams

For International Preliminary Examining Authority use only

1. Date of actual receipt of DEMAND:

2. Adjusted date of receipt of demand due to CORRECTIONS under Rule 60.1(b):

3. The date of receipt of the demand is AFTER the expiration of 19 months from the priority date and item 4 or 5, below, does not apply. The applicant has been informed accordingly.

4. The date of receipt of the demand is WITHIN the period of 19 months from the priority date as extended by virtue of Rule 80.5.

5. Although the date of receipt of the demand is after the expiration of 19 months from the priority date, the delay in arrival is EXCUSED pursuant to Rule 82.

For International Bureau use only

Demand received from IPEA on:

CHAPTER II

PCT

FEE CALCULATION SHEET

Annex to the Demand

International application No. PCT/US00/99999	For International Preliminary Examining Authority use only Date stamp of the IPEA								
Applicant's or agent's file reference CMC-123-PCT									
Applicant COLUMBIA MARINE CORPORATION									
<p>CALCULATION OF PRESCRIBED FEES</p> <p>1. Preliminary examination fee 490 P</p> <p>2. Handling fee (<i>Applicants from certain States are entitled to a reduction of 75% of the handling fee. Where the applicant is (or all applicants are) so entitled, the amount to be entered at H is 25% of the handling fee.</i>) 137 H</p> <p>3. Total of prescribed fees Add the amounts entered at P and H and enter total in the TOTAL box..... 627</p> <div style="text-align: right; border: 1px solid black; width: 150px; margin-left: auto; padding: 2px;"> TOTAL </div>									
<p>MODE OF PAYMENT</p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> authorization to charge deposit account with the IPEA (see below)</td> <td><input type="checkbox"/> cash</td> </tr> <tr> <td><input checked="" type="checkbox"/> cheque</td> <td><input type="checkbox"/> revenue stamps</td> </tr> <tr> <td><input type="checkbox"/> postal money order</td> <td><input type="checkbox"/> coupons</td> </tr> <tr> <td><input type="checkbox"/> bank draft</td> <td><input type="checkbox"/> other (<i>specify</i>):</td> </tr> </table>		<input type="checkbox"/> authorization to charge deposit account with the IPEA (see below)	<input type="checkbox"/> cash	<input checked="" type="checkbox"/> cheque	<input type="checkbox"/> revenue stamps	<input type="checkbox"/> postal money order	<input type="checkbox"/> coupons	<input type="checkbox"/> bank draft	<input type="checkbox"/> other (<i>specify</i>):
<input type="checkbox"/> authorization to charge deposit account with the IPEA (see below)	<input type="checkbox"/> cash								
<input checked="" type="checkbox"/> cheque	<input type="checkbox"/> revenue stamps								
<input type="checkbox"/> postal money order	<input type="checkbox"/> coupons								
<input type="checkbox"/> bank draft	<input type="checkbox"/> other (<i>specify</i>):								
<p>AUTHORIZATION TO CHARGE (OR CREDIT) DEPOSIT ACCOUNT <i>(This mode of payment may not be available at all IPEAs)</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Authorization to charge the total fees indicated above. <input checked="" type="checkbox"/> <i>(This check-box may be marked only if the conditions for deposit accounts of the IPEA so permit)</i> Authorization to charge any deficiency or credit any overpayment in the total fees indicated above. </td> <td style="width: 50%; vertical-align: top;"> IPEA/ US Deposit Account No.: 99-1111 Date: 03 August 2001 Name: John Adams Signature: _____ </td> </tr> </table>		<input type="checkbox"/> Authorization to charge the total fees indicated above. <input checked="" type="checkbox"/> <i>(This check-box may be marked only if the conditions for deposit accounts of the IPEA so permit)</i> Authorization to charge any deficiency or credit any overpayment in the total fees indicated above.	IPEA/ US Deposit Account No.: 99-1111 Date: 03 August 2001 Name: John Adams Signature: _____						
<input type="checkbox"/> Authorization to charge the total fees indicated above. <input checked="" type="checkbox"/> <i>(This check-box may be marked only if the conditions for deposit accounts of the IPEA so permit)</i> Authorization to charge any deficiency or credit any overpayment in the total fees indicated above.	IPEA/ US Deposit Account No.: 99-1111 Date: 03 August 2001 Name: John Adams Signature: _____								

1866 Filling in of Headings on Chapter II Forms

The examiner will encounter several different forms for use in the Chapter II preliminary examination phase and most of the forms will have the same "header" information to be provided.

The notes below list the common identifying information requested on the top of the first page of most of the forms:

Applicant's mailing address - this is usually the attorney's address taken from the file wrapper.

Applicant's or Agent's File Reference - this is the applicant's or agent's application reference (or docket number) which is composed of either letters or numbers, or both, provided this reference does not exceed twelve characters. This reference may be found in the upper right hand box on the first sheet of the Demand, Form PCT/IPEA/401. See Administrative Instructions Section 109.

International Application Number - this is the 14 digit PCT application number as stamped and typed on the international application file wrapper and may also be found on the first page of the Demand, Form PCT/IPEA/401.

International Filing Date - this is the filing date printed on the international application file wrapper and may also be found on the first page of the Demand, Form PCT/IPEA/401.

Applicant (Name) - the first named applicant as set forth on the international application file wrapper and may also be found in box II of the Demand, Form PCT/IPEA/401.

1867 Preliminary Examination Fees

37 CFR 1.481. Payment of international preliminary examination fees.

(a) The handling and preliminary examination fees shall be paid within the time period set in PCT Rule 57.3. The handling fee or preliminary examination fee payable is the handling fee or preliminary examination fee in effect on the date of receipt of the Demand except under PCT Rule 59.3(a) where the fee payable is the fee in effect on the date of arrival of the Demand at the United States International Preliminary Examining Authority.

(1) If the handling and preliminary fees are not paid within the time period set in PCT Rule 57.3, applicant will be notified and given one month within which to pay the deficient fees plus a late payment fee equal to the greater of:

(i) Fifty percent of the amount of the deficient fees, but not exceeding an amount equal to double the handling fee; or

(ii) An amount equal to the handling fee (PCT Rule 58^{bis}.2).

(2) The one-month time limit set in this paragraph to pay deficient fees may not be extended.

(b) If the payment needed to cover the handling and preliminary examination fees, pursuant to paragraph (a) of this section, is not timely made in accordance with PCT Rule 58^{bis}.1(d), the United States International Preliminary Examination Authority will declare the Demand to be considered as if it had not been submitted.

The preliminary examination fee is for the benefit of the International Preliminary Examining Authority and the amount for the U.S. doing the preliminary examination is specified in 37 CFR 1.482. The fee is somewhat higher if the international search was performed by an authority other than the USPTO.

The handling fee is a fee for the benefit of the International Bureau and is collected by the International Preliminary Examining Authority. The amount of the handling fee is set out in the PCT schedule of fees which is annexed to the PCT Regulations.

The current amount of both the preliminary examination fee and the handling fee can be found in each weekly issue of the *Official Gazette*. Since supplements to the handling fee were deleted, no additional Chapter II fees are required other than any additional preliminary examination fee where additional inventions are determined to be present. The amount of this fee is also specified in 37 CFR 1.482 and in the weekly issues of the *Official Gazette*. See also PCT Rules 57 and 58.

The time limit for paying the preliminary examination fee and the handling fee is set forth in PCT Rules 57.3 and 58.1(b). 37 CFR 1.481(a) provides that the preliminary examination fee or handling fee payable is the preliminary examination fee or handling fee in effect on the date of receipt of the Demand in the United States International Preliminary Examining Authority. Effective July 1, 1998, PCT Rule 58bis.1(c) was added to consider the preliminary examination fee and handling fee to have been received before the expiration of the time limit set in PCT Rule 57.3 if the fees were submitted prior to the sending of an invitation to pay the fees.

Effective July 1, 1998, PCT Rule 58bis.1(a) was added to permit the International Preliminary Examining Authority to collect a late payment fee set forth in PCT Rule 58bis.2 if the fees for preliminary examination are not paid prior to the sending of the invitation

to pay the fees. If the preliminary examination fee and handling fee are not paid within the time set in PCT Rule 57.3, applicants will be notified and given 1 month within which to pay the deficient fees plus a late payment fee equal to the greater of: (1) 50% of the amount of the deficient fees, but not exceeding an amount equal to double the handling fee; or (2) an amount equal to the handling fee. See 37 CFR 1.481(a)(1)(i) and (ii). The 1 month time limit set forth in 37 CFR 1.481(a)(1) to pay deficient fees may not be extended. See 37 CFR 1.481(a)(2).

If the payment needed to cover the preliminary examination fee and handling fee is not timely made in accordance with PCT Rule 58bis.1(d), the United States International Preliminary Examining Authority will declare the Demand to be considered as if it had not been submitted. In this regard, where the Authority sends a notification that the Demand is considered not to have been made and applicant's payment is received, both on that same date, the fee is considered to be late and the notification remains effective. The fee must antedate the notice in order for the notice not to be effective. See 37 CFR 1.481(b).

1868 Correction of Defects in the Demand

PCT Rule 60.

Certain Defects in the Demand or Elections

60.1. Defects in the Demand

(a) If the demand does not comply with the requirements specified in Rules 53.1, 53.2(a)(i) to (iv), 53.2(b), 53.3 to 53.8, and 55.1, the International Preliminary Examining Authority shall invite the applicant to correct the defects within a time limit which shall be reasonable under the circumstances. That time limit shall not be less than one month from the date of the invitation. It may be extended by the International Preliminary Examining Authority at any time before a decision is taken.

(b) If the applicant complies with the invitation within the time limit under paragraph (a), the demand shall be considered as if it had been received on the actual filing date, provided that the demand as submitted contained at least one election and permitted the international application to be identified; otherwise, the demand shall be considered as if it had been received on the date on which the International Preliminary Examining Authority receives the correction.

(c) Subject to paragraph (d), if the applicant does not comply with the invitation within the time limit under paragraph (a), the

demand shall be considered as if it had not been submitted and the International Preliminary Examining Authority shall so declare.

(d) Where, to paragraph (d), if the applicant does not comply with the invitation within the time limit under paragraph (a), the demand shall be considered as if it had not been submitted and the International Preliminary Examining Authority shall so declare.

(e) If the defect is noticed by the International Bureau, it shall bring the defect to the attention of the International Preliminary Examining Authority, which shall then proceed as provided in paragraphs (a) to (d).

(f) If the demand does not contain a statement concerning amendments, the International Preliminary Examining Authority shall proceed as provided for in Rules 66.1 and 69.1(a) or (b).

(g) Where the statement concerning amendments contains an indication that amendments under Article 34 are submitted with the demand (Rule 53.9(c)) but no such amendments are, in fact, submitted, the International Preliminary Examining Authority shall invite the applicant to submit the amendments within a time limit fixed in the invitation and shall proceed as provided for in Rule 69.1(e).

60.2. Defects in Later Elections

(a) If the notice effecting a later election does not comply with the requirements of Rule 56, the International Bureau shall invite the applicant to correct the defects within a time limit which shall be reasonable under the circumstances. That time limit shall not be less than one month from the date of the invitation. It may be extended by the International Bureau at any time before a decision is taken.

(b) If the applicant complies with the invitation within the time limit under paragraph (a), the notice shall be considered as if it had been received on the actual filing date, provided that the notice as submitted contained at least one election and permitted the international application to be identified; otherwise, the notice shall be considered as if it had been received on the date on which the International Bureau receives the correction.

(c) Subject to paragraph (d), if the applicant does not comply with the invitation within the time limit under paragraph (a), the notice shall be considered as if it had not been submitted.

(d) Where, in respect of an applicant for a certain elected State, the signature required under Rule 56.1(b) and (c) or the name or address is lacking after the expiration of the time limit under paragraph (a), the later election of that State shall be considered as if it had not been made.

Defects in the Demand may be corrected. The type of correction determines whether the filing date of the Demand must be changed. The most common defects which result in the mailing of an invitation to correct are found in PCT Rules 53 and 55. If the applicant complies with the invitation, the Demand is considered as if it had been received on the actual filing date, i.e., the original date of receipt. See PCT Rule 60.1(b).

1869 Notification to International Bureau of Demand

PCT Article 31.

Demand for International Preliminary Examination

(7) Each elected Office shall be notified of its election.

The International Preliminary Examining Authority, pursuant to PCT Rule 61, promptly notifies the International Bureau and the applicant of the filing of any Demand. The International Bureau in turn notifies each elected Office of their election and also notifies the applicant that such notification has been made.

1870 Priority Document and Translation Thereof

PCT Rule 66.

Procedure before the International Preliminary Examining Authority

66.7. Priority Document

(a) If the International Preliminary Examining Authority needs a copy of the application whose priority is claimed in the international application, the International Bureau shall, on request, promptly furnish such copy. If that copy is not furnished to the International Preliminary Examining Authority because the applicant failed to comply with the requirements of Rule 17.1, the international preliminary examination report may be established as if the priority had not been claimed.

(b) If the application whose priority is claimed in the international application is in a language other than the language or one of the languages of the International Preliminary Examining Authority, that Authority may, where the validity of the priority claim is relevant for the formulation of the opinion referred to in Article 33(1), invite the applicant to furnish a translation in the said language or one of the said languages within two months from the date of the invitation. If the translation is not furnished within that time limit, the international preliminary examination report may be established as if the priority had not been claimed.

A copy of the priority document may be required by the examiner if necessary because of an intervening reference, and a translation thereof, if the priority document is not in English.

1871 Processing Amendments Filed Under Article 19 and Article 34 Prior to or at the Start of International Preliminary Examination

PCT Rule 62.

Copy of Amendments Under Article 19 for the International Preliminary Examining Authority

62.1. Amendments Made Before the Demand Is Filed

Upon receipt of a demand, or a copy thereof, from the International Preliminary Examining Authority, the International Bureau shall promptly transmit a copy of any amendments under Article 19, and any statement referred to in that Article, to that Authority, unless that Authority has indicated that it has already received such a copy.

62.2. Amendments Made After the Demand Is Filed

If, at the time of filing any amendments under Article 19, a demand has already been submitted, the applicant shall preferably, at the same time as he files the amendments with the International Bureau, also file with the International Preliminary Examining Authority a copy of such amendments and any statement referred to in that Article. In any case, the International Bureau shall promptly transmit a copy of such amendments and statement to that Authority.

The documents making up the international application may include amendments of the claims filed by the applicant under PCT Article 19. PCT Article 19 amendments are exclusively amendments to the claims and these amendments can only be made after the search report has been established. PCT Article 19 amendments will be transmitted to the International Preliminary Examining Authority by the International Bureau. If a Demand for international preliminary examination has already been submitted, the applicant should preferably, at the time he files the PCT Article 19 amendments, also file a copy of the amendments with the International Preliminary Examining Authority. In the event that the time limit for filing amendments under PCT Article 19, as provided in PCT Rule 46.1, has not expired and the Demand includes a statement that the start of the international preliminary examination is to be postponed under PCT Rule 53.9(b), the international preliminary examination should not start before the examiner receives a copy of any amendments made under PCT Article 19 or a notice from the applicant that he does not wish to make amendments under PCT Article 19, or before the expiration of 20 months from the priority date, whichever occurs first.

The applicant has the right to amend the claims, the description, and the drawings, in the prescribed manner and before the start of international preliminary examination. The amendment must not go beyond the disclosure in the international application as filed. These amendments are referred to as PCT Article 34(2)(b) amendments. It should be noted that PCT Article 19 amendments are strictly amendments to the claims made during the Chapter I search phase while PCT Article 34(2)(b) amendments to the description, claims, and drawings are made during the Chapter II examination phase.

When amendments to the description, claims, or drawings are made under PCT Rule 66.8, they may be accompanied by an explanation. These amendments may have been submitted to avoid possible objections as to lack of novelty or lack of inventive step in view of the citations listed in the international search report; to meet any objections noted by the International Searching Authority under PCT Article 17(2)(a)(ii) (i.e., that all or at least some claims do not permit a meaningful search) or under PCT Rule 13 (i.e., that there is a lack of unity of invention); or to meet objections that may be raised for some other reason, e.g., to remedy some obscurity which the applicant himself/herself has noted in the original documents.

The amendments are made by the applicant of his/her own volition. This means that the applicant is not restricted to amendments necessary to remedy a defect in his/her international application. It does not, however, mean that the applicant should be regarded as free to amend in any way he/she chooses. Any amendment must not add subject matter which goes beyond the disclosure of the international application as originally filed. Furthermore, it should not itself cause the international application as amended to be objectionable under the PCT, e.g., the amendment should not introduce obscurity.

As a matter of policy and to ensure consistency in handling amendments filed under PCT Articles 19 and 34 of the PCT, the following guidelines for processing these amendments have been established:

(A) Any amendment which complies with 37 CFR 1.485(a) will be considered;

(B) Amendments filed after the Demand

(1) will be considered if filed before the application is docketed to the examiner,

(2) may be considered if filed after docketing. The examiner has discretion to consider such amendments if the examiner determines that the amendment places the application in better condition for examination or the examiner determines that the amendment should otherwise be entered;

(C) Amendments filed after expiration of the period for response to the written opinion

(1) will be considered if the amendment was requested by the examiner,

(2) may be considered if the examiner determines that the amendment places the application in better condition for examination or the examiner determines that the amendment should otherwise be entered.

It is expected, due to the relatively short time period for completion of preliminary examination, that the Chapter II application will be taken up for preparation of the written opinion promptly after docketing to the examiner and taken up for preparation of the final report promptly after the time expires for response to the written opinion (i.e., after allowing for mail processing). The examiner is not obliged to consider amendments or arguments which are filed after he/she has taken up the case for preparation of the written opinion or the final report.

Amendments timely filed but misdirected or are otherwise late reaching the examiner will be considered as in the case of regular domestic applications and may require a supplemental written opinion and/or final report.

Clearly, these guidelines offer the examiner flexibility. The examiner should be guided by the overriding principle that the final report (the PCT/IPEA/409) should be established with as few written opinions as possible and resolution of as many issues as possible consistent with the goal of a timely and quality report.

See also Administrative Instructions Section 602 regarding processing of amendments by the International Preliminary Examining Authority.

1872 Transmittal of Demand to the Examining Corps

PCT Administrative Instruction Section 605.

File to be used for International Preliminary Examination

Where the International Preliminary Examining Authority is part of the same national Office or intergovernmental organization

as the International Searching Authority, the same file shall serve the purposes of international search and international preliminary examination.

When the PCT International Application Processing Division has finished processing of the papers and fees filed with a complete Demand, a copy of the Demand and other papers are forwarded to the appropriate Technology Center for examination. The documents will be placed in the Search Copy file wrapper before forwarding to the examiner.

1873 Later Election of States

PCT Article 31.

Demand for International Preliminary Examination

(6)(b) Any later election shall be submitted to the International Bureau.

PCT Rule 56.

Later Elections

56.1. Elections Submitted Later Than the Demand

(a) The election of States subsequent to the submission of the demand ("later election") shall be effected by a notice submitted to the International Bureau. The notice shall identify the international application and the demand, and shall include an indication as referred to in Rule 53.7(b)(ii).

(b) Subject to paragraph (c), the notice referred to in paragraph (a) shall be signed by the applicant for the elected States concerned or, if there is more than one applicant for those States, by all of them.

(c) Where two or more applicants file a notice effecting a later election of a State whose national law requires that national applications be filed by the inventor and where an applicant for that elected State who is an inventor refused to sign the notice or could not be found or reached after diligent effort, the notice need not be signed by that applicant ("the applicant concerned") if it is signed by at least one applicant and

(i) a statement is furnished explaining, to the satisfaction of the International Bureau, the lack of signature of the applicant concerned, or

(ii) the applicant concerned did not sign the request but the requirements of Rule 4.15(b) were complied with, or did not sign the demand but the requirements of Rule 53.8(b) were complied with.

(d) An applicant for a State elected by a later election need not have been indicated as an applicant in the demand.

(e) If a notice effecting a later election is submitted after the expiration of 19 months from the priority date, the International Bureau shall notify the applicant that the election does not have the effect provided for under Article 39(1)(a) and that the acts

referred to in Article 22 must be performed in respect of the elected Office concerned within the time limit applicable under Article 22.

(f) If, notwithstanding paragraph (a), a notice effecting a later election is submitted by the applicant to the International Preliminary Examining Authority rather than the International Bureau, that Authority shall mark the date of receipt on the notice and transmit it promptly to the International Bureau. The notice shall be considered to have been submitted to the International Bureau on the date marked.

56.2. Identification of the International Application

The international application shall be identified as provided in Rule 53.6.

56.3. Identification of the Demand

The demand shall be identified by the date on which it was submitted and by the name of the International Preliminary Examining Authority to which it was submitted.

56.4. Form of Later Elections

The notice effecting the later election shall preferably be worded as follows: "In relation to the international application filed with ... on ... under No. ... by ...(applicant) (and the demand for international preliminary examination submitted on ... to ...), the undersigned elects the following additional State(s) under Article 31 of the Patent Cooperation Treaty: ..."

56.5. Language of Later Elections

The later election shall be in the language of the demand.

Applicants may, after filing of the Demand, later, but still within 19 months of the priority date, elect additional States which have been previously designated and obtain the benefit of delaying the national stage until 30 months after the priority date in the additional elected States. All such later elections must be filed directly with the International Bureau and not the International Preliminary Examining Authority. Elections received after 19 months will not delay the time for entry into the national stage from 20 to 30 months.

1874 Determination if International Preliminary Examination Is Required and Possible

PCT Article 34.

Procedure Before the International Preliminary Examining Authority

(4)(a) If the International Preliminary Examining Authority considers

(i) that the international application relates to a subject matter on which the International Preliminary Examining Authority is not required, under the Regulations, to carry out an international preliminary examination, and an international preliminary examination, and in the particular case decides not to carry out such examination, or

(ii) that the description, the claims, or the drawings, are so unclear, or the claims are so inadequately supported by the description, that no meaningful opinion can be formed on the novelty, inventive step (non-obviousness), or industrial applicability, of the claimed invention, the said authority shall not go into the questions referred to in Article 33(1) and shall inform the applicant of this opinion and the reasons therefor.

(b) If any of the situations referred to in subparagraph (a) is found to exist in, or in connection with, certain claims only, the provisions of that subparagraph shall apply only to the said claims.

There are instances where international preliminary examination is not required because of the nature of the subject matter claimed and also because the claims are so indefinite that no examination is possible. Such instances should seldom occur, especially since most problems of this nature would have already been discovered and indicated at the time of the international search.

If it is found that certain claims of an international application relate to subject matter for which no international preliminary examination is required, on Form PCT/IPEA/408, check the appropriate box. It should be noted that subject matter which is normally examined under U.S. national procedure should also be examined as an International Preliminary Examining Authority.

The examiner should check the appropriate box if it is found that the description, claims or drawings are so unclear, or the claims are so inadequately supported by the description that no opinion could be formed as to the novelty, inventive step (nonobviousness) and industrial applicability of the claimed invention.

