Chapter 900 Prior Art, Classification, Search

901 Prior Art

Note 37 CFR 1.104(a)(1) in MPEP § 707. See also MPEP § 2121- § 2129.

901.01 Canceled Matter in U.S. Patent Files

Canceled matter in the application file of a U.S. patent is not a proper reference as of the filing date under 35 U.S.C. 102(e). See *Ex parte Stalego*, 154 USPQ 52, 53 (Bd. App. 1966). However, matter canceled from the application file wrapper of a U.S. patent may be used as prior art as of the patent date in that it then constitutes prior public knowledge under 35 U.S.C. 102(a). *In re Lund,* 376 F.2d 982, 153 USPQ 625 (CCPA 1967). See also MPEP § 2127 and § 2136.02.

901.02 Abandoned Applications

Where an abandoned application is referred to in an issued U.S. patent, the disclosure of the application is incorporated by reference into the disclosure of the patent and is available to the public. See 37 CFR 1.14 (a)(3)(iv)(A).

In re Heritage, 182 F.2d 639, 86 USPQ 160 (CCPA 1950), holds that where a patent refers to and relies on the disclosure of a previously copending but subsequently abandoned application, such disclosure is available as a reference. See also *In re Lund,* 376 F.2d 982, 153 USPQ 625 (CCPA 1967).

It has also been held that where the reference patent refers to a previously copending but subsequently abandoned application which discloses subject matter in common with the patent, the effective date of the reference as to the common subject matter is the filing date of the abandoned application. *In re Switzer*, 166 F.2d 827, 77 USPQ 1 (CCPA 1948); *Ex parte Peterson,* 63 USPQ 99 (Bd. App. 1944); and *Ex parte Clifford,* 49 USPQ 152 (Bd. App. 1940). See MPEP § 2127(a).

Published abstracts, abbreviatures, defensive publications (MPEP § 901.06(d)), and statutory invention registrations (MPEP Chapter 1100) are references.

901.03 Pending Applications

Except as provided in 37 CFR 1.11(b), pending U.S. applications are preserved in confidence (37 CFR 1.14(a)) and are not available as references. However, claims in one nonprovisional application may be rejected on the claimed subject matter of a copending nonprovisional application of the same inventive entity. See MPEP § 804. For applications having a common assignee and different inventive entities claiming a single inventive concept, see MPEP § 804.03. See also MPEP § 2127, paragraph IV.

901.04 U.S. Patents [R-1]

The following different series of U.S. patents are being or in the past have been issued. The date of patenting given on the face of each copy is the publication date and is the one usually cited. The filing date, in most instances also given on the face of the patent, is ordinarily the effective date as a reference (35 U.S.C. 102(e)). See MPEP § 2127, paragraph II. The 35 U.S.C. 102(e) date for a nonprovisional application claiming the benefit of a prior provisional application (35 U.S.C. 111(b)) is the filing date of the provisional application.

X-Series. These are the approximately 10,000 patents issued between 1790 and July 4, 1836. They were not originally numbered, but have been arbitrarily assigned numbers in the sequence in which they were issued. The number should *not* be cited. When copies are ordered, the patentee's name and date of issue suffice for identification.

1836 Series. The mechanical, electrical, and chemical patents issued since 1836 and frequently designated as "utility" patents are included in this series. A citation by number only is understood to refer to this series. This series comprises the bulk of all U.S. patents issued. Some U.S. patents issued in 1861 bear two numbers but only the larger number should be cited.

Reissue Series. Reissue patents (MPEP § 1401) have been given a separate series of numbers preceded by "Re." In citing, the letters and the number must be given, e.g., Re. 1776. The date that it is effective as a reference is the effective date of the original patent application, not the filing date of the reissue application.

Design reissue patents are numbered with the same number series as "utility" reissue patents. The letter prefix does, however, indicate them to be design reissues.

A.I. Series. From 1838 to 1861, patents covering an inventor's improvement on his own patented device were given a separate series of numbers preceded by "A.I." to indicate Additional Improvement. In citing, the letters and the number must be given, e.g., A.I. 113. About 300 such patents were issued.

Plant Patent Series. When the statutes were amended to provide for patenting certain types of plants (see MPEP Chapter 1600) these patents were given a separate series of numbers. In citing, the letters "P.P." and the number must be given, e.g., P.P. 13.

Design Patents. Patents for designs (see MPEP Chapter 1500) are issued under a separate series of numbers preceded by "D." In citing, the letter "D." and the number must be given, e.g., D. 140,000.

NUMBERS FOR IDENTIFICATION OF BIBLIOGRAPHIC DATA ON THE FIRST PAGE OF PATENT AND LIKE DOCUMENTS >INCLUDING INDUSTRIAL DESIGNS< (INID NUMBERS)

The purpose of INID Codes ("INID" is an acronym for "Internationally agreed Numbers for the Identification of (bibliographic) Data") is to provide a means whereby the various data appearing on the first page of patent and like documents >,including industrial designs,< can be identified without knowledge of the language used and the laws applied. They are now used by most patent offices and have been applied to U.S. patents since Aug. 4, 1970. Some of the codes are not pertinent to the documents of a particular country and some which are may, in fact, not be used. See list in MPEP § 901.05(b).

901.05 Foreign Patent Documents [R-1]

All foreign patents, published applications, or any other published derivative material containing portions or summaries of the contents of published or unpublished patents (e.g., abstracts) which have been disseminated to the public are available to U.S. examiners. See MPEP § 901.06(a), paragraphs I.C. and IV.C. In general, a foreign patent, the contents of its application, or segments of its content should not be cited as a reference until its date of patenting or publication can be confirmed by an examiner's review of a copy of the document. Examiners should remember that in some countries, there is a delay between the date of the patent grant and the date of publication.

Information pertaining to those countries from which the most patent publications are received are given in the following sections and in MPEP § 901.05(a). Additional information can be obtained from the Scientific and Technical Information Center.

See MPEP § 707.05(e) for data used in citing foreign references.

I. PLACEMENT OF FOREIGN PATENT EQUIVALENTS IN THE SEARCH FILES

There are approximately 25 countries in which the specifications of patents are published in printed form either before or after a patent is granted.

UNTIL OCTOBER 1, 1995, THE FOLLOWING PRACTICE WAS USED IN PLACING FOREIGN PATENT EQUIVALENTS IN THE SEARCH FILES:

When the same invention is disclosed by a common inventor(s) and patented in more than one country, it is called a family of patents. Whenever a family of patents or published patent disclosures existed, the Office selected from a prioritized list of countries a single family member for placement in the examiners' search file and selected the patent of the country with the earliest patent date. If the U.S. was one of the countries granting a patent in the "family" of patents, none of the foreign "equivalents" was placed in our search file. See paragraph III., below. However, foreign patents or published patent disclosures within a common family which issued prior to the final highest priority patent (e.g., U.S.) may have been placed in our paper search file and these copies were generally not removed when the higher priority patent was added to our search files at a later date.

Beginning in October 1995, paper copies of foreign patents were no longer classified into the U.S. Classification System by the U.S. Patent and Trademark Office. See MPEP § 901.05(c) for search of recently issued foreign patents.

II. OVERVIEW OF FOREIGN PATENT LAWS

This section includes some general information on foreign patent laws and summarizes particular features and their terminology. Some additional details on the most commonly cited foreign patent publications may be found under the individual country in paragraph V., below. Examiners should recall, by way of contrast, that in the United States our patent law requires that a number of different events all occur on the issue date of a U.S. patent. These events include the following:

(A) a patent document, the "letters patent" which grants and thereby creates the legal rights conferred by a patent, is executed and sent to the applicant;

(B) the patent rights come into existence;

(C) the patent rights can be exercised;

(D) the specification of the patent becomes available to the public;

(E) the patented file becomes available to the public;

(F) the specification is published in printed form; and

(G) an issue of an official journal, the *Official Gazette*, containing an announcement of the patent and a claim, is published.

In most foreign countries, various ones of these events occur on different days and some of them may never occur at all.

The following list catalogs some of the most significant variations from U.S. practices:

A. Applicant

In most countries, the owner of the prospective rights, derived from the inventor, may also apply for a patent in the owner's name as applicant; in a few, other persons may apply as well or be joined as coapplicants. Hence applicant is not synonymous with inventor, and the applicant may be a company. Some countries require the inventors' names to be given and regularly print them on the published copies. Other countries may sometimes print the inventors' names only when available or when requested to do so.

B. Application

The word "application" is commonly used in the U.S. to refer to the entire set of papers filed when seeking a patent. However, in many countries and in PCT cases, the word application refers only to the paper, usually a printed form, which is to be "accompanied by" or have "attached" to it certain other papers, namely a specification, drawings when necessary, claims, and perhaps other papers. Unless it is otherwise noted in the following portions of this section, the term "application" refers to the entire set of papers filed.

C. Publication of Contents of Pending Applications

In general, pending applications are confidential until a certain stage in the proceedings (e.g., upon patent grant), or until a certain date (e.g., 18 months after filing), as may be specified in a particular law.

Many countries have adopted the practice of publishing the specification, drawing, or claims of pending applications. In these countries, the contents of the application are published at a certain time, usually 18 months after filing. The applicant is given certain provisional rights upon publication even though examination has not been completed or in some cases has not even begun at the time of publication.

This publication may take either of two forms. In the first form, some countries publish a notice giving certain particulars in their official journal and thereafter any one may see the papers at the patent office or order copies. This procedure is referred to as "laying open for public inspection". There is no printed publication of the specification, although an abstract may be published in printed form. If anyone can inspect or obtain copies of the laid open application, then it is sufficiently accessible to the public to constitute a "publication" within the meaning of 35 U.S.C. 102(a) and (b). The full application is thus available as prior art as of either the date of publication of its notice or its laying open to public inspection if this is a later date. *In re Wyer*, 655 F.2d 221, 210 USPQ 790 (CCPA 1981). See MPEP § 2127, paragraph III.

In the second form, several other countries publish the specifications of pending applications in printed form at a specified time, usually 18 months after filing. These documents, of course, constitute references as printed publications.

D. Administrative Systems

Patent law administration varies from country to country. In some countries, all that is undertaken is an inspection of the papers to determine if they are in proper form. Other countries perform an examination of the merits on the basis of an extensive search of the prior art, as is done in the U.S. The former are referred to as nonexamining or registration countries, although some systems allow for a rejection on matters apparent on the face of the papers, such as matters of form or statutory subject matter.

Of the examining countries, the extent of the material searched prior to issue varies greatly. Only a few countries include both their own patents and a substantial amount of foreign patent material and nonpatent publications in their search files. Some countries specifically limit the search by rule, or lack of facilities, to their own patents with very little or no additional material. An increasing number of countries are requiring applicants to give information concerning references cited in corresponding applications filed in other countries.

E. Opposition

Some examining countries consider participation by the public as an inherent feature of their examining system. When an application is found to be allowable by the examiner, it is "published" for opposition. Then there is a period, usually 3 or 4 months, within which members of the public can oppose the grant of the patent. In some countries, the opposing party can be any person or company. In other countries, only those parties who are affected by the outcome can participate in the opposition. The opposition is an *inter partes* proceeding and the opposing party can ordinarily raise any ground on the basis of which a patent would be refused or held invalid, including any applicable references.

The publication for opposition may take the form of a laying open of the application by the publication of a notice in the official journal with the application being then open to public inspection and the obtaining of copies. Otherwise publication occurs by the issue of the applications in printed form. Either way, these published documents constitute printed publications which are available as references under 35 U.S.C. 102(a) and (b).

F. The Patent

Practices and terminology vary worldwide regarding patents. In some countries, there is no "letters patent" document which creates and grants the rights. In other countries, the examiner grants the patent by signing the required paper. In a few countries, the patent is granted by operation of law after certain events have occurred. The term "granting the patent" is used here for convenience, but it should be noted that 35 U.S.C. 102(a) and 102(b) do not use this terminology.

A list of granted patents is ordinarily published in each country's official journal and some of these countries also print an abstract or claims at or after the granting date. Not all countries publish the granted patent. Where the specifications of granted patents are issued in printed form, publication seldom occurs simultaneously with the day of grant; instead, publication occurs a short time thereafter. There also are a few countries in which publication does not take place until several years after the grant.

The length of time for which the patent is enforceable (the patent term) varies from country to country. The term of the patent may start as of the grant of the patent, or as of the filing date of the application.

Most countries require the payment of periodic fees to maintain a patent in force. These fees often start a few years after filing and increase progressively during the term

of the patent. If these fees are not paid within the time allowed, the patent lapses and is no longer in force. This lapsing does not affect the use of the patent as a reference.

G. Patents of Addition

Some countries issue patents of addition which should be identified as such and, when separately numbered as in France, the number of the addition patent should be cited. "Patents of addition" generally cover improvements of a patented parent invention and can be obtained by the owner of the parent invention. Inventiveness in relation to the parent invention need not be demonstrated and the term is governed by the term of the parent patent.

III. CORRESPONDING SPECIFICATIONS IN A FAMILY OF PATENTS

Since a separate patent must be obtained in each country in which patent rights are desired (except for EP, the European Patent Convention, * AP, the African Regional Industrial Property Organization, >OA, African Intellectual Property Organization, GC, Patent Office of the Cooperation Council for the Arab States of the Gulf, and EA, Eurasian Patent Office,< whose members issue a common patent), there may be a large number of patents issued in different countries for the same invention. This group of patents is referred to as a family of patents.

All of the countries listed in paragraph V. below are parties to the Paris Convention for the Protection of Industrial Property and provide for the right of priority. If an application is filed in one of these countries, an application for the same invention thereafter filed in another country, within 1 year of the filing of the first application, will be entitled to the benefit of the filing date of the first application on fulfilling various conditions. See MPEP § 201.13. The patents or published specifications of the countries of later filing are required to specify that priority has been claimed and to give the country, date, and number of the priority application. This data serves the purpose, among others, of enabling any patent based on the priority application to be easily located.

In general, the specification of the second application is identical in substance to the specification of the first. In many instances, the second, if in another language, is simply a translation of the first with perhaps some variation in purely formal parts. But in a minority of cases, the two may not be identical. For instance, sometimes two applications filed in one country are combined into one second application which is filed in another country. Alternatively, a second application could be filed for only part of the disclosure of the priority application. The second application may have the relationship to the first which we refer to as a continuation-in-part (e.g., the second application includes additional subject matter discovered after the first was filed). In some instances, the second application could have its disclosure diminished or increased, to meet the requirements or practices of the second country.

Duplicate or substantially duplicate versions of a foreign language specification, in English or some other language known to the examiner, can sometimes be found. It is possible to cite a foreign language specification as a reference, while at the same time citing an English language version of the specification with a later date as a convenient translation if the latter is in fact a translation. Questions as to content in such cases must be settled based on the specification which was used as the reference.

If a U.S. patent being considered as a reference claims the priority of a previously filed foreign application, it may be desirable to determine if the foreign application has issued or has been published, to see if there is an earlier date. For example, it has occurred that an examiner rejected claims on the basis of a U.S. patent and the applicant filed affidavits to overcome the filing date of the reference; the affidavits were controversial and the case went to appeal, with an extensive brief and an examiner's answer having been filed. After all this work, somebody noticed that the U.S. patent reference claimed the priority of a foreign application filed in a country in which patents were issued fairly soon, checked the foreign application, and discovered that the foreign patent had not only been issued, but also published in printed form, more than 1 year prior to the filing date of the application on appeal.

If a foreign patent or specification claims the priority of a U.S. application, it can be determined whether the latter is abandoned, still pending, or patented. Even if the U.S. case is or becomes patented, however, the foreign documents may still be useful as supplying an earlier printed publication date.

If a foreign patent or specification claims the priority of an application in another foreign country, it may sometimes be desirable to check the latter to determine if the subject matter was patented or published at an earlier date. As an example, if a British specification being considered as a reference claims the priority of an application filed in Belgium, it is known at once that a considerably earlier effective date can be established, if needed, because Belgian patents issue soon after filing. In addition, if the application referred to was filed in one of the countries which publish applications in printed form 18 months after filing, the subject matter of the application will be available as a printed publication as of the 18 month publishing date. These remarks obviously also apply to a U.S. patent claiming a foreign priority.

The determination of whether a foreign patent has been issued or the application published is a comparatively simple matter for some countries, but for some it is quite laborious and time-consuming and may not even be possible from the sources maintained by the Scientific and Technical Information Center. Other sources for this data which are not maintained by the Office do exist and can be utilized for locating corresponding patents. One source is *Chemical Abstracts* which publishes abstracts of patents from a large number of countries. Only one patent or published specification from a family is abstracted in full and any related family members issued or published are cross-referenced. Its annual indexes include lists of patent numbers, and also include patentees' and inventors' names in the alphabetical author index. A concordance of corresponding patents appearing during five year periods has also been published. Other sources for this family data are the INPADOC and DERWENT data files.

When an application is filed outside the convention year from an earlier application, the later application may not refer to the first application. It is hence possible that there will be duplicate specifications published without any indication revealing the fact. These may be detected when the two copies come together in the same subclass. Because the later application is filed outside the convention year, the earlier application may be prior art to the latter if it has been published or issued.

IV. VALIDITY OF DATES DISPLAYED ON FACE OF FOREIGN PATENT DOCUMENTS

The examiner is not required to prove either the date or the occurrence of events specified on specifications of patents or applications, or in official journals, of foreign patent offices which the Office has in its possession. In a court action, certified copies of the Office copies of these documents constitute *prima facie* evidence in view of 28 U.S.C. 1745. An applicant is entitled to show the contrary by competent evidence, but this question seldom arises.

The date of receipt of copies by the Office, as shown by Office records or stamped on the copies, need only to be stated by the examiner, when necessary.

V. NOTES ON INDIVIDUAL COUNTRIES

The following table gives some data concerning the published patent material of a number of countries to assist in their use and citation as references. The countries listed were selected based on the current level of material provided for the examiner search files. Together, the countries and organizations account for over 98% of the patent material that was added to the examiner files each year. This table reflects only the most current patent office practice for each foreign county specified and is not applicable for many older foreign patent documents. The Scientific and Technical Information Center staff can help examiners obtain data related to any documents not covered by this table. Note that the citation dates listed in the following table are not necessarily the oldest possible dates. Sometimes an earlier effective date, which is not readily apparent from the face of the document, is available. If an earlier date is important to a rejection, the examiner should consult STIC staff who will attempt to obtain further information regarding the earliest possible effective date.

How To Use Table

Each horizontal row of boxes contains information on one or more distinct patent document from a specified country available as a reference under 35 U.S.C. 102(a) and (b). If several distinct patent documents are included within a common box of a row, these documents are related to each other and are merely separate documents published at different stages of the same invention's patenting process. Usually, this related group of documents includes a published application which ripens into an issued patent. Within each box of the second column of each row, the top listed document of a related group is the one that is "published" first (e.g., made available for public inspection by laying open application, or application printed and disseminated to the public). Once an examiner determines the country or organization publishing the documents, the name of the document can be located in the second column of the table and the examiner can determine if a document from the related group containing the same or similar disclosure having an earlier date is available as a reference. Usually, the documents within a related group have identical disclosures, sometimes, however, there are differences in the claims or minor differences in the specification. Therefore, examiners should always verify that the earlier related document also includes the subject matter necessary for the rejection. Some countries issue more than one type of patent and for clarity, in these situations, separate rows are provided for each type.

