

In the Matter of

**CERTAIN COIN-OPERATED AUDIOVISUAL
GAMES AND COMPONENTS THEREOF
(VIZ., RALLY-X AND PAC MAN)**

Investigation No. 337-TA-105



USITC PUBLICATION 1267

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United States International Trade Commission / Washington, D.C. 20436

UNITED STATES INTERNATIONAL TRADE COMMISSION

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COMMISSION ACTION AND ORDER

Introduction

The United States International Trade Commission has concluded its investigation under section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337) of alleged unfair methods of competition and unfair acts in the unauthorized importation into the United States of certain coin-operated audiovisual games and components thereof, or in their sale by the owner, importer, consignee, or agent of either, the alleged effect or tendency of which is to destroy or substantially injure an industry, efficiently and economically operated, in the United States. The Commission's investigation concerned allegations that coin-operated audiovisual games imported or sold by the respondents in this investigation infringed complainant Midway Manufacturing Co.'s PAC-MAN and Rally-X copyrights and trademarks.

This Action and Order provides for final disposition of the above-captioned investigation. It is based upon the Commission's determination, made in public session at the Commission meeting of June 22, 1982, that there is a violation of section 337 with respect to complainant's

PAC-MAN coin-operated audiovisual game, and that there is no violation of section 337 with respect to complainant's Rally-X coin-operated audiovisual game.

Action

Having reviewed the record in investigation No. 337-TA-105, including the recommended determination of the Administrative Law Judge, the Commission, on June 22, 1982, determined that--

1. There is a violation of section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337) in the importation and sale of certain coin-operated audiovisual games which infringe complainant's PAC-MAN copyright and trademark, the effect or tendency of which is to substantially injure an industry, efficiently and economically operated, in the United States;
2. The appropriate remedy for such violation of section 337 is a general exclusion order, pursuant to subsection (d) of section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337(d)), preventing the importation of coin-operated audiovisual games and components thereof which infringe complainant's PAC-MAN copyright and/or trademark;
3. The public-interest factors enumerated in subsection (d) of section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337(d)) do not preclude the issuance of an exclusion order in this investigation; and
4. As provided in subsection (g)(3) of section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337(g)(3)), the appropriate bonds during the period this matter is pending before the President are in the following amounts: (1) 54 percent of the entered value of infringing games, and (2) 300 percent of the entered value of infringing component parts.

Order

Accordingly, it is hereby ORDERED THAT--

1. Coin-operated audiovisual games and components thereof which infringe complainant's PAC-MAN copyright and/or trademark are excluded from entry into the United States, except where such importation is licensed by the copyright and/or trademark owner;

2. The articles to be excluded from entry into the United States shall be entitled to entry under bond in the following amounts: (1) 54 percent of the entered value of infringing games, and (2) 300 percent of the entered value of infringing component parts, from the day after this order is received by the President pursuant to subsection (g)(3) of section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337(g)(3)) until such time as the President notifies the Commission that he approves or disapproves this action, but, in any event, not later than 60 days after the date of receipt;
3. Notice of this Action and Order be published in the Federal Register;
4. A copy of this Action and Order and of the Commission Opinion issued in connection therewith be served upon each party of record to this investigation and upon the Department of Health and Human Services, the Department of Justice, the Federal Trade Commission, and the Secretary of the Treasury; and
5. The Commission may amend this Order in accordance with the procedure described in section 211.57 of the Commission's Rules of Practice and Procedure (46 F.R. 17533, March 18, 1981; to be codified at 19 C.F.R. § 211.57)

By order of the Commission.


Kenneth R. Mason
Secretary

Issued: July 1, 1982

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.

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CERTAIN COIN-OPERATED AUDIOVISUAL)
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COMMISSION OPINION

A. Procedural Background ^{1/}

On April 17, 1981, Midway Manufacturing Company filed a complaint with the Commission. The complaint alleged that certain unfair methods of competition and unfair acts had occurred, including the infringement of the complainant's copyrights in the Rally-X and PAC-MAN audiovisual works and the infringement of complainant's common law trademark rights in the terms Rally-X and PAC-MAN, the effect or tendency of which was allegedly to destroy or substantially injure an industry, efficiently and economically operated, in the United States. The Commission instituted an investigation on the basis of these allegations and published notice thereof in the Federal Register of July 1, 1981 (46 F.R. 34436). In addition to naming Midway as the complainant, the notice listed 35 firms as respondents.