Subject matter not searched under Chapter I will not be the subject of a preliminary examination under Chapter II. This is so even if claims which were not searched under Chapter I are modified to be acceptable for examination.

1875 Unity of Invention Before the International Preliminary Examining Authority

PCT Article 34.

Procedure before the International Preliminary Examining Authority

(3)(a) If the International Preliminary Examining Authority considers that the international application does not comply with the requirement of unity of invention as set forth in the Regulations, it may invite the applicant, at his option, to restrict the claims so as to comply with the requirement or to pay additional fees.

(c) If the applicant does not comply with the invitation referred to in subparagraph (a) within the prescribed time limit, the International Preliminary Examining Authority shall establish an international preliminary examination report on those parts of the international application which relate to what appears to be the main invention and shall indicate the relevant facts in the said report. The national law of any elected State may provide that, where its national Office finds the invitation of the International Preliminary Examining Authority justified, those parts of the international application which do not relate to the main invention shall, as far as effects in that State are concerned, be considered withdrawn unless a special fee is paid by the applicant to that Office.

37 CFR 1.488. Determination of unity of invention before the International Preliminary Examining Authority.

(a) Before establishing any written opinion or the international preliminary examination report, the International Preliminary Examining Authority will determine whether the international application complies with the requirement of unity of invention as set forth in § 1.475.

(b) If the International Preliminary Examining Authority considers that the international application does not comply with the requirement of unity of invention, it may:

(1) Issue a written opinion and/or an international preliminary examination report, in respect of the entire international application and indicate that unity of invention is lacking and specify the reasons therefor without extending an invitation to restrict or pay additional fees. No international preliminary examination will be conducted on inventions not previously searched by an International Searching Authority.

(2) Invite the applicant to restrict the claims or pay additional fees, pointing out the categories of invention found, within a set time limit which will not be extended. No international preliminary examination will be conducted on inventions not previously searched by an International Searching Authority, or

(3) If applicant fails to restrict the claims or pay additional fees within the time limit set for reply, the International Preliminary Examining Authority will issue a written opinion and/or establish an international preliminary examination report on the main invention and shall indicate the relevant facts in the said report. In case of any doubt as to which invention is the main invention, the invention first mentioned in the claims and previously searched by an International Searching Authority shall be considered the main invention.

(c) Lack of unity of invention may be directly evident before considering the claims in relation to any prior art, or after taking the prior art into consideration, as where a document discovered during the search shows the invention claimed in a generic or linking claim lacks novelty or is clearly obvious, leaving two or more claims joined thereby without a common inventive concept. In such a case the International Preliminary Examining Authority may raise the objection of lack of unity of invention.

The examiner will usually begin the preliminary examination by checking the international application for unity of invention. The international preliminary examination will only be directed to inventions which have been searched by the International Searching Authority. All claims directed to inventions which have not been searched by the International Searching Authority will not be considered by the International Preliminary Examining Authority. If the examiner in the International Preliminary Examining Authority finds lack of unity of invention in the claims to be examined, an invitation is normally prepared and sent to the applicant requesting the payment of additional fees or the restriction of the claims on Form PCT/IPEA/405. Such an invitation will include the identification of what the examiner considers to be the “main invention” which will be examined if no additional fees are paid or restriction is made by the applicant.

The procedure before the International Preliminary Examining Authority regarding lack of unity of invention is governed by PCT Article 34(3)(a) through (c), PCT Rule 68 (see also PCT Rule 70.13), and 37 CFR 1.475 and 1.488. It should be noted that in most instances lack of unity of invention will have been noted and reported upon by the International Searching Authority which will have drawn up an International Search Report based on those parts of the international application relating to the invention, or unified linked group of inventions, first mentioned in the claims (“main invention”). If the applicant has paid additional search fees, additional inventions would also have been searched. No international preliminary examination will be conducted on inventions

not previously searched by an International Searching Authority (37 CFR 1.488(b)(2)).

Unity of invention must be addressed within 7 days from the date the PCT application is charged to the Technology Center from the PCT International Application Processing Division. This simply means that a determination must be made as to whether or not the international application relates to one invention or to a group of inventions so linked as to form a single general inventive concept.

If it is determined that the international application does meet the requirements for unity of invention and no additional fees will be requested, the international application must be returned to the Paralegal Specialist or Legal Instruments Examiner in the Technology Center so that an indication to that effect may be made on the PALM System which monitors deadlines such as the deadline for checking unity of invention.

If the examiner determines that unity of invention is lacking, there are two options:

(A) The examiner may conduct an international preliminary examination covering all the claimed and previously searched inventions and indicate that unity of invention is lacking and specify the reasons therefor without extending an invitation to restrict or pay additional fees (PCT Rule 68.1), or

(B) The examiner may invite the applicant to restrict the claims, so as to comply with the requirement, or pay additional fees, pointing out the categories of invention found. The invitation to restrict or pay additional fees shall state the reasons for which the international application is considered as not complying with the requirement of unity of invention. (PCT Rule 68.2). Inventions not previously searched will not be considered or included in the invitation.

The written opinion, if any, and the international preliminary examination report must be established on all inventions for which examination fees have been paid.

If the applicant fails to reply to the invitation to restrict the claims or pay additional examination fees due to lack of unity of invention, the written opinion and international preliminary examination report must be established on the claims directed to what appears to be the main invention (PCT Article 34(3)(c)). The main invention, in case of doubt, is the first claimed invention for which an international search report has

been issued by the International Searching Authority. The main invention, as viewed by the examiner, must be set forth on Form PCT/IPEA/405.

Whether or not the question of unity of invention has been raised by the International Searching Authority, it may be considered by the examiner when serving as an authorized officer of the International Preliminary Examining Authority. In the examiner's consideration, all documents cited by the International Searching Authority should be taken into account and any additional relevant documents considered. However, there are cases of lack of unity of invention, where, compared with the procedure of inviting the applicant to restrict the international application or pay additional fees (PCT Rule 68.2), little or no additional effort is involved in establishing the written opinion and the international preliminary examination report for the entire international application. Then reasons of economy may make it advisable for the examiner to use the option referred to in PCT Rule 68.1 by choosing not to invite the applicant to restrict the claims or to pay additional fees.

Unity of invention is defined by 37 CFR 1.475 which describes the circumstances in which the requirement of unity of invention is considered fulfilled.

1875.01 Preparation of Invitation Concerning Unity

The "Invitation to restrict or pay additional fees" Form PCT/IPEA/405 is used to invite the applicant, at his/her option, to restrict the claims to comply with the requirements of unity of invention or to pay additional examination fees. In addition, the examiner must explain the reasons why the international application is not considered to comply with the requirement of unity of invention. The examiner must also specify, on Form PCT/IPEA/405, at least one group or groups of claims which, if elected, would comply with the requirement for unity of invention.

INVITATION

In the space provided on form PCT/IPEA/405, the examiner should identify the disclosed inventions by claim numerals and indicate which disclosed inventions are so linked as to form a single general inven-

tive concept, thereby complying with the requirement of unity of invention. For example, claims to different categories of invention such as a product, claims to a process specifically adapted for the manufacture of the product and a claim for a use of the product would be considered related inventions which comply with the unity of invention requirement, whereas a claim to an apparatus for making the product in the same application would be considered a second invention for which additional fees would be required. The reasons for holding that unity of invention is lacking must be specified. See 37 CFR 1.475 and Annex B of the Administrative Instructions.

Also, the examiner should specify the main invention and claims directed thereto which will be examined if the applicant fails to restrict or pay additional fees. The main invention, in case of doubt, is the first claimed invention or related invention before the International Preliminary Examining Authority for which a search fee has been paid and an international search report has been prepared.

The examiner should indicate the total amount of additional fees required for examination of all claimed inventions.

In the box provided at the top of the form, the time limit for response is set according to PCT Rule 68.2, normally a 1 month time limit. Extensions of time are not permitted.

Since the space provided on Form PCT/IPEA/405 is limited, supplemental attachment sheets, supplied by the examiner, with reference back to the specific section, should be incorporated whenever necessary.

AUTHORIZED OFFICER

Form PCT/IPEA/405 must be signed by an examiner with at least partial signatory authority.

TELEPHONIC RESTRICTION PRACTICE

Telephone practice may be used in certain cases to allow applicants to elect an invention to be examined or to pay additional fees. Additional fees may be charged to a deposit account using the telephone practice only if:

(A) The Demand for International Preliminary Examination included an authorization to charge additional fees to a deposit account,

(B) Applicant or the legal representative or agent orally agrees to charge the additional fees to the account, and

(C) A complete record of the telephone conversation is included with the written opinion including:

- (1) Examiner's name;
- (2) Authorizing attorney's name;
- (3) Date of conversation;
- (4) Invention elected and/or inventions for which additional fees paid; and
- (5) Deposit account number and amount to be charged.

If applicant or the legal representative or agent refuses to either restrict the claims to one invention or authorize payment of additional fees, Form PCT/IPEA/499 should be prepared and mailed to applicant.

When the telephone practice is used in making lack of unity requirements, it is critical that the examiner orally inform applicant that there is no right to protest the holding of lack of unity of invention for any group of invention(s) for which no additional examination fee has been paid.

The examiner must further orally advise applicant that any protest to the holding of lack of unity or the amount of additional fee required must be filed in writing no later than one month from the mailing date of the written opinion or the international preliminary examination report if the lack of unity holding is first mailed with the IPER because there was no written opinion. The examiner should fill in the information on Form PCT/IPEA/499 "Chapter II PCT Telephone Memorandum for Lack of Unity" as a record of the telephonic holding of lack of unity.

37 CFR 1.475. Unity of invention before the International Searching Authority, the International Preliminary Examining Authority and during the national stage.

(a) An international and a national stage application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept ("requirement of unity of invention"). Where a group of inventions is claimed in an application, the requirement of unity of invention shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art.

(b) An international or a national stage application containing claims to different categories of invention will be considered

to have unity of invention if the claims are drawn only to one of the following combinations of categories:

- (1) A product and a process specially adapted for the manufacture of said product; or
- (2) A product and process of use of said product; or
- (3) A product, a process specially adapted for the manufacture of the said product, and a use of the said product; or
- (4) A process and an apparatus or means specifically designed for carrying out the said process; or
- (5) A product, a process specially adapted for the manufacture of the said product, and an apparatus or means specifically designed for carrying out the said process.

(c) If an application contains claims to more or less than one of the combinations of categories of invention set forth in paragraph (b) of this section, unity of invention might not be present.

(d) If multiple products, processes of manufacture or uses are claimed, the first invention of the category first mentioned in the claims of the application and the first recited invention of each of the other categories related thereto will be considered as the main invention in the claims, see PCT Article 17(3)(a) and § 1.476(c).

(e) The determination whether a group of inventions is so linked as to form a single general inventive concept shall be made without regard to whether the inventions are claimed in separate claims or as alternatives within a single claim.

¶ 18.05 Heading for Lack of Unity Action (Not Involving Species)

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Examiner Note:

Begin all Lack of Unity actions with this heading.

¶ 18.06 Lack of Unity - Three Groups of Claims

- Group [1], claim(s) [2], drawn to [3].
Group [4], claim(s) [5], drawn to [6].
Group [7], claim(s) [8], drawn to [9].

Examiner Note:

1. In brackets 1,4 and 7, insert Roman numerals for each Group.
2. In brackets 2, 5 and 8, insert respective claim numbers.
3. In brackets 3, 6 and 9, insert respective names of grouped inventions.

¶ 18.06.01 Lack of Unity - Two (or Additional) Groups of Claims

- Group [1], claim(s) [2], drawn to [3].
Group [4], claim(s) [5], drawn to [6].

Examiner Note:

This form paragraph may be used alone or following form paragraph 18.06.

¶ 18.06.02 *Lack of Unity - One Additional Group of Claims*

Group [1], claim [2], drawn to [3].

Examiner Note:

This form paragraph may be used following either form paragraph 18.06 or 18.06.01.

¶ 18.07 *Lack of Unity - Reasons Why Inventions Lack Unity*

The inventions listed as Groups [1] do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: [2]

Examiner Note:

1. In bracket 1, insert appropriate Roman numerals for Groups involved.
2. In bracket 2, insert reasoning.

¶ 18.16 *Lack of Unity - Species - Heading*

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In order for more than one species to be examined, the appropriate additional examination fees must be paid. The species are as follows:

[1]

Examiner Note:

In bracket 1, list each species by Fig. No. or embodiment.

¶ 18.17 *Lack of Unity - Species - Correspondence of the Claims to the Species*

The claims are deemed to correspond to the species listed above in the following manner:

[1]

The following claim(s) are generic: [2]

Examiner Note:

1. This form paragraph is to be used immediately following 18.16.
2. In bracket 1, for each species, list the claims, e.g., Fig. 1 - claims 1, 3 and 6.
3. In bracket 2, identify each generic claim by number or insert the word --NONE--.

¶ 18.18 *Lack of Unity - Species - Reasons Why Unity Is Lacking*

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: [1]

Examiner Note:

1. This form paragraph is to be used immediately following form paragraph 18.17.
2. In bracket 1, insert reasoning.

¶ 18.19 *National Stage Restriction in 35 U.S.C. 371 Applications*

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Examiner Note:

1. This form paragraph is to be used when making a restriction requirement in an application filed under the provisions of 35 U.S.C. 371.
2. This form paragraph is to be followed by form paragraphs 18.06 through 18.06.02, as appropriate, and by form paragraph 18.07.

¶ 18.20 *National Stage Election of Species in 35 U.S.C. 371 Applications*

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

[1]

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Examiner Note:

1. This form paragraph is to be used when making an election of species requirement in an application filed under the provisions of 35 U.S.C. 371.
2. In bracket 1, list each species by Fig. No. or embodiment.
3. This form paragraph is to be followed by form paragraphs 18.17 and 18.18.

¶ 18.21 *National Stage Election by Original Presentation in 35 U.S.C. 371 Applications*

Newly submitted claim [1] directed to an invention that lacks unity with the invention originally claimed for the following reasons: [2]

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim [3] withdrawn from consideration as being

directed to a nonelected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

1875.02 Reply to Invitation Concerning Lack of Unity of Invention

*PCT Administrative Instruction Section 603.
Transmittal of Protest Against Payment of Additional Fee and Decision Thereon Where International Application is Considered to Lack Unity of Invention*

The International Preliminary Examining Authority shall transmit to the applicant, at the latest together with the international preliminary examination report, any decision which it has taken under Rule 68.3(c) on the protest of the applicant against payment of the additional fee where the international application is considered to lack unity of invention. At the same time, it shall transmit to the International Bureau a copy of both the protest and the decision thereon, as well as any request by the applicant to forward the texts of both the protest and the decision thereon to the elected Offices.

37 CFR 1.489. Protest to lack of unity of invention before the International Preliminary Examining Authority.

(a) If the applicant disagrees with the holding of lack of unity of invention by the International Preliminary Examining Authority, additional fees may be paid under protest, accompanied by a request for refund and a statement setting forth reasons for disagreement or why the required additional fees are considered excessive, or both.

(b) Protest under paragraph (a) of this section will be examined by the Commissioner or the Commissioner's designee. In the event that the applicant's protest is determined to be justified, the additional fees or a portion thereof will be refunded.

(c) An applicant who desires that a copy of the protest and the decision thereon accompany the international preliminary examination report when forwarded to the Elected Offices, may notify the International Preliminary Examining Authority to that effect any time prior to the issuance of the international preliminary examination report. Thereafter, such notification should be directed to the International Bureau.

Applicant may reply by paying some or all additional fees or by restricting the claims to one invention. If applicant makes no reply within the set time limit, the international preliminary examination will proceed on the basis of the main invention only.

If applicant has paid an additional fee or fees, a protest to the holding of lack of unity of invention may be filed with the International Preliminary Examining Authority.

NOTIFICATION OF DECISION ON PROTEST

Form PCT/IPEA/420 is used by the Technology Center (TC) to inform the applicant of the decision

regarding applicant's protest on the payment of additional fees concerning unity of invention.

NOTIFICATION

The TC checks the appropriate box, i.e., 1 or 2. If box 2 is checked, a clear and concise explanation as to why the protest concerning the unity of invention was found to be unjustified must be given.

Since the space is limited, supplemental attachment sheet(s) should be incorporated whenever necessary.

AUTHORIZED OFFICER

Form PCT/IPEA/420 must be signed by a TC Director. See MPEP § 1002.02(e).

1876 Notation of Errors and Informalities by the Examiner

*PCT Administrative Instruction Section 607.
Rectifications of Obvious Errors Under Rule 91.1*

Where the International Preliminary Examining Authority authorizes a rectification of an obvious error under Rule 91.1, Rule 70.16 and Section 602(a) and (b) shall apply *mutatis mutandis*, provided that, where a sheet is marked as indicated in Section 602, the words "RECTIFIED SHEET (RULE 91)" shall be used.

Although the examiner is not responsible for discovering errors in the international application, if any errors come to the attention of the examiner, they should be noted and called to the applicant's attention. The examiner may invite applicant to rectify obvious errors using Form PCT/IPEA/411. Errors that are not obvious may be called to applicant's attention in item VII of PCT/IPEA/408.

AUTHORIZED OFFICER

Form PCT/IPEA/408 and 411 must be signed by an examiner having at least partial signatory authority.

1876.01 Request for Rectification and Notification of Action Thereon

NOTIFICATION OF DECISION CONCERNING REQUEST FOR RECTIFICATION

The rectification of obvious errors is governed by PCT Rules 91.1 and 66.5.

NOTIFICATION

If the applicant requests correction of any obvious errors in the international application or in any paper submitted to the International Preliminary Examining Authority, other than in the request, any acceptable correction should be authorized by using Form PCT/IPEA/412.

The procedure governing the rectification of obvious errors is set forth in PCT rules 91.1(d) and 26.4(a). Rectification may be made on the request of the applicant. Any rectification offered to the international preliminary examining authority may be stated in a letter addressed to the international preliminary examining authority if the rectification is of such a nature that it can be transferred from the letter to the international application without adversely affecting the clarity and direct reproducibility of the sheet on to which the rectification is to be transferred; otherwise, the applicant is required to submit a replacement sheet embodying the rectification and the letter accompanying the replacement sheet must draw attention to the differences between the replaced sheet and the replacement sheet.

The examiner after fully considering applicant's Request for Rectification of an obvious error, will notify applicant of the action taken on Form PCT/IPEA/412. Since the space provided is limited, supplemental sheet(s) should be incorporated whenever necessary.

AUTHORIZED OFFICER

Form PCT/IPEA/412 must be signed by an examiner having at least partial signatory authority.

1877 Nucleotide and/or Amino Acid Sequence Listings During the International Preliminary Examination

If the International Preliminary Examining Authority finds that the international application contains disclosure of one or more nucleotide and/or amino acid sequences but (A) the international application does not contain a sequence listing complying with the standard provided for in the Administrative Instructions, or (B) applicant has not furnished a sequence listing in computer readable form comply-

ing with the standard provided for in the Administrative Instructions, the International Preliminary Examining Authority may request the applicant to furnish such sequence listing or listing in computer readable form in accordance with the Administrative Instructions. PCT Rule 13^{ter}.1(e)

1878 Preparation of the Written Opinion

PCT Article 34.

Procedure Before the International Preliminary Examining Authority

(2)(c)The applicant shall receive at least one written opinion from the International Preliminary Examining Authority unless such Authority considers that all of the following conditions are fulfilled:

- (i) the invention satisfies the criteria set forth in Article 33(1),
- (ii) the international application complies with the requirements of this Treaty and the Regulations in so far as checked by that Authority,
- (iii) no observations are intended to be made under Article 35(2), last sentence.

37 CFR 1.484. Conduct of international preliminary examination.

(a) An international preliminary examination will be conducted to formulate a non-binding opinion as to whether the claimed invention has novelty, involves an inventive step (is non-obvious) and is industrially applicable.

(b) International preliminary examination will begin promptly upon receipt of a proper Demand in an application for which the United States International Preliminary Examining Authority is competent, for which the fees for international preliminary examination (§ 1.482) have been paid, and which requests examination based on the application as filed or as amended by an amendment which has been received by the United States International Preliminary Examining Authority. Where a Demand requests examination based on a PCT Article 19 amendment which has not been received, examination may begin at 20 months without receipt of the PCT Article 19 amendment. Where a Demand requests examination based on a PCT Article 34 amendment which has not been received, applicant will be notified and given a time period within which to submit the amendment.

- (1) Examination will begin after the earliest of:
 - (i) Receipt of the amendment;
 - (ii) Receipt of applicant's statement that no amendment will be made; or
 - (iii) Expiration of the time period set in the notification.
- (2) No international preliminary examination report will be established prior to issuance of an international search report.

(c) No international preliminary examination will be conducted on inventions not previously searched by an International Searching Authority.

(d) The International Preliminary Examining Authority will establish a written opinion if any defect exists or if the claimed invention lacks novelty, inventive step or industrial applicability and will set a non-extendable time limit in the written opinion for the applicant to reply.

(e) If no written opinion under paragraph (d) of this section is necessary, or after any written opinion and the reply thereto or the expiration of the time limit for reply to such written opinion, an international preliminary examination report will be established by the International Preliminary Examining Authority. One copy will be submitted to the International Bureau and one copy will be submitted to the applicant.

(f) An applicant will be permitted a personal or telephone interview with the examiner, which must be conducted during the non-extendable time limit for reply by the applicant to a written opinion. Additional interviews may be conducted where the examiner determines that such additional interviews may be helpful to advancing the international preliminary examination procedure. A summary of any such personal or telephone interview must be filed by the applicant as a part of the reply to the written opinion or, if applicant files no reply, be made of record in the file by the examiner.

(g) If the application whose priority is claimed in the international application is in a language other than English, the United States International Preliminary Examining Authority may, where the validity of the priority claim is relevant for the formulation of the opinion referred to in Article 33(1), invite the applicant to furnish an English translation of the priority document within two months from the date of the invitation. If the translation is not furnished within that time limit, the international preliminary examination report may be established as if the priority had not been claimed.

A written opinion must be prepared if the examiner:

(A) Considers that the international application has any of the defects described in PCT Article 34(4);

(B) Considers that the report should be negative with respect to any of the claims because of a lack of novelty, inventive step (non-obviousness) or industrial applicability;

(C) Notices any defects in the form or contents of the international application under the PCT;

(D) Considers that any amendment goes beyond the disclosure in the international application as originally filed;

(E) Wishes to make an observation on the clarity of the claims, the description, the drawings or to question whether the claims are fully supported by the description;

(F) Decides not to carry out the international preliminary examination on a claim for which no International Search Report was issued; or

(G) Considers that no acceptable amino acid sequence listing is available in a form that would allow a meaningful international preliminary examination to be carried out.

The applicant must be notified on Form PCT/IPEA/408 of the defects found in the application. The examiner is further required to fully state the reasons for his/her opinion (PCT Rule 66.2(b)) and invite a written reply, with amendments where appropriate (PCT Rule 66.2(c)), setting a time limit for the reply of normally 2 months.