ISSUING/ PUBLISHING COUNTRY OR ORGANIZATION	DOCUMENT NAME IN LANGUAGE OF ISSUING COUNTRY (TYPE OF DOCUMENT)	FOREIGN LANGUAGE NAME DESIGNATING THE DATE USED FOR CITATION PURPOSES (TYPE OF DATE)	GENERAL COMMENTS
EP European Patent Office	European patent application	Date application made available to public	Printing of application occurs 18 months after *>priority< date.
	European patent specification	Date published	EP dates are in day/month/ year order.
	New European patent specification (above specification amended)	Date published	
FR France	Demande de brevet d'invention (patent application)	Disposition du public de la demande (date of laying open application)/date published	Date of laying open the application is the earliest possible date. This usually occurs 18 months after the filing or priority date but can occur earlier at applicant's request. The application is printed a short time after being laid open.
	Brevet d'invention (patent)	**>Disposition du public du brevet d' invention< (date of publication of the notice of patent grant)	FR dates are in day/month/ year order
FR France	Demande de certificat d'utilite (utility certificate application 1st level publication)	Disposition du public de la demande (date published)	
	Certificat d'utilite (utility certificate, 2nd publication)	Disposition du public du certificat d'utilite (date published)	
DE Germany	Offenlegungschrift (unexamined patent application)	Offenlegungstag (date application printed)	Patentschrift are printed (up to four different times) after examination and at various stages of opposition.
	Patentschrift (examined patent)	Veræfentlichung-stag der patenterteilung (date printed)	DE dates are in day/month/ year order

ISSUING/ PUBLISHING COUNTRY OR ORGANIZATION	DOCUMENT NAME IN LANGUAGE OF ISSUING COUNTRY (TYPE OF DOCUMENT)	FOREIGN LANGUAGE NAME DESIGNATING THE DATE USED FOR CITATION PURPOSES (TYPE OF DATE)	GENERAL COMMENTS
DE Germany	Patentschrift (Ausschließungs-patent) (exclusive type patent based on former East German application and published in accordance with E. German laws)	First printing coded "DD" (date of first publication before examination as to novelty)	Several more printings (up to four) occur as examination proceeds and patent is granted. Separate DD numbering series is used.
DE Germany	Patentschrift (Wirtschaft-patent) (economic type patent published in accordance with East German laws)	First printing coded "DD" (date of first printing before examination as to novelty)	Another printing occurs after examination. Separate DD numbering series is used.
DE Germany	Gebrauchsmuster (utility model or petty patent)	Eintragungstag (date laid open after registration as a patent) Bekanntmachung im patentblatt (date published for public)	Copy is supplied only on request. Published from No. DE-GM 1 186 500J.
JP Japan	Kôkai Tokkyo kôhô (unexamined patent application) Kôhyo Tokkyo kôhô (unexamined patent application based on international)	Upper right corner beneath number (date laid open and printed)	INID codes (41)-(47) include first date listed in terms of the year of the Emperor. To convert yrs. prior 1989, add 1925. To convert yrs. after 1988, add 1988.
	Tokkyo kôhô (examined patent application)	Upper right corner beneath number (date laid open and printed; 1st publication when Kôkai Tokkyo kôhô or Kôhyo Tokkyo kôhô not published)	Newer documents also include second date following the first given in OUR Gregorian Calendar in year/ month/day sequence in Arabic numerals intermixed with their equivalent JP characters.

ISSUING/ PUBLISHING COUNTRY OR ORGANIZATION	DOCUMENT NAME IN LANGUAGE OF ISSUING COUNTRY (TYPE OF DOCUMENT)	FOREIGN LANGUAGE NAME DESIGNATING THE DATE USED FOR CITATION PURPOSES (TYPE OF DATE)	GENERAL COMMENTS
JP Japan *(Continued)*	Tokkyo shinpan seikyû kôkoku (corrected patent specification)	Upper right corner beneath number (date laid open and printed)	
JP Japan	Kôkai jitsuyô shin-an kôhô (unexamined utility model application) or Kôhyo jitsuyô shin-an kôhô (unexamined utility model application based on international) Jitsuyô shin-an kôhô (examined utility model application)	Upper right corner beneath number (date laid open and printed) Upper right corner beneath number (date laid open and printed; 1st publication when Kôkai or Kôhyo not published)	
JP Japan	Tôroku jitsuyô shin-an >shin-pan< seikyû kôkoku (corrected registered utility model)	**	
JP Japan	Isyô kôhô (registered design application)	**	
RU Russian Federation	Zayavka Na Izobretenie (unexamined application for invention) Patent Na Izobreteniye (Patent)	Date application printed (1st publication) Date printed (normally 2nd publication, but 1st publication when application not published)	
RU Russian Federation	Svidetelstvo Na Poleznuyu Model (utility model)		Supplied upon request only
RU Russian Federation	Patent Na Promishlenniy Obrazec (design patent)		Supplied upon request only

ISSUING/ PUBLISHING COUNTRY OR ORGANIZATION	DOCUMENT NAME IN LANGUAGE OF ISSUING COUNTRY (TYPE OF DOCUMENT)	FOREIGN LANGUAGE NAME DESIGNATING THE DATE USED FOR CITATION PURPOSES (TYPE OF DATE)	GENERAL COMMENTS
GB United Kingdom	Published patent application (searched, but unexamined) Patent Specification (granted examined patent)	(date of printing the application) (date of printing)	
GB United Kingdom *(Continued)*	Amended or Corrected Patent Specification (amended granted patent)	(date of printing)	
WO World Intellectual Property Organization	International * application (PCT patent application)	(date of printing the application)	

901.05(a) Citation Data [R-1]

Foreign patent publications that use Arabic and Roman numerals in lieu of names to indicate the date show in order the day, month, and year>, or alternatively, the year, month, and day<. Roman numerals always refer to the month.

Japanese patent application publications show the date in Arabic numerals by indicating in order the year of the reign of the Emperor, the month, and the day. To convert the Japanese year of the Emperor to the Western calendar year, for years prior to 1989, add 1925 to the JAPANESE YEAR. For example: 40.3.6 = March 6, 1965. For years after 1988, add 1988 to the JAPANESE YEAR.

Alphabetical lists of the foreign language names of the months and of the names and abbreviations for the United States of America follow. The lists set forth only selected commonly encountered foreign language names and do not include those which are similar to the English language names and thus easily translatable.

In using the lists, identification of the foreign language (except for Russian), is not necessary. The translation into English is ascertained by alphabetically locating the foreign language name on the list.

The list of the foreign language names and abbreviations for the United States is useful in determining whether a foreign language patent publication indicates the filing of a similar application in the United States.

ALPHABETICAL LIST OF SELECTED FOREIGN LANGUAGE NAMES OF MONTHS

agosto	August
août	August
augusti	August
avril	April
březen	March
červen	June
červenec	July
czerwiec	June
décembre	December
dicembre	December
duben	April
elokuu	August
febbraio	February
Feber [Februar]	February
februari	February
février	February
gennaio	January
giugno	June
grudzień	December
heinäkuu	July
helmikuu	February
huhtikuu	April
Jänner [Januar]	January
janvier	January
joulukuu	December
juillet	July
juin	June
kesäkuu	June
květen	May
kwiecień	April
leden	January
lipiec	July
listopad	November
lokakuu	October
luglio	July
luty	February
maaliskuu	March
maart	March
maggio	May
Mai	May
maj	May
maraskuu	November
marzec	March
mars	March
marts	March
März	March
marzo	March
mei	May
ottobre	October
październik	October
prosinec	December
října	October
settembre	September
sierpień	August
srpen	August
styczeń	January
syyskuu	September
tammikuu	January
toukokuu	May
ùnora	February

wrzesień	September
září	September

RUSSIAN

август	August
апрель	April
декабрь	December
июль	July
июнь	June
май	May
март	March
ноябрь	November
октябрь	October
сентябрь	September
февраль	February
январь	January

LIST OF SELECTED FOREIGN LANGUAGE NAMES AND ABBREVIATIONS FOR THE UNITED STATES OF AMERICA

Amerikas Förenta Stater;

[Förenta Staterna av Amerika]

De forenete stater av Amerika

De vorenede Stater av Amerika

EE.UU.

E.U.

E.U.A.

E.U.d Am.

Etats-Unis d'Amérique

Sp. St. A.

Spoj. St. Am.

Spojene Staty Americke

Stany Zjednoczone Ameriki

Stati Uniti d'America

S.U.A.

S.Z.A.

V.St.A.

V.St.v.A.

Ver. St. v. Am(erika)

de Vereinigde Staten van Amerika

Vereinigde Staaten van Noord-Amerika

Vereinigten Staaten von Amerika

Vorenede Stater i Amerika

901.05(b) Other Significant Data [R-1]

NUMBERS FOR IDENTIFICATION OF BIBLIOGRAPHIC DATA ON THE FIRST PAGE OF PATENT AND LIKE DOCUMENTS >INCLUDING INDUSTRIAL DESIGNS< (INID NUMBERS)

The purpose of INID Codes ("INID" is an acronym for "Internationally agreed Numbers for the Identification of (bibliographic) Data") is to provide a means whereby the various data appearing on the first page of patent and like documents or in patent gazettes can be identified without knowledge of the language used and the laws applied. They are now used by most patent offices and have been applied to U.S. patents since Aug. 4, 1970. Some of the codes are not pertinent to the documents of a particular country and some which are may, in fact, not be used. >INID codes for industrial designs are similar to, but not identical to, those used for patents and like documents. INID codes for industrial designs are provided separately below.<

INID Codes and Minimum Required for the Identification of Bibliographic Data >for Patent and Like Documents (based on WIPO Standard ST.9)<

(10) Identification of the patent, SPC or patent document

°(11) Number of the patent, SPC or patent document

°(12) Plain language designation of the kind of document

°(13) Kind of document code according to WIPO Standard ST.16

>°(15) Patent correction information<

°°(19) WIPO Standard ST.3 code, or other identification, of the office or organization publishing the document

Notes:

(i) For an SPC, data regarding the basic patent should be coded by using code (68).

(ii) °° Minimum data element for patent documents only.

(iii) With the proviso that when data coded (11) and (13), or (19), (11) and (13), are used together and on a single line, category (10) can be used, if so desired.

(20) Data concerning the application for a patent or SPC

°(21) Number(s) assigned to the application(s), e.g., "Numéro d'enregistrement national," "Aktenzeichen"

°(22) Date(s) of filing the application(s)

°(23) Other date(s), including date of filing complete specification following provisional specification and date of exhibition

(24) Date from which industrial property rights may have effect

(25) Language in which the published application was originally filed

(26) Language in which the application is published

*>Notes:<

>(i)<Attention is drawn to the Appendix >3 of WIPO Standard ST. 9< which contains information on the term of protection and on the date from which industrial property rights referred to under code (24) may have effect.

>(ii) The language under code (25) and (26) should be indicated by using the two-letter language symbol according to International Standard ISO 639:1988.<

(30) Data relating to priority under the Paris Convention

°(31) Number(s) assigned to priority application(s)

°(32) Date(s) of filing of priority application(s)

°(33) WIPO Standard ST.3 code identifying the national industrial property office allotting the priority application number or the organization allotting the regional priority application number; for international applications filed under the PCT, the code "WO" is to be used

(34) For priority filings under regional or international arrangements, the WIPO Standard ST.3 code identifying at least one country party to the Paris Convention for which the regional or international application was made

Notes:

(i) With the proviso that when data coded (31), (32), and (33) are presented together, category (30) can be used, if so desired. If an ST.3 code identifying a country for which a regional or international application was made is published, it should be identified as such using INIDCode (34) and should be presented separately from elements coded (31), (32) and (33) or (30).

(ii) The presentation of priority application numbers should be as recommended in WIPO Standards ST.10/C and in ST.34.

(40) Date(s) of making available to the public

°°(41) Date of making available to the public by viewing, or copying on request, an unexamined patent document, on which no grant has taken place on or before the said date

°°(42) Date of making available to the public by viewing, or copying on request, an examined patent document, on which no grant has taken place on or before the said date

°°(43) Date of making available to the public by printing or similar process of an unexamined patent document, on which no grant has taken place on or before the said date

°°(44) Date of making available to the public by printing or similar process of an examined patent document, on which no grant >or only a provisional grant< has taken place on or before the said date

°°(45) Date of making available to the public by printing or similar process of a patent document on which grant has taken place on or before the said date

(46) Date of making available to the public the claim(s) only of a patent document

°°(47) Date of making available to the public by viewing, or copying on request, a patent document on which grant has taken place on or before the said date

>°(48) Date of issuance of a corrected patent document<

Note:

°°Minimum data element for patent documents only, the minimum data requirement being met by indicating the date of making available to the public the patent document concerned.

(50) Technical information

°(51) International Patent Classification or, in the case of a design patent, as referred to in subparagraph 4(c) of [WIPO Standard ST.9], International Classification for Industrial Designs

(52) Domestic or national classification

**

°(54) Title of the invention

**

(56) List of prior art documents, if separate from descriptive text

(57) Abstract or claim

(58) Field of search

Notes:

(i) The presentation of the classification symbols of the International Classification for Industrial Designs should be made in accordance with paragraph **>4< WIPO Standard ST.10/C.

(ii) With regard to code (56) attention is drawn to WIPO Standard ST.14 in connection with the citation of references on the front page of patent documents and in search reports attached to patent documents.

(60) References to other legally or procedurally related domestic or previously domestic patent documents including unpublished applications therefor

°(61) Number and, if possible, filing date of the earlier application, or number of the earlier publication, or number of earlier granted patent, inventor's certificate, utility model or the like to which the present document is an addition

°(62) Number and, if possible, filing date of the earlier application from which the present patent document has been divided up

°(63) Number and filing date of the earlier application of which the present patent document is a continuation

°(64) Number of the earlier publication which is "reissued"

(65) Number of a previously published patent document concerning the same application

(66) Number and filing date of the earlier application of which the present patent document is a substitute, i.e., a later application filed after the abandonment of an earlier application for the same invention

(67) Number and filing date of a patent application, or number of a granted patent, on which the present utility model application or registration (or a similar industrial property right, such as a utility certificate or utility innovation) is based

(68) For an SPC, number of the basic patent and/or, where appropriate, the publication number of the patent document

Notes:

(i) Priority data should be coded in category (30).

(ii) Code (65) is intended primarily for use by countries in which the national laws require that republication occur at various procedural stages under different publication numbers and these numbers differ from the basic application numbers.

(iii) Category code (60) should be used by countries which were previously part of another entity for identifying bibliographic data elements relating to applications or grants of patents which data had initially been announced by the industrial property office of that entity.

(70) Identification of parties concerned with the patent or SPC

°°(71) Name(s) of applicant(s)

(72) Name(s) of inventor(s) if known to be such

°°(73) Name(s) of grantee(s), holder(s), assignee(s) or owner(s)

(74) Name(s) of attorney(s) or agent(s)

°°(75) Name(s) of inventor(s) who is (are) also applicant(s)

°°(76) Names(s) of inventor(s) who is (are) also applicant(s) and grantee(s)

Notes:

(i) °°For patent documents for which grant has taken place on or before the date of making available to the public, and gazette entries relating thereto, the minimum data requirement is met by indicating the grantee, and for other documents by indication of the applicant.

(ii) (75) and (76) are intended primarily for use by countries in which the national laws require that the inventor and applicant be normally the same. In other cases (71) or (72) or (71), (72) and (73) should generally be used.

(80) Identification of data related to International Conventions other than the Paris Convention and to legislation

(90) with respect to SPC's

(81) Designated State(s) according to the PCT

(83) Information concerning the deposit of microorganisms, e.g., under the Budapest Treaty

(84) Designated Contracting States under regional patent conventions

(85) Date of **>commencement of the national phase pursuant to PCT Article 23(l) or 40(l)<

(86) Filing data of the ** PCT >international< application, i.e., *>international< filing date, >international< application number, and, optionally, the language in which the published >international< application was originally filed

(87) Publication data of the ** PCT >international< application, i.e., >international< publication date, >international< publication number, and, optionally, the language in which the application is published

(88) Date of deferred publication of the search report
**

(91) Date on which an international application filed under the PCT no longer has an effect in one or several designated or elected States due to failure to enter the national or regional phase or the date on which it has been determined that it had failed to enter the national or regional phase

(92) For an SPC, number and date of the first national authorization to place the product on the market as a medicinal product

(93) For an SPC, number, date and, where applicable, country of origin, of the first authorization to place the product on the market as a medicinal product within a regional economic community

(94) Calculated date of expiry of the SPC or the duration of the SPC

(95) Name of the product protected by the basic patent and in respect of which the SPC has been applied for or granted

>(96) Filing date of the regional application, i.e., application filing date, application number, and, optionally, the language in which the published application was originally filed

(97) Publication data of the regional application (or of the regional patent, if already granted), i.e., publication date, publication number, and, optionally, the language in which the application (or, where applicable, the patent) is published<

Notes:

(i) The codes (86)*>,< (87)>, (96), and (97)< are intended to be used:

• on national documents when identifying one or more of the relevant filing data or publication data of a ** PCT >international< application, or >of the regional application (or of the regional patent, if already granted), or<

• on regional documents when identifying one or more of the relevant filing data or publication data of ** >the< PCT >international< application >or of another regional application (or the regional patent, if already granted)<.

(ii) All data in code (86), **>(87), (96), or (97)< should be presented together and preferably on a single line. >The application number or publication number should comprise the three basic elements as shown in the example in paragraph 17 of WIPO Standard ST.10/B, i.e., the two letter code identifying the republishing office, the document number, and the kind of document code.<

(iii) When data to be referenced by INID Codes (86) or (87) refer to two or more regional and/or PCT applications, each set of relevant filing or publication data of each such application should be displayed so as to be clearly distinguishable from other sets of relevant data, e.g., by presenting each set on a single line or by presenting the data of each set grouped together on adjacent lines in a column with a blank line between each set. >When data to be referenced by codes (86), (87), (96), or (97) refer to two or more PCT international applications and/or regional applications (or regional patents, if already granted), each set of relevant filing or publication data of each such application (or granted patent) should be displayed so as to be clearly distinguishable from other sets of relevant data, e.g., by presenting each set on a single line or by presenting the data of each set grouped together on adjacent lines in a column with a blank line between each set.<

(iv) **>The languages under codes (86), (87), (96), and (97) should be indicated by using the two-letter language symbols according to International Standard ISO 639:1988.<

(v) The country of origin in code (93), if mentioned, should be indicated by using the two letter code according to WIP Standard ST.3.

(vi) Attention is drawn to the Appendix which contains information on the term of protection and on the date from which SPCs referred to under code (94) may have effect.

>NUMBERS FOR IDENTIFICATION OF BIBLIOGRAPHIC DATA ON THE FIRST PAGE OF INDUSTRIAL DESIGNS (INID NUMBERS)

INID codes for industrial designs are similar to, but not identical to, those used for patents and like documents. INID codes for industrial designs may be of most interest to design patent examiners.

INID Codes and Minimum Required for the Identification of Bibliographic Data for Industrial Designs (based on WIPO Standard ST.80)

(10) Data concerning the registration/renewal

°(11) Serial number of the registration and/or number of the design document

°°(12) Plain language designation of the kind of published document

°(14) Serial number of the renewal where different from initial registration number

°(15) Date of the registration/Date of the renewal

(17) Expected duration of the registration/renewal

(18) Expected expiration date of the registration/renewal

°°(19) Identification, using the two-letter code according to WIPO Standard ST.3, of the authority publishing or registering the industrial design.