^{1/} The following abbreviations are used in this opinion: ALJ = Administrative Law Judge; IA = Investigative Attorney; RD = ALJ's recommended determination; CX = complainant's exhibit; RX = respondents' exhibit; TR = transcript of evidentiary hearing before ALJ; CTR = transcript of May 24, 1982, hearing before the Commission on violation, remedy, public interest, and bonding.

On July 24, 1981, complainant moved to amend its complaint and the notice of investigation to name 33 additional respondents. On September 21, 1981, the Commission granted the motion with respect to 20 of the 33 proposed respondents (46 F.R. 47891). The Commission specifically noted that these 20 additional respondents would not be obliged to appear at the hearing on temporary relief and as a result would not be subject to any in personam temporary relief which the Commission might issue.

The ALJ conducted a temporary relief hearing at which only complainant Midway, respondent Artic International, Inc., and the Commission investigative attorney (IA) participated. Following the hearing, the ALJ recommended that the Commission determine that there was reason to believe that a violation of section 337 existed with respect to the PAC-MAN copyright and trademark, but not with respect to the Rally-X copyright and trademark.

After a public hearing on the questions of violation, remedy, public interest, and bonding, the Commission determined on January 4, 1982, that there was reason to believe that a violation of section 337 existed in the infringement of complainant's copyright and trademark in the PAC-MAN game. 2/ The Commission also determined that there was no reason to believe that a violation of section 337 existed with respect to the Rally-X game.

Relying primarily upon the representation of the U.S. Customs Service that it could not enforce a temporary exclusion order, the Commission issued cease and desist orders against 18 respondents. These orders forbid the respondents in question to "import, distribute, sell or deal in any copy" of

2/ Commissioner Stern dissented, finding no reason to believe that a violation of section 337 existed with respect to the subject imports.

the PAC-MAN game machine without complainant's authorization during the pendency of the investigation. The orders permitted entry of infringing games produced by these respondents into the United States under bond in the amount of 54 percent of the entered value of such games. 3/ 4/

The ALJ conducted a permanent relief hearing at which only the complainant and the IA participated. 5/ After the hearing, the ALJ issued a recommended determination (RD) that the Commission find that a violation of section 337 exists with respect to the PAC-MAN game, but not with respect to the Rally-X game. Pursuant to section 210.52 of the Commission's rules, the record in the investigation and the RD were certified to the Commission for its consideration (19 CFR 210.52).

On May 24, 1982, the Commission conducted a hearing at which the complainant and the IA presented arguments on the issues of violation, remedy, public interest, and bonding. Neither the respondents nor any nonparties made an appearance at the hearing.

B. Jurisdiction

After the temporary relief hearing, the ALJ found that the Commission lacked jurisdiction over respondents David Kamen, Mike Munves Corp., and Penn

3/ In a letter to the Commission dated April 22, 1982, the Customs Service indicated that it could enforce a general exclusion order if complainant provided certain necessary assistance. On June 23, 1982, the Commission, relying upon the Customs Service opinion on the question of enforceability, replaced its temporary cease and desist orders with a temporary exclusion order.

4/ Commissioner Stern, having found no reason to believe that a violation of section 337 existed, did not participate in the consideration of temporary relief.

5/ Artic relied upon the evidence and arguments it presented during the temporary relief phase of the investigation and did not participate in the balance of the investigation.

Regal Vending Co., inasmuch as their dealings were exclusively with the domestic respondents. The Commission reserved judgment on the jurisdictional issue and requested the ALJ to develop the record on that issue during the permanent relief phase of the investigation.

In his recommended determination concerning permanent relief, the ALJ again recommended a finding that the Commission lacks jurisdiction over the aforementioned respondents. However, we determine that these 3 respondents, as first-purchasers of imported articles from importers, are subject to the Commission's jurisdiction. See Certain Molded-in Sandwich Panel Inserts and Methods for Their Installation, inv. No. 337-TA-99 USITC Pub. 1246, p. 4 (May 1982). Such a finding of personal jurisdiction, however, is not necessary when, as in this case, the Commission issues a general exclusion order.