The examiner should insert the words “first” or “second”, as the case may be, in the space provided on page 1 of the written opinion.

ITEM I. BASIS OF OPINION

Applicant has two opportunities to amend the international application prior to international preliminary examination. Under PCT Article 19, the applicant is entitled to one opportunity to amend the claims of the international application by filing amendments with the International Bureau within 2 months of the mailing of the international search report. See PCT Rule 46.1. Applicant is also permitted to make amendments before the International Preliminary Examining Authority under PCT Article 34(2)(b) and PCT Rule 66.1. Any amendment, however, that does not accompany the filing of the Demand but is filed later may not be considered unless it reaches the examiner before he/she takes up the application for examination.

For the purpose of completing Box I, Item 1, of Form PCT/IPEA/408, substitute and/or rectified sheets of the specification and drawings filed during Chapter I proceedings are considered to be originally filed pages/sheets and should be listed as originally filed pages/sheets. Only those amendments or rectifications to the specification and drawings filed on the date of Demand or after the filing of a Demand should be listed as later filed pages/sheets. Substitute and/or rectified sheets of claims filed during the Chapter I proceedings are also considered to be originally filed pages/sheets and should be listed as originally filed pages/sheets. However, amended sheets of claims filed under Article 19 in response to the international

search report are to be indicated as pages/sheets as amended under Article 19. Only those amendments, or rectifications to the claims filed on the date of Demand or after the filing of a Demand should be listed as later filed pages/sheets. All claims present on a sheet stamped AMENDED SHEET are listed as amended irrespective of which of the claims present on that sheet were actually amended. If a claim is made up of sheets filed on different dates, the latest date is the date that should be used for the claim.

ITEM II. PRIORITY

Item II of Form PCT/IPEA/408 is to inform applicant of non-establishment of a request for priority.

If applicant fails to furnish a copy or translation of the earlier application, whose priority has been claimed, within the time limit set by the examiner pursuant to PCT Rule 66.7, check box No. 1 and then check the first box of the subsection if applicant failed to furnish a copy of the earlier application whose priority has been claimed, and check the second box in the subsection if applicant failed to furnish a translation of the earlier application whose priority has been claimed.

When the claim for priority has been found invalid (e.g., the claimed priority date is more than one year prior to the international filing date and the notification under PCT Rule 4.10(d) has been provided or all claims are directed to inventions which were not described and enabled by the earlier application), check box No. 2 of Item II and indicate why the claim for priority has been found invalid following No. 3 "Additional observations". The examiner is reminded that when some claims in an international application are directed to an invention which was disclosed in the earlier application, the priority claim is valid provided that a copy and/or translation of the earlier application have/has been filed and the filing date of the earlier application is one year or less from the filing date of the international application.

ITEM III. NON-ESTABLISHMENT OF OPINION ON NOVELTY, INVENTIVE STEP AND INDUSTRIAL APPLICABILITY

Item III of Form PCT/IPEA/408 is intended to cover situations where some or all claims of an application are so unclear or inadequately supported by the description that the question of novelty, inventive step

(nonobviousness), and industrial applicability cannot be considered, or where the international application or claims thereof relate to subject matter which does not require international preliminary examination, or where no international search report has been established for the claims.

If some or all of the claims of an application relate to subject matter which does not require international preliminary examination, check the appropriate box, indicate which claims relate to that subject matter and specify the reasons.

If some or all of the claims of an application are so unclear that no meaningful opinion could be formed, check the appropriate box, indicate which claims are unclear and specify the reasons.

If some or all of the claims are so inadequately supported by the description that no meaningful opinion could be formed, check the appropriate box.

If no international search report has been established for certain claims, check the appropriate box and indicate the claim numbers.

ITEM IV. LACK OF UNITY OF INVENTION

Item IV of Form PCT/IPEA/408 should be used by the examiner to notify applicant that lack of unity of invention has been found.

If in reply to an invitation to restrict, applicant restricted the claims to a particular group, check the first box under subsection 1.

If applicant paid additional fees for examination of additional invention, check the second box under subsection 1.

If the additional fees were paid under protest, check the third box under subsection 1.

If applicant neither restricted nor paid additional fees in reply to the objection of lack of unity of invention, check the fourth box under subsection 1.

Subsection 2 of Item IV is to be completed if the examiner determines that unity of invention is lacking but chooses not to invite the applicant to restrict or pay additional fees.

Subsection 3 of Item IV is to be completed to indicate which claims were the subject of international preliminary examination.

If all claims are to be examined, check the first box under subsection 3.

If only some of the claims were the subject of international preliminary examination, check the second

box under subsection 3 and identify the claim numbers.

ITEM V. REASONED STATEMENT WITH REGARD TO NOVELTY, INVENTIVE STEP, AND INDUSTRIAL APPLICABILITY OF CLAIMS

In Item V, the examiner must list in summary form all claims with regard to the criteria of novelty (N), inventive step (IS), and industrial applicability (IA).

Item V is the main purpose of the Written Opinion. All claims without fatal defects are treated on the merits in Item V as to novelty, inventive step (nonobviousness) and industrial applicability.

The treatment of claims in Item V is similar in format to an Office action in a U.S. national patent application except that the words “rejection” and “patentability” are never used in a written opinion. On the international level, all written opinions are nonbinding and a patent does not issue; what does issue is an international preliminary examination report (IPER), which is nonbinding on the Elected States.

Examiner statements in Item V can be positive and/or negative. If, for example, claims define over the prior art and meet the test of novelty, inventive step (nonobviousness) and industrial applicability, a statement equivalent to detailed reasons for allowance in a corresponding U.S. application, indicating how the claims meet the tests of novelty, inventive step and industrial applicability is sufficient. If on the other hand it is the opinion of the examiner that some or all claims lack novelty, inventive step, and/or industrial applicability, specific reasons for the opinion employing PCT form paragraphs, if appropriate, must be given similar to those used in U.S. national applications including a statement of motivation to combine references cited regarding negative statements of inventive step.

Form paragraphs to be used by the examiners appear in the relevant sections of this Manual. All examiners are expected to use the PCT form paragraphs in formulating any negative statements listed in Item V.

Examiners are encouraged to indicate any amendments which applicant could present which would avoid a negative statement in the international preliminary examination report.

All international applications where an examination has been demanded should be searched by the exam-

iner at least to the point of bringing the previous search up to date. Prior art discovered in a search and applied in an Item V statement must be made of record in Item V. Prior art already cited on the international search report need not again be cited on the written opinion or international preliminary examination report. The subsequently discovered prior art is to be cited in compliance with PCT Rule 43.5 and Administrative Instructions Section 503 using the same citation format used on the international search report. Two copies of each newly cited reference should be included in the PCT Chapter II file when it is sent to PCT Operations for the mailing of the form PCT/IPEA/408. One of the copies of the newly cited reference will be sent to the applicant and one copy will be retained in the Chapter II file.

¶ 18.01 Lacks Novelty

Claim [1] novelty under PCT Article 33(2) as being anticipated by [2].

Examiner Note:

1. In bracket 1, pluralize ‘claim’ if needed, insert claim no.(s), and the verb --lack-- or --lacks--, as appropriate.
2. In bracket 2, insert name of prior art relied upon.

¶ 18.02 Lacks Inventive Step - One Reference

Claim [1] an inventive step under PCT Article 33(3) as being obvious over [2]. [3]

Examiner Note:

1. In bracket 1, pluralize ‘claim’ if needed, insert claim no.(s), and the verb --lack-- or --lacks--, as appropriate.
2. In bracket 2, insert name of prior art relied upon.
3. In bracket 3, add reasoning.

¶ 18.02.01 Lacks Inventive Step - Two References

Claim [1] an inventive step under PCT Article 33(3) as being obvious over [2] in view of [3]. [4]

Examiner Note:

1. In bracket 1, pluralize ‘claim’ if needed, insert claim no.(s), and the verb --lack-- or --lacks--, as appropriate.
2. In bracket 2, insert name of PRIMARY prior art relied upon.
3. In bracket 3, insert name of SECONDARY prior art relied upon.
4. In bracket 4, add reasoning.

¶ 18.02.02 Lacks Inventive Step - Additional Reference

Claim [1] an inventive step under PCT Article 33(3) as being obvious over the prior art as applied in the immediately preceding paragraph and further in view of [2]. [3]

Examiner Note:

1. This form paragraph may follow either 18.02 or 18.02.01.
2. In bracket 1, pluralize ‘claim’ if needed, insert claim no.(s), and the verb --lack-- or --lacks--, as appropriate.

3. In bracket 2, insert name of additional prior art relied upon.
4. In bracket 3, add reasoning.

¶ 18.03 Lacks Industrial Applicability

Claim [1] industrial applicability as defined by PCT Article 33(4). [2]

Examiner Note:

1. In bracket 1, pluralize ‘claim’ if needed, insert claim no.(s), and the verb --lack-- or --lacks--, as appropriate.
2. In bracket 2, add reasoning.

¶ 18.04 Meets Novelty, Inventive Step and Industrial Applicability

Claim [1] the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest [2].

Examiner Note:

1. In bracket 1, pluralize ‘claim’ if needed, insert claim no.(s), and the verb --meet-- or --meets--, as appropriate.
2. In bracket 2, insert patentable subject matter.

ITEM VI. CERTAIN DOCUMENTS CITED

Item VI provides a convenient manner of listing two different types of documents:

(A) Published documents - by the application number or patent number as well as the publication date, filing date and priority date; and

(B) Nonwritten disclosure - by the kind of disclosure, date of the disclosure and the date of the written disclosure referring to the nonwritten disclosure.

ITEM VII. CERTAIN DEFECTS IN THE INTERNATIONAL APPLICATION

In Item VII, defects in the form and content of the international application are identified.

Examples of defects that would be listed in Item VII are:

(A) Informalities such as misplaced and/or omitted drawing numerals, misspelled words, grammatical errors, etc.

(B) An amendment to the drawings, description or claims which was not timely filed.

(C) Improper multiple-dependent claims (PCT Rule 6.4) if not indicated under Item III.

The following form paragraphs are used in Box VII of PCT/IPEA/408 or PCT/IPEA/409 “Certain defects in the international application” for noting technical defects.

¶ 18.08 Drawing Objections - Defects

The drawings are objected to under PCT Rule 66.2(a)(iii) as containing the following defect(s) in the form or content thereof: [1]

Examiner Note:

In bracket 1, insert identification of defects in drawings.

¶ 18.08.01 Drawing Is Required

The subject matter of this application admits of illustration by drawing to facilitate understanding of the invention. Applicant is required under PCT Article 7(1) to furnish a drawing.

¶ 18.09 Description Defective

The description is objected to as containing the following defect(s) under PCT Rule 66.2(a)(iii) in the form or contents thereof: [1]

Examiner Note:

In bracket 1, insert the technical problem, e.g., misspelled word.

¶ 18.10 Claims Defective

Claim [1] objected to under PCT Rule 66.2(a)(iii) as containing the following defect(s) in the form or contents thereof: [2]

Examiner Note:

1. In bracket 1, pluralize ‘claim’ if needed, insert claim no.(s) and the appropriate verb --is-- or --are--.
2. In bracket 2, identify the technical deficiency.

ITEM VIII. CERTAIN OBSERVATIONS ON THE INTERNATIONAL APPLICATION

In Item VIII, the examiner notifies the applicant of observations made as to the clarity of the claims, the description, the drawings, or on the question whether the claims are fully supported by the description.

If the claims, the description, or the drawings are so unclear, or the claims are so inadequately supported by the description, that no meaningful opinion can be formed on the question of novelty, inventive step (nonobviousness) or industrial applicability, the applicant is so informed in Item III (PCT Article 34(4)(a)(ii)). Reasons for the examiner’s opinion that the claims, description and drawings, etc., lack clarity must also be provided.

If the above situation is found to exist in certain claims only, the provisions of PCT Article 34(4)(ii) shall apply to those claims only.

If the lack of clarity of the claims, the description, or the drawings is of such a nature that it is possible to form a meaningful opinion on the claimed subject matter, then it is required that the examiner consider the claims and render a written opinion on novelty,

inventive step, and industrial applicability in Item V of Form PCT/IPEA/408.

Since the claims of an international application are not subject to a rejection on either art or indefiniteness consistent with U.S. practice, observations by the examiner with regard to clarity of the claims, the description and the drawings will be treated in the form of an objection in the written opinion in Item VIII.

The following form paragraphs are used in Box VIII “Certain observations on the international application” of PCT/IPEA/408 and PCT/IPEA/409 for noting objections which are substantive rather than merely technical in nature.

¶ 18.11 Drawing Objections - Lack Clarity

The drawings are objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 7 because: [1]

Examiner Note:

In bracket 1, insert reasons why the drawings lack clarity, e.g., inaccurate showing.

¶ 18.12.01 Claims Objectionable - Inadequate Written Description

Claim [1] objected to as lacking clarity under PCT Rule 66.2(a)(v) because the claim [2] not fully supported by the description. The application, as originally filed, did not describe: [3]

Examiner Note:

1. In bracket 1, pluralize “claim” if needed, insert claim no.(s), and the verb --is-- or --are--, as appropriate.
2. In bracket 2, pluralize “claim” if needed, and insert the verb --is-- or --are--.
3. In bracket 3, identify subject matter not described in the application as filed.

¶ 18.13.01 Claims Objectionable - Non-Enabling Disclosure

Claim [1] objected to as lacking clarity under PCT Rule 66.2(a)(v) because the claim [2] not fully supported by the description. The description does not disclose the claimed invention in a manner sufficiently clear and complete for the claimed invention to be carried out by a person skilled in the art because: [3]

Examiner Note:

1. In bracket 1, pluralize “claim” if needed, insert claim no.(s) and the appropriate verb --is-- or --are--.
2. In bracket 2, pluralize “claim” if needed, insert the verb --is-- or --are--.
3. In bracket 3, identify the claimed subject matter that is not enabled and explain why it is not enabled.

¶ 18.14.01 Claims Objectionable - Lack of Best Mode

Claim [1] objected to under PCT Rule 66.2(a)(v) because the claim [2] not fully supported by the description. The description fails to set forth the best mode contemplated by the applicant for carrying out the claimed invention as required by PCT Rule 5.1(a)(v) because: [3].

Examiner Note:

1. In bracket 1, pluralize “claim” if needed, insert claim no.(s) and the appropriate verb --is-- or --are--.
2. In bracket 2, pluralize “claim” if needed, and insert the appropriate verb --is-- or --are--.
3. In bracket 3, insert the objection and reasons.

¶ 18.15 Claims Objectionable - Indefiniteness

Claim [1] objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 6 because claim [2] indefinite for the following reason(s): [3]

Examiner Note:

1. In brackets 1 and 2, pluralize “claim” if needed, insert claim no.(s) and the appropriate verb --is-- or --are--.
2. In bracket 3, insert reasons.

TIME TO REPLY

An invitation by the International Preliminary Examining Authority (IPEA) to applicant to reply to the examiner’s written opinion will normally set a 2-month time limit for reply.

However, PCT Rule 69.2 sets forth time limits for the IPEA to establish the international preliminary examination report (IPER). Accordingly, a 1-month time limit should be set by the examiner in situations when a 2-month time limit would risk delaying the date of establishment of the IPER beyond:

- (A) 28 months from the priority date; or
- (B) 8 months from the date of payment of the handling fee referred to in PCT Rule 57.1 and the preliminary examination fee referred to in PCT Rule 58.1(a); or
- (C) 8 months from the date of receipt by the IPEA of the translation furnished under PCT Rule 55.2.

As a general rule, a 1-month time limit for reply to the written opinion should be set by the examiner if the written opinion (Form PCT/IPEA/408) has not been completed by the examiner within 24 months following the application’s “priority date” as defined in PCT Article 2.

The United States rules pertaining to international preliminary examination of international applications do not provide for any extension of time to reply to a first written opinion. See 37 CFR 1.484(d) and MPEP §1878.02.

AUTHORIZED OFFICER

Every written opinion must be signed by an examiner having at least partial signatory authority.

The first document prepared by the examiner in most international applications during the international preliminary examination proceedings will be the written opinion. Normally only in those international applications where all the formal matters are proper and the claims are directed to inventions which have novelty, inventive step and industrial applicability will an international preliminary examination report be established without a written opinion having been issued first.

1878.01

1878.01(a) Prior Art Under Chapter II

PCT Article 33.

The International Preliminary Examination

(6) The international preliminary examination shall take into consideration all the documents cited in the international search report. It may take into consideration any additional documents considered to be relevant in the particular case.

PCT Rule 64.

Prior Art for International Preliminary Examination

64.1. Prior Art

(a) For the purposes of Article 33(2) and (3), everything made available to the public anywhere in the world by means of written disclosure (including drawings and other illustrations) shall be considered prior art provided that such making available occurred prior to the relevant date.

(b) For the purposes of paragraph (a), the relevant date will be:

(i) subject to item (ii), the international filing date of the international application under international preliminary examination;

(ii) where the international application under international preliminary examination validly claims the priority of an earlier application, the filing date of such earlier application.

64.2. Non-Written Disclosures

In cases where the making available to the public occurred by means of an oral disclosure, use, exhibition or other non-written means ("non-written disclosure") before the relevant date as defined in Rule 64.1(b) and the date of such non-written disclosure is indicated in a written disclosure which has been made available to the public on a date which is the same as, or later than, the relevant date, the non-written disclosure shall not be considered part of the prior art for the purposes of Article 33(2) and (3). Nevertheless, the international preliminary examination report shall call attention to such non-written disclosure in the manner provided for in Rule 70.9.

64.3. Certain Published Documents

In cases where any application or any patent which would constitute prior art for the purposes of Article 33(2) and (3) had it been published prior to the relevant date referred to in Rule 64.1 was published on a date which is the same as, or later than, the relevant date but was filed earlier than the relevant date or claimed the priority of an earlier application which had been filed prior to the relevant date, such published application or patent shall not be considered part of the prior art for the purposes of Article 33(2) and (3). Nevertheless, the international preliminary examination report shall call attention to such application or patent in the manner provided for in Rule 70.10.

The relevant date for the purpose of considering prior art is defined in PCT Rule 64.1(b) as the international filing date or, where the international application contains a valid claim for priority, that date of priority.

In cases where any application or any patent which would constitute prior art for the purpose of international preliminary examination as to novelty and inventive step (nonobviousness) was published on or after the relevant date of the international application under consideration but was filed earlier than the relevant date or claimed the priority of an earlier application which was filed prior to the relevant date, the published application or patent is not to be considered part of the prior art for the purpose of international preliminary examination as to novelty and inventive step. Nevertheless, these documents are to be listed on Form PCT/IPEA/409 under the heading "CERTAIN PUBLISHED DOCUMENTS".

In determining whether there is inventive step, account should be taken of what the applicant acknowledges in his/her description as known. Such acknowledged prior art should be regarded as correct and used during preliminary examination where appropriate.

For oral or nonwritten disclosure, see PCT Rules 64.2 and 70.9.

1878.01(a)(1) Novelty Under Chapter II

Novelty is defined in PCT Article 33(2).

PCT Article 33.

The International Preliminary Examination

(2) For the purposes of the international preliminary examination, a claimed invention shall be considered novel if it is not anticipated by the prior art as defined in the Regulations.

1878.01(a)(2) Inventive Step Under Chapter II

Inventive step is defined in PCT Article 33(3).

PCT Article 33.

The International Preliminary Examination

(3) For purposes of the international preliminary examination, a claimed invention shall be considered to involve an inventive step if, having regard to the prior art as defined in the Regulations, it is not, at the prescribed relevant date, obvious to a person skilled in the art.

PCT Rule 65.

Inventive Step or Non-Obviousness

65.1. Approach to Prior Art

For the purposes of Article 33(3), the international preliminary examination shall take into consideration the relation of any particular claim to the prior art as a whole. It shall take into consideration the claim's relation not only to individual documents or parts thereof taken separately but also its relation to combinations of such documents or parts of documents, where such combinations are obvious to a person skilled in the art.

65.2. Relevant Date

For the purposes of Article 33(3), the relevant date for the consideration of inventive step (non-obviousness) is the date prescribed in Rule 64.1.

1878.01(a)(3) Industrial Applicability Under Chapter II

Industrial applicability is defined in PCT Article 33(4).

PCT Article 33.

The International Preliminary Examination

(4) For the purposes of the international preliminary examination, a claimed invention shall be considered industrially applicable if, according to its nature, it can be made or used (in the technological sense) in any kind of industry. "Industry" shall be understood in its broadest sense, as in the Paris Convention for the Protection of Industrial Property.

1878.02 Reply to the Written Opinion

PCT Article 34.

Procedure before the International Preliminary Examining Authority

(2)(a) The applicant shall have a right to communicate orally and in writing with the International Preliminary Examining Authority.

(b) The applicant shall have a right to amend the claims, the description, and the drawings, in the prescribed manner and within the prescribed time limit, before the international preliminary examination report is established. The amendment shall not go beyond the disclosure in the international application as filed.

(d) The applicant may respond to the written opinion.

PCT Rule 66.

Procedure before the International Preliminary Examining Authority

66.3. Formal Response to the International Preliminary Examining Authority

(a) The applicant may respond to the invitation referred to in Rule 66.2(c) of the International Preliminary Examining Authority by making amendments or - if he disagrees with the opinion of that Authority - by submitting arguments, as the case may be, or do both.

(b) Any response shall be submitted directly to the International Preliminary Examining Authority.

66.5. Amendment

Any change, other than the rectification of obvious errors, in the claims, the description, or the drawings, including cancellation of claims, omission of passages in the description, or omission of certain drawings, shall be considered an amendment.

66.6. *Informal Communications with the Applicant*

The International Preliminary Examining Authority may, at any time, communicate informally, over the telephone, in writing, or through personal interviews, with the applicant. The said Authority shall, at its discretion, decide whether it wishes to grant more than one personal interview if so requested by the applicant, or whether it wishes to reply to any informal written communication from the applicant.

66.8. *Form of Amendments*

(a) Subject to paragraph (b), the applicant shall be required to submit a replacement sheet for every sheet of the international application which, on account of an amendment, differs from the sheet previously filed. The letter accompanying the replacement sheets shall draw attention to the differences between the replaced sheets and the replacement sheets and shall preferably also explain the reasons for the amendment.

(b) Where the amendment consists in the deletion of passages or in minor alterations or additions, the replacement sheet referred to in paragraph (a) may be a copy of the relevant sheet of the international application containing the alterations or additions, provided that the clarity and direct reproducibility of that sheet are not adversely affected. To the extent that any amendment results in the cancellation of an entire sheet, that amendment shall be communicated in a letter which shall preferably also explain the reasons for the amendment.

66.9. *Language of Amendments*

(a) Subject to paragraphs (b) and (c), if the international application has been filed in a language other than the language in which it is published, any amendment, as well as any letter referred to in Rule 66.8, shall be submitted in the language of publication.