Note:

°°Minimum data element for design documents only

(20) Data concerning the application

°(21) Serial number of the application

°(22) Date of filing of the application

°(23) Name and place of exhibition, and date on which the industrial design was first exhibited there (exhibition priority data)

(24) Date from which the industrial design right has effect

(27) Kind of application or deposit (open/sealed)

(28) Number of industrial designs included in the application

(29) Indication of the form in which the industrial design is filed, e.g., as a reproduction of the industrial design or as a specimen thereof

(30) Data relating to priority under the Paris Convention

°(31) Serial number assigned to the priority application

°(32) Date of filing of the priority application

(33) Two-letter code, according to WIPO Standard ST.3, identifying the authority with which the priority application was made

Notes:

(i) With the proviso that when data coded (31), (32) and (33) are presented together, category code (30) can be used, if so desired.

(ii) For international deposits made under the Hague Agreement, the two-letter code "WO" is to be used.

(40) Date(s) of making information available to the public

(43) Date of publication of the industrial design before examination by printing or similar process, or making it available to the public by any other means

(44) Date of publication of the industrial design after examination, but before registration, by printing or similar process, or making it available to the public by any other means

(45) Date of publication of the registered industrial design by printing or similar process, or making it available to the public by any other means

(46) Date of expiration of deferment

(50) Miscellaneous Information

°(51) International Classification for Industrial Designs (class and subclass of the Locarno Classification)

(52) National classification

(53) Identification of the industrial design(s) comprised in a multiple application or registration which is (are) affected by a particular transaction when not all are so affected

°(54) Designation of article ( ) or product ( ) covered by the industrial design or title of the industrial design

°°(55) Reproduction of the industrial design (e.g., drawing, photograph) and explanations relating to the reproduction

(56) List of prior art document, if separate from descriptive text

(57) Description of characteristic features of the industrial design including indication of colors

(58) Date of recording of any kind of amendment in the Register (e.g., change in ownership, change in name or address, renunciation to an international deposit, termination of protection)

Notes:

(i) Code (52) should be preceded by the two-letter code, according to WIPO Standard ST.3, identifying the country whose national classification is used (the two-letter code should be indicated within parentheses).

(ii) °°Minimum data element for design documents only.

(60) References to other legally related application(s) and registration(s)

(62) Serial number(s) and, if available, filing date(s) of application(s), registration(s) or document(s) related by division

(66) Serial number(s) of the application, or the registration, of the design(s) which is (are) a variant(s) of the present one

Note:

Category code (60) should be used by countries which were previously part of another entity for identifying bibliographic data elements relating to applications or registrations of industrial designs, which data had initially been announced by the industrial property office of that entity.

(70) Identification of parties concerned with the application or registration

°°(71) Name(s) and address(es) of the applicant(s)

(72) Name(s) of the creator(s) if known to be such

°°(73) Name(s) and address(es) of the owner(s)

(74) Name(s) and address(es) of the representative(s)

(78) Name(s) and address(es) of the new owner(s) in case of change in ownership

Note:

°°If registration has taken place on or before the date of making the industrial design available to the public, the minimum data requirement is met by indicating the owner(s); in other cases, by indicating the applicant(s).

(80) Identification of certain data related to the international deposit of industrial designs under the Hague Agreement Concerning the International Deposit of Industrial Designs and data related to other international conventions.

Designated State(s)/State(s) concerned:

(81) Designated State(s) according to the 1960 Act

(82) State(s) concerned according to the 1934 Act

(84) Designated Contracting State(s) under regional convention.

Information regarding the owner(s):

(86) Nationality of the owner(s)

(87) Residence or headquarters of the owner(s)

(88) State in which the owner(s) has (have) a real and effective industrial or commercial establishment

Note:

The data to be referenced by INID codes (81) to (88) should be indicated by using the two-letter code according to WIPO Standard ST.3.<

901.05(c) Obtaining Copies [R-1]

Until October 1, 1995, the Patent and Trademark Office received copies of the published specifications of patents and patent applications from nearly all the countries which issue them in printed form. The Patent and Trademark Office now receives all foreign patents from these countries in the form of CD-ROM disks >and other electronic media<. The foreign patents so obtained are available to examiners >from the PTO's automated search systems and< from the foreign patents branch of the Scientific and Technical Information Center (STIC) through the Foreign Patent Access System (FPAS). The U.S. has agreements with these countries to exchange patent documentation.

Until October 1995, it was the practice in the Patent and Trademark Office to classify and place only a single patent family member for each invention in the examiner search files. In addition, all non-English language patent documents placed in the examiner files were accompanied, to the extent possible, by an English language abstract. For countries where the specification is printed twice, once during the application stage and again after the patent has been granted, only the first printing was in general placed in the search files, since the second printing ordinarily does not vary from the first as to disclosure.

Copies of various specifications not included in the search files, whether non-English-language patent documents or documents not printed or available for exchange,

may come to the examiner's attention. For example, they may be cited in a motion to dissolve an interference, be cited by applicants, or turn up in an online search. Upon request, the Scientific and Technical Information Center will obtain a copy from its extensive collection, or if necessary, from the patent office of the particular country. In the case of unprinted patent documents, the Scientific and Technical Information Center will request that the date of granting and the date the specification was made available to the public be indicated on the copies provided by the country of origin.

Examiners can order copies of any foreign patent documents from the Foreign Patent Branch. If examiners so choose, they can make copies themselves. The most current patent documents are accessible through the >PTO's automated search systems and through the< Foreign Patent Access System (FPAS), a CD-ROM-based local area network that allows public and PTO users to look up, view, and print foreign documents. Older documents can be found on microfilm in the Microfilm Room or in the paper collection in the stacks. Examiners may place a photocopy or translation in the shoes of the class which he or she examines if the patents are particularly relevant. See MPEP § 903.03.

901.05(d) Translation

Examiners may consult the translators in the Translation Branch of the Scientific and Technical Information Center (STIC) for oral assistance in translating foreign patents or literature that are possible references for an application being examined. Examiners may also request written translations of pertinent portions of references being considered for citation or already cited in applications. See MPEP § 901.06(a), STIC Services - Translations, and MPEP § 903.03, Availability of Foreign Patents.

Examiners can request written translations at any point in the examination process, at the discretion of the individual examiner, but are encouraged to use oral assistance and/or language reference resources as much as possible in the early phases of examination.

Equivalent versions of foreign specifications, that is, members of the same patent family, are often available in English or other languages known to the examiner. In addition, copies of previously translated documents are stored in the Translation Branch. Before any translation request is processed, the staff of the Translation Branch checks for equivalents or previous translations. The staff of STIC's Foreign Patents Branch or the Translation Branch can assist examiners in locating equivalents or abstracts. See MPEP § 901.06(a), STIC Services - Foreign Patent Services.

901.06 Nonpatent Publications [R-1]

All printed publications may be used as references, the date to be cited being the publication date. ** See MPEP § 2128 - § 2128.02.

There are some publications kept or circulated in every group and each examiner should ascertain which are available in his or her group and whether or not any of them is likely to bear on any assigned class. >See MPEP § 707.05(e) for information on how to cite such publica tions.<

**

901.06(a) Scientific and Technical Information Center (STIC) [R-1]

The Scientific and Technical Information Center, formerly known as the Scientific Library, is located at CP3/4, Room 2C01. The STIC maintains three additional satellite information centers: the Biotechnology/Chemical Library in CM1, Room 1C19, the Electronic Information Center in CPK2, Room 4B40, and the Lutrelle F. Parker, Sr. Memorial Law Library in **>CP 3/4, Room 3D62<.

35 U.S.C. 8. Library.

The Commissioner shall maintain a library of scientific and other works and periodicals, both foreign and domestic, in the Patent and Trademark Office to aid the officers in the discharge of their duties.

Technical literature, foreign patent documents, and reference and online search services available in the Scientific and Technical Information Center (STIC) are all important resources for the patent examiner to utilize. These resources provide material which must be known or searched to determine whether claims of applications are directly anticipated and therefore unpatentable under the provisions of 35 U.S.C. 102. STIC handbooks, textbooks, periodicals, reports, and other materials assist examiners in deciding the question of patentable invention in cases in which the primary search indicates that there is some novelty as compared to any single reference in the art (35 U.S.C. 103). These resources enable the examiner to determine whether the features novel in the particular combination searched would be obvious to a person skilled in the art from the general state of knowledge as reflected in the technical literature.

I. STIC COLLECTIONS

A. Books

The Scientific and Technical Information Center carefully selects and purchases primarily English-language publications in all fields of applied technology. There is a modest collection in French and German, mostly in the field of chemistry. Collections of books and trade catalogs are also purchased by STIC for permanent location in

specific examining groups. For instance, the Design Patent Group has a great many manufacturer's catalogs. Books may be ordered by examiners for location in the groups by addressing a memorandum to the Manager of STIC via the Group Director. The STIC is also developing a collection of materials in electronic formats (i.e., CD-ROM) in order to provide more timely delivery of requested references. The locations of all acquired publications are recorded in STIC so that users will know where to look for a particular publication, be it in the Information Center or in an examining group. All publications, regardless of location, are processed in STIC's Technical Services Branch.

Reference works including encyclopedias, dictionaries, handbooks, and abstracting and indexing services are also available in the Information Center to assist examiners in finding information pertinent to the subject matter of a patent application. STIC does not circulate reference materials. Books in the reference collection are so labeled.

The staff of the Scientific and Technical Information Center makes every effort to obtain current, useful publications. However, all suggestions for additional purchases that come in from the Examining Corps are welcomed.

B. Periodicals

Approximately 1,300 technical periodical titles are received in STIC, including publications of many important scientific and technical societies. Incorporated into the collection are a number of titles pertinent to the examination of design patent applications and titles of interest to nonexamining areas of the PTO. Many of the periodical holdings in STIC are in microfilm or CD-ROM formats.

Requests for the purchase of new subscription titles are accepted at any time throughout the year, with subsequent purchase dependent on demonstrated need and availability of funds. STIC staff is alert to new periodical titles and often acquires sample copies which are sent to appropriate examining groups for review and recommendation.

Current issues of periodicals are arranged alphabetically and located on shelves near the reference collection. Bound periodicals are interfiled with the book collection by their library classification numbers. Periodicals on microfilm and CD-ROM are housed in cabinets. A list of periodicals is available in STIC.

C. Foreign Patent Documents

The United States Patent and Trademark Office receives foreign patent documents through exchange agreements with almost all countries that print >or otherwise publish< their patent documents. This makes STIC's collection of foreign patent documents the most comprehensive in the United States.

The collection is located in the Foreign Documents Division. The most current part of the collection is made available to examiners and the public through the >PTO's automated search system and through the< Foreign Patent Access System (FPAS), a CD-ROM-based local area network in STIC that allows users to look up, view and print documents. The documents from the major industrial countries for the period 1969 to 1990 are found on 16 mm microfilm in the Microfilm Room. The earliest patent documents, back as far as 1617, and documents from smaller countries are found in the paper collection in the stacks or at remote sites.

Most foreign countries issue official patent and trademark journals corresponding to the *Official Gazette of the United States Patent and Trademark Office*. These journals are shelved under country name. Most countries issue name indexes; some also issue classified indexes. Indexes are shelved with the journals. Much of the index information is also available on FPAS.

The official journals of a few countries include abstracts of the disclosures of the patents announced or applications published.

In addition, the Foreign Patents Branch acquires English language abstracts of foreign patent documents for selected countries published by Derwent. Holdings are in 16mm format from 1972 to date. Earlier holdings are in paper. The Branch also has unexamined Japanese patent applications abstracted by the Japanese Patent Office, the Patent Abstracts of Japan, from 1977 to date in paper.

Many countries, e.g., China, are providing abstracts of their patent documents on CD-ROM>and other electronic media<. These abstracts will also be accessible through FPAS.

Many technical abstracting publications include patent literature; the most notable of these is Chemical Abstracts. The annual indexes of Chemical Abstracts include, in addition to the subject matter index, an author index in which the patentee's and inventor's names appear, and patent number lists; corresponding patents of different countries are identified. Specifications of unprinted, or as yet unprinted, patents may be included in some of these abstracting services.

D. Special Collections

Biotechnology/Chemical

With the formulation of a new biotechnology examining group in 1988 came a mandate to improve STIC resources in this area. The former Chemical Library, located with the biotechnology and chemical examining groups, was replaced by the Biotech/Chemical Library. The library staff has been developing a collection to reflect the needs of the examiners in the biotechnology and chemical arts.

Besides the usual journals and books in print, the library has been collecting backfiles of journals in microfilm and in CD-ROM format.

Government Publications

In 1986, the Scientific and Technical Information Center was designated a Federal Depository Library which means that it now receives a selected number of documents published by various U.S. government agencies. Many of these publications are on microfiche or CD-ROM. The primary search aids are the *Monthly Catalog of U.S. Government Publications* and the *List of Classes*. All the documents received in the STIC have been cataloged into the STIC's online catalog system and interfiled with the main collection.

Project XL Materials

This collection of books, games, puzzles, and manipulatives relate to the teaching of thinking skills whether they are classified as creative thinking, critical thinking, decision making, innovation and invention, or problem-solving skills. The collection is primarily aimed at, but not limited to, elementary education and is a result of a PTO initiative in the mid-1980's to emphasize the importance of encouraging creativity in America's youth. Access to the collection is through STIC's online catalog. All Project XL materials are available for loan.

II. HOW TO LOCATE MATERIALS IN STIC

The STIC Online Catalog

The primary vehicle for locating books and other materials is the STIC online catalog. The online catalog contains a record of all materials held by the STIC collections, including location, call number, and availability. Workstations for accessing the online catalog are located in the STIC branches.

Materials acquired by the STIC are classified according to the Library of Congress classification system, which employs a combination of letters and numbers. Books and bound periodicals are intershelved in the stacks according to this classification system. New unbound periodical issues are shelved in a separate area of each branch, in alphabetical order by title.

III. LOAN POLICY

All STIC materials except noncirculating items may be charged out at the Circulation Desk. (Noncirculating material includes reference publications, foreign patent documents, and microfilm.) Books circulate for a period of 4 weeks and can be renewed on request. Extended loan periods are available on request. Examiners may use the Department of Commerce Libraries as well as other Federal Government libraries in the area. STIC's staff can answer questions regarding the accessibility and lending practices of other libraries. If books are needed from another library for official use, the request should go through the Scientific and Technical Information Center by means of an interlibrary loan request. (See "Interlibrary Loans" under STIC SERVICES.)

IV. STIC SERVICES

A. Reference Services

The staff of the Scientific Reference Branch, the Electronic Information Center, the Lutrelle F. Parker, Sr. Memorial Law Library, and the Biotechnology/Chemical Information Branch assist examiners in the use of the STIC. Upon request, they provide guidance on finding information in the collection. If any problems are encountered in locating materials, using the catalogs or indexing services, or finding answers to informational needs, please check with the staff. They are ready and willing to assist. Queries may be made in person or by telephone.

B. Online Searching

Online computer data base searching is provided by the Scientific Reference Branch, the Electronic Information Center, the Lutrelle F. Parker, Sr. Law Library, and the Biotechnology/Chemical Information Branch. All branches have access via modems or the in-house system to a number of vendors' commercial data base search systems. These vendors' databases extensively cover the field of knowledge and make it possible for online searchers to retrieve bibliographic information with abstracts, chemical structures, DNA sequences, and sometimes the full text of the articles, depending on the database. This online search service provides a valuable screen of the nonpatent literature for the examiner intending to make a search of the secondary sources of his/her area of interest.

Vendors accessed by STIC staff include DIALOG, ORBIT, DOE/RECON, Chemical Abstracts Services (STN), INPADOC, DataTimes, DATASTAR, DTIC/DROLS, IntelliGenetics, and Mead Data Central. When they are identified as meeting the needs and requirements of the Office, new data base vendors are added. A list of the data bases offered by each vendor is available in the vendors' manuals located in each STIC branch. Examiners may request a computer search by submitting a request form to the appropriate branch. Searches are usually completed and ready for pickup within 1-2 days.

Examiners are allowed to conduct searches of online commercial databases independently of STIC staff. Training is provided through the Patent Academy and individual

assistance is available from the STIC staff, especially for searching chemical structures and DNA sequences.

Online searching of nucleic and amino acid sequences is conducted by the staff of the Biotechnology/Chemical Information Branch through the use of an in-house computer network developed for this purpose. Examiners who wish to access the Automated Biotechnology Sequence Search (ABSS) system located in Group 1600 must apply through their SPE to the Biotechnology/Chemical System Branch for an ID and password. On an as needed basis, introductory classes are conducted by STIC staff to assist examiners in understanding the sequence search results.

C. Foreign Patent Services

The staff of the Foreign Patents Branch of the Foreign Document Division is available to assist with any problem or informational need regarding foreign patent searching or foreign patent documents.

Online search services on Orbit/Questel and Dialog (on the basis of Derwent databases) or INPADOC are performed for patent examiners by the Foreign Patents Branch. The services provided include: identification of English-language or preferred-language equivalents; determination of priority dates and publication dates; searches by inventor name or abstract number; other patent family and bibliographic searches; and foreign classification information.

Examiners who choose to perform their own patent searches after receiving appropriate training through the Patent Academy can consult foreign patent experts for difficult searches. In using the Derwent versus the INPADOC databases, examiners should be aware that the systems overlap in coverage and have other similarities, but also differ in format, kinds of searches that can be performed, and patent document and country coverage. Derwent maintains superior coverage of chemical patent documents, while INPADOC includes earlier documents and more countries and has more extensive coverage of mechanical and electrical patent documents than Derwent databases.

The staff of the Foreign Patents Branch can supplement the online searching effort with manual searches of foreign patent journals, including *Official Gazette(s)*, patent concordances, and/or indexes. The staff also provides training in the use of the Foreign Patents Access System (FPAS) and information of use of the foreign patent collections.

SPECIAL NOTE: Members of the public can order copies of foreign patent documents. Procedures are outlined in a brochure entitled, "Foreign Patent Document Copy Orders" available in STIC.

D. Translations

Examiners may consult the translators in the Trans lations Branch of STIC's Foreign Document Division for oral assistance in translating foreign language patents and other literature sources that are possible ref erences for applications being examined. Oral translations are performed for the major European languages and for Japanese. Examiners may also request written translations of pertinent portions of references being considered for citation or already cited in applications. Full translations are also made upon request. Written translations can be made from virtually all foreign languages into English.

There is a computerized database located in the Translations Branch listing all translations which have been made by the Branch, and a few others gathered from miscellaneous sources. This database lists over 30,000 translations of foreign patents and articles, all of which are located in the Translations Branch. Patent translations are indexed by country and patent number; articles are indexed by language and author or title. Any copies of translations coming to examiners from outside the Office should be furnished to the Translations Branch so that it may make copies for its files.

E. Interlibrary Loans

When needed for official business purposes, STIC will borrow materials not available in-house from other libraries. Requests are initially submitted to the Reference Fulfillment Branch. Those that can be filled by libraries in the metropolitan area are handled by staff who go out on a daily basis to retrieve requested materials. Those that must be filled by libraries elsewhere in the country are requested electronically via numerous networks and commercial vendors. Law books cannot be borrowed by STIC for use by examiners in connection with law courses.