C. Violation

1. Copyright infringement

The subject of the copyrights in issue here is the "audiovisual work" contained in the Rally-X and PAC-MAN games. Such audiovisual work consists of the mazes, characters and other graphic works appearing on the screen in the various modes of the games, and the sound effects which accompany these graphic works. Complainant does not seek copyright protection of the circuit boards (in which the audiovisual work is stored) or of any specific pattern of play on the games.

To establish infringement of one of its copyrights, complainant must show both "ownership" 6/ of the copyright and copying by the respondents of the

6/ Ownership of a copyright, as is apparent below, corresponds in many respects to the validity of a patent.

"audiovisual work" contained in such copyright. Atari, Inc. v. North American Phillips Consumer Electronics Corp., No. 81-2920, slip op. at 5 (7th Cir. March 2, 1982).

a. Ownership

The question of ownership turns on the following factors:

1. Originality in the author;
2. Copyrightability of the subject matter;
3. Citizenship status of the author, such as to permit a claim of copyright;
4. Compliance with applicable statutory formalities; and
5. If the complainant is not the author, a transfer of rights or other relationship between the author and the complainant so as to constitute the complainant the valid copyright claimant.

Coin-Operated Audio-Visual Games and Components Thereof, inv. No. 337-TA-87, USITC Pub. No. 1160, p. 13 (1981). At the outset it must be borne in mind that complainant possesses certificates of registration issued by the Copyright Office. These certificates constitute prima facie evidence of the validity of complainant's copyrights. 17 U.S.C. § 410(c). Respondents must therefore bear the burden of proof in overcoming this presumption of validity. Flick-Reedy Corp. v. Hydro-Line Mfg. Co., 351 F.2d 546 (7th Cir. 1965), cert. denied, 383 U.S. 958 (1966).

(1) Originality

The audiovisual work in both games was created by Namco, Ltd., a Japanese firm, and assigned by Namco to the complainant. CX 115; CX 116; CX 117; CX 118.

(2) Copyrightable subject matter

Respondent Artic argues that the audiovisual work contained in the games is not copyrightable subject matter because it is, according to Artic, not "fixed in any tangible medium of expression now known or later developed," as required by 17 U.S.C. § 102(a). "Fixation" is defined in section 101 of the copyright statute:

A work is "fixed" in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration.

The legislative history reveals that such 'fixation' does not include--

purely evanescent or transient reproductions such as those projected briefly on a screen, shown electronically on a television or other cathode ray tube, or captured momentarily in the 'memory' of a computer.

H.R. Rep. No. 1476, 94th Cong. 2d Sess. 52 (1976).

Respondent Artic argues that the interaction between the machine and the player deprives the games in question of any copyright protection. Artic contends that for any given play of the game there is no predetermined sequence of images and sounds. Rather, the audiovisual details are entirely dependent upon the "authorship" of the player. To this extent, the game is not fixed, but varies from play to play.

However, the variety of possible game sequences is irrelevant to the fixation requirement. "It is not the games, or their attract modes, or their coin drop modes, or any other particular sequence of images and sounds, which are protected." RD at 66. It is the 'audiovisual works' which are utilized within them which are protected. The images (the pathways, the fruit, the

ghosts, etc.,) and the characteristic sounds of the games are fixed because they are stored in the games' circuit boards from which they may be reproduced.

Support for the conclusion that the precise sequence of images and sounds is irrelevant to the question of fixation is found in the statutory definition of the term "perform." According to the statute--

To "perform" a work means to recite, render, play, dance, or act it, either directly or through any device or process or, in the case of . . . [an] audiovisual work, to show its images in any sequence or to make the sounds accompanying it audible. 17 U.S.C. § 101. [emphasis added]

Additionally, courts which have applied the fixation requirement to the audiovisual work contained in electronic games have found that the variation of the sequence of sound and images from one play to the next did not render the audiovisual work "transient." ^{7/} The recent case Stern Electronics, Inc. v. Kaufman, 669 F.2d 852, 856 (2d Cir., 1982) concerned an audiovisual game called "Scramble." The game involves a spaceship which the player attempts to maneuver past a series of obstacles, including mountains and enemy spacecraft, and, at the same time, to strike at certain enemy positions with a laser. The precise sequence of sound and images of any play of Scramble is determined by the action of the player. As a result, each play typically yields a different sequence. The court stated that--

[t]he entire sequence of all the sights and sounds of the game are different each time the game is played, depending upon the route and speed the player selects for his spaceship and the timing and accuracy of his release of his craft's bombs and lasers. Nevertheless, many aspects of the sights and the sequence of their