(b) If the international preliminary examination is carried out, pursuant to rule 55.2, on the basis of a translation of the international application, any amendment, as well as any letter referred to in paragraph (a), shall be submitted in the language of that translation.

(c) Subject to Rule 55.3, if an amendment or letter is not submitted in a language as required under paragraph (a) or (b), the International Preliminary Examining Authority shall, if practicable, having regard to the time limit for establishing the international preliminary examination report, invite the applicant to furnish the amendment or letter in the required language within a time limit which shall be reasonable under the circumstances.

(d) If the applicant fails to comply, within the time limit under paragraph (c), with the invitation to furnish an amendment in the required language, the amendment shall not be taken into account for the purposes of the international preliminary examination. If the applicant fails to comply, within the time limit under paragraph (c), with the invitation to furnish a letter referred to in paragraph (a) in the required language, the amendment concerned need not be taken into account for the purposes of the international preliminary examination.

37 CFR 1.485. *Amendments by applicant during international preliminary examination.*

(a) The applicant may make amendments at the time of filing the Demand. The applicant may also make amendments within the time limit set by the International Preliminary Examining Authority for reply to any notification under § 1.484(b) or to any written opinion. Any such amendments must:

(1) Be made by submitting a replacement sheet in compliance with PCT Rules 10 and 11.1 to 11.13 for every sheet of the application which differs from the sheet it replaces unless an entire sheet is cancelled; and

(2) Include a description of how the replacement sheet differs from the replaced sheet. Amendments that do not comply with PCT Rules 10 and 11.1 to 11.13 may not be entered

(b) If an amendment cancels an entire sheet of the international application, that amendment shall be communicated in a letter.

All amendments in reply to a written opinion must be received within the time limit set for reply in order to be assured of consideration in the international preliminary examination report. Amendments filed at or before expiration of the period for reply will be considered. Since the examiner will begin to draw up the final report rather promptly after the time period expires, amendments filed after expiration of the reply period may not be considered. In view of the short time period for completion of preliminary examination, applicants are strongly encouraged to file any amendments promptly. 37 CFR 1.484(d) does not allow for extensions of time to reply to a written opinion. The policy of not allowing extensions of time is to ensure that the USPTO can meet its treaty deadline for transmission of the final report.

Any change, other than the rectification of obvious errors in the claims, the description, or the drawings, including the cancellation of claims, omission of passages in the description or omission of certain drawings will be considered an amendment (PCT Rule 66.5). The Patent and Trademark Office when acting as the International Preliminary Examining Authority will not accept any non-English applications or amendments.

Any amendments to the claims, the description, and the drawings in reply to a written opinion must (1) be made by submitting a replacement sheet for every sheet of the application which differs from the sheet it replaces unless an entire sheet is cancelled and (2) include a description of how the replacement sheet differs from the replaced sheet in accordance with PCT Rule 66.8.

In the particular case where the amendment cancels claims, passages in the description or certain drawings resulting in the cancellation of an entire sheet, the amendment must be submitted in the form of a letter cancelling the sheet (PCT Rule 66.8(a)).

Replacement sheets must be in typed form.

Any paper submitted by the applicant, if not in the form of a letter, must be accompanied by a letter signed by the applicant or agent (PCT Rule 92.1). The letter must draw attention to the differences between the replaced sheet and the replacement sheet.

The examiner should make sure that amendments filed in accordance with the PCT, which are necessary to correct any deficiencies notified to the applicant, do not go beyond the disclosure of the international application as filed, thus violating PCT Article 34(2)(b). In other words, no amendment should contain matter that cannot be substantiated by the application as originally filed. In a situation where new matter is introduced by amendment in reply to a written opinion, the international preliminary examination report will be established as if the amendment had not been made, and the report should so indicate. It shall also indicate the reasons why the amendment goes beyond the disclosure (PCT Rule 70.2(c)).

INTERVIEWS

The examiner or applicant may, during the time limit for reply to the written opinion, request a telephone or personal interview. Only one interview is a matter of right, whether by telephone or in person. Additional interviews may be authorized by the examiner in a particular international application where such additional interview may be helpful to advance the international preliminary examination procedure.

All interviews of substance must be made of record by using PCT/IPEA/428 Notice on Informal Communication with the Applicant.

When an interview is arranged, whether by telephone or in writing, and whether by the examiner or by the applicant, the matters for discussion should be stated.

The records of interviews or telephone conversations should indicate, where appropriate, whether a reply is due from the applicant or agent or whether the examiner wishes to issue an additional written opin-

ion or establish the international preliminary examination report.

If the applicant desires to reply to the written opinion, such reply must be filed within the time limit set for reply in order to assure consideration. No extensions to the time limit will be considered or granted. If no timely reply is received from the applicant, the international preliminary examination report will be established by the examiner, treating each claim substantially as it was treated in the written opinion. Replies to the written opinion which are not filed within the time limit set but which reach the examiner before the examiner takes up the application for preparation of the final report may be considered. Thus, only timely replies can be assured of consideration.

The applicant may reply to the invitation referred to in Rule 66.2(c) by making amendments or, if the applicant disagrees with the opinion of the authority, by submitting arguments, as the case may be, or both (PCT Rule 66.3).

If applicant does not reply to the written opinion, the international preliminary examination report will be prepared in time for forwarding to the International Division in finished form by 27 months from the priority date.

1879 Preparation of the International Preliminary Examination Report

PCT Article 35.

The International Preliminary Examination Report

(1) The international preliminary examination report shall be established within the prescribed time limit and in the prescribed form.

(2) The international preliminary examination report shall not contain any statement on the question whether the claimed invention is or seems to be patentable or unpatentable according to any national law. It shall state, subject to the provisions of paragraph (3), in relation to each claim, whether the claim appears to satisfy the criteria of novelty, inventive step (non-obviousness), and industrial applicability, as defined for the purposes of the international preliminary examination in Article 33(1) to (4). The statement shall be accompanied by the citation of the documents believed to support the stated conclusion with such explanations as the circumstances of the case may require. The statement shall also be accompanied by such other observation as the Regulations provide for.

(3)(a) If, at the time of establishing the international preliminary examination report, the International Preliminary Examining Authority considers that any of the situations referred to in Article 34(4)(a) exists, that report shall state this opinion and the reasons

therefor. It shall not contain any statement as provided in paragraph (2).

(b) If a situation under Article 34(4)(b) is found to exist, the international preliminary examination report shall, in relation to the claims in question, contain the statement as provided in subparagraph (a), whereas, in relation to the other claims, it shall contain the statement as provided in paragraph (2).

PCT Administrative Instruction Section 604.

Guidelines for Explanations Contained in the International Preliminary Examination Report

(a) Explanations under Rule 70.8 shall clearly point out to which of the three criteria of novelty, inventive step (non-obviousness) and industrial applicability referred to in Article 35(2), taken separately, any cited document is applicable and shall clearly describe, with reference to the cited documents, the reasons supporting the conclusion that any of the said criteria is or is not satisfied.

(b) Explanations under Article 35(2) shall be concise and preferably in the form of short sentences.

After examination of the international application, if there are no negative statements and/or negative comments for Form PCT/IPEA/408, then the only statement that will issue from the International Preliminary Examining Authority will be the international preliminary examination report (IPER).

The international preliminary examination report is established on Form PCT/IPEA/409.

The international preliminary examination report must be established within:

(A) 28 months from the priority date; or

(B) 8 months from the date of payment of the fees referred to in PCT Rules 57.1 and 58.1(a); or

(C) 8 months from the date of receipt by the International Preliminary Examining Authority of the translation furnished under PCT Rule 55.2, whichever expires last, as provided in PCT Rule 69.2.

To meet the 28-month date for establishing the report, Office practice is to complete internal processing by 27 months from the priority date in order to provide adequate time for reviewing, final processing and mailing. Thus, under normal circumstances, the applicant receives the report, at the latest, 2 months before national processing at the elected Offices may start. This ensures that he/she has time to consider whether, and in which elected Offices, he/she wants to enter the national stage and to take the necessary action.

The international preliminary examination report contains, among other things, a statement (in the form of simple “yes” or “no”), in relation to each claim which has been examined, on whether the claim appears to satisfy the criteria of novelty, inventive step (non-obviousness) and industrial applicability. The statement is, where appropriate, accompanied by the citation of relevant documents together with concise explanations pointing out the criteria to which the cited documents are applicable and giving reasons for the International Preliminary Examining Authority’s conclusions. Where applicable, the report also includes remarks relating to the question of unity of invention.

The international preliminary examination report identifies the basis on which it is established, that is, whether, and if so, which amendments have been taken into account. Replacement sheets containing amendments under PCT Article 19 and/or Article 34 which have been taken into account are attached as “annexes” to the international preliminary examination report. Amendments under PCT Article 19 which have been considered as reversed by an amendment under PCT Article 34 or which have been superseded by later replacement sheets are not annexed to the report; neither are the letters which accompany replacement sheets.

The international preliminary examination report may not express a view on the patentability of the invention. PCT Article 35(2) expressly states that “the international preliminary examination report shall not contain any statement on the question whether the claimed invention is or seems to be patentable or unpatentable according to any national law.”

CLASSIFICATION OF SUBJECT MATTER

The classification of the subject matter shall be either (1) that given by the International Searching Authority under PCT Rule 43.3, if the examiner agrees with such classification, or (2) shall be that which the examiner considers to be correct, if the examiner does not agree with that classification. Both the International Patent Classification (IPC) and the U.S. classification should be given. This classification is placed on the first sheet of the report.

ITEM I. BASIS OF REPORT

The international preliminary examination report will be established on the basis of any amendments, rectifications, priority and/or unity of invention holdings and shall answer the questions concerning novelty, inventive step, and industrial applicability for each of the claims under examination.

In completing Form PCT/IPEA/409, the examiner should first indicate any amendments and/or rectifications of obvious errors taken into account in establishing the international preliminary examination report. The amendments and/or rectifications should be indicated by references to the dates on which the amendments and/or rectifications were filed.

For the purpose of completing Box I, item 1, substitute and/or rectified sheets of the specification and drawings filed during Chapter I proceedings are considered to be originally filed pages/sheets and should be listed as originally filed pages/sheets. Only those amendments or rectifications to the specification and drawings filed on the date of Demand or after the filing of a Demand should be listed as later filed pages/sheets.

Substitute and/or rectified sheets of claims filed during the Chapter I proceedings are also considered to be originally filed claims and should be listed as originally filed claims. However, amended sheets of claims filed under Article 19 in response to the international search report are to be indicated as claims as amended under Article 19. Applicant's submission of a timely amendment to the claims alleged to be under Article 19 is accepted under Article 34 (not Article 19) unless the International Bureau has indicated the amendments were accepted under Article 19. Only those amendments, or rectifications to the claims filed on the date of Demand or after the filing of a Demand should be listed as later filed claims. All claims present on a sheet stamped AMENDED SHEET are listed as amended irrespective of which of the claims present on that sheet were actually amended. If a claim is made up of sheets filed on different dates, the latest date is the date that should be used for the claim.

Amendments and/or rectifications filed but not taken into account in the establishment of the report (e.g., an amendment not taken into account because the amendment went beyond the disclosure of the international application as filed or a rectification that is not considered to be merely a correction of an obvi-

ous error) are then indicated separately. The replacement sheets (but not replacement sheets superseded by later replacement sheets) or letters cancelling sheets under PCT Rule 66.8(a) are included as an annex to the report.

The final report package when sent to the International Application Processing Division for mailing must include copies of all amendments and rectifications entered and any cover letters to those amendments.

ITEM II. PRIORITY

Item II of Form PCT/IPEA/409 is to inform applicant of non-establishment of a request for priority. If the report is established as if the priority claim contained in the Request of the international application had not been made, it shall so indicate. This will occur in the event that the applicant has failed to comply with the invitation to furnish either

(A) a copy of the earlier application whose priority is claimed, or

(B) a translation of the earlier application, or

(C) where the priority claim is found invalid, e.g., the claimed priority date is more than one year prior to the international filing date (PCT Rule 17) or all claims are directed to inventions which were not described and enabled by the earlier application (PCT Rule 64.1), or

(D) where the priority claim has been withdrawn.

ITEM III. NON-ESTABLISHMENT OF OPINION WITH REGARD TO NOVELTY, INVENTIVE STEP OR INDUSTRIAL APPLICABILITY

Indications that a report has not been established on the questions of novelty, inventive step or industrial applicability, either as to some claims or as to all claims, are given in Item III on the Report. The examiner must specify that the report has not been established because:

(A) the application relates to subject matter which does not require international preliminary examination;

(B) the description, claims or drawings are so unclear that no meaningful opinion could be formed;

(C) the claims are so inadequately supported by the description that no meaningful opinion could be formed.

Where the report has not been established in relation to certain claims only, the claims affected must be specified.

ITEM IV. LACK OF UNITY OF INVENTION

If the applicant has paid additional fees or has restricted the claims in response to an invitation to do so or if the applicant has failed to respond to the invitation to pay additional fees or restrict the claims, the international preliminary examination report shall so indicate. The examiner should indicate whether:

- (A) the claims have been restricted;
- (B) additional fees have been paid without protest;
- (C) additional fees have been paid by the applicant under protest;
- (D) the applicant has neither restricted the claims nor paid additional fees;
- (E) the examiner was of the opinion that the international application did not comply with the requirement of unity of invention but decided not to issue an invitation to restrict the claims or pay additional fees.

In addition, if the examiner is examining less than all the claims, the examiner must indicate which parts of the international application were, and which parts were not, the subject of international preliminary examination.

In the case where additional fees were paid under protest, the text of the protest, together with the decision thereon, must be annexed to the report by International Application Processing Division IPEA personnel if the applicant has so requested.

Where an indication has been given under item (E) above, the examiner must also specify the reasons for which the international application was not considered as complying with the requirement of unity of invention.

ITEM V. REASONED STATEMENT UNDER ARTICLE 35(2) WITH REGARD TO NOVELTY, INVENTIVE STEP, AND INDUSTRIAL APPLICABILITY; AND CITATIONS AND EXPLANATIONS SUPPORTING SUCH STATEMENT

The examiner must indicate whether each claim appears to satisfy the criteria of novelty, inventive step (nonobviousness), and industrial applicability. The determination or statement should be made on

each of the three criteria taken separately. The determination as to any criteria should be negative if the criteria as to the particular claim is not satisfied. The examiner should always cite documents believed to support any negative determination as to novelty and inventive step. Any negative holding as to lack of industrial applicability must be fully explained. See the discussion under MPEP § 1878, Item V. The citation of documents should be in accordance with Administrative Instructions Sections 503 and 611. The procedure is the same as the procedure for search report citations. Explanations should clearly indicate, with reference to the cited documents, the reasons supporting the conclusions that any of the said criteria is or is not satisfied, unless the statement is positive and the reason for citing any document is easy to understand when consulting the document. If only certain passages of the cited documents are relevant, the examiner should identify them, for example, by indicating the page, column, or the lines where such passages appear. Preferably, a reasoned statement should be provided in all instances.

ITEM VI. CERTAIN DOCUMENTS CITED

If the examiner has discovered, or the international search report has cited, a relevant document which refers to a nonwritten disclosure, and the document was only published on or after the relevant date of the international application, the examiner must indicate on the international preliminary examination report:

- (A) the date on which the document was made available to the public;
- (B) the date on which the non-written public disclosure occurred.

The examiner should also identify any published application or patent and should provide for each such published application or patent the following indications:

- (A) its date of publication;
- (B) its filing date, and its claimed priority date (if any).

The Report may also indicate that, in the opinion of the International Preliminary Examining Authority, the priority date of the document cited has not been validly claimed (PCT Rule 70.10).

Guidelines explaining to the examiner the manner of indicating certain special categories of documents as well as the manner of indicating the claims to which the documents cited in such report are relevant are set forth in Administrative Instructions Sections 507(c), (d), and (e) and 508.

ITEM VII. CERTAIN DEFECTS IN THE INTERNATIONAL APPLICATION

If, in the opinion of the examiner, defects existing in the form or contents of the international application have not been suitably solved at the prescribed time limit for establishing the international preliminary examination report, the examiner may include this opinion in the report, and if included, must also indicate the reasons therefor. See the discussion under MPEP § 1878, Item VII.

ITEM VII. CERTAIN OBSERVATIONS ON THE INTERNATIONAL APPLICATION

If, in the opinion of the examiner, the clarity of claims, the description, and the drawings, or the ques-

tion as to whether the claims are fully supported by the description have not been suitably solved at the prescribed time limit for establishing the international preliminary examination report, the examiner may include this opinion in the report, and if included, must also indicate the reasons therefor. See the discussion under MPEP § 1878, Item VIII.

CERTIFICATION

When completing the certification of the report, the examiner must indicate the date on which the Demand for International Preliminary Examination was submitted and the date on which the examiner completed the report and the name and mailing address of the International Preliminary Examining Authority.

These last mentioned items may either be completed when including the other data or when completing the certification. Every international preliminary examination report must be signed by a primary examiner.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
IPI-001 PCT			
International application No.	International filing date (<i>day/month/year</i>)	Priority date (<i>day/month/year</i>)	
PCT/US99/15678	05 June 1999 (05.06.1999)	05 June 1998 (05.06.1998)	
International Patent Classification (IPC) or national classification and IPC			
IPC(7): A62C 27/00 and US Cl.: 280/004			
Applicant			
International Products, Inc.			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of ___ sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of ___ sheets.</p> <p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input checked="" type="checkbox"/> Non-establishment of report with regard to novelty, inventive step and industrial applicability</p> <p>IV <input checked="" type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>			
Date of submission of the demand		Date of completion of this report	
05 January 2000 (05.01.2000)		14 July 2001 (14.07.2001)	
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230		Authorized officer Pat Examiner Telephone No. 703-305-3257	

Form PCT/IPEA/409 (cover sheet)(July 1998)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/15678

I. Basis of the report1. With regard to the **elements** of the international application:*

- the international application as originally filed.
- the description:
 pages 1-6 as originally filed
 pages NONE, filed with the demand
 pages NONE, filed with the letter of _____.
- the claims:
 pages 10 and 12-16, as originally filed
 pages NONE, as amended (together with any statement) under Article 19
 pages 11, filed with the demand
 pages 11/1, filed with the letter of 23 June 2000 (23.06.2000).
- the drawings:
 pages 1-3, as originally filed
 pages NONE, filed with the demand
 pages NONE, filed with the letter of _____.
- the sequence listing part of the description:
 pages NONE, as originally filed
 pages NONE, filed with the demand
 pages NONE, filed with the letter of _____.

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in printed form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages NONE
- the claims, Nos. NONE
- the drawings, sheets/fig NONE

5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/15678

II. Priority

1. This report has been established as if no priority has been claimed due to the failure to furnish within the prescribed time limit the requested:
- copy of the earlier application whose priority has been claimed (Rule 66.7(a)).
 - translation of the earlier application whose priority has been claimed (Rule 66.7(b)).
2. This report has been established as if no priority has been claimed due to the fact that the priority claim has been found invalid (Rule 64.1).

Thus for the purposes of this report, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT	International application No. PCT/US99/15678
III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	
1. The question whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been and will not be examined in respect of:	
<input type="checkbox"/> the entire international application, <input checked="" type="checkbox"/> claims Nos. <u>11</u>	
because:	
<input type="checkbox"/> the said international application, or the said claim Nos. ____ relate to the following subject matter which does not require international preliminary examination (<i>specify</i>):	
<input checked="" type="checkbox"/> the description, claims or drawings (<i>indicate particular elements below</i>) or said claims Nos. <u>11</u> are so unclear that no meaningful opinion could be formed (<i>specify</i>): Claim 11 has not been examined because it is an improper multiple dependent claim under PCT Rule 6.4(a) because it depends from another multiple dependent claim.	
<input type="checkbox"/> the claims, or said claims Nos. ____ are so inadequately supported by the description that no meaningful opinion could be formed.	
<input type="checkbox"/> no international search report has been established for said claims Nos.	
2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:	
<input type="checkbox"/> the written form has not been furnished or does not comply with the standard.	
<input type="checkbox"/> the computer readable form has not been furnished or does not comply with the standard.	

Form PCT/IPEA/409 (Box III) (July 1998)

✓

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/15678

IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees the applicant has:

- restricted the claims.
- paid additional fees.
- paid additional fees under protest.
- neither restricted nor paid additional fees.

2. This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention is accordance with Rules 13.1, 13.2 and 13.3 is

- complied with.
- not complied with for the following reasons:

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claim(s) 1-5, drawn to a fire-fighting vehicle with a particular high-visibility finish.

Group II, claim(s) 6-10, drawn to a fire hose made of PVC reinforced canvas.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The special technical feature of the Group I vehicle is the claimed high-visibility paint applied to the vehicle. The special technical feature of the Group II invention is the particular composition of the claimed fire hose. Since the special technical feature of the Group I invention is not present in the Group II claims and the special technical feature of the Group II invention is not present in the Group I claims, unity of invention is lacking.

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- all parts.
- the parts relating to claims Nos. ____

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/15678

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. STATEMENT

Novelty (N)	Claims <u>6-11</u>	YES
	Claims <u>1-5</u>	NO
Inventive Step (IS)	Claims <u>9-11</u>	YES
	Claims <u>1-8</u>	NO
Industrial Applicability (IA)	Claims <u>1-11</u>	YES
	Claims <u>NONE</u>	NO

2. CITATIONS AND EXPLANATIONS (Rule 70.7)

Claims 1-5 lack novelty under PCT Article 33(2) as being anticipated by Jones. Jones teaches the claimed fire-fighting vehicle including the claimed high-visibility polyester finish.

Claims 6-8 lack an inventive step under PCT Article 33(3) as being obvious over Johnson in view of Fairfield. Johnson does not teach the particular PVC compositions claimed for use in a fire hose but otherwise teaches all of the claimed elements for the claimed fire hose. Fairfield teaches that it is known to use the claimed PVC compositions as additives in canvas material intended for use as an inlet hose in a pumping system. Since each type of environment, the fire hose environment and the pumping equipment environment, demand resistance to fungus growths and dry rot it would have been obvious to one of ordinary skill in this art at the time this invention was made to provide the claimed PVC compositions as additives in the Johnson fire hose as taught by the Fairfield reference.

Claims 9-11 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest the specific PVC compositions claimed as additives for the fire hose.

Claims 1-11 meet the criteria set out in PCT Article 33(4) and thus have industrial applicability, because the fire fighting vehicle and the claimed fire hose can be made and/or used in the fire fighting industry.