When a book or periodical is borrowed from another library, and cited in an Office action, a photocopy of the portion cited should be placed in an appropriate class and subclass. This class and subclass should be cited in the Office action.

STIC also loans its materials to other libraries around the country so that occasionally an examiner may find that the item he/she desires is unavailable. Materials which are out on interlibrary loan may be recalled for the examiner if required for immediate use.

F. On-Site Photocopying

For the convenience of the Examining Corps, photocopy machines are available for employee use in STIC. These are to be used for photocopying STIC materials which do not circulate, or for materials which examiners do not wish to checkout.

G. Obtaining Publication Dates

Requests pertaining to the earliest date of publication or first distribution to the public of publications should be made to the Scientific Reference Branch or the Biotechnology/Chemical Information Branch. For U.S. publications, the staff can obtain the day and month of publication claimed by the copyright owner. The same information can be obtained for foreign publications through correspondence although it will take a little longer.

H. Tours

Special tours of the STIC can be arranged for examiners or for outside groups. Contact the Scientific Reference Branch.

I. STIC Brochure

A brochure detailing location, hours, holdings, telephone numbers, and services of the Scientific and Technical Information Center is available from STIC.

901.06(b) Borrowed Publications

See MPEP § 901.06(a), STIC Services - Interlibrary Loans.

901.06(c) Alien Property Custodian Publications

Applications vested in the Alien Property Custodian during World War II were published in 1943 even though they had not become patents.

Care must be taken not to refer to these publications as patents; they should be designated as A.P.C. published applications.

An A.P.C. published application may be used by the examiner as a basis for rejection only as a printed publication effective from the date of publication, which is printed on each copy.

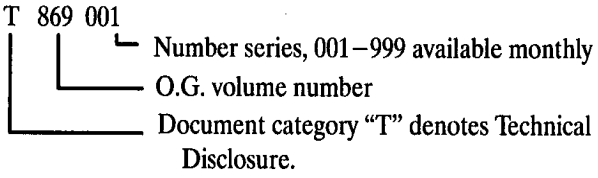
The manner of citing one of these publications is as follows: A.P.C. Application of ....., Ser. No. ....., Published .....

The Public Search Room contains a complete set of A.P.C. published applications arranged numerically in bound volumes.

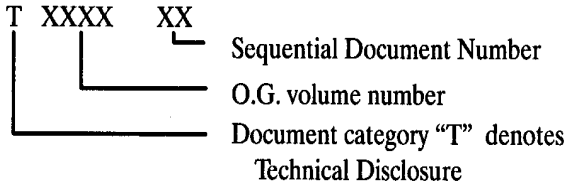
901.06(d) Abstracts, Abbreviatures, and Defensive Publications

Abstracts and Abbreviatures are Patent and Trademark Office publications of abandoned applications. Defensive Publications (the O.G. defensive publication and search copy) are Patent and Trademark Office publications of a provisionally abandoned application wherein the applicant retains his rights to an interference for a limited time period of 5 years from the earliest effective U.S. filing date. On May 8, 1985, the Patent and Trademark Office stopped accepting Defensive Publication requests and began accepting applications for Statutory Invention Registrations (SIRs), although there was an overlap period where both Defensive Publications and Statutory Invention Registrations were processed; see MPEP § 711.06 and § 711.06(a). Statutory Invention Registrations have now replaced the Defensive Publication program. Statutory Invention Registrations are numbered with document category "H," beginning with "H1." Defensive Publications and Statutory Invention Registrations are included in subclass lists and subscription orders.

Distinct numbers are assigned to all Defensive Publications published December 16, 1969 through October 1980.



For Defensive Publications published on and after November 4, 1980, a different numbering system is used.



A conversion table from the application serial number to the distinct number for all Defensive Publications published before December 16, 1969 appears at 869 O.G. 687. The distinct numbers are used for all official reference and document copy requirements.

901.07 Arrangement of Art in Examining Groups

In the examining groups, the U.S. patents are arranged in shoes bearing appropriate labels, each showing the class, subclass, and usually the lowest and highest numbered patents put in the respective shoe. The patents are arranged in numerical order. White labels denote U.S. patents, pink labels denote foreign patents filed according to U.S. classifications, blue labels denote non-patent literature, and yellow labels denote foreign patents filed according to IPC classifications.

One copy of a U.S. patent is designated as "original" and is classified in a specific subclass, based on the controlling claim. Other copies may be placed in other subclasses as cross-references, based on additional claimed inventions and/or pertinent unclaimed disclosure. Cross-reference copies are filed in numerical order along with the copies of original patents to simplify the tasks of searching and filing.

Copies of foreign patents are usually kept in shoes separate from and immediately following the U.S. patents.

All foreign patent documents (patents and published applications) involved in a reclassification project issued between January 1, 1974 and October 1, 1995 are filed by a computer-generated sequence number within each subclass. Each such foreign patent document has the year of publication indicated in the upper right-hand corner of the front page.

Nonpatent publications or photocopies thereof containing disclosures for particular subclasses, if numerous, should be filed in shoes following the foreign patents; otherwise, they should be filed at the bottom of the last shoe of foreign patents.

In most reclassification projects undertaken after October 1, 1995, foreign patents associated with the reclassified art have not been reclassified into the new classification schedule created for the U.S. patents.

Foreign patents in this category are available for searching in a "foreign patent art collection," which appears at the end of the class which includes the newly created classification schedule. The "foreign patent art collection" is identified by reference to the subclass portion of the main schedule to which it pertains. Its subclasses are characterized by the prefix "for" followed immediately by a three digit number.

The "foreign patent art collection" maintains the foreign patents classified in the former classification schedule, i.e., the schedule which was the subject of the reclassification project. At the end of each subclass in the "foreign patent art collection", there appears in parentheses the subclass number under which the foreign patents had been classified prior to the reclassification project.

Subclass definitions for the "foreign patent art collection," exactly corresponding to those of said former classification schedule, are maintained.

901.08 Borrowing References

The search files in each examining group should at all times be complete. Where they are incomplete, the examiners using such files and relying on their completeness may miss valuable references. References removed from the files whether for use in the group or otherwise should, of course, be promptly returned.

901.09 Missing Copies — Replacement

To expedite the handling of requests for replacement copies and thereby ensure the quickest response, the following routing procedures should be adhered to:

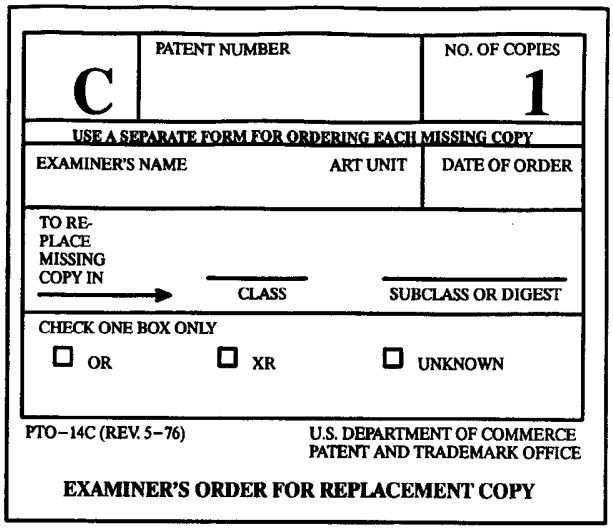
(A) Use designated collection drops within each group for copy orders.

(B) Clerical personnel from the Office of Classification Support (OCS) will visit designated collection drops at least twice each week to pick up PTO-14C orders.

Alternatively, the orders may be mailed or otherwise delivered to the Search File Improvement Division, OCS, currently located in Crystal Mall, Building 2, Room 967.

The attorneys' drop slot at the Public Service Window should not be used nor should the forms be mailed to Copy Fulfillment Services as consequent rerouting to Office of Classification Support for processing will result in unnecessary delay.

All replacement copies ordered through the PTO-14C program are returned to the requesting examiner as notification of order fulfillment. The examiner should then place the copies in the designated file drop location for filing by the contractor in the search file.



902 Search Tools and Classification Information

902.01 Manual of Classification

The Manual of Classification is the key to the U.S. Patent Classification System. It is published in full as the Basic Manual every 2 years. Basic Manuals reflect current classifications as of December of even-numbered years. Revisions to the Basic Manual occur at 6-month intervals.

Pages of the Manual revisions are inserted as replacements to update the previous versions.

There are over 400 classes in the U.S. Patent Classification System, each having a title descriptive of its subject matter and each being identified by a class number. Each class is subdivided into a number of subclasses. Each subclass bears a descriptive title and is identified by a subclass number. The subclass number may be an integral number or may contain a decimal portion and/or alpha characters. A complete identification of a subclass requires both the class and subclass number and any alpha or decimal designations; e.g., 417/161.1A identifies Class 417, Subclass 161.1A.

The Manual of Classification contains ordered arrangements of the class and subclass titles, referred to as class schedules. These titles are necessarily brief, although they are intended to be as suggestive as possible of subject matter included. Therefore, it is best not to depend exclusively upon titles to delineate the subject matter encompassed by a class or subclass. Reference to respective definitions and notes is essential. If a search is to be expeditious, accurate, and complete, the Manual of Classification should be used only as a key to the class or subclass definition and appended notes.

The Manual of Classification has the following parts:

(A) A list of classes revised in the most recent revision to the Manual and the reason for the revision to each class.

(B) A list of the contents of the Manual showing the current page date for each class and the year in which the class was originally established.

(C) Overview of the classification system.

(D) A hierarchical arrangement of class titles organized into three main groups by related subject matter. It should be noted that this hierarchy is to be used to determine document placement only as a last resort, (i.e., when none of the other classification criteria, such as comprehensiveness, etc., allow placement. This part also includes an exact hierarchical listing of the synthetic resin and chemical compound classes.

(E) A list, in numerical order, of each Examining Group and Art Unit indicating Examining Group personnel, their location, and phone numbers.

(F) A list, in numerical order, by art unit indicating the classification(s) assigned to each.

(G) A list of classifications in numerical order by class number giving the class title, the art unit to which the art is assigned, and the examiner search room in which the art can be found.

(H) A list of classes in alphabetical order by class title with associated class numbers.

(I) The class schedule for PLANTS.

(J) Class schedules for utility patent classes arranged in numerical sequence by class number.

(K) The class schedules for the Design classes.

The Manual of Classification is available to PTO personnel online from the “Patent Examiner's Toolkit” toolbar.

902.01(a) Index to the U.S. Patent Classification System

The Index to the U.S. Patent Classification System is an alphabetic listing of technical and common terms referring to specific classes and subclasses of the U.S. Patent Classification System. It is intended as an initial entry into the system and should not be considered exhaustive. All appropriate class schedules should be scanned for specifically related subclasses and the definitions and associated notes of the pertinent classifications must also be reviewed, even when the citation found in the Index appears to be restricted to a specific subject matter area.

The Index is published every year reflecting classification as of December of the year. Suggestions or changes to the Index are encouraged and should be directed to the Classification Groups.

The Index is available to PTO personnel online from the “Patent Examiner's Toolkit” toolbar.

902.02 Class and Subclass Definitions

All of the utility classes (i.e., classes devoted to technology) and the plant class have definitions. The design classes do not have definitions.

Definitions state the subject matter of the classes and subclasses much more explicitly than it is possible to state in short class and subclass titles. A study of the definitions is essential to determine the proper classification of subject matter within the U.S. Patent Classification System.

A complete set of definitions of all classes and subclasses in the U.S. Classification System is available to PTO personnel online from the “Patent Examiner's Tool-Kit” toolbar. These definitions are revised every June and every December.

Definitions are available as full sets on microfiche. The microfiche is revised every 6 months, with full (basic) sets being issued in December of each even numbered year. Each examining group has at least one set of definitions on microfiche and a microfiche reader. There are several sets of microfiche and a paper set of definitions in the Public Search Room.

Definitions of individual classes in paper form or on floppy disc are available from the Office of Classification Support. It is noted that classification orders frequently affect existing definitions. Personal sets of definitions used

by examiners should be periodically revised to reflect these changes.

902.02(a) Definition Notes

Many of the definitions have accompanying notes. These notes are of two types: notes that supplement definitions by explaining terms or giving examples, and notes referring to related disclosures located in other classes or subclasses.

These latter notes are termed search notes and are helpful in explaining the limits of a class or subclass. They generally state the relationship to, and difference from, other identified subject matter collections. It is intended that each note should guide a user to the extent necessary to reach a decision either to include or exclude an area containing relevant subject matter.

Search notes are not exhaustive and should be regarded as suggestive of additional fields of search, but not as limiting the search. Additionally, since a search note which applies to a particular subclass is rarely repeated for subclasses indented thereunder, it is advisable to review the search notes of all parent subclasses.

902.02(b) Search Cards

Many older subclasses have "search cards" containing the subclass definition in the first shoe of each defined subclass in both the examining group and the Public Search Room.

902.03 Classification Information

Current classification information for U.S. patents is available from the sources indicated below.

902.03(a) Master Classification File (MCF) on Microfilm

A patent number index of domestic patents giving their current original and cross-reference classification is available on microfilm in the Public Search Room. Patent numbers are arranged in both numeric and classified array. The microfilm is updated semiannually, in June and December.

902.03(b) Patent Index

Original and cross-reference classification information for individual patents can be obtained by use of computer terminals located in the Public Search Room or by calling the Patent Index telephone service (see MPEP § 1730). This data is updated bimonthly with new issues and reclassifications.

902.03(c) Subclass Listings

Computer printout listings of patents contained in subclasses may be obtained by request from the Office of Classification Support. Listings can be inclusive or limited by use of a cutoff date or patent number. This data is updated bimonthly with new issues and reclassifications.

902.03(d) Patent Information and Search Tools: the Cassis CD-ROM Series

Access to a great deal of patent information as well as various search tools is available in the Cassis CD-ROM series. These include:

Patents CLASS: Provides a list of all classifications of a patent number and a list of all patent numbers in a classification, showing ORs and XRs.

Patents BIB: Bibliographic information for utility patents issued since 1969 (other patents, since 1977), including issue date, title, current classifications, assignee at time of issue, status (withdrawn, reexamined, extended term, certificate of correction issued or expired due to nonpayment of maintenance fee), and abstracts for the most recent 2 1/2 - 3 years depending on disc space.

Patents ASSIGN: Shows assignment of patent rights recorded at the USPTO from August 1980 to present.

Patents ASSIST: This disc provides a variety of files: Manual of Classification; Manual of Patent Examining Procedure; Index to the U.S. Patent Classification System; Attorneys and Agents Registered to Practice before the U.S. Patent and Trademark Office; Classification Orders Index showing Classes/subclasses abolished or established since 1976; IPC-USPC Concordance; Classification, Art Unit, Supervisory Patent Examiner and Telephone Number (CAST) showing which Art Units examine which art according to classification; Classification Definitions; and Patentee-Assignee File showing assignment of patent rights at time of issue since 1969 for utility patents (other patents, since 1977), and inventor names since 1975.

The above CD-ROMs are text-searchable. Search results can be viewed on-screen, printed, or down-loaded to diskette. Patents CLASS and Patents BIB are updated with new information every two months; Patents ASSIGN and Patents ASSIST are updated every three months.

In addition to the text-searchable discs, USAPat offers full facsimile images on CD-ROM of U.S. patents issued weekly. The backfile includes patents issued since January 1994. Intended as a document delivery system, USAPat allows retrieval of patents by document number only.

Excellent printed copies can be obtained using a laser printer.

902.03(e) Automated Patent System (APS)

APS is the PTO online system which allows access to the full text of U.S. patents granted since 1970. In addition, APS provides access to current classification information for all U.S. patents.

902.04 Classification Orders

Classification Orders issue once a month, each Order detailing the changes resulting from a classification project effected that month.

Since classification projects issue monthly throughout the year, orders are used to bridge the gap between the time a project issues and the time the other search tools (Manual, Index, Definitions) are updated.

The order includes the following:

(A) Either the new class schedules or changes to existing class schedules necessitated by the project;

(B) The changes to the definitions necessary to support the changes in (A), above;

(C) Source and disposition lists showing how the old art has been distributed into the newly established subclasses; and

(D) A revised concordance showing the relationship between the newly established subclasses and their International Patent Classification (IPC) counterparts.

Classification Orders are distributed to classifiers and examiners associated with the reclassification project of the order, to Patent Depository Libraries, and to the Public Search Room. Copies can be obtained through the Group Post Classifier or from the Office of Classification Support.

902.04(a) Reclassification Alert Report

The Reclassification Alert Report is distributed to examiners, classifiers, and technicians each quarter. It lists numerically the classes and subclasses affected by classification orders which issued during the quarter, indicating if the classifications were established, abolished, or had definition changes.

Copies of definitions of newly established subclasses, definition changes to existing subclasses, or entire classification orders are available from the Office of Classification Support.

903 Classification

903.01 Statutory Authority

The statutory authority for establishing and maintaining a classification system is given in the following statute, which states:

35 U.S.C. 9. Classification of patents.

The Commissioner may revise and maintain the classification by subject matter of United States letters patent, and such other patents and printed publications as may be necessary or practicable, for the purpose of determining with readiness and accuracy the novelty of inventions for which applications for patent are filed.

903.02 Basis and Principles of Classification

The basis of classification used in the U.S. Patent and Trademark Office, the principles followed, and the reasons why such principles were adopted are set forth in the booklet *Development and Use of Patent Classification Systems,* which is available in each art unit. The booklet is also available from the Editorial Division of the Office of Classification Support. Since classification is the basic tool of every examiner, this booklet, particularly as it relates to the present classification system, should be carefully studied. Also available is the "Examiner Handbook to the U.S. Patent Classification System" which can be accessed on the PTO Home Page.

903.02(a) New and Revised Classes

The establishment of new classes or subclasses and the revision of old classes are done under the supervision of a patent classifier.

The classifier performing the reclassification is provided with a set of patent copies of the present classification. With these copies, by study and successive groupings, he or she develops an arrangement of the patents which is satisfactory for searching. Usually expert examiner opinion is sought.

The definition of the new class or revised class is written or modified, the lines between the class and other classes are drawn up, and the subclass definitions are established.

The Index to the U.S. Classification System and the Classification Data System files are also updated.

Notification of the new class or subclass is published in a Classification Order, and Supplementary sheets necessary to correct the looseleaf Manual of Classification are published.

Definitions of all revised classes and subclasses are included in Classification Orders.

903.02(b) Scope of a Class

In using any classification system, it is necessary to analyze the organization of the class or classes to be included in the search.

The initial analysis should determine which one or ones of the several types of subject matter (manufacture, art, apparatus, or stock material) are contained in the class being considered.

Further, relative to each type of subject matter, it is necessary to consider each of the various combinations and subcombinations set out below:

Basic Subject Matter Combined with Feature for Some Additional Purpose. The added purpose is in excess of the scope of the subject matter for the class, as defined in the class definition; e.g., adding a sifter to a stone crusher which gives the added function of separating the crushed stone.

Basic Subject Matter Combined with Perfecting Feature. Features may be added to the basic subject matter which do not change the character thereof, but do perfect it for its intended purpose; e.g., an overload release means tends to perfect a stonecrusher by providing means to stop it on overload and thus prevent ruining the machine. However, this perfecting combined feature adds nothing to the basic character of the machine.