^{7/} In Midway Mfg. Co. v. Artic International, Inc., Docket No. 80-C-8363 (N.D. Ill., March 10, 1982), the District Court determined that the audiovisual work in the PAC-MAN game satisfied the statutory fixation requirement.

appearance remain constant during each play of the game. These include the appearance (shape, color, and size) of the player's spaceship, the enemy craft, the ground missile bases and fuel depots and the terrain over which (and beneath which) the space ship flies, as well as the sequence in which the missile bases, fuel depots, and terrain appears. Also constant are the sounds heard whenever the player successfully destroys an enemy craft or installation or fails to avoid an enemy missile or laser. It is true, as appellants contend, that some of these sights and sounds will not be seen and heard during each play of the game in the event that the player's spaceship is destroyed before the entire course is traversed. But the images remain fixed, capable of being seen and heard each time a player succeeds in keeping his spaceship aloft long enough to permit the appearances of all the images and sounds of a complete play of the game. The repetitive sequence of a substantial portion of the sights and sounds of the game qualifies for copyright protection as an audiovisual work.

Stern, supra, at 5519-5520. Similarly, in the instant case, the permanence of the characteristic PAC-MAN characters and sounds stored within the memory of complainant's game satisfies the statutory requirement of fixation.

(3) Author's citizenship

Complainant Midway Manufacturing Co. is incorporated in the state of Illinois and therefore a United States citizen for purposes of the Copyright Act.

(4) Compliance with statute

(a) recordation

Respondent Artic contends that the complainant is estopped from bringing the instant case because of an alleged failure to record with the Copyright Office the instrument of transfer by which complainant Midway claims title to the copyrights in question. Respondent Artic bases its argument on section 205(d) of the Copyright Act which provides:

No person claiming by virtue of a transfer to be the owner of a copyright or of an exclusive right under a copyright is entitled to institute an infringement action under this title until the instrument of transfer under which such person claims has been recorded in the Copyright Office, but suit may be instituted after such recordation on a cause of action that arose before recordation.

17 U.S.C. § 205(d)

Respondent Artic's allegation of a failure to record involves five separate documents. The first two documents are assignments dated October 10, 1980, which purport to transfer all "right, title and interest" to the Rally-X and PAC-MAN copyrights from Namco to Midway. The third document is a letter dated October 11, 1980, from Midway to Namco. In essence, the letter indicates that future assignments of the rights to the PAC-MAN and Rally-X copyrights would be governed by a future agreement. The fourth and fifth documents, both dated November 4, 1980, are license agreements among Midway, Namco, and Namco's U.S. subsidiary regarding the transfer of certain property rights associated with the manufacture and distribution of the PAC-MAN and Rally-X games. Before institution of this investigation, Midway recorded the October 10, 1980, assignments, but not the other documents, with the Copyright Office.

In our temporary relief opinion, we directed the ALJ to determine which "document actually transferred the rights" to the copyrights in question. Additionally, Commissioner Frank asked the ALJ to consider:

- (1) the intent of the parties;
- (2) which document in fact transferred the rights in question; and
- (3) whether the October 10 assignments constituted "short forms".

During the permanent relief phase of this investigation, David Marofske, President of Midway, and Hideyuki Nakajima, President of Namco America,

(Namco's U.S. subsidiary) testified that the parties intended the October 10 assignments to transfer all copyright ownership rights to Midway. Tr. 901-902; CX 1, p. 66. According to Marofske, the letter of October 11, 1980, merely acknowledged that the copyrights in question could be returned to Namco in a future agreement. Tr. 903. Further, the November 4, 1980, licenses constituted a more detailed description of the transfer completed in the October 10 assignments. Tr. 903-904.

The terms of the October 11 letter and the November 4 licensing agreements are entirely consistent with the terms of the October 10 assignments. Additionally, the complainant undertook certain activities which are consistent with a complete transfer of the copyrights by the October 10 assignments. These activities included Midway's purchase of prototypes and advertisement for the PAC-MAN and the Rally-X games in October of 1980. Tr. 926-928. We therefore conclude that the October 10 assignments actually transferred the copyrights in issue.