----- NEW CITATIONS -----

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/15678

VI. Certain documents cited

1. Certain published documents (Rule 70.10)

Application No <u>Patent No.</u>	Publication Date <i>(day/month/year)</i>	Filing Date <i>(day/month/year)</i>	Priority date (valid claim) <i>(day/month/year)</i>
-------------------------------------	---	--	--

2. Non-written disclosures (Rule 70.9)

<u>Kind of non-written disclosure</u>	Date of non-written disclosure <i>(day/month/year)</i>	Date of written disclosure referring to non-written disclosure <i>(day/month/year)</i>
---------------------------------------	---	--

7

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/15678

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

Form PCT/IPEA/409 (Box VII) (July 1998)

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/15678

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the questions whether the claims are fully supported by the description, are made:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/US99/15678

Supplemental Box
(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of Certain Documents Cited

1. Certain published documents (Rule 70.10)

Application No <u>Patent No.</u>	Publication Date <u>(day/month/year)</u>	Filing Date <u>(day/month/year)</u>	Priority date (valid claim) <u>(day/month/year)</u>
None	None	None	None

2. Non-written disclosures (Rule 70.9)

<u>Kind of non-written disclosure</u>	Date of non-written disclosure <u>(day/month/year)</u>	Date of written disclosure referring to non-written disclosure <u>(day/month/year)</u>
None	None	None

1879.01 Time Limit for Preparing Report

PCT Rule 69.

Start of and Time Limit for International Preliminary Examination

69.1. Start of International Preliminary Examination

(a) Subject to paragraphs (b) to (e), the International Preliminary Examining Authority shall start the international preliminary examination when it is in possession both of the demand and of either the international search report or a notice of the declaration by the International Searching Authority under Article 17(2)(a) that no international search report will be established.

(b) If the competent International Preliminary Examining Authority is part of the same national Office or intergovernmental organization as the competent International Searching Authority, the international preliminary examination may, if the International Preliminary Examining Authority so wishes and subject to paragraph (d), start at the same time as the international search.

(c) Where the statement concerning amendments contains an indication that amendments under Article 19 are to be taken into account (Rule 53.9(a)(i)), the International Preliminary Examining Authority shall not start the international preliminary examination before it has received a copy of the amendments concerned

(d) Where the statement concerning amendments contains an indication that the start of the international preliminary examination is to be postponed (Rule 53.9(b)), the International Preliminary Examining Authority shall not start the international preliminary examination before

(i) it has received a copy of any amendments made under Article 19,

(ii) it has received a notice from the applicant that he does not wish to make amendments under Article 19, or

(iii) the expiration of 20 months from the priority date, whichever occurs first.

(e) Where the statement concerning amendments contains an indication that amendments under Article 34 are submitted with the demand (Rule 53.9(c)) but no such amendments are, in fact, submitted, the International Preliminary Examining Authority shall not start the international preliminary examination before it has received the amendments or before the time limit fixed in the invitation referred to in Rule 60.1(g) has expired, whichever occurs first.

69.2. Time Limit for International Preliminary Examination

The time limit for establishing the international preliminary examination report shall be:

(i) 28 months from the priority date, or

(ii) eight months from the date of payment of the fees referred to in Rules 57.1 and 58.1(a), or

(iii) eight months from the date of receipt by the International Preliminary Examining Authority of the translation furnished under Rule 55.2, whichever expires last.

PCT Rule 69.2 was amended July 1, 1998. The time limit for preparing the international preliminary examination report is 28 months from the priority date, or 8 months from the date of payment of the fees referred to in PCT Rules 57.1 and 58.1(a), or 8 months from the date of receipt by the International Preliminary Examining Authority of the translation furnished under PCT Rule 55.2, whichever expires first. This time limit is 27 months internally to ensure sufficient time to process, review and mail the report in sufficient time to reach the International Bureau by 28 months from the earliest priority date.

1879.02 Transmittal of the International Preliminary Examination Report

PCT Article 36.

Transmittal, Translation, and Communication of the International Preliminary Examination Report

(1) The international preliminary examination report, together with the prescribed annexes, shall be transmitted to the applicant and to the International Bureau.

PCT Rule 71.

Transmittal of the International Preliminary Examination Report

71.1. Recipients

The International Preliminary Examining Authority shall, on the same day, transmit one copy of the international preliminary examination report and its annexes, if any, to the International Bureau, and one copy to the applicant.

71.2. Copies of Cited Documents

(a) The request under Article 36(4) may be presented any time during seven years from the international filing date of the international application to which the report relates.

(b) The International Preliminary Examining Authority may require that the party (applicant or elected Office) presenting the request pay to it the cost of preparing and mailing the copies. The level of the cost of preparing copies shall be provided for in the agreements referred to in Article 32(2) between the International Preliminary Examining Authorities and the International Bureau.

(c) *[Deleted]*

(d) Any International Preliminary Examining Authority may perform the obligations referred to in paragraphs (a) and (b) through another agency responsible to it.

The international preliminary examination report is transmitted to the International Bureau using a trans-

mittal Form PCT/IPEA/416. Every effort is made to ensure that the transmittal is effected in sufficient time to reach the International Bureau before the expiration of the time limit set in PCT Rule 69.2.

AUTHORIZED OFFICER

Form PCT/IPEA/416 must be signed by a primary examiner.

1879.03 Translations

PCT Article 36.

*Transmittal, Translation, and Communication
of the International Preliminary Examination Report*

(2)(a) The international preliminary examination report and its annexes shall be translated into the prescribed languages.

(b) Any translation of the said report shall be prepared by or under the responsibility of the International Bureau, whereas any translation of the said annexes shall be prepared by the applicant.

PCT Rule 72.

*Translation of the International
Preliminary Examination Report*

72.1. Languages

(a) Any elected State may require that the international preliminary examination report, established in any language other than the official language, or one of the official languages, of its national Office, be translated into English.

(b) Any such requirement shall be notified to the International Bureau, which shall promptly publish it in the Gazette.

72.2. Copy of Translation for the Applicant

The International Bureau shall transmit a copy of the translation referred to in Rule 72.1(a) of the international preliminary examination report to the applicant at the same time as it communicates such translation to the interested elected Office or Offices.

72.3. Observations on the Translation

The applicant may make written observations on what, in his opinion, are errors of translation in the translation of the international preliminary examination report and shall send a copy of any such observations to each of the interested elected Offices and a copy to the International Bureau.

The international preliminary examination report and any annexes are established in Chinese, English, French, German, Japanese, Russian or Spanish, if the international application was filed in one of those lan-

guages, or in English if the international application was filed in another language. Each elected State may require that the report, if it is not in (one of) the official language(s) of its national Office, be translated into English. In that case, the translation of the body of the report is prepared by International Bureau, which transmits copies to the applicant and to each interested elected Office. If any elected Office requires a translation of annexes to the report, the preparation and furnishing of that translation is the responsibility of the applicant.

The U.S. requires the final report and the annexes thereto to be in English. Translation of the annexes for national stage purposes is required pursuant to 35 U.S.C. 371(c)(5) and 37 CFR 1.495(e). Failure to timely provide such translation results in cancellation of the annexes.

1879.04 Confidential Nature of the Report

PCT Article 38.

*Confidential Nature of the
International Preliminary Examination*

(1) Neither the International Bureau nor the International Preliminary Examining Authority shall, unless requested or authorized by the applicant, allow access within the meaning, and with the proviso, of Article 30(4) to the file of the international preliminary examination by any person or authority at any time, except by the elected Offices once the international preliminary examination report has been established.

(2) Subject to the provisions of paragraph (1) and Articles 36(1) and (3) and 37(3)(b), neither the International Bureau nor the International Preliminary Examining Authority shall, unless requested or authorized by the applicant, give information on the issuance or non-issuance of an international preliminary examination report and on the withdrawal or non-withdrawal of the demand or of any election.

1880 Withdrawal of Demand or Election

PCT Article 37.

Withdrawal of Demand or Election

- (1) The applicant may withdraw any or all elections.
- (2) If the election of all elected States is withdrawn, the demand shall be considered withdrawn.
- (3)(a) Any withdrawal shall be notified to the International Bureau.
- (b) The elected Office concerned and the International Preliminary Examining Authority concerned shall be notified accordingly by the International Bureau.

(4)(a) Subject to the provisions of subparagraph (b), withdrawal of the demand or of the election of a Contracting State shall, unless the national law of that State provides otherwise, be considered to be withdrawal of the international application as far as that State is concerned.

(b) Withdrawal of the demand or of the election shall not be considered to be withdrawal of the international application if such withdrawal is effected prior to the expiration of the applicable time limit under Article 22; however, any Contracting State may provide in its national law that the aforesaid shall apply only if its national Office has received, within the said time limit, a copy of the international application, together with a translation (as prescribed), and the national fee.

PCT Rule 90^{bis}.

Withdrawals

90^{bis}.4. Withdrawal of the Demand, or of Elections

(a) The applicant may withdraw the demand or any or all elections at any time prior to the expiration of 30 months from the priority date.

(b) Withdrawal shall be effective upon receipt of a notice addressed by the applicant to the International Bureau.

(c) If the notice of withdrawal is submitted by the applicant to the International Preliminary Examining Authority, that Authority shall mark the date of receipt on the notice and transmit it promptly to the International Bureau. The notice shall be considered to have been submitted to the International Bureau on the date marked.

PCT Administrative Instruction Section 606.

Cancellation of Elections

The International Preliminary Examining Authority shall, if the election is in the demand, cancel *ex officio* the election of any State which is not a designated State or which is not bound by Chapter II of the Treaty, shall enclose that election within square brackets, shall draw a line between the square brackets while still leaving the election legible and shall enter, in the margin, the words "CANCELLED EX OFFICIO BY IPEA" or their equivalent in the language of the demand, and shall notify the applicant accordingly.

Any withdrawal of the Demand or any election must be sent to the International Bureau. Withdrawal, if timely, is effective upon receipt by the International Bureau.

1881 Receipt of Notice of Election by the Patent and Trademark Office

PCT Rule 61.

Notification of the Demand and Elections

61.2. Notification to the Elected Offices

(a) The notification provided for in Article 31(7) shall be effected by the International Bureau.

(b) The notification shall indicate the number and filing date of the international application, the name of the applicant, the filing date of the application whose priority is claimed (where priority is claimed), the date of receipt by the International Preliminary Examining Authority of the demand, and - in the case of a later election - the date of receipt of the notice effecting the later election. The latter date shall be the actual date of receipt by the International Bureau or, where applicable, the date referred to in Rule 56.1(f) or 60.2(b).

(c) The notification shall be sent to the elected Office together with the communication provided for in Article 20. Elections effected after such communication shall be notified promptly after they have been made.

(d) Where the applicant makes an express request to an elected Office under Article 40(2) before the communication provided for in Article 20 has taken place, the International Bureau shall, upon request of the applicant or the elected Office, promptly effect that communication to that Office.

61.3. Information for the Applicant

The International Bureau shall inform the applicant in writing of the notification referred to in Rule 61.2 and of the elected Offices notified under Article 31(7).

All notices of election are received by the PCT International Division from the International Bureau. The PCT International Division prepares the appropriate records of the election and places the paper in storage with the communicated copy of the international application until the national stage is entered.

1890 Receipt of Notice of Designation

After publication of the international application, between about 18 and 19 months from the priority date, the International Bureau notifies each national Office that it has been designated and at the same time forwards to each designated Office a copy of the international application, a copy of the search report (an English translation is sent to the U.S. if the search report was not in English), a copy of any amendment under PCT Article 19, and a copy of any

priority document (PCT Rule 47). Thus, the U.S. as a designated Office first becomes aware of the fact of its designation at about 18 to 19 months from the priority date and may begin a national stage application file from the papers forwarded by the International Bureau. See PCT Rule 24.2(b). Contracting States have the option of being notified of their designation earlier. The U.S. did not choose to be notified earlier.

The national stage papers sent by the International Bureau are received in the Designated/Elected Office (DO/EO) Section of the International Division of the USPTO. The papers are matched with applicant's submission for entry into the national stage in the U.S. and together make up the U.S. national stage application file. The DO/EO checks the national stage papers to be sure all necessary parts have been received from applicant and from the International Bureau. When the application is complete, a notice of acceptance and a filing receipt are mailed to applicant and the application is forwarded to the Office of Initial Patent Examination to be scanned electronically before the application is forwarded to the appropriate Technology Center.

1891 Receipt of Notice of Election and Preliminary Examination Report

If the U.S. is elected in a Demand for preliminary examination prior to 19 months from the priority date, applicant may postpone the steps needed for entry into the national stage from 20 to 30 months from the priority date. The USPTO will hold the national stage papers sent by the International Bureau awaiting applicant's submissions for entry into the national stage. The international application is examined and the results (the international preliminary examination report) are received by the USPTO for inclusion into the national stage file. The examination report is communicated to the elected Offices by the International Bureau.

The notice of election is communicated to the elected Office along with the PCT Article 20 communication or as soon thereafter as the International Bureau receives notice of the election. Election of a Contracting State, of course, is not possible unless that state was designated.

1893 National Stage (U.S. National Application Filed Under 35 U.S.C. 371)

37 CFR 1.9. Definitions.

(a)(1) A national application as used in this chapter means a U.S. application for patent which was either filed in the Office under 35 U.S.C. 111, or which entered the national stage from an international application after compliance with 35 U.S.C. 371.

(2) A provisional application as used in this chapter means a U.S. national application for patent filed in the Office under 35 U.S.C. 111(b).

(3) A nonprovisional application as used in this chapter means a U.S. national application for patent which was either filed in the Office under 35 U.S.C. 111(a), or which entered the national stage from an international application after compliance with 35 U.S.C. 371.

Thus, there are three types of U.S. national applications: a national stage application under the PCT (filed under 35 U.S.C. 371), a regular domestic national application filed under 35 U.S.C. 111(a), and a provisional application filed under 35 U.S.C. 111(b).

An applicant who uses the Patent Cooperation Treaty gains the benefit of

(A) a delay in the time when papers must be submitted to the national offices;

(B) an international search (to judge the level of the relevant prior art) before having to expend resources for filing fees, translations and other costs;

(C) a delay in the expenditure of fees;

(D) additional time for research;

(E) additional time to evaluate financial, marketing, commercial and other considerations.

The time delay is, however, the benefit most often recognized as primary. Ultimately, applicant might choose to submit the national stage application. The national stage is unique compared to a domestic national application in that

(A) it is submitted later (i.e., normally 20 or 30 months or more from a claimed priority date as compared to 12 months for a domestic application claiming priority).

(B) the status of the prior art is generally known before the national stage begins and this is not necessarily so in a domestic national application.

(C) if the filing of an international application is to be taken into account in determining the patentability or validity of any application for patent or granted patent, then special provisions apply. See MPEP § 1895.01, subsection (E) and MPEP § 1896.

A “patent” under 35 U.S.C. 102(e)(2) refers to a patent granted on an application filed in the U.S. However, a patent issuing from an international application filed on or after November 29, 2000, which entered the national stage under 35 U.S.C. 371 is not considered to be filed in the U.S. for purposes of 35 U.S.C. 102(e)(2). Patents issuing in other countries throughout the world are not prior art under 35 U.S.C. 102(e).

IDENTIFICATION OF THE NATIONAL STAGE APPLICATION

Once the national stage application has been accorded an application number (the two digit series code followed by a six digit serial number), that number as well as the international application number should be used whenever papers or other communications are directed to the USPTO regarding the national stage application. The national stage application is tracked through the Patent Application Locating and Monitoring (PALM) system by the eight digit U.S. application number. Therefore, processing is expedited if the U.S. application number is indicated. The international application number is helpful for identification purposes and can be used to cross-check a possibly erroneous U.S. application number. Of course, the international filing date and the national stage entry date under 35 U.S.C. 371 should also be provided. See 37 CFR 1.5(a).

1893.01 Commencement and Entry

35 U.S.C. 371. National stage: Commencement.

(a) Receipt from the International Bureau of copies of international applications with any amendments to the claims, international search reports, and international preliminary examination reports including any annexes thereto may be required in the case of international applications designating or electing the United States.

(b) Subject to subsection (f) of this section, the national stage shall commence with the expiration of the applicable time limit under article 22 (1) or (2), or under article 39 (1)(a) of the treaty.

(c) The applicant shall file in the Patent and Trademark Office —

(1) the national fee provided in section 41(a) of this title;

(2) a copy of the international application, unless not required under subsection (a) of this section or already communicated by the International Bureau, and a translation into the English language of the international application, if it was filed in another language;

(3) amendments, if any, to the claims in the international application, made under article 19 of the treaty, unless such amendments have been communicated to the Patent and Trademark Office by the International Bureau, and a translation into the English language if such amendments were made in another language;

(4) an oath or declaration of the inventor (or other person authorized under chapter 11 of this title) complying with the requirements of section 115 of this title and with regulations prescribed for oaths or declarations of applicants;

(5) a translation into the English language of any annexes to the international preliminary examination report, if such annexes were made in another language.

(d) The requirement with respect to the national fee referred to in subsection (c)(1), the translation referred to in subsection (c)(2), and the oath or declaration referred to in subsection (c)(4) of this section shall be complied with by the date of the commencement of the national stage or by such later time as may be fixed by the Director. The copy of the international application referred to in subsection (c)(2) shall be submitted by the date of the commencement of the national stage. Failure to comply with these requirements shall be regarded as abandonment of the application by the parties thereof, unless it be shown to the satisfaction of the Director that such failure to comply was unavoidable. The payment of a surcharge may be required as a condition of accepting the national fee referred to in subsection (c)(1) or the oath or declaration referred to in subsection (c)(4) of this section if these requirements are not met by the date of the commencement of the national stage. The requirements of subsection (c)(3) of this section shall be complied with by the date of the commencement of the national stage, and failure to do so shall be regarded as a cancellation of the amendments to the claims in the international application made under article 19 of the treaty. The requirement of subsection (c)(5) shall be complied with at such time as may be fixed by the Director and failure to do so shall be regarded as cancellation of the amendments made under article 34 (2)(b) of the treaty.

(e) After an international application has entered the national stage, no patent may be granted or refused thereon before the expiration of the applicable time limit under article 28 or article 41 of the treaty, except with the express consent of the applicant. The applicant may present amendments to the specification, claims, and drawings of the application after the national stage has commenced.

(f) At the express request of the applicant, the national stage of processing may be commenced at any time at which the application is in order for such purpose and the applicable requirements of subsection (c) of this section have been complied with.

37 CFR 1.491. National stage commencement and entry.

(a) Subject to 35 U.S.C. 371(f), the national stage shall commence with the expiration of the applicable time limit under PCT Article 22(1) or (2), or under PCT Article 39(1)(a).

(b) An international application enters the national stage when the applicant has filed the documents and fees required by 35 U.S.C. 371(c) within the period set in § 1.494 or § 1.495.

Subject to 35 U.S.C. 371(f), commencement of the national stage occurs upon expiration of the applicable time limit, as stated in 35 U.S.C. 371(b) and 37 CFR 1.491(a).

Entry into the national stage occurs upon completion of certain acts, as stated in 37 CFR 1.491(b).

1893.01(a) Entry via the U.S. Designated Office

37 CFR 1.494. Entering the national stage in the United States of America as a Designated Office.

(a) Where the United States of America has not been elected by the expiration of 19 months from the priority date (see § 1.495), the applicant must fulfill the requirements of PCT Article 22 and 35 U.S.C. 371 within the time periods set forth in paragraphs (b) and (c) of this section in order to prevent the abandonment of the international application as to the United States of America. International applications for which those requirements are timely fulfilled will enter the national stage and obtain an examination as to the patentability of the invention in the United States of America.

(b) To avoid abandonment of the application, the applicant shall furnish to the United States Patent and Trademark Office not later than the expiration of 20 months from the priority date:

(1) A copy of the international application, unless it has been previously communicated by the International Bureau or unless it was originally filed in the United States Patent and Trademark Office; and

(2) The basic national fee (see § 1.492(a)). The 20-month time limit may not be extended.

(c) If applicant complies with paragraph (b) of this section before expiration of 20 months from the priority date but omits:

(1) A translation of the international application, as filed, into the English language, if it was originally filed in another language (35 U.S.C. 371(c)(2)) and/or

(2) The oath or declaration of the inventor (35 U.S.C. 371(c)(4); see § 1.497), and a declaration of inventorship in compliance with § 1.497 has not been previously submitted in the international application under PCT Rule 4.17(iv) within the time limits provided for in the PCT Rule 26^{ter}.1, applicant will be so notified and given a period of time within which to file the translation and/or oath or declaration in order to prevent abandonment of the application. The payment of the processing fee set forth in § 1.492(f) is required for acceptance of an English translation later than the expiration of 20 months after the priority date. The payment of the surcharge set forth in § 1.492(e) is required for acceptance of the oath or declaration of the inventor later than the

expiration of 20 months after the priority date. A “Sequence Listing” need not be translated if the “Sequence Listing” complies with PCT Rule 12.1(d) and the description complies with PCT Rule 5.2(b).

(d) A copy of any amendments to the claims made under PCT Article 19, and a translation of those amendments into English, if they were made in another language, must be furnished not later than the expiration of 20 months from the priority date. Amendments under PCT Article 19 which are not received by the expiration of 20 months from the priority date will be considered to be cancelled. The 20-month time limit may not be extended.

(e) Verification of the translation of the international application or any other document pertaining to an international application may be required where it is considered necessary, if the international application or other document was filed in a language other than English.

(f) The documents and fees submitted under paragraphs (b) and (c) of this section must, except for a copy of the international publication or translation of the international application that is identified as provided in § 1.417, be clearly identified as a submission to enter the national stage under 35 U.S.C. 371. Otherwise, the submission will be considered as being made under 35 U.S.C. 111(a).

(g) An international application becomes abandoned as to the United States 20 months from the priority date if the requirements of paragraph (b) of this section have not been complied with within 20 months from the priority date where the United States has been designated but not elected by the expiration of 19 months from the priority date. If the requirements of paragraph (b) of this section are complied with within 20 months from the priority date but any required translation of the international application as filed and/or the oath or declaration are not timely filed, an international application will become abandoned as to the United States upon expiration of the time period set pursuant to paragraph (c) of this section.

An international application designating the U.S. will enter the national stage via the U.S. Designated Office unless a Demand electing the U.S. is filed prior to the expiration of 19 months from the priority date whereupon entry will be via the U.S. Elected Office. The procedure for entry via the U.S. Designated Office is as prescribed in 37 CFR 1.494.

1893.01(a)(1) Submissions Required by 20 Months from the Priority Date

To begin entry into the national stage, applicant is required to comply with 37 CFR 1.494(b) within 20 months from the priority date unless election of the U.S. under Chapter II of the PCT has been made prior to 19 months from the priority date (see MPEP § 1893.01(b)). Thus, applicant must pay the

basic national fee on or before 20 months from the priority date and be sure that a copy of the international application has been received by the U.S. Designated Office prior to expiration of 20 months from the priority date. The notice referred to in PCT Rule 47.1(c) constitutes conclusive evidence of transmission of the international application. Payment of the basic national fee will indicate applicant's intention to enter the national stage and will provide a U.S. correspondence address in most instances.

Facsimile transmission is not acceptable for submission of the basic national fee and/or the copy of the international application. See 37 CFR 1.6(d). Likewise, the certificate of mailing procedures of 37 CFR 1.8 do not apply to the filing of the copy of the international application and payment of the basic national fee. See 37 CFR 1.8(a)(2)(i)(F).