Basic Subject Matter. The combination of features necessary and essential to the fundamental character of the subject matter treated; e.g., a stonecrusher requires a minimum number of features as essential before it can function as such.

Subcombinations Specialized to Basic Subject Matter. Each type of basic subject matter may have subcombinations specialized to use therewith; e.g., the crushing element of a stonecrusher.

Subcombinations of General Utility. Each type of basic subject matter may have subcombinations which have utility with other and different types of subject matter; e.g., the machine elements of a stonecrusher. Subcombinations of this character usually are provided for in some general class so that the examiner should determine in each instance where they are classified.

903.02(c) Establishing Subclasses and Cross-Reference Art Collections

When an examiner finds it desirable to create a new subclass or cross-reference art collection, the appropriate post classifier must be consulted before work is begun. The post classifier will assist the examiner in establishing any new subclass or cross-reference art collection by providing appropriate instructions on how to mark patents to be transferred from an existing subclass to a new subclass, obtaining any additional cross-reference copies that might be needed, determining the title of the newly established subclass or cross-reference art collection, and assigning the numeric designation to be placed on the new subclass or cross-reference art collection.

All newly created subclasses will be made official so as to be a part of the defined classification system and will thus appear in both the examiners' and Public Search Room files. The intent is to accomplish this with a minimum amount of disruption to the examiners. Any examiner having the Group Director's approval to create new subclasses should contact the group post classifier for his or her group. As workload permits, the classifier will be assigned to cooperate with the examiner on the arrangement of the subclasses he or she wishes to establish and the definitions thereof. Then, the examiner will physically establish the subclasses or provide a marked-up computer printout of the patents in the subclass or subclasses being affected. On a time available basis, the examiner may be aided in this task by classification personnel.

At this point, the Office of Classification Support will withdraw the corresponding Search Room copies, and using data gathered from the examiners' newly created subclasses or computer printout, conduct the final processing of the Search Room patents. After this is complete (i.e., the Search Room copies are arranged by the new classification), the examiners' copies will be withdrawn for a short period to go through final clerical processing into new subclasses and then returned to the examiners.

The above procedures will not only be beneficial to the Search Room file but will also provide the examiners with defined subclasses.

903.03 Availability of Foreign Patents [R-1]

All foreign patent documents received in the Office before October 1, 1995 were placed in the shoes in the examining groups, according to either the United States Patent Classification System or, in relatively few instances, an IPC classification. Foreign patents received by the Office after October 1, 1995 are available >on the PTO's automated search systems and< on CD-ROM from the Foreign Patents Division of the Scientific and Technical Information Center (STIC) through the Foreign Patent Access System (FPAS).

If the examiner desires to update the classification of a foreign patent by changing, canceling, or adding copies, he or she should forward the patent to his or her post classifier with a request for the desired transaction attached.

The Scientific and Technical Information Center retains copies of foreign patents (see MPEP § 901.06(a)) so that foreign patents, known by country, number, and publication

date, can be inspected in the Scientific and Technical Information Center or photocopies ordered.

Examiners confronted with language problems in classifying foreign-language patents may call upon the Translation Branch of the Scientific and Technical Information Center for assistance (see MPEP § 901.06(a)).

903.05 Transfer of U.S. Patents

The transfer of official copies of U.S. patents, either original or cross-reference, from one class or subclass to another requires the approval of a classifier.

Examiners must submit to the appropriate classification group all questions of transfer of patents.

When an examiner desires to transfer official copies of domestic patents to a different class or subclass, he or she should have a memorandum list prepared for signature of the primary examiner of the numbers of all patents which are to be transferred indicating only the class and subclass into which each is to be placed. Both originals and properly identified official cross-references may be included in the same list and these may involve transfers to or from any number of different classes or subclasses. Additional cross-reference copies of any listed patent may also be requested by merely indicating where the cross reference copies should be placed. This list with the examiner's copies of the patents is routed through any other group involved for its prompt approval or comment and is forwarded to the appropriate classification group.

In those instances where a transfer is approved by a patent classifier, the class and subclass designations on both the examiner and Patent Search Room copies of the patents are changed and the classification data files are altered to agree with the new classification. When the transfer is not approved, the copies of the patents will be returned with a notification thereof.

Unauthorized transfers render the subclasses in the Patent Search Room no longer duplicates of those in the examiners' rooms, and also render incorrect the classification data files.

The procedure for transferring an entire class or subclass from one group to another is given in the Manual of Clerical Operations.

903.06 Practice To Be Followed in Ordering Official Cross-References

Patents which are useful as references may be found either in the course of a search or from inspection of the *Official Gazette* each week. All patent copies in official subclasses, cross-reference art collections, and digests are now recorded on the Master Classification File (MCF). In order that the search file be complete as to patent copies and to ensure the accuracy of the MCF, it is necessary that each patent copy subsequently added to the search file be recorded.

The informal placement of cross-references as "Unofficial Patents" into the examiner's search file is prohibited. All patent copies now placed in the examiner's search file are official cross-references. Requests for additional cross-references will be utilized by the Office of Classification Support to ensure the placement of labeled copies in the examiner's search file and the Patent Search Room.

To order new or additional cross-references, the examiner should submit a pink-colored form, PTO-14B, completed as follows:

(A) Enter the "DATE OF ORDER," "PATENT NUMBER," "EXAMINER'S NAME," and "ART UNIT" in the appropriate boxes.

(B) Enter the "CLASS" and "SUBCLASS/DIGEST" information for each location where a copy of the requested patent should be placed.

(C) Enter the number of "TOTAL COPIES" requested. This number is determined by multiplying the total number of unique classifications listed times two. This ensures a sufficient number of copies will be obtained to place a labeled copy in both the Examiner Search File and the Patent Search Room.

When cross-references for more than three different patent numbers are desired, the examiner can prepare a list of the patent numbers and their associated classifications. One copy of form PTO-14B should be completed to reflect the Date of Order, Art Unit, and Examiner's Name and should be attached to the list.

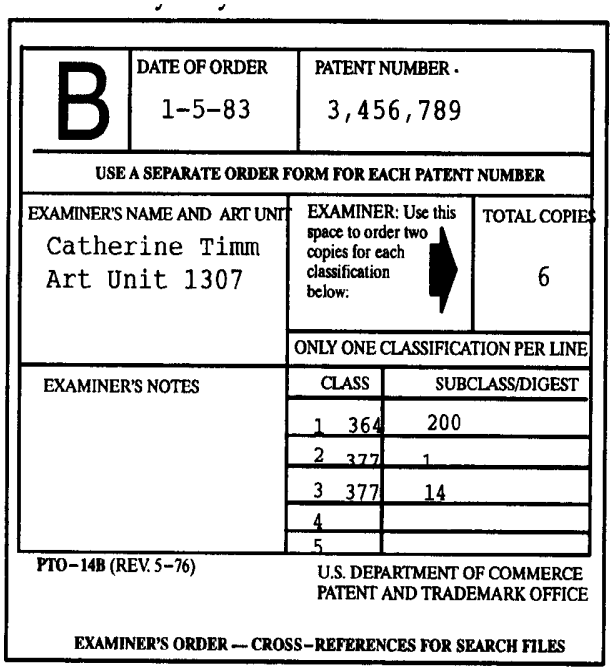
To expedite the handling of requests for additional cross-references and thereby ensure the quickest response, the following routing procedures should be adhered to:

(A) Designated collection drops within each group for copy orders should be used.

(B) Clerical personnel from the Office of Classification Support (OCS) will visit designated collection drops at least twice each week to pick up PTO-14 orders.

Alternatively, the orders may be mailed or otherwise delivered to the Search File Improvement Division, OCS, currently located in Crystal Mall, Building 2, Room 967.

The attorneys' drop slot at the Public Service Window should not be used, nor should the forms be mailed to Copy Fulfillment Services as consequent rerouting to the Office of Classification Support for processing will result in unnecessary delay.



B

DATE OF ORDER	PATENT NUMBER
1-5-83	3,456,789

USE A SEPARATE ORDER FORM FOR EACH PATENT NUMBER

EXAMINER'S NAME AND ART UNIT	EXAMINER: Use this space to order two copies for each classification below:	TOTAL COPIES
Catherine Timm Art Unit 1307		6

ONLY ONE CLASSIFICATION PER LINE

EXAMINER'S NOTES	CLASS	SUBCLASS/DIGEST
	1 364	200
	2 377	1
	3 377	14
	4	
	5	

PTO-14B (REV. 5-76) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

EXAMINER'S ORDER — CROSS-REFERENCES FOR SEARCH FILES

903.07 Classifying and Cross-Referencing at Allowance [R-1]

It is the duty of each primary examiner to personally review the original classification and cross-referencing made by his or her assistants in the issuing classification boxes on the face of the file wrapper, or on the blue issue classification slip for series 08/ and earlier applications, of every application passed for issue. Both the blue issue classification slip (PTO-270) and the file wrapper provide space for the full name of the "Primary Examiner" to show that the review has been made.

An examiner with full signatory authority who acts personally on an application and sends it to issue should stamp and sign his or her name on the file wrapper ONLY in the "Primary Examiner" space. A line should be drawn through the "Assistant Examiner" space on the file wrapper or blue issue slip, as appropriate, to make it clear that the absence of information in the box was not an oversight.

The initial classification of pending applications and the drawings thereof will have been indicated in pencil by the supervisory patent examiner. See MPEP § 903.08(b).

However, an application, properly classified at the start of examination, may be classified differently when it is ready for allowance. The allowed claims should be reviewed in order to determine the subject matter covered thereby. It is the disclosed subject matter covered by the allowed claims that determines the original and any mandatory cross-reference classification of U.S. patents.

The procedure for determining the classification of an issuing application is as follows: every claim, whether independent or dependent, must be considered separately for classification. A separate mandatory classification is required for each claim which is classifiable in a different class or subclass; some claims, particularly in chemical areas, may require plural classifications. After all mandatory classifications have been determined, the classification to be designated as the original (OR) is determined. If all mandatory classifications are in the same class, the mandatory classification that appears first (highest) in the class schedule is the original classification; in certain circumstances (e.g., the genus-species array), however, modifications of this rule may apply. See the "Examiner Handbook to the U.S. Patent Classification System" for an explanation of genus-species classification.

If the mandatory classifications are in different classes, the original classification is determined by considering, in turn, the following criteria:

(A) selection based on the most comprehensive claim,

(B) selection based on priority of statutory category of invention,

(C) selection based on superiority of types of subject matter, >and<

**>

(D) <selection among classes in the "related subject" listing at the front of the manual of classification.

It should be noted that the criteria, *supra*, may be superseded by

(A) special circumstances, e.g., superconductor technology and biotechnology are superior to all other subject matter,

(B) prior placement of patents for a particular body of art, or

(C) particular class lines and class notes.

Once the controlling class is determined, classification within said class is determined by the hierarchy of the class.

For a more complete discussion of this subject, see the "Plan and Use of the Manual of Classification" on page I-1 *et seq.* of the Manual of Classification, or the "Examiner Handbook to the U.S. Patent Classification System."

Once the original classification is determined, all remaining mandatory classifications are designated as cross-references, as are any additional discretionary classifications that the examiner wishes to apply to the patent.

Only the correct original classification should be left on the file and drawing of each application when passed for issue.

The examiner must legibly fill out the issuing classification boxes on the face of the file wrapper (or a blue issue classification slip (PTO-270) for series 08/ and earlier applications) to indicate the class and subclass in which the patent should be classified as an original and also the classifications in which it should appear as a cross-reference. In those unusual cases involving more than 31 cross references, an addendum issue slip will be used and attached to the left inside of the file wrapper. The examiner should be certain that all subclasses into which cross-references are placed are still valid.

All examiners are requested to fill in the original class and subclass on the drawings in large numerals using as much of the space provided as feasible. In this way, the filing of drawings and subsequent retrieval by the Publishing Division will be greatly aided. See also MPEP § 1302.10.

All examiners must include alpha subclass designators in the issuing classification boxes on the file wrapper or on the blue issue slips (PTO-270) at the time of issue when appropriate. This applies to both the original classification and the cross-reference classification. Any time that a patent is being issued in or cross-referenced to a subclass containing alpha subclasses, the alpha designation for the proper alpha subclass must be included. No other designation is permissible. Inclusion of only the numeric designation of a subclass which includes an alpha subclass designation is an incomplete and improper entry. A numeric subclass from which alpha subclasses have been created is designated with an "R" (denoting residual) and if the patent does not fit an indented alpha subclass, the "R" designation must be included. It is permissible to place multiple copies of a patent into a single set of alpha subclasses.

When the original patent is classified in an alpha subclass (including the "R" subclass), the drawing should also include the alpha designation.

Digests and cross-reference art collections should also be included in the issuing classification boxes on the face of the file wrapper or on the blue issue slip, but the original classification must never be a digest or cross-reference art collection. The indication for a copy of a patent in a digest or cross-reference art collection must be in the cross-reference area of the issuing classification boxes. A digest must be identified by class number, alpha characters DIG, and appropriate digest number.

APPLICATIONS IN ISSUE

Where an official Classification Order affects an application already passed to issue, the classification group makes the necessary changes on the file wrapper, blue slip, and drawing, if any.

Patents issuing from applications which already have been sent to the printer will be reclassified by the classification group at the time the patent issues.

903.07(a) Cross-Referencing — Keep Systematic Notes During Prosecution

Throughout the examination of an application, systematic notes should be kept as to cross-references needed either due to claimed or unclaimed disclosure. Examiners handling related subject matter should be consulted during prosecution (whether they handle larger unclaimed combinations or claimed or unclaimed, but disclosed, subcombinations), and asked if cross-references are needed.

Each consultation involving a question of the propriety of the classification of subject matter and/or the need for a cross-reference must be recorded in the SEARCH NOTES box on the file wrapper and must include: the name of each examiner consulted, the date that the consultation took place, and the results of the consultation including the consulted examiners' or examiner's indication of where claimed subject matter is properly classified and where subject matter disclosed but unclaimed is properly classified and whether or not a cross-reference is needed.

A cross-reference MUST be provided for all CLAIMED disclosure where possible and inserted in the issuing classification boxes at time of issue.

903.07(b) Issuing in Another Examining Group Without Transfer

When an examiner issues a prospective patent in another examining group, he or she notes in the space provided on the issuing classification area on the face of the file wrapper (or on the blue issue classification slip in series 08/ and earlier applications), *in red ink,* the class and subclass of the other group, and in parentheses the number of said other group. (The initials of said other primary examiner must appear in the area to the right of the original classification.) When the patent issues, the classification group will, as a matter of routine, send the necessary notices to the group involved.

The sending of cases to issue from one group and assigning them to classes in another group is restricted to those situations where both examiners concur in the proposed classification of the patent, which must be shown by the concurring primary examiner initialing the area to the right of the original classification on the issuing classification area on the face of the file wrapper (or the issue classification slip in series 08/ and earlier applications), or where there has been a ruling by a patent classifier, who must initial the same space.

When primary examiners disagree on the proper original classification of the allowed claims, the application should be submitted for resolution to the post classifier having jurisdiction over the art area to which the application is presently assigned. The post classifier shall give the application a high priority.

903.08 Applications: Assignment and Transfer

The titles "supervisory patent examiner" and "primary examiner," as used in this Chapter 900, include in their definition any person designated by them to act on their behalf. It is recognized that authority to accept or refuse the transfer of an application may be delegated when such authority is deserved.

The examining group to which an application is assigned is responsible for its examination until such time as the application is officially transferred to another group by the classification group.

The primary examiners have full authority to accept any application submitted to them that they believe is properly classifiable in a class in their art unit.

Applicants may be advised of expected application transfers by using Form Paragraph 5.03.

¶ 5.03 Reassignment Affecting Application Location

The Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit **[1]**.

Examiner Note:

This paragraph should be used in all Office actions when the location of an application is changed due to a reassignment of the art, transfer of the application to a different Art Unit, or transfer of an examiner and the examiner's docket.

903.08(a) New Applications

New nonprovisional applications are assigned to the various examining groups in the first instance by the Office of Initial Patent Examination. Upon receiving an application from the Office of Initial Patent Examination, the technical support staff in charge of processing new applications should wand the application on the PALM bar code reader to the art unit to which it has been assigned and date stamp the file wrapper on the day the file is to be delivered to the supervisory patent examiner. The complete application (file and drawing) are then given to the appropriate supervisory patent examiner. The technical support staff should not permit these cases to remain overnight before distributing.

If the supervisory patent examiner decides that the application properly belongs in his or her art unit, it is processed as a new receipt. See MPEP § 903.08(b).

When a new application is received which, in the opinion of the primary examiner, does not belong to his or her group, he or she may request transfer of it to another group. See MPEP § 903.08(d).

Form PTO-447A, "Transfer Request" consists of two copies and is used as a transmittal and notification form.

If the search in connection with the first action develops art showing proper classification elsewhere, the transfer is usually initiated before the first action is prepared and mailed.

903.08(b) Classification and Assignment to Examiner [R-1]

Every nonprovisional application, new or amended, and including the drawings, if any, when first assigned to a group must be classified and assigned to an examiner for examination. The supervisory patent examiner normally assigns them, noting in lead pencil in the space provided on the face of the file the assigned class and subclass and also the name of the examiner. The application file is then turned over to the technical support staff for processing. Provisional applications are not classified or assigned since they are not examined.

If an examiner other than the supervisory patent examiner is given the responsibility of assigning applications, time so spent may, at the Group Director's discretion, be charged to "Assisting SPE."

>CLASSIFICATION AND ASSIGNMENT OF APPLICATIONS FILED UNDER THE PATENT COOPERATION TREATY (PCT)

Applications filed under the Patent Cooperation Treaty (PCT) are normally classified on the basis of the first claimed invention in the application. The following special situations, however, apply:

(A) if a U.S. national application has been acted upon by an examiner to whom the national application was assigned on the basis of the controlling (not necessarily the first) claim, a subsequent PCT application claiming priority of the national application will normally be assigned to the same examiner, or to the examiner's art unit in his/her absence;

(B) in all other situations where a U.S. national application and a corresponding PCT application are copending, irrespective of which application was filed first, every effort should be made to ensure that both applications are assigned for search and examination to the examiner to whom the PCT application would normally be assigned on the basis of the first claimed invention, or to the examiner's art unit in his/her absence;

(C) if a PCT application has been the subject of international search and possibly international preliminary examination outside the U.S., a U.S. national

phase application or a U.S. national application claiming benefit of the PCT application will be assigned like any other application, i.e., on the basis of the controlling claim.

The object of having the U.S. national and PCT applications assigned to the same examiner is to promote consistent search and examination results.

Should a PCT application be submitted to a classification unit for resolution of an assignment dispute, the PCT application must:

(A) be hand-carried throughout the dispute resolution process; and

(B) be returned to an examining unit within three working days of receipt in the classification unit.

See MPEP § 903.08(d) for a discussion of transfer procedures.<

903.08(c) Immediate Inspection of Amendments

Upon the receipt of an amendment which makes a transfer proper, steps should be taken promptly in accordance with the transfer procedure outlined in MPEP § 903.08(d).

903.08(d) Transfer Procedure [R-1]

TRANSFER BETWEEN ART UNITS WITHIN THE SAME GROUP

All within the group transfers must be called to the attention of the group technical support staff so that the PALM system may be updated to correctly indicate the assignment of the nonprovisional application.

Where there is a difference of opinion among the supervisory patent examiners as to assignment within the same group, the matter is submitted to the post classifier assigned to that group for resolution by use of form PTO-447A. Note MPEP § 903.10.