Further, even if they did not complete such a transfer, they constituted a "short form," the recordation of which satisfies section 205(d) of the Copyright Act. The function of a short form filed with the Copyright Office is to put the public on notice of the transfer of title and yet preserve the confidentiality of certain business information. See 3 Nimmer on Copyright, § 10.07[A], n. 2 (1981).

Here, the October 10 assignments were filed at approximately the same time as the execution of the other documents. In this regard, the U.S. District Court for the Northern District of Illinois, presented with the same issue of whether the October 10 assignments constitute short forms, reached

the same conclusion. Midway Mfg. Co. v. Artic International, Inc., No. 80-C-5863, at 26-27 (N.D. Ill. March 10, 1982).

Finally, on February 18, 1982, complainant recorded with the Copyright Office nonconfidential versions of the November 4 license agreements. CX 195; CX 196. Such recordation after the filing of a complaint of infringement has retroactive effect to the date on which the complaint was filed, thereby satisfying the requirement of section 205(d). Co-opportunities v. National Broadcasting Co., 510 F.Supp. 43, 48 (N.D. Cal. 1981); Frankel v. Stein & Day, 470 F.Supp. 209, 212, (S.D.N.Y. 1979).

(b) loss of copyright by publication without notice

Respondent Artic argues that complainant has lost its copyright by its failure to provide adequate notice. Section 401 of the Copyright Act provides in pertinent part:

(a) General requirement. Whenever a work protected under this title is published in the United States or elsewhere by authority of the copyright owner, a notice of copyright as provided by this section shall be placed on all publicly distributed copies from which the work can be visually perceived, either directly or with the aid of a machine or device.

(b) Form of notice. The notice appearing on the copies shall consist of the following three elements:

(1) the symbol (C) (the letter C in a circle), or the word "Copyright", or the abbreviation "Copr." and

(2) The year of the first publication of the work; in the case of compilations or derivative works incorporating previously published material, the year date of first publication of the compilation or derivative work is sufficient. The year date may be omitted where a pictorial, graphic, or sculptural work, with accompanying text matter, if any, is reproduced in or on greeting cards, postcards, stationery, jewelry, dolls, toys, or any useful articles; and

(3) the name of the owner of copyright in the work, or an abbreviation by which the name can be recognized, or a generally known alternative designation of the owner.

(c) Position of notice. The notice shall be affixed to the copies in such manner and location as to give reasonable notice of the claim of copyright.

17 U.S.C. § 401.

The result of failure to comply with section 401 is loss of the copyright.

17 U.S.C. § 405(a) & (b). However, there are two exceptions to the above rule. Thus, when notice is omitted from copies publicly distributed by authority of the copyright owner, the copyright nevertheless remains intact if, the notice has been omitted from no more than a relatively small number of the copies distributed, 17 U.S.C. § 405(a)(1), or, if registration for the work has been made before or is made within five years after publication without notice, and a reasonable effort is made to add notice to all copies that are distributed publicly in the United States. 17 U.S.C. § 405(a)(2).

During the temporary relief hearing, Mr. Huang, president of Artic International, and Mr. Storino, president of respondent Jay Industries, testified that they had seen Puckman and RALLY-X games in Japan, manufactured by Namco, which did not display the copyright notice on the screen. Tr. 691-96; CX 67. Since such testimony was unopposed during the TEO hearing, the ALJ stated that there was "evidence that some of Namco's early RALLY-X and PAC-MAN games may not have displayed a copyright notice."

However, during the permanent relief hearing, Mr. Nakajima, an official of Namco, testified that Namco had displayed the necessary notice and presented printed circuit boards in support of that testimony. SX 1, p. 28.

Since Mr. Nakajima's testimony was supported by physical evidence, while that of the respondents' presidents was not, the ALJ credited Mr. Nakajima's

testimony over that of respondents. Moreover, as noted by the ALJ, it is possible that the machines without copyright notices viewed by Messrs. Huang and Storino were illegal copies of the Namco machines, rather than those of Namco.

Respondent Artic has offered no evidence that the alleged distribution by Namco without proper notice was by authority of the complainant. Further, even if such distribution were made by authority of the U.S. owner, it would not invalidate the copyrights if registration for the work had been made before or within five years of the publication without notice, and a reasonable effort had been to add notices to all copies that are distributed to the public in the United States after the omission has been discovered. 17 U.S.C. § 405(a)(2).