Applicants cannot pay the basic national fee with a surcharge after the 20 month deadline. Failure to pay the basic national fee within 20 months from the priority date will result in abandonment of the application. The time for payment of the basic fee is not extendable.

Similarly, the copy of the international application is required to be provided within 20 months from the priority date. A copy of the international application is provided to the U.S. Designated Office by the International Bureau (the copy is ordinarily received shortly after publication at about 18 months from the priority date). The International Bureau also mails a confirmation (Form IB/308) to applicant upon which applicant can rely that the copy has been provided, see PCT Rule 47.1(c). The copy is placed in a file to await applicant's submission of the basic national fee and other national stage requirements.

If the basic national fee has been paid by expiration of 20 months from the priority date, but the required oath, declaration or translation has not been filed within 20 months from the priority date, as appropriate, the Office will send applicant a notice and provide a period of time to supply the deficiency as set forth in 37 CFR 1.494(c). The time period usually set is 1 month from the date of notification by the Office or 21 months from the priority date, whichever is later. This period may be extended pursuant to the provisions of 37 CFR 1.136(a). Thus, payment of the basic national fee on or before 20 months from the priority date will (1) cause the Office, after a check of

the national stage papers at 20 months, to mail a notice identifying any deficiencies and affording applicant a period for correction of those deficiencies, and (2) as in national practice under 37 CFR 1.53, enable applicants to extend the period of time under 37 CFR 1.136(a) for submission of a proper oath, declaration or translation. The international application enters the national stage under 35 U.S.C. 371 and 37 CFR 1.491 when the last of the items indicated in 35 U.S.C. 371(c) is timely received by the office.

An international application becomes abandoned if the copy of the international application or the filing fee have not been received by the U.S. Designated Office prior to expiration of 20 months from the priority date. A notification of any missing requirements pursuant to 37 CFR 1.494(c) will only be mailed in those instances where the applicant has paid the basic national fee within 20 months from the priority date.

The notice of missing requirements lists several items which 37 CFR 1.497(a) and (b) require and all of those items will have to be satisfied before the oath or declaration is considered accepted. Similarly, the translation must be a translation of the international application. A translation of less than all of the international application (e.g., untranslated words in the drawings or translations of those untranslated words in a different part of the document) or a translation that includes modification, e.g., the insertion of headings, is unacceptable. "Sequence Listing" need not be translated if the "Sequence Listing" complies with PCT Rule 12.1(d) and the description complies with PCT Rule 5.2(b). See 37 CFR 1.494(c).

1893.01(a)(2) Article 19 Amendment (Filed With the International Bureau)

The international application may be amended under Article 19 after issuance of the search report. The amendment is forwarded to the U.S. Designated Office by the International Bureau for inclusion in the U.S. national stage application. Article 19 amendments which were made in English will be entered by substituting each page of amendment for the corresponding English language page of claims of the international application. If the Article 19 amendments were made in a language other than English, applicant must provide an English translation for the U.S. national stage application. The English transla-

tion of the amendment(s) must be submitted by 20 months from the priority date, unless the U.S. was elected by 19 months from the priority date in which case the English translation must be filed by 30 months, or the amendment(s) will be considered to be canceled, 35 U.S.C. 371(d). Where applicant elects to request early processing of the national stage application under 35 U.S.C. 371(f), subsequently received amendments made in the international stage (and English translations thereof) will not become part of the U.S. national stage application file. If such amendments are desired, they should be offered under 37 CFR 1.121 as a preliminary amendment or a responsive amendment under 37 CFR 1.111.

Applicants entering the national stage in the U.S. are encouraged to submit an amendment in accordance with 37 CFR 1.121 rather than an English translation of an Article 19 amendment. Sometimes when an Article 19 amendment is translated into English, it cannot be entered. That is, each page of an Article 19 amendment must be entered by substituting a page of amendment for the corresponding page of claims of the international application. After translation of a page, the translated page may no longer correspond to a page of the claims of the international application such that the amendment is capable of entry by substituting the page of English translation (of the amendment) for the corresponding page of claims of the international application without leaving an inconsistency. Where applicant chooses to submit an English translation of the Article 19 amendment, applicant should check to be sure that the English translation can be entered by substituting the pages of translation for corresponding pages of the claims of the international application without leaving an inconsistency. If entry of the page of translation causes inconsistencies in the claims of the international application the translation will not be entered. For example, if the translation of the originally filed application has a page which begins with claim 1 and ends with a first part of claim 2 with the remainder of claim 2 on the next page then translation of the Article 19 amendment to only claim 1 must include a substitute page or pages beginning with the changes to claim 1 and ending with the last of the exact same first part of claim 2. This enables the original translated first page of claims to be replaced by the translation of the amendment without changing the subsequent unamended

page(s). Alternatively, applicant may submit a preliminary amendment in accordance with 37 CFR 1.121.

1893.01(b) Entry via the U.S. Elected Office

37 CFR 1.495. Entering the national stage in the United States of America as an Elected Office.

(a) Where the United States of America has been elected by the expiration of 19 months from the priority date, the applicant must fulfill the requirements of 35 U.S.C. 371 within the time periods set forth in paragraphs (b) and (c) of this section in order to prevent the abandonment of the international application as to the United States of America. International applications for which those requirements are timely fulfilled will enter the national stage and obtain an examination as to the patentability of the invention in the United States of America.

(b) To avoid abandonment of the application, the applicant shall furnish to the United States Patent and Trademark Office not later than the expiration of 30 months from the priority date:

(1) A copy of the international application, unless it has been previously communicated by the International Bureau or unless it was originally filed in the United States Patent and Trademark Office; and

(2) The basic national fee (see § 1.492(a)). The 30-month time limit may not be extended.

(c) If applicant complies with paragraph (b) of this section before expiration of 30 months from the priority date but omits:

(1) A translation of the international application, as filed, into the English language, if it was originally filed in another language (35 U.S.C. 371(c)(2)) and/or

(2) The oath or declaration of the inventor (35 U.S.C. 371(c)(4); see § 1.497), and a declaration of inventorship in compliance with § 1.497 has not been previously submitted in the international application under PCT Rule 4.17(iv) within the time limits provided for in PCT Rule 26^{ter}.1, applicant will be so notified and given a period of time within which to file the translation and/or oath or declaration in order to prevent abandonment of the application. The payment of the processing fee set forth in § 1.492(f) is required for acceptance of an English translation later than the expiration of 30 months after the priority date. The payment of the surcharge set forth in § 1.492(e) is required for acceptance of the oath or declaration of the inventor later than the expiration of 30 months after the priority date. A "Sequence Listing" need not be translated if the "Sequence Listing" complies with PCT Rule 12.1(d) and the description complies with PCT Rule 5.2(b).

A "Sequence Listing" need not be translated if the "Sequence Listing" complies with PCT Rule 12.1(d) and the description complies with PCT Rule 5.2(b).

(d) A copy of any amendments to the claims made under PCT Article 19, and a translation of those amendments into English, if they were made in another language, must be furnished not later than the expiration of 30 months from the priority date. Amendments under PCT Article 19 which are not received by the

expiration of 30 months from the priority date will be considered to be cancelled. The 30-month time limit may not be extended.

(e) A translation into English of any annexes to the international preliminary examination report, if the annexes were made in another language, must be furnished not later than the expiration of 30 months from the priority date. Translations of the annexes which are not received by the expiration of 30 months from the priority date may be submitted within any period set pursuant to paragraph (c) of this section accompanied by the processing fee set forth in § 1.492(f). Annexes for which translations are not timely received will be considered cancelled. The 30-month time limit may not be extended.

(f) Verification of the translation of the international application or any other document pertaining to an international application may be required where it is considered necessary, if the international application or other document was filed in a language other than English.

(g) The documents submitted under paragraphs (b) and (c) of this section must be clearly identified as a submission to enter the national stage under 35 U.S.C. 371, otherwise the submission will be considered as being made under 35 U.S.C. 111.

(h) An international application becomes abandoned as to the United States 30 months from the priority date if the requirements of paragraph (b) of this section have not been complied with within 30 months from the priority date and the United States has been elected by the expiration of 19 months from the priority date. If the requirements of paragraph (b) of this section are complied with within 30 months from the priority date but any required translation of the international application as filed and/or the oath or declaration are not timely filed, an international application will become abandoned as to the United States upon expiration of the time period set pursuant to paragraph (c) of this section.

An international application designating the U.S. will enter the national stage via the U.S. Elected Office if a Demand electing the U.S. is filed prior to the expiration of 19 months from the priority date. The procedure for entry via the U.S. Elected Office is as prescribed in 37 CFR 1.495.

1893.01(b)(1) Submissions Required by 30 Months from the Priority Date

To begin entry into the national stage, where election of the U.S. under Chapter II of the PCT has been made prior to 19 months from the priority date, applicant is required to comply with 37 CFR 1.495(b) within 30 months from the priority date. Thus, applicant must pay the basic national fee on or before 30 months from the priority date and be sure that a copy of the international application has been received by the U.S. Designated Office prior to expi-

ration of 30 months from the priority date. The notice referred to in PCT Rule 47.1(c) constitutes conclusive evidence of transmission of the international application. Payment of the basic national fee will indicate applicant's intention to enter the national stage and will provide a U.S. correspondence address in most instances.

Facsimile transmission is not acceptable for submission of the basic national fee and/or the copy of the international application. See 37 CFR 1.6(d). Likewise, the certificate of mailing procedures of 37 CFR 1.8 do not apply to the filing of the copy of the international application and payment of the basic national fee. See 37 CFR 1.8(a)(2)(i)(F).

Applicants cannot pay the basic national fee with a surcharge after the 30 months deadline. Failure to pay the basic national fee within 30 months from the priority date will result in abandonment of the application. The time for payment of the basic fee is not extendable.

Similarly, the copy of the international application is required to be provided within 30 months from the priority date. A copy of the international application is provided to the U.S. Designated Office by the International Bureau (the copy is ordinarily received shortly after publication at about 18 months from the priority date). The International Bureau also mails a confirmation (Form IB/308) to applicant upon which applicant can rely that the copy has been provided. See PCT Rule 47.1(c). The copy is placed in a file to await applicant's submission of the basic national fee and other national stage requirements.

If the basic national fee has been paid by expiration of 30 months from the priority date but the required oath, declaration, or translation has not been filed within 30 months from the priority date, as appropriate, the Office will send applicant a notice and provide a period of time to supply the deficiency as set forth in 37 CFR 1.495(c). The time period usually set is 1 month from the date of the notification by the Office or 31 months from the priority date, whichever is later. This period may be extended pursuant to the provisions of 37 CFR 1.136(a). Thus, payment of the basic national fee on or before 30 months from the priority date will (1) cause the Office, after a check of the national stage papers at 30 months, to mail a notice identifying any deficiencies and affording applicant a period for correction of those deficiencies,

and (2) as in national practice under 37 CFR 1.53, enable applicants to extend the period of time under 37 CFR 1.136(a) for submission of a proper oath, declaration, or translation. The international application enters the national stage under 35 U.S.C. 371 when the last of the items indicated in 35 U.S.C. 371(c) and 37 CFR 1.491 is timely received by the office.

An international application becomes abandoned if the copy of the international application or the basic national fee has not been received by the U.S. Designated Office prior to expiration of 30 months from the priority date. A notification of any missing requirements pursuant to 37 CFR 1.495 will only be mailed in those instances where the applicant has paid the basic national fee within 30 months from the priority date.

The notice of missing requirements lists several items which 37 CFR 1.497(a) and (b) require and all of those items will have to be satisfied before the oath or declaration is considered accepted. Similarly, the translation must be a translation of the international application. A translation of less than all of the international application (e.g., untranslated words in the drawings or translations of those untranslated words in a different part of the document) or a translation that includes modifications, e.g., the insertion of headings, is unacceptable. "Sequence Listing" need not be translated if the "Sequence Listing" complies with PCT Rule 12.1(d) and the description complies with PCT Rule 5.2(b). See 37 CFR 1.495(c).

1893.01(b)(2)Article 19 and Article 34 Amendments (Filed with the International Preliminary Examining Authority)

Paragraph (d) of 37 CFR 1.495 states that if an Article 19 amendment is not received before expiration of 30 months from the priority date, it is considered to be canceled. Nevertheless, applicant may submit a preliminary amendment in accordance with 37 CFR 1.121 adding the substance of the Article 19 amendment to the national stage application. In some instances, entry of the subject matter via an amendment under 37 CFR 1.121 may be preferable to entry via Article 19. For example, where the Article 19 amendment was not filed in English the amendment

would have to be translated into English in order that it be submitted for entry into the national stage. The translation must be submitted before expiration of 30 months from the priority date and the substitute pages must be capable of insertion into the text of the international application. Thus, where an Article 19 amendment was made in the international stage the same amendment may be entered for the national stage either in accordance with 35 U.S.C. 371(c)(3) or the amendments may be added via a preliminary amendment in accordance with 37 CFR 1.121.

TRANSLATION OF AN ANNEX TO THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT

The translation of an Annex to the international preliminary examination report must be submitted so that the translation of the originally filed application can be changed by replacing the originally filed application page(s) (of translation) with substitute page(s) of translation of the annex. Where applicant chooses to submit an English translation of the annex, applicant should check to be sure that the English translation can be entered by substituting the pages of translation for corresponding pages of the claims of the international application without leaving an inconsistency. If entry of the page of translation causes inconsistencies in the specification or claims of the international application the translation will not be entered. For example, if the translation of the originally filed application has a page which begins with claim 1 and ends with a first part of claim 2 with the remainder of claim 2 on the next page then translation of the annex to only claim 1 must include a substitute page or pages beginning with the changes to claim 1 and ending with the last of the exact same first part of claim 2. This enables the original translated first page of claims to be replaced by the translation of the annex without changing the subsequent unamended page(s). Alternatively applicant may submit a preliminary amendment in accordance with 37 CFR 1.121.

1893.01(c) Fees

Because the national stage fees are subject to change, applicants and examiners should always consult the *Official Gazette* for the current fee listing.

Applicants are cautioned that national stage fees are specifically provided for in 37 CFR 1.492 and autho-

rizations to charge fees under 37 CFR 1.16 do not constitute a specific authorization to charge national stage fees.

1893.01(d) Translation

Applicants entering the national stage in the U.S. are required to file a translation of the international application (if the international application was filed in another language). 35 U.S.C. 371(c)(2). A “Sequence Listing” need not be translated if the “Sequence Listing” complies with PCT Rule 12.1(d) and the description complies with PCT Rule 5.2(b). See 37 CFR 1.495(c). The translation must be a translation of the international application as filed with any changes which have been properly accepted under PCT Rule 26 or any rectifications which have been properly accepted under PCT Rule 91. Amendments, even those considered to be minor or to not include new matter, may not be incorporated into the translation. If an amendment to the international application as filed is desired for the national stage, it may be submitted in accordance with 37 CFR 1.121. An amendment filed under 37 CFR 1.121 should be submitted within 1 month after completion of the 35 U.S.C. 371(c) requirements and entry into the national stage. See 37 CFR 1.496(a). If applicant has timely paid the basic national fee but the translation is missing or is defective, a notice of Missing Requirements will be sent to applicant setting a period to correct any missing or defective requirements. The time period is 21 months or 31 months from the priority date, as appropriate, or 1 month from the date of the notice, whichever expires later. The time period is subject to the provisions of 37 CFR 1.136(a).

1893.01(e) Oath/Declaration

37 CFR 1.497. *Oath or declaration under 35 U.S.C. 371(c)(4).*

(a) When an applicant of an international application desires to enter the national stage under 35 U.S.C. 371 pursuant to §§ 1.494 or 1.495, and a declaration in compliance with this section has not been previously submitted in the international application under PCT Rule 4.17(iv) within the time limits provided for in PCT Rule 26^{ter}.1, he or she must file an oath or declaration that:

- (1) Is executed in accordance with either §§ 1.66 or 1.68;
- (2) Identifies the specification to which it is directed;
- (3) Identifies each inventor and the country of citizenship of each inventor; and

(4) States that the person making the oath or declaration believes the named inventor or inventors to be the original and first inventor or inventors of the subject matter which is claimed and for which a patent is sought.

(b)(1) The oath or declaration must be made by all of the actual inventors except as provided for in §§ 1.42, 1.43 or 1.47.

(2) If the person making the oath or declaration or any supplemental oath or declaration is not the inventor (§§ 1.42, 1.43, or §1.47), the oath or declaration shall state the relationship of the person to the inventor, and, upon information and belief, the facts which the inventor would have been required to state. If the person signing the oath or declaration is the legal representative of a deceased inventor, the oath or declaration shall also state that the person is a legal representative and the citizenship, residence and mailing address of the legal representative.

(c) Subject to paragraph (f) of this section, if the oath or declaration meets the requirements of paragraphs (a) and (b) of this section, the oath or declaration will be accepted as complying with 35 U.S.C. 371(c)(4) and §§ 1.494(c) or 1.495(c). However, if the oath or declaration does not also meet the requirements of § 1.63, a supplemental oath or declaration in compliance with § 1.63 or an application data sheet will be required in accordance with § 1.67.

(d) If the oath or declaration filed pursuant to 35 U.S.C. 371(c)(4) and this section names an inventive entity different from the inventive entity set forth in the international application, or a change to the inventive entity has been effected under PCT Rule 92^{bis} subsequent to the execution of any declaration which was filed under PCT Rule 4.17(iv), the oath or declaration must be accompanied by:

(1) A statement from each person being added as an inventor and from each person being deleted as an inventor that any error in inventorship in the international application occurred without deceptive intention on his or her part;

(2) The processing fee set forth in § 1.17(i); and

(3) If an assignment has been executed by any of the original named inventors, the written consent of the assignee (see § 3.73(b) of this chapter).

(e) The Office may require such other information as may be deemed appropriate under the particular circumstances surrounding the correction of inventorship.

(f) A new oath or declaration in accordance with this section must be filed to satisfy 35 U.S.C. 371(c)(4) if the declaration was filed under PCT Rule 4.17(iv), and:

(1) There was a change in the international filing date pursuant to PCT Rule 20.2 after the declaration was executed; or

(2) A change in the inventive entity was effected under PCT Rule 92^{bis} after the declaration was executed.

(g) If a priority claim has been corrected or added pursuant to PCT Rule 26^{bis} during the international stage after the declaration of inventorship was executed in the international application under PCT Rule 4.17(iv), applicant will be required to submit either a new oath or declaration or an application data sheet as set forth in § 1.76 correctly identifying the application upon which priority is claimed.

Applicants entering the national stage in the U.S. are required to file an oath or declaration of the inventor in accordance with 37 CFR 1.497(a) and (b). If the basic national fee has been paid by the expiration of 20 or 30 months from the priority date as appropriate, but the required oath or declaration has not been filed, the Office will send applicant a notice of Missing Requirements setting a time period to correct any missing or defective requirements. The time period is 21 months or 31 months from the priority date, as appropriate, or 1 month from the date of the notice, whichever expires later. The time period is subject to the provisions of 37 CFR 1.136(a). The oath or declaration must comply with the requirements of 35 U.S.C. 115 and with the regulations prescribed for oaths and declarations. See especially 37 CFR 1.497(a) and (b). Further, pursuant to 37 CFR 1.497(c), to avoid the need to submit a supplemental oath or declaration, the oath or declaration must comply with 37 CFR 1.63.

If an inventor refuses to execute the oath or declaration or is unavailable, applicant must file an oath or declaration and a petition in accordance with 37 CFR 1.47. Similarly, where an inventor is deceased or legally incapacitated, an oath or declaration in accordance with the provisions of 37 CFR 1.42 or 1.43 must be provided. To avoid abandonment the oath or declaration and petition (under 37 CFR 1.42, 1.43 and/or 1.47, as appropriate) must be filed either before expiration of 20 or 30 months from the priority date, as appropriate, or, where a notification of deficiency of the oath/declaration has been mailed, within the time for reply to that notification.

The Office no longer requires proof of authority of the legal representative of a deceased or legally incapacitated inventor. See MPEP § 409.01(b).

1893.02 Abandonment

If the requirements of 35 U.S.C. 371(c) are not complied with by the time period set in 37 CFR 1.494(b) and (c) or 37 CFR 1.495(b) and (c), as appropriate, the application is considered to be abandoned, see 37 CFR 1.494(g) and 37 CFR 1.495(h).

Examiners and applicants should be aware that sometimes papers filed for the national stage are deficient and abandonment results. For example, if the fee submitted does not include at least the amount of the

basic national fee that is due, the application becomes abandoned.

Applicant may file a petition to revive an abandoned application in accordance with the provisions of 37 CFR 1.137. See MPEP § 711.03(c).

1893.03 Prosecution of U.S. National Stage Applications Before the Examiner

37 CFR 1.496. Examination of international applications in the national stage.

(a) International applications which have complied with the requirements of 35 U.S.C. 371(c) will be taken up for action based on the date on which such requirements were met. However, unless an express request for early processing has been filed under 35 U.S.C. 371(f), no action may be taken prior to one month after entry into the national stage.

(b) A national stage application filed under 35 U.S.C. 371 may have paid therein the basic national fee as set forth in § 1.492(a)(4) if it contains, or is amended to contain, at the time of entry into the national stage, only claims which have been indicated in an international preliminary examination report prepared by the United States Patent and Trademark Office as satisfying the criteria of PCT Article 33(1)-(4) as to novelty, inventive step and industrial applicability. Such national stage applications in which the basic national fee as set forth in § 1.492(a)(4) has been paid may be amended subsequent to the date of entry into the national stage only to the extent necessary to eliminate objections as to form or to cancel rejected claims. Such national stage applications in which the basic national fee as set forth in § 1.492(a)(4) has been paid will be taken up out of order.

An international application which enters the national stage will be forwarded to the appropriate Technology Center (TC) for examination in turn based on the 35 U.S.C. 371(c) date of the application. As set forth in 37 CFR 1.496(b), if an application includes only claims which have been indicated in an IPER prepared by the USPTO to satisfy the criteria of PCT Article 33(1)-(4), the application qualifies for the reduced basic national fee set forth in 37 CFR 1.492(a)(4). Applications in which the reduced basic national fee has been paid will be taken up out of order by the examiner. See MPEP § 708 for a discussion of the order of examination of applications by examiners.

Once the national stage application has been taken up by the examiner, prosecution proceeds in the same manner as for a domestic application with the exceptions that:

(A) the international filing date is the date to keep in mind when searching the prior art; and

(B) unity of invention proceeds as under 37 CFR 1.475.

1893.03(a) How To Identify That an Application Is a U.S. National Stage Application

Applicant's initially deposited application must indicate that treatment as a national stage application (filed under 35 U.S.C. 371) is requested (see 37 CFR 1.494(f) and 37 CFR 1.495(g)). Otherwise, the application will be treated as an application filed under 35 U.S.C. 111(a).