TRANSFERS BETWEEN DIFFERENT GROUPS

Where a supervisory patent examiner (SPE) believes an application, either new or amended, does not belong in his or her art unit, he or she may request transfer from his or her art unit (the "originating" art unit) to another art unit of a different examining group (the "receiving" art unit) using form PTO-447A. The supervisory patent examiner of the originating art unit dates and completes Section I of the PTO-447A giving a full explanation of the reasons for classification in the other art unit.

In the space provided on the form, at least one of the following must be included:

(A) Identification of the controlling claim examinable in another group;

(B) Identification of any existing informal transfer agreement; or

(C) Other reasons - with full explanation.

Each application must be fully reviewed before it is sent to the receiving art unit of a different examining group or a post classifier. In order to ensure that the application has been thoroughly reviewed by the originating examining group prior to the transfer, the SPE of the originating art unit requesting the transfer of the application must send the application to an individual designated by his or her examining group for review of the application before the application leaves the originating examining group. The designated individual will be responsible for ensuring that the written record is clear and that all appropriate areas in the originating examining group have been considered with respect to the classification of the application.

In all cases when transfer is initiated the application must be sent to another art unit. It cannot be sent directly to a classification group. Even if the application is informal, confusing, or contains unfamiliar subject matter, the examiner must make his or her best judgment as to where the application should be classified and attempt to transfer it there.

Where an application's claims include a combination of limitations for plural disciplines (chemical, electrical, or mechanical), a primary examiner may request transfer to another discipline, notwithstanding the fact that the controlling claims are properly classified in his or her art unit, on the ground that the application is "best examinable" in the other discipline. In this instance, the examiner requesting transfer should cite art showing the limitations classifiable in his or her discipline. For discussion of the situations in which assignment of an application on a "best examinable" basis may be proper, see MPEP § 903.08(e).

PROCESS FOR TRANSFER

When the supervisory patent examiner or primary examiner determines that transfer is proper, he or she staples the form PTO-447A to the face of the file and gives it to the technical support staff for forwarding.

If the receiving examiner agrees to accept the application, he or she classifies and assigns the application and initials the form PTO-447A. The transfer is effected by the technical support staff in the group which accepts the application for transfer.

If the receiving art unit refuses to accept the application, the reasons for refusal, the date, and the examiner's name are placed on the form PTO-447A in Section II "DISPOSITION BY RECEIVING TC." Where an application is refused by the receiving art unit based upon the

classification of any claim, the application will be forwarded to a post classifier in the receiving examining group for resolution of any classification issues. The post classifier will consider the statements and evidence of both the originating and receiving art units and will assign the application to the art unit which has jurisdiction over the art in which the controlling claims of the application are properly classified. This may be the originating, receiving, or another art unit as appropriate. The post classifier writes the assigned class and art unit number and his or her initials on the face of the file wrapper or PALM bib. data sheet and on form PTO-447A, briefly giving reasons for assignment of the application in the space of the form.

In order for the post classifiers to assign an application outside of their examining group, a concurring signature of an SPE or designated examiner/classifier for the particular class or art unit where the application is being assigned will be required. The group receptionist will have a current list of all people designated to accept applications for each art unit or class.

Under certain circumstances, a post classifier may, contrary to controlling classification rules, assign an application to a class or group which in his or her judgment is better equipped to examine the application. This is fully described in paragraphs 6 and 9 of MPEP § 903.08(e).

Any application assignment disputes that cannot be resolved by post classifiers in the examining groups will be resolved by a panel which consists of designated representatives from each examining group. Where an application assignment dispute cannot be resolved by a post classifier, the post classifier will check the appropriate box on the form PTO-447A and forward the application to a designated panel member of the examining group for decision. The decisions of the panel will be final. Request for reconsideration of the decision of the panel will be considered ONLY in the event that an examining group has not have the opportunity to review the application prior to the decision from the panel. Reconsideration must be requested within 2 calendar weeks of the receipt in an art unit of a decision of the panel. There will be no reconsideration of application assignments by classification units once an application assignment has been accepted by another examining group.

In the assignment of applications, it must be realized that every application, no matter how peculiar or confusing, must be assigned somewhere for examination. Thus, in contesting the assignment of an application, it may be more successful to point out another class that is thought to be a better place to classify the application at hand than simply to argue that the application does not fit the examiner's class.

Where an application is refused by the receiving art unit solely for reasons within the purview of the examining corps, e.g., propriety of a restriction requirement, timeliness of transfer, etc., and there is no dispute as to the classification of any claim, the application should be returned directly to the originating art unit using the appropriate line in Section II of the PTO-447A.

If an application contains both classification issues and examining corps issues, e.g., a dispute both as to the classification of claims and the propriety of restriction, etc., the examining issues should be resolved first. If thereafter classification issues still need to be addressed, use of Form PTO-447A, as above, is appropriate. For the procedure in the classification groups for applications which contain examining corps issues, see MPEP § 903.08(e), paragraph 13.

The time limits for requesting or refusing transfer are as follows. In a new application, transfer must be requested within 2 calendar weeks of the group receipt date of the application. In an amended application transfer must be requested within 2 calendar weeks of the group receipt date of the amendment upon which the request for transfer is based. The time limit for refusal of a transfer request is 2 calendar weeks from the receipt of the transfer request in the receiving art unit.

Exceptions to these time limits are:

(A) All new applications (docketed and undocketed) transferred to Group 3640 purely for security reasons.

(B) New reissue applications should be retained in the group indicated by the notice of filing in the *Official Gazette* for 2 months following the notice before transfer.

(C) PCT applications and other special applications for which a different time limit is set by competent authority.

Failure to fill in the date on the form by either the originating examiner or the receiving examiner may result in the assignment of the application to his or her art unit.

If a request for transfer is not made or refused within the 2-week time limit, the art unit having physical possession of the application must keep it for purposes of examination. However, if the Group Directors having authority over the art units involved agree that strict adherence to the 2-week time limit would not provide the best examination for the application, they may waive the requirement.

The question of need for a restriction requirement does not influence the determination of transfer.

The regular messenger service may be used to effect the transfer of applications, with the exception that applications filed under the Patent Cooperation Treaty and such other special applications designated by competent authority must be hand-carried throughout the transfer process. If an

application is hand-carried at any stage of the transfer process, care must be taken that it is wanded in or out on the PALM system as appropriate so that the PALM system will always have an accurate record of the location of the application.

**

FORM PTO-447A (Rev. 3-98) Staple to face of Application U.S. DEPARTMENT OF COMMERCE PATENT & TRADEMARK OFFICE

APPLICATION TRANSFER REQUEST FOR S.N. _____

Section I. TRANSFER REQUEST BY (PRINT NAME) _____ Date_____

TO: Art Unit _____ Class/sub_____ **From:** A.U._____ Class_____

REASON:

Gatekeeper concurrence_____ **Hand carried: Personally accepted by** _____

Section II. DISPOSITION BY RECEIVING TC **A.U.**_____ **Date**_____

☐ **ACCEPTED BY RECEIVING T.C.**

NOT ACCEPTED ☐ Forward to Post Classifier

☐ Return to Originating Technology Center /AU_____

REASON:

DISPOSITION BY RECEIVING TC POST CLASSIFIER

☐ This dispute was resolved. Forward to Class/Sub_____ TC/AU_____ Post Classifier_____ Date_____

Concurring_____ Date_____

☐ This dispute was not resolved, forward to DISPUTE RESOLUTION PANEL

Post Classifier Assessment:

Gatekeeper Concurrence _____

Section III. DISPOSITION BY DISPUTE RESOLUTION PANEL Date _____

Panel Decision: Forward to Technology Center / Art Unit _____ Class/sub _____

REASON:

Panel Member _____ Concurring Panel Member _____

☐ This application **MAY** be returned to the dispute resolution panel if reconsideration is desired (use form 447R).

☐ This application **MAY NOT** be returned to the dispute resolution panel. **THIS IS A FINAL DISPOSITION.**

903.08(e) General Regulations Governing the Assignment of Nonprovisional Applications for Examination [R-1]

This section applies only to nonprovisional applications. It does not apply to provisional applications since such applications are not examined.

The fact should be borne in mind that the following regulations are only general guides, and exceptions frequently arise because of some unusual condition. The fact should also be kept in view that the post classifiers as well as the patent examiners are confronted with an already existing classification made up of newly revised classes, those revised years ago and which have somewhat outgrown their definitions and limits, and still others made a generation ago and never changed. Also, these classes are based on different theories and plans, some on art, some on structure, some on functions, some on the material worked upon, and some apparently on no theory or plan at all. The post classifiers cannot change this existing condition as each application comes up for assignment, but must seek to dovetail the cases into the patchwork and try to get the applications where they will be best handled. To do this may violate the post classifier's views as to what constitutes a really proper classification.

1. The assignment of nonprovisional applications follows, as far as possible, the rules or principles governing the classification of patents. Applications are assigned, as far as possible, on the basis of the original classification of the application.

2. The criteria by which the original classification is determined are set forth in MPEP § 903.07.

3. The claims and statement of invention are generally taken as they read; however, claims must be read in light of the disclosure (claimed disclosure). Any attempt of a post classifier to go behind the record and decide the case upon what is deemed the "real invention" would, it is believed, introduce more errors than such action would cure. The post classifiers cannot possess the specific knowledge of the state of the art in all the classes that the patent examiners collectively possess. Further, such questions are matters of merit for the examiners to determine and are often open to argument and are subject for appeal.

4. Within a class, the first coordinate subclass that will take any claim controls classification.

5. As stated in MPEP § 903.07, the location of the United States patents constituting the prior art is generally controlling over all else. (Note: Where time permits, obvious misplacements of the patents constituting the prior art are corrected, but to straighten all lines as the cases come up for assignment would require the time of several people and would often involve a reclassification of an entire class.)

6. Ordinarily, an application cannot be assigned to a class which includes one element or part only of several claimed in combination. The claim is treated in its entirety. The question of aggregation is not reviewed by the post classifiers.

7. The post classifiers are authorized in all cases, where they evaluate the facts as warranting it, to assign applications for examination to the group best able to examine the same. Since assignment for examination on this basis will at times be contrary to classification of patents containing the same character of claims, the post classifiers will indicate the proper classification of the patent, if such claims are allowed.

Thus, in cases where there is a claim drawn to hybrid or mixed subject matter and the supervisory patent examiner in one discipline feels that the application requires consideration by, or may be best examined by, a group in one of the other technical disciplines, chemical, electrical, or mechanical, he or she may submit the application to his or her post classifier who *may* assign the application on a "best examinable" basis, in accordance with this subsection.

Some examples of applications which may be thus submitted include the following:

(a) An application containing a hybrid claim wherein, for instance, a product is defined merely in terms of the process for producing it. See MPEP § 705.01(e), situation (A).

(b) Where an application properly assigned to a mechanical or electrical class contains at least one claim to mixed subject matter, a part of which is chemical, the application *may* be assigned to the appropriate chemical art unit for examination; or where the application is properly assigned to a mechanical class and a claim therein contains electrical subject matter, the application *may* be assigned to the appropriate electrical art unit for examination.

As indicated earlier, when an application which had been assigned for examination in accordance with this subsection ultimately is allowed, it will be classified according to the controlling claim. In effect, assignment for examination may be on a "best examinable" basis, but the patent will issue and be classified according to the rules of superiority in classification; thus, the search file will have a constant set of rules governing placement of patents therein.

Where an application is being reassigned from one examining discipline to another, under the provisions of the "best examinable" practice, the post classifiers are authorized to require the first or transferring examiner to cite references pertinent to the claimed features falling under the jurisdiction of the art within his or her discipline. In those

cases wherein the application of the reference(s) is not evident or clear, the transferring examiner should include a brief statement explaining the relation and possible application of the reference(s) to the claim(s); in case of dispute as to the necessity of this procedure, the post classifier has power to require the statement.

8. See MPEP *>§ 903.08(b)< for a discussion of how to properly assign PCT international applications and U.S. national applications associated therewith.

9. When an application has been taken up by an examiner for action and a requirement to restrict is found necessary, a part of the claims being directed to matter classifiable in the group where the case is being examined, an action requiring restriction should be made without seeking a transfer of the case to another group. The action of the applicant in reply to the requirement for restriction may result in making a transfer of the application unnecessary.

10. Ordinarily, where all the claims of an application are for an article made of a specific composition or alloy with no other structure of the article recited, the application will be assigned to the composition or alloy class.

11. A class of cases exists in which either no art or a divided art is found and in which no rule or principle is involved. Such cases are placed where, in the judgment of the post classifiers, they will be best searched and adjudicated. It is often impossible to so explain a decision in this class of cases as to satisfy, or in any way aid, the examiners interested. Indeed, the reasons for or against sending such cases one place or another may be so evenly balanced that no reason of any value can be given.

12. An examiner seeking the transfer of a case may make a search, both of his or her own class and the class to which he or she thinks the case should be transferred, and the examiner in charge of the art unit should exhibit the result of such search to the appropriate classification group. This is the way the expert knowledge of the examiners involved is utilized.

13. When an application is received in a classification group in which there is a matter under dispute which is not related to the classification of a claim but which is in the purview of the examining corps, e.g., propriety of a restriction requirement, timeliness of submission for transfer, etc., as well as a dispute over the classification of claims, the application will be treated as follows.

The classifier will check the appropriate box on the PTO-447A indicating that the application is being returned (not assigned) to the originating group to resolve the nonclassifying issues involved. The classifier will indicate on the PTO-447A the proper classification of any claims under dispute. If any claims under dispute are outside the jurisdiction of the classifier associated with the originating group, that classifier will obtain concurrence of the classifier having jurisdiction of the claims in question who will sign the PTO-447A as the concurring classifier. Multiple concurrences may be required for application with claims classifiable in different art areas.

It is important that newly received applications be immediately screened for these situations so that the applications may be promptly returned to the originating group.

If after resolution of the nonclassifying issues there is still a dispute as to which group should examine the application, the originating group may return the application to classification for assignment.

903.08(f) Post Classifier's Decision

A post classifier decides the question of the proper classification of the application, and either (1) returns the application to the group which submitted it if he or she denied the transfer request, or (2) forwards the application to the group to which it is transferred. See also MPEP § 903.10.

903.08(g) Transfer to Another Examining Group After Decision

If the application is to remain in the group which submitted it for classification, no further procedure is necessary. If assigned to another group, the classification group processes the application as described in the Manual of Clerical Procedures.

If the application is one which has been taken up for action by an examiner according to its effective filing date, it should be treated as special by any examiner, art unit, or group to which it is transferred. See MPEP § 708.01.

903.09 International Classification of Patents for Inventions [R-1]

In accordance with the Strasbourg Agreement Concerning the International Patent Classification, the United States is required to indicate on its issuing documents the classification symbols of the International Patent Classification **>1999 (Seventh Edition)<, hereinafter referred to as "Int. *>Cl.[7]<."

The complete Int. *>Cl.[7]< symbols must be placed in the indicated space on the face of the file wrapper (or on the Issue Classification Slip (form PTO-270) for series 08/ and earlier applications) when an application is issued.

INT. *>Cl.[7]<LAYOUT

The layout of the Int.*>Cl.[7]< is explained below with reference to the sample page.

Section

The Classification represents the whole body of knowledge which may be regarded as proper to the field of patents for invention, divided into eight sections.

(A) *Section Symbol* — Each section is designated by one of the capital letters A through H.

(B) *Section Title* — The section title is to be considered as a very broad indication of the contents of the section. The eight sections are entitled as follows:

A. Human Necessities

B. Performing Operations; Transporting

C. Chemistry; Metallurgy

D. Textiles; Paper

E. Fixed Constructions

F. Mechanical Engineering; Lighting; Heating; Weapons; Blasting

G. Physics

H. Electricity

(C) *Contents of Section* — Each section title is followed by a summary of the titles of its main subdivisions.

(D) *Subsection* — Within sections, informative headings form subsections, which are titles without classification symbols.

Example: Agriculture

Class

Each section is subdivided into classes.

(A) *Class Symbol* — Each class symbol consists of the section symbol followed by a two digit number.

Example: A 01

(B) *Class Title* — The class title gives an indication of the content of the class.

Example: A 01 Agriculture; Forestry; Animal Husbandry; Hunting; Trapping; Fishing

Subclass

Each class comprises one or more subclasses.

(A) *Subclass Symbol* — Each subclass symbol consists of the class symbol followed by a capital letter.

Example: A 01 B

(B) *Subclass Title* — The subclass title indicates as precisely as possible the content of the subclass.

Example: A 01 B Soil Working in Agriculture or Forestry; Parts, Details, or Accessories of Agricultural Machines or Implements, in General

(C) *Subclass Index* — Some subclasses have an index which is merely an informative summary giving a broad survey of the content of the subclass.

Group

Each subclass is broken down into subdivisions referred to as "groups," which are either main groups or subgroups.

(A) *Group Symbol* — Each group symbol consists of the subclass symbol followed by two numbers separated by an oblique stroke.

(B) *Main Group Symbol* — Each main group symbol consists of the subclass symbol followed by a one to three digit number, the oblique stroke, and the number 00.

Example: A 01 B 1/00

(C) *Main Group Title* — The main group title defines a field of subject matter considered to be useful in searching for inventions.

Example: A 01 B 1/00 Hand tools

(D) *Subgroup Symbol* — Subgroups form subdivisions under the main groups. Each subgroup symbol consists of the subclass symbol followed by the one to three digit number of its main group, the oblique stroke, and a number of at least two digits other than 00.

Example: A 01 B 1/02

Any third or fourth digit after the oblique stroke is to be read as a decimal subdivision of the second or third digit, respectively; e.g. 3/426 is to be read as "three slash forty-two point six", not three slash four hundred and twenty six and is to be found after 3/42 and before 3/43, and 5/1185 is to be read as "five slash eleven point eight five," and is to be found after 5/118 and before 5/119.

(E) *Subgroup Title* — The subgroup title defines a field of subject matter within the scope of its main group considered to be useful in searching for inventions. The title is preceded by one or more dots indicating the hierarchical position of the subgroup, i.e., indicating that each subgroup forms a subdivision of the nearest group above it having one dot less. The subgroup title is often a complete expression, in which case it begins with a capital letter. A subgroup title begins with a lower case letter if it reads as a continuation of the title of the next higher, less-indented

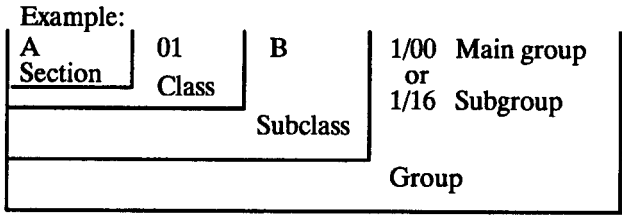
group, i.e., having one dot less. **In all cases, the subgroup title must be read as being dependent upon, and restricted by, the title of the group under which it is indented**.

Examples

A 01 B 1/00 1/24	Hand tools for treating meadows or lawns (The title of 1/24 is to be read as: Hand tools for treating meadows or lawns.)
A 01 B 1/00 1/16	Hand tools Tools for uprooting weeds (The title of 1/16 is a complete expression, but owing to its hierarchical position, the tools for uprooting weeds are restricted to hand tools.)