That is, if applicant wishes the application to be filed under 35 U.S.C. 111(a), applicant's originally filed application papers need indicate simply that the papers are for a new U.S. patent application. If, however, applicant is filing papers for entry into the national stage of a PCT application, or to establish an effective date for provisional rights resulting from the filing of a PCT application under 35 U.S.C. 154(d), applicant must so state. See 37 CFR 1.417, 1.494(f) and 1.495(g). If the applicant's papers are not clearly identified as "a submission pursuant to 35 U.S.C. 154(d)(4)" or "a submission to enter the national stage under 35 U.S.C. 371," the submission will be considered as being made under 35 U.S.C. 111(a). As provided in 37 CFR 1.494(f) and 1.495(g), a copy of the international publication and/or a translation of the international application identified as provided in 37 CFR 1.417 can be used to fulfill the 35 U.S.C. 371(c)(2) requirements. Examination of the originally filed application papers occurs in either the Office of Initial Patent Examination or in the National Stage Processing Division of the Office of PCT Operations where it is determined whether applicant has asked that the papers be treated as a national stage filing under 35 U.S.C. 371. If the application is accepted for entry into the national stage, the National Stage Processing Division will fill out and mail Form PCT/DO/EO/903 indicating acceptance of the application as a national stage filing under 35 U.S.C. 371 and will stamp the face of the file with an indication that the application is filed under 35 U.S.C. 371. Accordingly, the three key indicators which reflect that an application is filed under 35 U.S.C. 371 are:

(A) The file face indication of a filing under 35 U.S.C. 371;

(B) The Form PCT/DO/EO/903 indicating acceptance of the application as a national stage filing under 35 U.S.C. 371; and

(C) Applicant's statement (or the equivalent) in the originally filed application papers that the application is a national stage filing under 35 U.S.C. 371. Applicants who use transmittal Form PCT/DO/EO/1390 will satisfy the requirement for such a statement since the form includes an indication that the application is a national stage filing under 35 U.S.C. 371.

Initially, the examiner should inspect the face of the file wrapper and/or the PALM bib-data sheet for an indication that it is filed under 35 U.S.C. 371 and should also check the application papers for the presence of Form PCT/DO/EO/903. If neither of these indications are present the application may, in the absence of evidence to the contrary (there is an indication in the originally filed application papers that processing as a national stage is desired), be treated as a filing under 35 U.S.C. 111(a). Thus, if both indications are present, the application should be treated as a filing under 35 U.S.C. 371. If the face of the file wrapper does not indicate a filing under 35 U.S.C. 371, but a properly completed Form PCT/DO/EO/903 is in the file, the examiner should complete the face of the file by adding "filed under 35 U.S.C. 371" in the upper left margin thereof. The examiner should initial and date this change. If the file wrapper does not include a properly completed Form PCT/DO/EO/903 but the face of the file indicates a filing under 35 U.S.C. 371, the application should be returned to the National Stage Processing Division of the Office of PCT Operations for certification that the application has been accepted for the national stage.

In accordance with the notice at 1077 O.G. 13 (14 April 1987), if the applicant files a U.S. national application and clearly identifies in the accompanying oath or declaration the specification to which it is directed by referring to a particular international application by PCT Application Number and International Filing Date and that he or she is executing the declaration as, and seeking a U.S. Patent as, the inventor of the invention described in the identified international application, then the application will be accepted as filed under 35 U.S.C. 371. Merely claiming priority of an international (PCT) application in an

oath or declaration will not serve to indicate a filing under 35 U.S.C. 371. Also, if there are any conflicting instructions as to whether the filing is under 35 U.S.C.

111(a) or 35 U.S.C. 371, the application will be accepted as filed under 35 U.S.C. 111(a).

PATENT COOPERATION TREATY

1893.03(a)

APPLICATION NUMBER 09/XXX,XXX	FILING DATE 04/02/2001	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO 1234-PCT	
APPLICANT Ted R. Wilson et al. **CONTINUING DOMESTIC DATA***** VERIFIED _____ **371 (NAT'L STAGE) DATA***** VERIFIED THIS APPLN IS A 371 OF PCT/EP99/XXXXX 04/09/1999 _____ **FOREIGN APPLICATIONS***** VERIFIED FED REP GERMANY XXX XX XXX.X 04/10/1998 _____					
Foreign priority claimed O yes O no 35 USC 119 (a-d) conditions met O yes O no O Met after Allowance Verified and acknowledged _____ Examiner's Name Initials		STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
ADDRESS					
TITLE					
FILING FEE RECEIVED	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT NO. _____ for the following:		O All Fees O 1.16 Fees (Filing) O 1.17 Fees (Processing Ext. of Time) O 1.18 Fees (Issue) O Other _____ O Credit _____		



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents, Box PCT
 United States Patent and Trademark Office
 Washington, D.C. 20231
 www.uspto.gov

U.S. APPLICATION NO. 09/ XXXXXX	FIRST NAMED APPLICANT Ted Wilson et al.	ATTY. DOCKET NO. 1234-PCT
INTERNATIONAL APPLICATION NO. PCT/EP99/XXXXX		
I.A. FILING DATE 09 APR 99	PRIORITY DATE 10 APR 98	
DATE MAILED: 04 APR 01		

JOHN SMITH
 212 MAIN STREET
 ANYTOWN, PA 12345

NOTIFICATION OF ACCEPTANCE OF APPLICATION UNDER 35 U.S.C. 371 AND 37 CFR 1.494 OR 1.495

1. The applicant is hereby advised that the United States Patent and Trademark Office in its capacity as a Designated Office (37 CFR 1.494), an Elected Office (37 CFR 1.495), has determined that the above-identified international application has met the requirements of 35 U.S.C. 371, and is **ACCEPTED** for national patentability examination in the United States Patent and Trademark Office.

2. The United States Application Number assigned to the application is shown above and the relevant dates are:

02 APR 2001	02 APR 2001
DATE OF RECEIPT OF	DATE OF RECEIPT OF ALL
35 U.S.C. 371(c)(1), (c)(2) and (c)(4) REQUIREMENTS	35 U.S.C. 371 REQUIREMENTS

A Filing Receipt (PTO-103X) will be issued for the present application in due course. **THE DATE APPEARING ON THE FILING RECEIPT AS THE "FILING DATE" IS THE DATE ON WHICH THE LAST OF THE 35 U.S.C. 371 REQUIREMENTS HAS BEEN RECEIVED IN THE OFFICE. THIS DATE IS SHOWN ABOVE.** The filing date of the above-identified application is the international filing date of the international application (Article 11(3) and 35 U.S.C. 363). Once the Filing Receipt has been received, send all correspondence to the Group Art Unit designated thereon.

3. A request for immediate examination under 35 U.S.C. 371(f) was received on _____ and the application will be examined in turn.

4. The following items have been received:

- U.S. Basic National Fee.
- Copy of the international application.
- Translation of the international application into English.
- Oath or Declaration of inventors(s).
- Copy of Article 19 amendments. Translation of Article 19 amendments into English.
 The Article 19 amendments have not been entered.
- The International Preliminary Examination Report in English and its Annexes, if any.
- Copy of the Annexes to the International Preliminary Examination Report (IPER).
 Translation of Annexes to the IPER into English.
 The Annexes have not been entered.
- Preliminary amendment(s) filed 06 OCT 2000 and _____
- Information Disclosure Statement(s) filed 28 DEC 2000 and _____
- Assignment document.
- Power of Attorney and/or Change of Address.
- Substitute specification filed _____
- Indication of Small Entity Status.
- Priority Document.
- Copy of the International Search Report and copies of the references cited therein.
- Other:

Applicant is reminded that any communication to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5).

Charles Pearson

Telephone: 703-305-3659

FORM PCT/DO/EO/903 (March 2001)

1893.03(b) The Filing Date of a U.S. National Stage Application

An international application designating the U.S. has two stages (international and national) with the filing date being the same in both stages. Often the date of entry into the national stage is confused with the filing date. It should be borne in mind that the filing date of the international stage application is also the filing date for the national stage application. Specifically, 35 U.S.C. 363 provides that

An international application designating the United States shall have the effect, from its international filing date under Article 11 of the treaty, of a national application for patent regularly filed in the Patent and Trademark Office except as otherwise provided in section 102(e) of this title.

Similarly, PCT Article 11(3) provides that

...an international filing date shall have the effect of a regular national application in each designated State as of the international filing date, which date shall be considered to be the actual filing date in each designated State.

37 CFR 1.496(a), first sentence, reads “International applications which have complied with the requirements of 35 U.S.C. 371(c) will be taken up for action based on the date on which such requirements were met.” Thus, when the file wrapper label or PALM bib-data sheet is printed, the information is read from the PALM data base and the information printed in the filing date box is the date of entry into the national stage rather than the actual international filing date. See in the preceding section the sample National Stage Filing Under 35 U.S.C. 371 wherein the face of the file of national stage application number 07/XXX,XXX is shown with the date of entry into the national stage (11/08/91) shown in the FILING DATE box and the true U.S. filing date (01/10/90) is indicated just to the right of the international application number (PCT/EP90/XXXXX) in the CONTINUING DATA block.

Applicants are quite often confused as to the true filing date and will ask for corrected filing receipts thinking that the information thereon is wrong. This explanation should offer some clarity. For all legal purposes, the filing date is the PCT international filing date. The date of actual entry into the national stage is

otherwise the date provided in the PALM system. Any issued patent will have all of the relevant dates listed.

1893.03(c) The Priority Date, Priority Claim, and Priority Papers for a U.S. National Stage Application

A U.S. national stage application (filed under 35 U.S.C. 371) may include a claim under 35 U.S.C. 119(a) and 365(b), 35 U.S.C. 119(e), or 35 U.S.C. 120 and 365(c) for benefit of the filing date of a prior application or applications.

PRIORITY CLAIM UNDER 35 U.S.C. 119(a)

A national stage application which includes a priority claim under 35 U.S.C. 119(a) and 365(b) must refer to a priority application, the priority of which was also claimed in the international application. If the 35 U.S.C. 119(a) and 35 U.S.C. 365(b) priority claim is to an application, the priority of which was properly claimed in the international application, the claim for priority is acknowledged and the national stage application file is checked to see if the file contains a copy of the certified copy of the priority document submitted to the International Bureau.

If the 35 U.S.C. 119(a) and 365(b) priority claim in the national stage application is to an application, the priority of which was not claimed in the international application, the claim for priority must be denied for failing to meet the requirements of the Patent Cooperation Treaty, specifically PCT Rule 4.10.

For a comparison with 35 U.S.C. 119(a)-(d) priority claims in a national application filed under 35 U.S.C. 111(a) see MPEP § 1895.01.

THE CERTIFIED COPY

The requirement in PCT Rule 17 for a certified copy of the foreign priority application is normally fulfilled by applicant providing a certified copy to the Receiving Office or to the International Bureau within 16 months from the priority date. Subsequently, the International Bureau forwards a photocopy of the certified priority document when it forwards a copy of the international application (shortly after publication at 18 months from the priority date) to each Designated Office. The copy from the International Bureau is placed in the U.S. national stage file. The

International Bureau stamps the face of the photocopy of the certified priority document with an indication that the certified priority document was received at the International Bureau. The stamped copy of the priority document sent to the U.S. Office of PCT Operations from the International Bureau is acceptable to establish that applicant has filed a certified copy of the priority document. The examiner should acknowl-

edge in the next Office action that the certified copy of the foreign priority document has been filed. Note the example of an acceptable priority document with the stamp (box) in the upper right hand section indicating receipt by the International Bureau (WIPO) on 30 November 1992 and the stamped term "PRIORITY DOCUMENT."

REPUBLIQUE FRANÇAISE

INSTITUT NATIONAL DE LA PROPRIÉTÉ INDUSTRIELLE

PRIORITY DOCUMENT

REC'D 30 NOV 1992

WIPO PCT

BREVETS D'INVENTION

CERTIFICATS D'UTILITÉ CERTIFICATS D'ADDITION

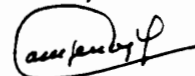
Copie officielle

Le Directeur général de l'Institut national de la propriété industrielle certifie que le document ci-annexé est la copie certifiée conforme, d'une demande de titre de propriété industrielle déposée à l'Institut.

Fait à Paris le - 7 SEP. 1992

*Pour le Directeur général de l'Institut
national de la propriété industrielle*

Le Chef de Division



Yves CAMPENON



2bis, rue de Leningrad 75800 PARIS Cédex 08
Tél. (1) 42 94 52 52 Télex 290 368 INPI PARIS Télécopie (1) 42 93 39 30
Établissement public national créé par la loi n° 51-444 du 19 avril 1951

BA 267/141190

If applicant has not forwarded a certified copy of the priority application in time for the International Bureau to forward it to the U.S. Designated Office with the copy of the international application, then applicant will have to provide a certified copy of the priority document during the national stage to fulfill the requirement of 37 CFR 1.55(a)(2).

PRIORITY CLAIM UNDER 35 U.S.C. 119(e), OR 120 AND 365(c)

A national stage application may include a priority claim under 35 U.S.C. 119(e), or 120 and 365(c) to a prior U.S. national application or under 35 U.S.C. 120 and 365(c) to a prior international application designating the U.S. The conditions for according benefit under 35 U.S.C. 120 are as described in MPEP § 201.07, § 201.08, and § 201.11 and are similar regardless of whether the U.S. national application is a national stage application filed under 35 U.S.C. 371 or a national application filed under 35 U.S.C. 111(a).

In order for a national stage application (of international application “X”) to obtain benefit under 35 U.S.C. 119(e) of a prior U.S. provisional application, the national stage application must comply with the requirements set forth in 37 CFR 1.78(a)(4) through 37 CFR 1.78(a)(6). Public Law 106-113 amended 35 U.S.C. 119(e) to eliminate the copendency requirement for a nonprovisional application claiming benefit of a provisional application. 35 U.S.C. 119(e)(2) as amended became effective on November 29, 1999 and applies to provisional applications filed on or after June 8, 1995. 37 CFR 1.78(a)(4) requires that the prior provisional application must be entitled to a filing date as set forth in 37 CFR 1.53(c), and the basic filing fee set forth in 37 CFR 1.16(k) must be paid on the provisional application within the time period set forth in 37 CFR 1.53(g). Additionally, the provisional application must name as an inventor at least one inventor named in the later filed international application “X” and disclose the named inventor’s invention claimed in at least one claim of the national stage application in the manner provided by the first paragraph of 35 U.S.C. 112. The national stage application must contain a reference to the provisional application (either in an application data sheet (37 CFR 1.76) or in the first sentence of the specification), identifying it as a provisional application, and including the provisional application number (series code and serial

number). If the provisional application was filed in a language other than English, the national stage application must also contain an English language translation of the non-English language provisional application and a statement that the translation is accurate. The required reference to the earlier provisional application and the English language translation must be submitted within the time period provided by 37 CFR 1.78(a)(5). This time period is not extendable.

In order for a national stage application (of international application “X”) to obtain benefit under 35 U.S.C. 120 and 365(c) of a prior filed copending nonprovisional application or prior filed copending international application designating the United States of America, the national stage application must comply with the requirements set forth in 37 CFR 1.78(a)(1) through 37 CFR 1.78(a)(3). The prior nonprovisional application or international application must name as an inventor at least one inventor named in the later filed international application “X” and disclose the named inventor’s invention claimed in at least one claim of the national stage application in the manner provided by the first paragraph of 35 U.S.C. 112. The national stage application must contain a reference to the prior nonprovisional or international application (either in an application data sheet (37 CFR 1.76) or in the first sentence of the specification), identifying it by application number (series code and serial number) or international application number and international filing date and indicating the relationship of the applications. There is a non-extendable time period for submitting the required reference to the earlier application. If the national stage application claims the benefit of a prior international application designating the United States of America, the first sentence of the specification of the national stage application must include an indication of whether the prior international application was published under PCT Article 21(2) in English (regardless of whether benefit for such an application is claimed in the application data sheet). See 37 CFR 1.78(a)(2). The required reference to the earlier filed application must be submitted within the time period set forth in 37 CFR 1.78(a)(2). This time period is not extendable.

A prior filed nonprovisional application is copending with the national stage application if the prior U.S.

national application was pending on the international filing date of the national stage application.

A prior international application designating the United States of America is copending with the national stage application if the prior international application was not abandoned or withdrawn on the international filing date of international application “X.”

Note: a national stage application filed under 35 U.S.C. 371 may not claim benefit of the filing date of the international application of which it is the national stage since its filing date is the date of filing of that international application. See also MPEP § 1893.03(b). Stated differently, since the international application is not an earlier application (it has the same filing date as the national stage), a priority claim in the national stage to the international application is inappropriate. Accordingly, it is not necessary for the applicant to amend the first sentence of the specification to reference the international application number that was used to identify the application during international processing of the application by the international authorities prior to commencement of the national stage under 35 U.S.C. 371.

For a comparison with 35 U.S.C. 120 priority claims in a national application filed under 35 U.S.C. 111(a), see MPEP § 1895.

1893.03(d) Unity of Invention

37 CFR 1.499. Unity of invention during the national stage

If the examiner finds that a national stage application lacks unity of invention under § 1.475, the examiner may in an Office action require the applicant in the response to that action to elect the invention to which the claims shall be restricted. Such requirement may be made before any action on the merits but may be made at any time before the final action at the discretion of the examiner. Review of any such requirement is provided under §§ 1.143 and 1.144.

PCT Rule 13 was amended effective July 1, 1992. 37 CFR 1.475 was amended effective May 1, 1993 to correspond to PCT Rule 13.

Examiners are reminded that unity of invention (not restriction) practice is applicable in international applications (both Chapter I and II) and in national stage (filed under 35 U.S.C. 371) applications. Restriction practice continues to apply to U.S. national applications filed under 35 U.S.C. 111(a).

When making a lack of unity of invention requirement, the examiner must (1) list the different groups

of claims and (2) explain why each group lacks unity with each other group (i.e., why there is no single general inventive concept) specifically describing the unique special technical feature in each group.

The principles of unity of invention are used to determine the types of claimed subject matter and the combinations of claims to different categories of invention that are permitted to be included in a single international or national stage patent application. The basic principle is that an application should relate to only one invention or, if there is more than one invention, that applicant would have a right to include in a single application only those inventions which are so linked as to form a single general inventive concept.

A group of inventions is considered linked to form a single general inventive concept where there is a technical relationship among the inventions that involves at least one common or corresponding special technical feature. The expression special technical features is defined as meaning those technical features that define the contribution which each claimed invention, considered as a whole, makes over the prior art. For example, a corresponding technical feature is exemplified by a key defined by certain claimed structural characteristics which correspond to the claimed features of a lock to be used with the claimed key. Note also examples 1-17 of Annex B Part 2 of the PCT Administrative Instructions as amended July 1, 1992 contained in Appendix AI of the MPEP.

A process is “specially adapted” for the manufacture of a product if the claimed process inherently produces the claimed product with the technical relationship being present between the claimed process and the claimed product. The expression “specially adapted” does not imply that the product could not also be manufactured by a different process.

An apparatus or means is specifically designed for carrying out the process when the apparatus or means is suitable for carrying out the process with the technical relationship being present between the claimed apparatus or means and the claimed process. The expression specifically designed does not imply that the apparatus or means could not be used for carrying out another process, nor does it imply that the process could not be carried out using an alternative apparatus or means.

Note: the determination regarding unity of invention is made without regard to whether a group of inventions is claimed in separate claims or as alternatives within a single claim. The basic criteria for unity of invention are the same, regardless of the manner in which applicant chooses to draft a claim or claims.

1893.03(e) Papers Received from the International Bureau and Placed in a U.S. National Stage Application File

The national stage application includes papers forwarded by the International Bureau and papers from applicant. Some of the papers from the International Bureau are identified in this section with a brief note as to their importance to the national stage application. The examiner should review each such paper and the important aspect indicated.

THE PAMPHLET

The Pamphlet includes

(A) a cover page with the applicant/inventor data, the application data (serial number, filing date, etc.) and the Abstract (and, if appropriate, a figure of drawing),

(B) the description, claims and drawing parts of the international application, and

(C) the search report (Form PCT/ISA/210).

The cover page is important as a source of the correct application data, most importantly the filing date and priority date accorded to the international application. If the pamphlet is published in English, applicant need not submit a copy of the international application to the Patent and Trademark Office. The Office will use the description, claims, abstract and drawings as published in the pamphlet for the U.S. national stage examination under 35 U.S.C. 371. The description, claims and drawing parts of the international application reflect the application subject matter on the international filing date and are important for comparison with any amendments to check for new

matter. The search report reflects the International Searching Authority's opinion regarding the prior art.

The abstract that appears on the cover page of the pamphlet will be published by the printing contractor if the national stage application (1) issues as a United States Patent or (2) is published as a patent application publication unless applicant amends the abstract and, for purposes of the patent application publication, complies with the requirements for publication. The burden on the applicant is to comply with PCT Rule 11.4 when the international application is filed. Since applicant has already complied with PCT Rule 11.4 by filing the abstract on a separate sheet when the international application was filed, it is improper for the examiner of the U.S. national stage application to require an abstract on a separate sheet during national stage processing of the international application.

THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT

If the international application underwent preliminary examination, the International Preliminary Examination Report (Form PCT/IPEA/409) reflects the International Preliminary Authority's non-binding opinion regarding novelty, inventive step and industrial applicability. The examiner may adopt any portion or all of this opinion upon consideration in the national stage so long as it is consistent with U.S. practice. The examiner should comment upon the Report in the first Office action on the merits to reflect that the Report has been considered. The comment may be a mere acknowledgement.

THE PRIORITY DOCUMENT

See the discussion in MPEP § 1893.03(c).

NOTIFICATION OF WITHDRAWAL

If the national stage application papers include a Notification of Withdrawal (PCT/IB/307), the examiner must check the date of receipt of the 35 U.S.C. 371 requirements (the 371 date) on Form PCT/DO/EO/903 to be sure that the 371 date is not later than the date of withdrawal. If it is later, the national stage application must be returned to the PCT Legal Office for a decision regarding the propriety of entry into the national stage.

1893.03(f) Drawings and PCT Rule 11

The drawings for the national stage application must comply with PCT Rule 11. The copy of the drawings provided by the International Bureau has already been checked and should be in compliance with PCT Rule 11. Accordingly, the drawing provided by the International Bureau should be acceptable. Sometimes, applicant submits a drawing for use in the national stage application and a check will be made by the Official Draftsman. The Official Draftsman may not impose requirements beyond those imposed by the Patent Cooperation Treaty (e.g., PCT Rule 11). The examiner does indeed have the authority to require new or more acceptable drawings if the drawings were published without meeting all requirements under the PCT for drawings. Unless the applicant requests the use of drawings which he or she has submitted, the drawings to be employed in the national stage are those which are a part of the Article 20 communication.

1893.03(g) Information Disclosure Statement in a National Stage Application

An extensive discussion of Information Disclosure Statement practice is to be found in MPEP § 609. Although not specifically stated therein, the duty to disclose information material to patentability as defined in 37 CFR 1.56 is placed on individuals associated with the filing and prosecution of a national stage application in the same manner as for a domestic national application. The declaration requires the same averments with respect to the duty under 37 CFR 1.56.

When an international application is filed under the Patent Cooperation Treaty (PCT), prior art documents may be cited by the examiner in the international search report and/or the international preliminary examination report. When a national stage application is filed under 35 U.S.C. 371, or a national application is filed under 35 U.S.C. 111 claiming benefit of the filing date of the international application, it is often desirable to have the examiner consider the documents cited in the international application when examining the national application.

As a result of an agreement among the European Patent Office (EPO), Japanese Patent Office (JPO),

and the United States Patent and Trademark Office (USPTO), copies of documents cited in the international search report issued by any one of these International Searching Authority Offices generally are being sent to the other Offices when designated in the international application. Accordingly, in many national stage applications where the international search was conducted by the EPO, JPO, or USPTO, copies of the documents cited in the international search report are made available to the examiner in the national stage application.

When all the requirements for a national stage application have been completed, applicant is notified (Form PCT/DO/EO/903) of the acceptance of the application under 35 U.S.C. 371, including an itemized list of the items received. The itemized list includes an indication of whether a copy of the international search report and copies of the references cited therein are present in the national stage file. The examiner will consider the documents cited in the international search report, without any further action by applicant under 37 CFR 1.97 and 1.98, when both the international search report and copies of the documents are indicated to be present in the national stage file. The examiner will note the consideration in the first Office action. There is no requirement that the examiners list the documents on a PTO-892 form. See form paragraphs 6.53, 6.54, and 6.55 (reproduced in MPEP § 609). Otherwise, applicant must follow the procedure set forth in 37 CFR 1.97 and 1.98 in order to ensure that the examiner considers the documents cited in the international search report.

This practice applies only to documents cited in the international search report relative to a national stage application filed under 35 U.S.C. 371. It does not apply to documents cited in an international preliminary examination report that are not cited in the search report. It does not apply to applications filed under 35 U.S.C. 111(a) claiming the benefit of an international application filing date.

1895 A Continuation or Continuation- In-Part Application of a PCT Application Designating the United States

It is possible to file a U.S. national application under 35 U.S.C. 111(a) during the pendency (prior to

the abandonment) of an international application which designates the United States without completing the requirements for entering the national stage under 35 U.S.C. 371(c). The ability to take such action is based on provisions of the United States patent law. 35 U.S.C. 363 provides that “[a]n international application designating the United States shall have the effect, from its international filing date under article 11 of the treaty, of a national application for patent regularly filed in the Patent and Trademark Office...” 35 U.S.C. 371(d) indicates that failure to timely comply with the requirements of 35 U.S.C. 371(c) “shall be regarded as abandonment ... by the parties thereof...” It is therefore clear that an international application which designates the United States has the effect of a pending U.S. application from the international application filing date until its abandonment as to the United States. The first sentence of 35 U.S.C. 365(c) specifically provides that “[i]n accordance with the conditions and requirements of section 120 of this title, ... a national application shall be entitled to the benefit of the filing date of a prior international application designating the United States.” The condition of 35 U.S.C. 120 relating to the time of filing requires the later application to be filed before the patenting or abandonment of or termination of proceedings on the first application. The filing of continuations and continuations-in-part of a PCT application designating the U.S. was used primarily in instances where there was difficulty in obtaining a signed oath or declaration by the expiration of the time for entry into the national stage. Since applicants are now notified of missing or defective oaths or declarations and/or translations, and are given a time period to respond which is extendable under 37 CFR 1.136(a), the use of this practice may well diminish.

A continuing application under 35 U.S.C. 365(c) and 120 must be filed before the abandonment or patenting of the prior application.

To obtain benefit under 35 U.S.C. 120 of a prior PCT application designating the U.S., the continuing U.S. national application must

(A) include an appropriate reference to the prior PCT application (either in the application data sheet (37 CFR 1.76) or in the first sentence of the specification),

(B) include an indication of whether the prior PCT international application was published under

PCT Article 21(2) in English in the first sentence of the specification regardless of whether benefit for such application is claimed in the application data sheet (if the continuing U.S. national application was filed on or after November 29, 2000),

(C) be copending with the prior PCT application, and

(D) have at least one inventor in common with the prior PCT application.

See MPEP § 201.11. A U.S. national application is copending with an international application if the prior international application was pending on the filing date of the subsequent U.S. national application.

If the prior application is an international application, the examiner must ascertain (C) and (D) above by either examining the national stage application file of the international application, or by examining the international application file, or requiring applicant to submit sufficient proof that the international application was copending with the U.S. national (35 U.S.C. 111(a)) application claiming benefit under 35 U.S.C. 120. If the parent international application was not copending (i.e., abandoned or withdrawn), benefit under 35 U.S.C. 120 is not possible.

If priority is claimed under 35 U.S.C. 120 in a third U.S. national application to a first national or international application via a second international application, the examiner must examine the second international application to see if it contains a proper reference and indication of publication language for benefit under 35 U.S.C. 120 of the first filed application. The second international application must include an appropriate reference in the Request to the prior U.S. national application. The appropriate reference in the Request should identify the parent application and include an indication that it is a continuation or continuation-in-part of the first filed U.S. application, PCT Rule 4.14. In order for the examiner to determine if the international application meets the above noted requirements, the examiner should review the copy of the Request form in the international application file or the cover page of the published international application. If the copy is not in the file, the International Application Processing Division may obtain a copy from the International Bureau.

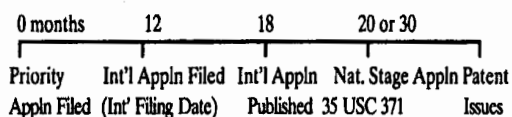
1895.01 Handling of and Considerations In the Handling of National Applications Under 35 U.S.C. 371 and 35 U.S.C. 111(a) Continuations and Continuations-In-Part of a PCT Application

A national application can be either a national stage application submitted under 35 U.S.C. 371 or a national application filed under 35 U.S.C. 111(a).

NATIONAL APPLICATIONS SUBMITTED UNDER 35 U.S.C. 371

These applications are the result of an international application filed under the PCT entering the national stage in the United States. They are called national stage applications. The national stage application papers are placed in a domestic application file wrapper and the phrase “FILED UNDER 35 U.S.C. 371” is stamped on the front of the file wrapper. In addition, a “Notification of Acceptance of Application under 35 U.S.C. 371 and 37 CFR 1.494 or 1.495” (Form PCT/DO/EO/903) is placed in the file.

A typical time line involving an international and a national stage application is illustrated as follows:



Although the illustrated time line is typical, there is no requirement that there be a priority application, nor is there any requirement that the national stage application be submitted after the international application is published.

National stage applications submitted under 35 U.S.C. 371 are treated differently in certain respects than national applications filed under 35 U.S.C. 111(a). Treatment of 35 U.S.C. 371 applications differs from treatment of 35 U.S.C. 111(a) applications as follows:

A. Filing Date As Applicant's Date Of Invention

By virtue of 35 U.S.C. 363, the U.S. filing date of a national stage application is the international filing

date (the filing date of the international application) for the purpose of determining whether information is prior art (i.e., has an effective date) relative to the invention claimed in the national stage application. The date which appears in the “filing date” box on the front of the file wrapper of a national stage application, however, is the date on which the requirements of 35 U.S.C. 371(c) were complied with, and typically is not the same as the international filing date of the application. The international filing date is the critical date for determining whether or not a particular reference is available as prior art against the application. The international filing date will appear next to the international application number in the CONTINUING DATA section on the file wrapper label and in the “Notification of Acceptance of Application under 35 U.S.C. 371 and 37 CFR 1.494 or 1.495” (Form PCT/DO/EO/903).

B. 35 U.S.C. 119(a) And 365(b) Priority In National Stage Application

The filing date of a national stage application is the international filing date. Pursuant to 35 U.S.C. 365(b), a priority claim under 35 U.S.C. 119(a) is proper if (a) a claim for priority was made in the international application, and (b) the application was filed within 12 months prior to the international filing date. See MPEP § 1893.03(c). The examiner should acknowledge the priority claim and priority document in the next Office action and on the file wrapper as in any 35 U.S.C. 119(a) situation, if appropriate.

C. Priority Document

In national stage applications, a photocopy of the foreign priority document is received from the International Bureau and placed in the national stage application file. This copy of the foreign priority document is sufficient to establish that applicant has filed a certified copy of the priority document. The copy received from the International Bureau bears a “WIPO” stamp. If a copy of the foreign priority document is not in the national stage application file, the examiner should consult with a Special Program Examiner in his or her Technology Center. A certified copy of a priority document filed as a U.S. provisional application in the U.S. national stage application because 37 CFR 1.55(a)(2) does not apply to priority claims under 35 U.S.C. 111(b) is not required in the

U.S. national stage application because 37 CFR 1.55(a)(2) does not apply to priority claims under 35 U.S.C. 119(e).

D. Unity Of Invention

Restriction practice in both international and national stage applications is determined under unity of invention principles as set forth in 37 CFR 1.475 and 1.499. Restriction practice under 35 U.S.C. 121, as it applies to national applications submitted under 35 U.S.C. 111(a), is not applicable to either international or national stage applications. However, a continuing application claiming benefit under 35 U.S.C. 365(c) to an international application or to a national stage application is not a national stage application and, therefore, the restriction practice under 35 U.S.C. 121 is applicable.

E. Filing Date For Prior Art Purposes Under 35 U.S.C. 102(e)

1. When Examining Applications Filed Prior to November 29, 2000 Which Were Not Voluntarily Published Under 35 U.S.C. 122(b)

Once a patent issues from a national stage application, the filing date for prior art purposes under 35 U.S.C. 102(e), when being cited against an application filed prior to November 29, 2000, which has not been voluntarily published under 35 U.S.C. 122(b), is not the international filing date, but is the date on which the requirements of 35 U.S.C.

371(c)(1), (2) and (4) were met (copy of the international application with any necessary translation, national fee and oath or declaration were filed). However, as the international application is usually published approximately 18 months from the priority date, this publication generally will have an earlier date for prior art purposes than the 35 U.S.C. 102(e) date of the U.S. patent. A copy of the published international application can be obtained through the Foreign Patents Branch of the Scientific and Technical Information Center (STIC). The publication number and publication date appear on the first page of the U.S. patent.

Note that a publication under 35 U.S.C. 122(b) of a U.S. national stage application will have no prior art effect under 35 U.S.C. 102(e) against an application

filed before November 29, 2000, which has not been voluntarily published under 35 U.S.C. 122(b).

2. When Examining Applications Filed on or After November 29, 2000, or Applications Filed Before November 29, 2000 Which Were Voluntarily Published Under 35 U.S.C. 122 (b)

The publication of a U.S. national stage application will have a 35 U.S.C. 102(e) date for prior art purposes as of its international filing date, provided that the application was published under PCT Article 21(2)(a) in the English language, against an application filed on or after November 29, 2000, or filed before November 29, 2000 and voluntarily published under 35 U.S.C. 122(b).

Note that any publication under 35 U.S.C. 122(b) of a U.S. national stage application which was published in the international stage under PCT Article 21(2)(a) in a language other than English or any United States Patent issuing from any national stage application will have no prior art effect under 35 U.S.C. 102(e)(1) or (2) against an application filed on or after November 29, 2000, or filed before November 29, 2000 and voluntarily published under 35 U.S.C. 122(b).

F. International Publication Number And The Publication Date

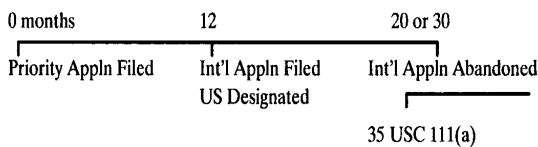
The International Publication Number and the Publication Date **MUST** be in the national stage application if the application is allowed. The International Publication Number and the Publication date can be found in the DO/US Worksheet WIPO Publication block. If the Publication Number and the Publication date are not found on the worksheet or if the worksheet is missing, the information may be taken either from the International Publication or the PCT Gazette page. The examiner should ensure that the International Publication Number and the Publication date are in one of these three locations before the application is sent to Office of Patent Publication.

CONTINUATION, CIP, OR DIVISION OF INTERNATIONAL APPLICATION FILED UNDER 35 U.S.C. 111(a)

Rather than filing a national stage application, a continuing application (i.e., continuation, C-I-P, or

division) under 35 U.S.C. 111(a) of the international application may be filed. Pursuant to 35 U.S.C. 365(c), a regular national application filed under 35 U.S.C. 111(a) and 37 CFR 1.53(b) (not under 37 CFR 1.53(d) or former 37 CFR 1.60 or 1.62) may claim benefit of the filing date of an international application which designates the United States.

A typical time line involving a continuing application filed during the pendency of an international application is illustrated as follows:



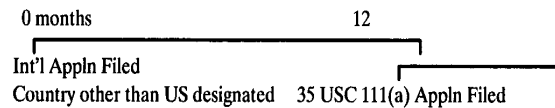
The continuing application must be filed before the international application becomes abandoned as to the U.S. as set forth in 37 CFR 1.494 and 1.495. An appropriate sentence (such as “This is a continuation of International Application PCT/EP90/00000, with an international filing date of January 4, 1990, published in English under PCT Article 21(2) and now abandoned.”) must appear in the first sentence of the specification. In addition, all other conditions of 35 U.S.C. 120 (such as having at least one common inventor) must be satisfied. A copy of the international application (and an English translation) may be required by the examiner to perfect the claim for benefit under 35 U.S.C. 120 and 365(c) if necessary, for example, where an intervening reference is found and applied in a rejection of one or more claims.

A claim for foreign priority under 35 U.S.C. 119(a)-(d) must be made in the continuing application in the same manner as a claim for foreign priority under 35 U.S.C. 365(b) in a national stage application. In the same manner as with a national stage application, a foreign priority claim is proper if (1) a claim for foreign priority was made in the international application, and (2) the foreign application was filed within 12 months prior to the international filing date. A certified copy of any foreign priority document must be provided by the applicant if the parent international application has not entered the national stage under 35 U.S.C. 371 (the photocopy received

from the International Bureau cannot be used). If the parent international application has entered the national stage under 35 U.S.C. 371, the applicant, in the continuing application, may state that the priority document is contained in the national stage application.

35 U.S.C. 119(a)-(d) AND 365(a) PRIORITY CLAIM TO INTERNATIONAL APPLICATION IN 35 U.S.C. 111(a) NATIONAL APPLICATION

An application filed under 35 U.S.C. 111(a) may make a claim for foreign priority under 35 U.S.C. 119 (a)-(d) and 365(a) to an international application which designates at least one country other than the United States (the U.S. may also be designated). In this situation, applicant must file a certified copy of the international application in the application filed under 35 U.S.C. 111(a) and the applicant must satisfy all other requirements of 35 U.S.C. 119(a)-(d). A typical time line for this situation is illustrated as follows:



The examiner should acknowledge the priority claim and priority document in the next Office action and on the file wrapper as in any 35 U.S.C. 119(a)-(d) situation, if appropriate.

1896 The Differences Between a National Application Filed Under 35 U.S.C. 111(a) and a National Stage Application Filed Under 35 U.S.C. 371

The following section describes the differences between a U.S. national application filed under 35 U.S.C. 111(a), including those claiming benefit of a PCT application under 35 U.S.C. 120 (a **continuation** or a **continuation-in-part** of a PCT application), and a U.S. **national stage application** (filed under 35 U.S.C. 371).

FILING DATE

The filing date of a 35 U.S.C. 111(a) application is the date when the USPTO receives a specification, claim, and any drawings. See 37 CFR 1.53(b).

The filing date of a PCT international application is the date applicant satisfies Article 11 requirements, i.e., includes a specification, claim, U.S. residency or nationality, prescribed language, designation of a contracting state, and names of the applicant.

In this regard, note that 35 U.S.C. 363 provides that,

An international application designating the United States shall have the effect, from its international filing date under Article 11 of the treaty, of a national application for patent regularly filed in the Patent and Trademark Office except as otherwise provided in section 102(e) of this title.

Similarly, PCT Article 11(3) provides:

(3) Subject to Article 64(4), any international application fulfilling the requirement listed in items (i) to (iii) of paragraph (1) and accorded an international filing date shall have the effect of a regular national application in each designated State as of the international filing date, which date shall be considered to be the actual filing date in each designated State.

PCT Article 64(4), in turn, provides:

(4)(a) Any State whose national law provides for prior art effect of its patents as from a date before publication, but does not equate for prior art purposes the priority date claimed under the Paris Convention for the Protection of Industrial Property to the actual filing date in that State, may declare that the filing outside that State of an international application designating that State is not equated to an actual filing in that State for prior art purposes.

(b) Any State making a declaration under subparagraph (a) shall to that extent not be bound by the provisions of Article 11(3).

(c) Any State making a declaration under subparagraph (a) shall, at the same time, state in writing the date from which, and the conditions under which, the prior art effect of any international application designating that State becomes effective in that State. This statement may be modified at any time by notification addressed to the Director General.

Accordingly, under PCT Article 64(4), the United States is free to have laws that, for prior art purposes, do not treat the filing of an international application designating the United States as equal to an actual filing in the United States. Additionally, under PCT Article 64(4)(c), the United States may modify the

<i>Chart of Some Common Differences</i>		
	National Applications (filed under 35 U.S.C. 111(a))	National Stage Applications (filed under 35 U.S.C. 371)
Filing Date	Deposit date in USPTO of specification, claim and any necessary drawing	International filing date of PCT application
35 U.S.C. 119(a)-(d) Priority Requirement	Claim & certified copy provided by applicant	Copy of certified copy provided by WIPO, claim by applicant
Unity of Invention	U.S. restriction practice	Unity of invention practice under 37 CFR 1.499
Filing Fees	37 CFR 1.16	37 CFR 1.492
Reference to Application in Declaration	Attached application, U.S. Application No., etc.	Same as in a 35 U.S.C. 111(a) filing or may refer to the international application
Copendency with International Application	Applicant provides proof	Not an issue

The differences between a national application filed under 35 U.S.C. 111(a) and a national stage application filed under 35 U.S.C. 371 are often subtle, but the differences are important.

date from which, and the conditions under which, the prior art effect of any international application designating the United States becomes effective in the United States.

EFFECTIVE DATE AS A REFERENCE

Publications Under 35 U.S.C. 122(b) as References

When examining an application filed before November 29, 2000, which has not been voluntarily published under 35 U.S.C. 122(b), publications under 35 U.S.C. 122(b) of 35 U.S.C. 111(a) applications and national stage applications are never effective as references as they are only available as references as of their publication date which can only be after November 29, 2000.

When examining an application filed on or after November 29, 2000, or filed before November 29, 2000 and voluntarily published under 35 U.S.C. 122(b), a publication under 35 U.S.C. 122(b) of a 35 U.S.C. 111(a) application will have an effective date as a reference under 35 U.S.C. 102(e) as of its earliest effective filing date, excluding any international filing dates except when the international application to which benefit is being claimed was published under PCT Article 21(2)(a) in English. In such a situation the effective date as a reference of the publication of the 35 U.S.C. 111(a) application will be its earliest effective filing date, including the international filing date. A publication under 35 U.S.C. 122(b) of a national stage application, when being cited against an application filed on or after November 29, 2000, or filed before November 29, 2000 and voluntarily published under 35 U.S.C. 122(b), will be effective as a reference under 35 U.S.C. 102(e)(1) as of its international filing date only if it was published in the international stage under PCT Article 21(2)(a) in English. Otherwise, such a publication of a national stage application is effective as a reference only as of its publication date under 35 U.S.C. 102(a) or (b), where appropriate.

U.S. Patents as References

Regardless of when the application being examined was filed, the effective date as a reference of a patent which has issued from a 35 U.S.C. 111(a) application is always its earliest effective filing date, excluding any international filing dates. In contrast the effective

date as a reference of a U.S. patent which has issued from a national stage application will differ based on the application being examined. When examining an application filed before November 29, 2000, which has not been voluntarily published under 35 U.S.C. 122(b), a U.S. patent issuing from a national stage application will be effective as a reference as of the date the national stage application satisfied the requirements of 35 U.S.C. 371(c)(1), (2), and (4)(copy of the international application with any necessary translation, national fee and oath or declaration were filed). However, when examining an application filed on or after November 29, 2000 or filed before November 29, 2000 and voluntarily published under 35 U.S.C. 122(b), a U.S. patent issuing from a national stage application will only be effective as a reference under 35 U.S.C. 102(a) or (b), where appropriate, as of the date on which it issued as a U.S. patent.

35 U.S.C. 119(a)-(d) PRIORITY REQUIREMENTS

The certified copy of the foreign priority application must be provided to the Office by applicant in a U.S. national application filed under 35 U.S.C. 111(a). Where applicant filed an international application claiming priority to an earlier filed national application, the certified copy of the priority application is required to be provided to the International Bureau by applicant during the international stage. The International Bureau (WIPO) then sends a copy of the certified copy of the priority application to each designated office for inclusion in the national stage application. A U.S. national stage application filed under 35 U.S.C. 371 will have a photocopy of the priority document with the first page stamped by the International Bureau to indicate that it is a priority document received by WIPO and the date of such receipt. Such a photocopy is acceptable in a U.S. national stage application to establish that applicant has filed a certified copy of the priority document. If the photocopy is missing from the national stage application file, either the document has been misplaced or it was not provided due to a defect in priority during the international stage. If the priority claim was not in accordance with PCT Rule 4.10 or the priority document was not provided in accordance with PCT Rule 17, the photocopy of the priority document

will not have been provided by the International Bureau.

UNITY OF INVENTION

U.S. national applications filed under 35 U.S.C. 111(a) are subject to restriction practice in accordance with 37 CFR 1.141-1.146. See MPEP § 803. U.S. national stage applications filed under 35 U.S.C. 371 are subject to unity of invention practice in accordance with 37 CFR 1.475 and 1.499 (effective May 1, 1993).

FILING FEES

U.S. national applications filed under 35 U.S.C. 111(a) are subject to the national application filing fees set forth at 37 CFR 1.16. U.S. national stage applications filed under 35 U.S.C. 371 are subject to the national stage fees prescribed at 37 CFR 1.492.

REFERENCE TO APPLICATION IN DECLARATION

Applicant's oath or declaration is required to identify the specification to which it is directed (37 CFR 1.63(b)(1)). The specification may be identified in a U.S. national application filed under 35 U.S.C. 111(a) by reference to an attached specification or by reference to the application number and filing date of a specification previously filed in the Office. MPEP § 601.01(a) gives the minimum requirements for identification of the specification. U.S. national stage applications filed under 35 U.S.C. 371 may identify the specification (in the oath or declaration) in the same manner as applications filed under 35 U.S.C. 111(a) or may identify the specification by reference to the application number and filing date of the international application.