Complete Classification Symbol

A complete classification symbol comprises the combined symbols representing the section, class, subclass, and main group or subgroup.



Guide Headings

The main groups in each subclass are arranged in a sequence intended to assist the user. It has not however, been found practicable to standardize the sequence. Where several successive main groups relate to common subject matter, it is usual to provide before the first of such main groups a "guide heading" which is underlined, indicating this subject matter (see, for example, the guide heading "**Ploughs**" before group A 01 B 3/00). The series of groups covered by such a heading extends to the next guide heading or to a line in heavy type extending across the column, which is used when the following group or groups relate to different subject matter for which no guide heading is provided. (See, for example, the line after A 01 B 75/00.)

CLASSIFYING IN THE INT. *>Cl.[7]< SYSTEM

A. Selecting Subclasses Corresponding to U.S. Classes

The effective scope of a subclass is defined by the following, taken together:

(A) The subclass title which describes, as precisely as is possible in a small number of words, the main characteristic of a portion of the whole body of knowledge covered by the Classification, this portion being the field of the subclass to which all its groups relate;

(B) Any references which follows the subclass title or the hierarchically higher class title. These references often indicate certain parts of the field described by the title which are covered by other subclasses and are therefore excluded. These parts may constitute a substantial part of the field described by the title and, thus, the references are in some respects as important as the title itself. For example, in subclass A 47 D — FURNITURE SPECIALLY ADAPTED FOR CHILDREN — a considerable part, namely school benches or desks, of the subject matter covered by the title is excluded in view of a reference to particular groups of subclass A 47 B, thus considerably altering the scope of subclass A 47 D;

(C) Any references which appear in groups or guide headings of a subclass and which refer subject matter to another class or subclass may also affect the scope of the subclass in question. For example, in subclass B 43 K — INSTRUMENTS FOR WRITING; DRAWING-PENS — writing points for indicating or recording apparatus are referred out of group 1/00 to group 15/16 of subclass G 01 D, thereby reducing the scope of the subject matter covered by the title of subclass B 43 K;

(D) Any notes or definitions appearing under the subclass title or its class, subsection or section title. Such notes or definitions may define terms or expressions used in the title, or elsewhere, or clarify the relation between the subclass and other places. Examples are

(1) Note (1) appearing under the title of the subsection "ENGINES OR PUMPS," embracing classes F 01 to F 04, which notes define the terms used throughout the subsection,

(2) the notes appearing under the title of subclass F 01 B, which define its scope in relation to subclasses F 01 C to F 01 P, and

(3) the note following the title of section C which defines groups of elements.

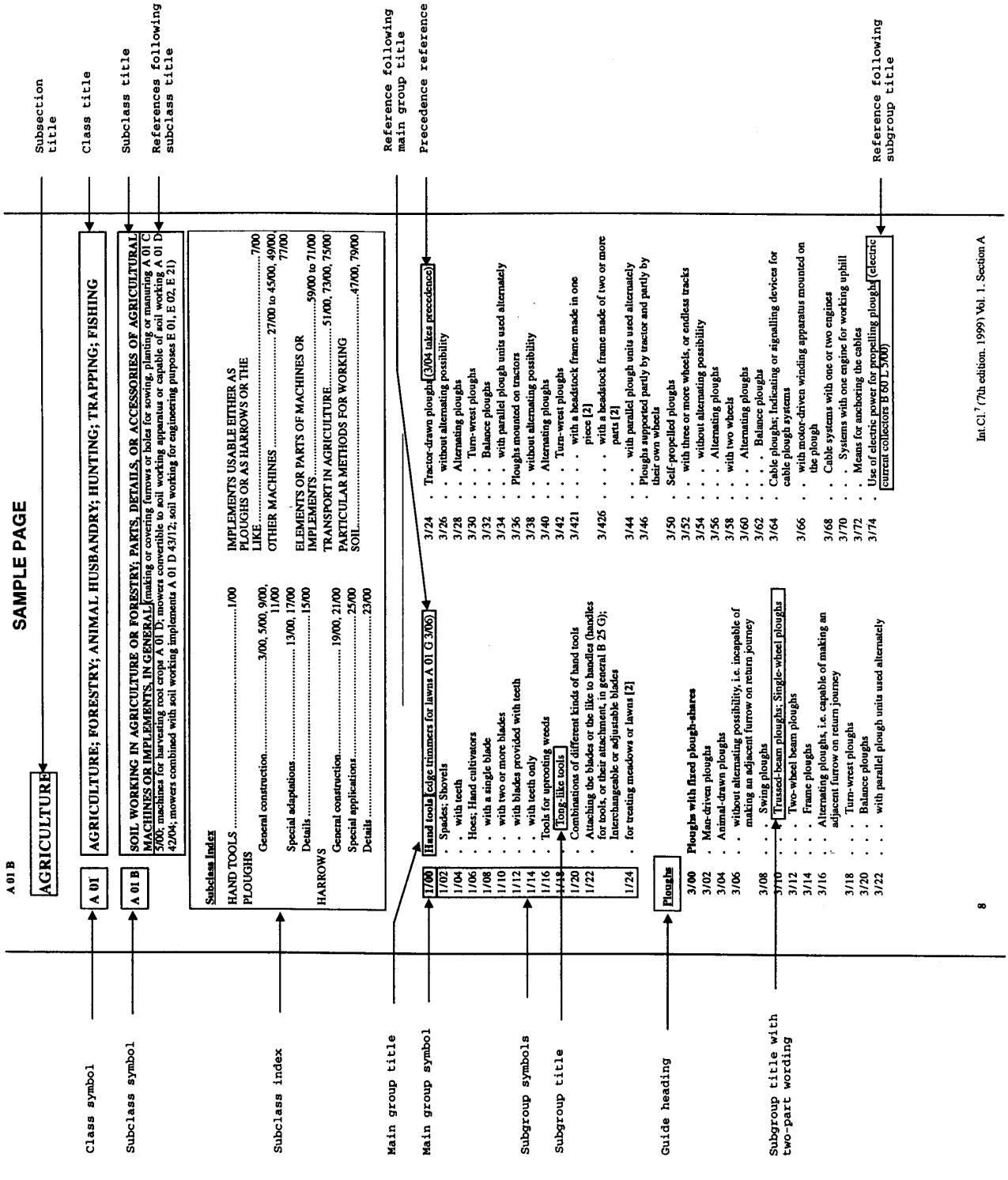
B. Selecting Main Groups Corresponding to U.S. Mainline Subclasses

The scope of a main group is to be interpreted only within the effective scope of its subclass (as indicated above). Subject to this, the effective scope of a main group is determined by its title as modified by any relevant references or notes associated with the main group or with any guide heading covering it. For example, a group for "bearings" in a subclass whose title is limited to a particular apparatus must be read as covering only features of bearings peculiar to that apparatus, e.g., the arrangement of bearings in the apparatus. Attention is drawn to the fact that guide headings are intended to be only informative and, as a rule, do not modify the scope of the groups covered by them, except where it is otherwise clear from the context. By contrast, references in the guide headings modify the scope of the associated groups.

C. Selecting Subgroups Corresponding to U.S. Indented Subclasses

The scope of a subgroup is likewise to be interpreted only within the effective scope of its main group and of any subgroup under which it is indented. Subject to this, the scope of a subgroup is determined by its title as modified by any relevant references or notes associated therewith.

Attention is invited to volume 9 of the International Patent Classification, entitled "Guide, Survey of Classes and Summary of Main Groups" for detailed procedures for classifying into and searching Int. *>Cl.[7]<.


A 01 B
SAMPLE PAGE
Subsection title
Class title
Subclass title
References following subclass title
Reference following main group title
Precedence reference
Reference following subgroup title
Class symbol
Subclass symbol
Subclass index
Main group title
Main group symbol
Subgroup symbols
Subgroup title
Guide heading
Subgroup title with two-part wording
AGRICULTURE
A 01
AGRICULTURE; FORESTRY; ANIMAL HUSBANDRY; HUNTING; TRAPPING; FISHING
A 01 B
SOIL WORKING IN AGRICULTURE OR FORESTRY; PARTS, DETAILS, OR ACCESSORIES OF AGRICULTURAL MACHINES OR IMPLEMENTS, IN GENERAL (making or covering furrows or holes for sowing, planting or manuring A 01 C 5/00; machines for harvesting root crops A 01 D; mowers convertible to soil working apparatus or capable of soil working A 01 D 42/04; mowers combined with soil working implements A 01 D 43/12; soil working for engineering purposes E 01, E 02, E 21)
Subclass Index
HAND TOOLS 1/00
PLOUGHS
General construction 3/00, 5/00, 9/00, 11/00
Special adaptations 13/00, 17/00
Details 15/00
HARROWS
General construction 19/00, 21/00
Special applications 25/00
Details 23/00
IMPLEMENTS USABLE EITHER AS PLOUGHS OR AS HARROWS OR THE LIKE 7/00
OTHER MACHINES ..... 27/00 to 45/00, 49/00, 77/00
ELEMENTS OR PARTS OF MACHINES OR IMPLEMENTS ..... 59/00 to 71/00
TRANSPORT IN AGRICULTURE 51/00, 73/00, 75/00
PARTICULAR METHODS FOR WORKING SOIL 47/00, 79/00
1/00 Hand tools (edge trimmers for lawns A 01 G 3/06)
1/02 . Spades; Shovels
1/04 . . with teeth
1/06 . Hoes; Hand cultivators
1/08 . . with a single blade
1/10 . . with two or more blades
1/12 . . with blades provided with teeth
1/14 . . with teeth only
1/16 . Tools for uprooting weeds
1/18 . Tong-like tools
1/20 . Combinations of different kinds of hand tools
1/22 . Attaching the blades or the like to handles (handles for tools, or their attachment, in general B 25 G); Interchangeable or adjustable blades
1/24 . for treating meadows or lawns [2]
Ploughs
3/00 Ploughs with fixed plough-shares
3/02 . Man-driven ploughs
3/04 . Animal-drawn ploughs
3/06 . without alternating possibility, i.e. incapable of making an adjacent furrow on return journey
3/08 . . Swing ploughs
3/10 . Trussel-beam ploughs; Single-wheel ploughs
3/12 . . Two-wheel beam ploughs
3/14 . . Frame ploughs
3/16 . Alternating ploughs, i.e. capable of making an adjacent furrow on return journey
3/18 . . Turn-wrest ploughs
3/20 . . Balance ploughs
3/22 . . with parallel plough units used alternately
3/24 . Tractor-drawn ploughs (3/04 takes precedence)
3/26 . without alternating possibility
3/28 . Alternating ploughs
3/30 . . Turn-wrest ploughs
3/32 . . Balance ploughs
3/34 . . with parallel plough units used alternately
3/36 . Ploughs mounted on tractors
3/38 . without alternating possibility
3/40 . Alternating ploughs
3/42 . . Turn-wrest ploughs
3/421 . . . with a headstock frame made in one piece [2]
3/426 . . . with a headstock frame made of two or more parts [2]
3/44 . . with parallel plough units used alternately
3/46 . Ploughs supported partly by tractor and partly by their own wheels
3/50 . Self-propelled ploughs
3/52 . with three or more wheels, or endless tracks
3/54 . . without alternating possibility
3/56 . . Alternating ploughs
3/58 . with two wheels
3/60 . . Alternating ploughs
3/62 . . Balance ploughs
3/64 . Cable ploughs; Indicating or signalling devices for cable plough systems
3/66 . with motor-driven winding apparatus mounted on the plough
3/68 . . Cable systems with one or two engines
3/70 . . Systems with one engine for working uphill
3/72 . Means for anchoring the cables
3/74 . Use of electric power for propelling ploughs (electric current collectors B 60 L 5/00)
8
Int.Cl.[7] (7th edition, 1999) Vol. 1. Section A

U.S. INT. *>Cl.[7]< CONCORDANCE, *>1999<

The Office of International Patent Classification has prepared a revised Concordance between the U.S. classes and subclasses and the Int. *>Cl.[7]<. In many areas, the two systems are conceptually different. With this in mind, it will be seen that a complete one-to-one correspondence between the two systems cannot be attained. An indication in the Concordance may refer to only one relevant group and not necessarily the only group in which the patent can or should be classified. For some inventions, the Concordance may not indicate any truly relevant group. Accordingly, the Concordance must be recognized as a *guide* to be used in conjunction with the Int. *>Cl.[7]<, and *not* as a translation list.

The *>printed version of the 1999< Concordance includes all changes in the International Classification corresponding to changes in the United States Classification through **>August, 19999. The electronic Concordance is updated monthly, and is available to PTO personnel online from the "Patent Examiner's Toolkit" toolbar<.

The Concordance may be incomplete in some areas and contain errors in other areas. Therefore, if corrections need to be made in the Concordance, members of the examining corps are requested to **>e-mail< suggested changes to the **>International Liaison Staff (ILS) via their SPE<.

903.09(a) Locarno Classification Designations

U.S. design patents prepared for issue after June 30, 1996 include a Locarno International Classification designation as part of the bibliographic data. The purpose of the international design classification designation is to enhance accessibility of design patents in foreign design search files as well as commercial databases.

The Locarno International Classification system was developed by members of the Paris Convention for the Protection of Industrial Property and is administered by the International Bureau of the World Intellectual Property Office (WIPO).

A Locarno International Classification designation consists of two pairs of numbers separated by a hyphen. The first pair of numbers designates a design class; the second pair of numbers indicates a particular subclass within the design class. The Locarno Classification manual, available from WIPO, delineates the individual classes and subclasses and includes: (1) a general list of classes of industrial designs divided into broad subclasses; and (2) an alphabetical list of specific industrial designs with an indication of the classes and subclasses into which they should be classified.

The Locarno designation included with design patent bibliographic data indicates the original classification of the patented design only. There is no provision for cross-reference designations within the Locarno system.

Locarno International Classifications are periodically revised by the Committee of Experts of the World Intellectual Property Organization. The present (sixth) edition of the system which incorporates all the revisions in and before March, 1993 became effective on January 1, 1994.

The design patent issue slip (PTO-328) includes an area with the heading "International Classification". A Locarno International Classification designation must be included on the issue slip when a design application is prepared for issue. The Locarno designation is printed on the design patent preceded by INID code [51] in compliance with ST.9 of the International Bureau. The abbreviation "LOC (6) CL." follows INID code [51] and complies with the recommended abbreviation by the International Bureau.

An example Locarno designation as it appears on a U.S. Design Patent is as follows:

[51] LOC (6) CL. 02-02

The Office of International Patent Classification has prepared a Concordance between the U.S. Design Classification classes and subclasses and the sixth edition of the Locarno International Classification. In many areas of design subject matter, the U.S. Design Classification and Locarno Classification systems are parallel. For others, the two systems are conceptually different. For example, there is no specific provision within the Locarno system for designs which are simulative of other objects. The International Classification is generally based on the nature of the design rather than ornamental appearance. Accordingly, a one-to-one relationship between the two classification systems is not always possible.

Each suggested designation in the Concordance refers to a single Locarno International class and subclass. This designation, however, is not necessarily the only pertinent class and subclass in which the design could be properly classified since for some U.S. Design Classification designations, there is no direct parallel within the Locarno system. Accordingly, the Concordance may not indicate the most specific relevant class and subclass, and should not be considered a translation list.

903.10 Duties of the Post Classifier

Examiners should contact their post classifier on all classification problems.

A post classifier is responsible for:

(A) The technical accuracy, adequacy, and completeness of all search systems in his or her group including the

monitoring of any need for major and minor reclassification projects including mechanized systems.

(B) The full range of classification administration functions including the resolution of classification disputes on pending applications, guidance on classification matters to both examiners and the public, which includes outlining fields of search and answering examiner's requests for advice as to the proper classification of allowed applications.

(C) The inspection of issuing applications to determine the accuracy and adequacy of original and cross-reference classification by working closely with the supervisory patent examiners and Group Directors to ensure feedback to correct problem areas.

(D) Determination of the training needs of the personnel in his or her assigned group relative to principles of classification and supplying this training through formal and informal channels.

Generally, the post classifiers are to aid the examiners in the use, maintenance, and perfection of the classification system.

904 How to Search [R-1]

The examiner, after having obtained a thorough understanding of the invention disclosed and claimed in the nonprovisional application, then searches the prior art as disclosed in patents and other *>published< documents>, i.e., nonpatent literature (NPL)<. Any such document used in the rejection of a claim is called a reference.

In all continuing applications, the parent applications should be reviewed by the examiner for pertinent prior art. Where the cited prior art of a parent application has been reviewed, this fact should be made of record in accordance with the procedure set forth at paragraph II.(E) of MPEP § 719.05.

The first search should be such that the examiner need not ordinarily make a second search of the prior art, unless necessitated by amendments to the claims by the applicant in the first *>reply<, except to check to determine whether any reference which would appear to be substantially more pertinent than the prior art cited in the first Office action has become available subsequent to the initial prior art search. *>The first search< should cover the invention as described and claimed, including the inventive concepts toward which the claims appear to be directed. It should not be extended merely to add immaterial variants.

>In the first action on the merits of an application, the examiner shall make an initial endorsement in black ink, in the space provided on the right outside panel of the file wrapper, of the classes and subclasses of domestic and foreign patents, abstract collections, and publications in which the search for prior art was made. Other information collections and sources in which the search for prior art was made must also be identified by the examiner. The examiner must also indicate the date(s) on which the search was conducted. Note MPEP § 719.05.

In subsequent actions, where the search is brought up to date and/or where a further search is made, the examiner must endorse and initial on the file wrapper that the search has been updated and/or identify the additional field of search. See MPEP § 719.05. Any search updates should include all of the databases and the search queries and classifications employed in the original search.<

904.01 Analysis of Claims [R-1]

The breadth of the claims in the application should always be carefully noted; that is, the examiner should be fully aware of what the claims do *no*t call for, as well as what they do require. **>During patent examination, the claims are given the broadest reasonable interpretation consistent with the specification. See *In re Morris*, 127 F.3d 1048, 44 USPQ2d 1023 (Fed. Cir. 1997).< See MPEP § 2111 - § 2116.01 for case law pertinent to claim analysis.

904.01(a) Variant Embodiments Within Scope of Claim [R-1]

Substantially, every claim includes within its breadth or scope ** one or more variant embodiments >that are< not disclosed **>in the application, but< which would anticipate the **>claimed invention if found in a reference<. The claim must be so analyzed and ** any such variant encountered during the search *>should< be recognized**.

In each type of subject matter capable of such treatment (e.g., a machine or other apparatus), the subject matter as defined by the claim may be sketched >or diagrammed< in order to clearly delineate the limitations of the claim. Two or more sketches, each of which is as divergent from the particular disclosure as is permitted by claim recitation, will assist the examiner in determining the claim's actual breadth or scope. However, an applicant will not be required to submit such sketches of claim structure. *In re Application filed November 16, 1945,* 89 USPQ 280, 1951 C.D. 1, 646 O.G. 5 (Comm'r Pat. 1951).

904.01(b) Equivalents [R-1]

All subject matter that is the * equivalent of the subject matter as defined in the claim, even though specifically different from the definition in the claim, must be considered >unless expressly excluded by the claimed subject matter<. See MPEP § 2181 - § 2184 for a discussion of equivalents when a claim employs means or step plus function terminology.

904.01(c) Analogous Arts [R-1]

Not only must the art be searched within which the invention claimed is classifiable, but also all analogous arts regardless of where classified.

The determination of *>what< arts are analogous >to a particular claimed invention< is at times difficult. It depends upon the necessary essential function or utility of the subject matter covered by the claims, and not upon what it is called >by the applicant<.

For example, a tea mixer and a concrete mixer ** >both relate to< the mixing art, this being the necessary function of each. Similarly a brick-cutting machine and a biscuit cutting machine have the same necessary function. See MPEP § 2141.01(a) for a discussion of analogous and nonanalogous art in the context of establishing a *prima facie* case of obviousness under 35 U.S.C. 103. >See MPEP § 2131.05 for a discussion of analogous and nonanalogous art in the context of 35 U.S.C. 102.<

**>

904.02 General Search Guidelines [R-1]

In the examination of an application for patent, an examiner must conduct a thorough search of the prior art. Planning a thorough search of the prior art requires three distinct steps by the examiner: (A) identifying the field of search; (B) selecting the proper tool(s) to perform the search; and (C) determining the appropriate search strategy for each search tool selected. Each step is critical for a complete and thorough search.

When determining the field of search, three reference sources must be considered - domestic patents, foreign patent documents and nonpatent literature (NPL). None of these sources can be eliminated from the search unless the examiner has and can justify a reasonable certainty that no references, more pertinent than those already identified, are likely to be found in the source(s) eliminated. The search should cover the claimed subject matter and should also cover the disclosed features which might reasonably be expected to be claimed. The field of search should be prioritized, starting with the area(s) where the invention would most likely be found in the prior art.

Having determined the field of search, the examiner should then determine what search tools should be employed in conducting the search. Examiners are provided access to a wide variety of both manual and automated search tools. Choice of search tools is a key factor in ensuring that the most relevant prior art is found during the search. The choice of search tools to be used is based on the examiner's knowledge of the coverage, strengths and weaknesses of the available search tools that are appropriate for use in an examiner's assigned art. For example, a search tool may cover foreign patent documents; but, if that coverage does not meet the examiner's current search needs, this should be taken into consideration by the examiner who will take recourse to employ other search tools in order to remedy the deficiency.

Search tool knowledge is particularly important for examiners in arts (e.g., very active, high technology) where patent documents may seriously lag invention and, consequently, represent a reference source of limited value. These examiners must take special care to ensure that their searches include consideration of NPL and employ the effective use of tools specialized to cover NPL pertinent to their search needs.

Search needs in some technologies, e.g., chemical structures, DNA sequences, are very specialized and can only be met through use of specific search tools specially constructed and maintained to respond to those needs. These tools cover all three reference sources - domestic and foreign patents, NPL - and their use may be deemed sufficient for search of claimed inventions in such technologies.

In recognition that there are many available NPL search tools and their use is often complex, examiners have been provided and are encouraged to use the services of trained professional on-line search personnel located in the Technology Centers (Information Technology Resource Person (ITRP)) and in the Scientific and Technical Information Center (STIC) for NPL searching. See MPEP § 901.06(a) for services available in STIC.

In crowded, highly developed arts where most claimed inventions are directed to improvements, patent documents may serve as the primary reference source. Search tool selection in such arts may focus heavily on those providing patent document coverage.

Automated search tools covering patent documents usually provide both a classified and text search capability. Text search can be powerful, especially where the art includes well-established terminology and the search need can be expressed with reasonable accuracy in textual terms. However, it is rare that a text search alone will constitute a thorough search of patent documents. Some combination of text search with other criteria, in particular classification, would be a normal expectation in most technologies.

Examiners will recognize that it is sometimes difficult to express search needs accurately in textual terms. This occurs often, though not exclusively, in mechanical arts where, for example, spatial relationships or shapes of mechanical components constitute important aspects of the claimed invention. In such situations, text searching can still be useful by employing broader text terms, with or without classification parameters. The traditional method of browsing all patent documents in one or more classifications will continue to be an important part of the search

strategy when it is difficult to express search needs in textual terms.

Having determined what search tool(s) should be used to conduct the search, the examiner should then determine the appropriate search strategy for each search tool selected. The appropriate search strategy should be determined by the examiner on a case-by-case basis along with consultation with other examiners and/or supervisory patent examiners, where appropriate.

In order for examiners to acquire specialized skills needed to determine an appropriate field of search in their specific arts, each Technology Center may develop supplemental specific guidance and training for its examiners. This training will augment general training and information on search tools that is normally provided through the Patent Academy and Search and Information Resources Administration.

904.02(a) Classified Search [R-1]

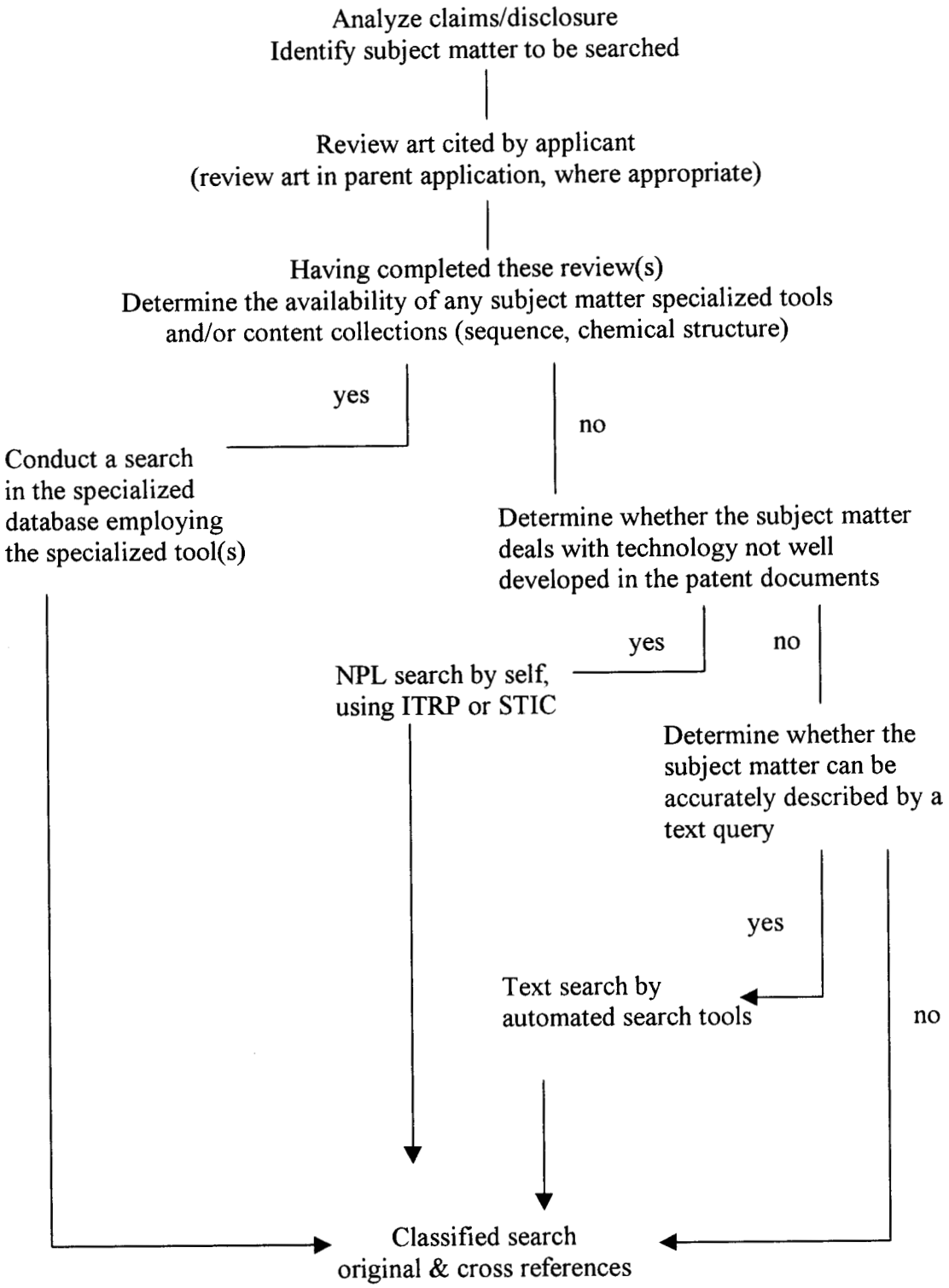
A proper field of search normally includes the subclass in which the claimed subject matter of an application would be properly classified. It is not necessary to search areas in which it could reasonably have been determined that there was a low probability of finding the best reference(s).

In outlining a field of search, the examiner should note every class and subclass under the U.S. Patent Classification system and other organized systems of literature that may have material pertinent to the subject matter as claimed. Every subclass, digest, and cross-reference art collection pertinent to each type of invention claimed should be included, from the largest combination through the various subcombinations to the most elementary part. The field of search should extend to all probable areas relevant to the claimed subject matter and should cover the disclosed features which might reasonably be expected to be claimed. The examiner should consult with other examiners and/or supervisory patent examiners, especially with regard to applications covering subject matter unfamiliar to the examiner.

The areas to be searched should be prioritized so that the most likely areas of finding relevant prior art are searched first.

904.02(b) Search Tool Selection [R-1]

Detailed guidance on the choice and use of specific search tools can be established only within the context of the special requirements of each Technology Center (TC). However, a general methodology following a “decision tree” process, set forth below, for making broad decisions in search tool selection is suggested.


Analyze claims/disclosure
Identify subject matter to be searched
Review art cited by applicant
(review art in parent application, where appropriate)
Having completed these review(s)
Determine the availability of any subject matter specialized tools
and/or content collections (sequence, chemical structure)
yes
no
Conduct a search
in the specialized
database employing
the specialized tool(s)
Determine whether the subject matter
deals with technology not well
developed in the patent documents
yes
no
NPL search by self,
using ITRP or STIC
Determine whether the
subject matter can be
accurately described by a
text query
yes
Text search by
automated search tools
no
Classified search
original & cross references

904.02(c) Internet Searching [R-1]

The Office published a Patent Internet Usage Policy to establish a policy for use of the Internet by the Patent Examining Corps and other organizations within the PTO. See *Internet Usage Policy*, 64 F.R. 33056 (June 21, 1999). The Articles of the Patent Internet Usage Policy pertinent to Internet searching and documenting search strategies are reproduced below. See MPEP § 707.05(e) for information pertaining to the citation of electronic documents and MPEP § 502.03 for information pertaining to communications via electronic mail.

INTERNET SEARCHING (ARTICLE 9)

The ultimate responsibility for formulating individual search strategies lies with individual Patent Examiners, Scientific and Technical Information Center (STIC) staff, and anyone charged with protecting proprietary application data. When the Internet is used to search, browse, or retrieve information relating to a patent application, other than a reissue application or reexamination proceeding, Patent Organization users **MUST** restrict search queries to the general state of the art unless the Office has established a secure link over the Internet with a specific vendor to maintain the confidentiality of the patent application. Non-secure Internet search, browse, or retrieval activities that could disclose proprietary information directed to a specific application, other than a reissue application or reexamination proceeding, are **NOT** permitted.

This policy also applies to use of the Internet as a communications medium for connecting to commercial database providers.

DOCUMENTING SEARCH STRATEGIES (ARTICLE 10)

All Patent Organization users of the Internet for patent application searches shall document their search strategies in accordance with established practices and procedures as set forth in MPEP § 719.05 II.(F).<

*>

904.03 < Conducting the Search [R-1]

It is a prerequisite to a speedy and just determination of the issues involved in the examination of an application that a careful and comprehensive search, commensurate with the limitations appearing in the most detailed claims in the case, be made in preparing the first action on the merits so that the second action on the merits can be made final or the application allowed with no further searching other than to update the original search. It is normally not enough that references be selected to meet only the terms of the claims alone, especially if only broad claims are presented; but the search should, insofar as possible, also cover all subject matter which the examiner reasonably anticipates might be incorporated into applicant's amendment. * >Applicants can facilitate a< complete search ** >by including<, at the time of filing, claims varying from the broadest to which they believe they are entitled to the most detailed that they would be willing to accept.

**>In doing a complete search, the examiner should find and cite references that, while not needed for treating the claims, would be useful for forestalling the presentation of claims to other subject matter regarded by applicant as his or her invention, by showing that this other subject matter is old or obvious.<.

In selecting the references to be cited, the examiner should carefully compare the references with one another and with the applicant's *disclosure* to avoid the citation of an unnecessary number. The examiner is not called upon to cite *all* references that may be available, but only the "best." (37 CFR 1.104(c).) Multiplying references, any one of which is as good as, but no better than, the others, adds to the burden and cost of prosecution and should therefore be avoided. The examiner must fully consider all the prior art references cited in the application, including those cited by the applicant in a properly submitted Information Disclosure Statement.

The best reference should always be the one used. Sometimes the best reference will have a publication date less than a year prior to the application filing date, hence it will be open to being overcome under 37 CFR 1.131. In these cases, if a second reference exists which cannot be so overcome and which, though inferior, is an adequate basis for rejection, the claims should be *additionally* rejected thereon.

In all references considered, including nonpatent, foreign patents, and domestic patents, the examiner should study the specification or description sufficiently to determine the full value of the reference disclosure relative to the claimed or claimable subject matter.

905 Miscellaneous

905.02 Soft Copy Orders

Soft copies of U.S. patents for the examiner's personal use may be ordered by the examiner on blue-colored order form PTO-14A. These copies are not to be placed in the official search file. To complete the form PTO-14A, the examiner should indicate the number of copies desired in the box marked "NO. OF COPIES" and should also complete the "PATENT NUMBER," "EXAMINER'S NAME," "ART UNIT," and "DATE OF ORDER" boxes.

When soft copies for more than three different patent numbers are desired, the examiner can prepare a list of the patent numbers and attach it to one copy of Form PTO-14A

which has been completed to reflect the Examiner's Name, Art Unit, and Date of Order.

To expedite the handling of requests for personal copies and thereby ensure the quickest response, the following routing procedures should be adhered to:

(A) Designated collection drops within each group for copy orders should be used.

(B) Clerical personnel from the Office of Classification Support (OCS) will visit designated collection drops at least twice each week to pick up PTO-14 orders.

Alternatively, the orders may be mailed or otherwise delivered to the Search File Improvement Division, OCS, currently located in Crystal Mall, Building 2, Room 967.

The attorneys' drop slot at the Customer Service Window should not be used nor should the forms be mailed to Copy Fulfillment Services as consequent rerouting to the Office of Classification Support for processing will result in unnecessary delay.

Copies provided for personal use will be stamped "DO NOT PLACE IN SEARCH FILE;" any such copy found in the search file will be removed by refiling personnel. Because of the cost of printing copies of patents, economy should be exercised in their use. Personal use soft copies no longer desired by examiners should be destroyed.

In view of the high cost of printing patents with color drawings, orders by examiners for plant patents and other patents with color drawings for personal use will normally not be filled.

A	PATENT NUMBER	NO. OF COPIES
	2,345,678	1

USE A SEPARATE ORDER FORM FOR EACH PATENT NUMBER

EXAMINER'S NAME	ART UNIT	DATE OF ORDER
HENRY GREEN	3502	10-15-78

EXAMINER'S NOTES

PTO-14A (REV. 5-76) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

PATENT ORDER FOR EXAMINER'S USE ONLY

905.03 Ordering of Patented and Abandoned Provisional and Nonprovisional Application Files

In the examination of an application it is sometimes necessary to inspect the application papers of some previously abandoned application (provisional or nonprovisional) or granted patent. This is always true in the case of a reissue application and reexamination proceeding.

Patented and abandoned files are stored at the Files Repository located near the other PTO buildings in Crystal City (Arlington, Virginia). Older files are housed in remote warehouses located in Maryland and Virginia.

Patented and abandoned files are ordered by means of a PALM video display or PALM intranet site transaction. To place such an order, the examiner is required to input his/her PALM location code, employee number, and patent number(s) and/or application number(s) of the file(s) that are needed. After transmission of the request transaction by the examiner, a "response" screen appears on the video display terminal or workstation browser which informs him/her of the status of the request for each file. The examiner is informed that the request

(A) is accepted;

(B) is accepted, but for which the file is located at a remote warehouse (in which case delivery time is increased);

(C) is not accepted because the file is not located at the repository or warehouse;

(D) is not accepted because a previous request for the file has not yet been filled; or

(E) is not accepted because the patent or application number inputted is not valid.

Periodically each day, personnel at the Files Repository perform a PALM print transaction which produces a list of all accepted requests in patent number order and, for requests for abandoned files, in application number order. The printed record of each request is detached from the list when its associated file is found. It is then stapled to it. Throughout the day, periodic deliveries of files are made directly to the offices of their requesters by Files Repository personnel. Upon delivery of files at the various locations, files that are ready to be returned to the repository are picked up.

With the exception of certain older files, the drawings of patented and abandoned files, if any, are now stored within their respective application file wrappers. Since it is desired not to separate one from the other, both the file and its drawings are delivered when a file is ordered.

905.04 Marking Examiners' Copies of Patents

When the examiners' copies of patents are sent to their respective art units to be filed, they should be routed across the appropriate examiners' desks prior to placement in the shoes. The assistant examiners who examined the application should mark in pencil on the face of the drawings, or the specifications where there are no drawings, such features as may be deemed advantageous in aiding understanding of the patents in future searches.

905.05 Application File Location

All files should be returned promptly to their proper location.

Whenever an application file is moved from one PALM location to another; e.g., removed from a group's central files or moved from one examiner to another, the PALM record should be updated with its current location. The appropriate bar code transaction should be performed. For example, if the examiner to whom the application is docketed obtains it, he/she should perform PALM transaction 1023 by pressing the F2 key on the bar code reader (BCR) and scanning the bar code label of the file with the light wand of the BCR. If an examiner other than the one to whom the application is docketed obtains the file, he/she should perform transaction 1036 which requires the input of his/her group number and his/her employee number before the label is scanned. All files should be returned promptly to their proper location.

905.06 Family of Patent Information [R-1]

Patent family information is available at the United States Patent and Trademark Office primarily through commercial databases. Examiners have access to this information either directly >through the automated search system< or >indirectly< through the search services of the Scientific and Technical Information Center (STIC).

AVAILABLE DATABASES

Derwent's World Patents Index (WPI) and International Patent Documentation Center (INPADOC) are two databases used for retrieving foreign patent information.

>The WPI database is loaded in-house at the Office and is integrated with the Office's automated search system. WPI in-house is used whenever abstracts are needed or when searches in addition to publication date or patent family are required, such as searches on inventor name or IPC (International Patent Classification). WPI in-house is also the first choice for searches for publication dates or patent families because of its ease of use and low cost.<

INPADOC is **>used< for quick searches for publication dates or patent families **. The Office enjoys cost effective rates for INPADOC due to an agreement between the Office and the International Patent Documentation Center (now part of the European Patent Office) negotiated several years ago. The agreement applies only to INPADOC as accessed directly on the INPADOC computer in Austria, not to INPADOC as available on other commercial database systems such as ORBIT, DIALOG, or STN.
**

ACCESS TO FOREIGN PATENT INFORMATION

Patent examiners ** may directly search >WPI in-house or< INPADOC ** or both. **

Examiners may also request foreign patent searches through the Scientific and Technical Information Center (STIC). Trained searchers in both the Reference and Foreign Patents sections of STIC perform patent family searches on demand, with a short turnaround time. The Foreign Patents section can also help examiners get copies of foreign patents found through online searching.