(c) deposit requirement

Respondent Artic contends that complainant failed to comply with section 408(b)(3) of the Copyright Act which provides: "[T]he material deposited for registration shall include in the case of a work first published outside the United States, one complete copy or phonorecord as so published."

Although the PAC-MAN and Rally-X games were originally published outside the United States, complainant did not deposit a complete copy, but rather a videotape of the audiovisual work. Nevertheless, the policy of the Copyright Office has been to accept videotapes for registration of audiovisual work. Two courts have recently held that such a deposit satisfies the statutory requirement. Stern Electronics, Inc. v. Kaufman, No. 81-74113 (2d Cir. Jan. 20, 1982), Midway Mfg. Co. v. Artic International, Inc., No. 80-C-5863 (N.D. Ill. March 10, 1982).

A second allegation regarding the videotapes deposited by the complainant is that they do not display the audiovisual work as originally published in Japan. However, the differences between the audiovisual work submitted to the Copyright Office and that originally published in Japan, such as use of English rather than Japanese, are not of copyrightable significance.

(d) inequitable conduct

In Large Video Matrix Display Systems, Inv. No. 337-TA-75, USITC Pub. 1158 (1981), the Commission adopted the rule that the elements of inequitable conduct sufficient to render a patent unenforceable are: (1) a material misrepresentation or omission of information; and (2) bad faith and intent to deceive the examiner or gross negligence representing such reckless disregard for the truth as to be tantamount to bad faith. Id. at 14. This is the standard for determining inequitable conduct before the Patent Office and is applicable, by analogy, to proceedings in the Copyright Office. See Russ Berrie & Co., Inc. v. Jerry Elsner Co., Inc., 482 F. Supp. 980 (S.D.N.Y. 1980).

Respondent Artic alleges that the complainant misled the Copyright Office with respect to the scope of the copyright protection it sought. In essence, Artic argues that complainant's attorney indicated that he was seeking registration of videotapes of the games in question rather than the audiovisual work identified in those videotapes.

Artic points to a cover letter to the Midway copyright applications in which complainant's attorney wrote:

- (1) Copyright application for audiovisual work entitled . . .
- (b) videotape deposit (one copy)
- (c) synopsis of deposit
- . . .

- (2) Copyright application for non-dramatic literary work entitled

 (b) deposit (two copies) and . . .
 [emphasis added]

RX 1. Artic asserts that use of the words "copy," "synopsis" and "copies" in copyright parlance reflects a desire to register the videotape itself, rather than the audiovisual work portrayed in the videotape. In none of its applications did complainant Midway explicitly state that the videotapes were submitted as "identifying material."

An examiner for the Copyright Office at the time of complainant's application, testified that he had attended a meeting in which complainant's attorney sought advice on how best to submit his application. The basic problem discussed was "whether or not these animated graphics could be captured in such a manner that [the Copyright Office] would have a copy that would serve as a basis for some type of registration in the Copyright Office." Tr. 679. In this vein, complainant's attorney and the Copyright Office officials considered use of a videotape. Tr. 517-519, 678-679. Complainant's attorney open talk of capturing the "animated graphics" on a videotape for submission to the Copyright Office belies Artic's allegation of fraud.

The ALJ makes two telling points in his rejection of Artic's fraud defense. First, complainant's method of applying for a copyright through a videotape has become the standard practice for registration of audiovisual works. CX 119, p. 4; Stern Electronics, Inc. v. Kaufman, supra. Second, following the temporary relief hearing in this matter, Artic called to the attention of the Copyright Office all of the alleged misrepresentations and deficiencies which it raised before this Commission, including the record of

the testimony concerning the events surrounding the registration of the audiovisual works of the PAC-MAN and Rally-X games. Artic requested that the Copyright Office cancel the copyrights on these works, based upon the evidence thus presented. However, the Copyright Office, through its General Counsel and the Chief of its Examining Division, notified respondent Artic that it found no grounds to cancel such registrations. (CX 189).

b. Copying

To establish copying, complainant must prove access by respondent and a substantial similarity of the audiovisual works. Sid & Marty Kroft Television Production v. McDonald's Corp., 562 F.2d 1157 (9th Cir. 1977) Alternatively, in the absence of direct proof of access, copying may be inferred when the similarity is overwhelming. Heim v. Universal Pictures, 154 F.2d 480 (2d Cir. 1946).

The ALJ correctly concluded that for both the Rally-X and PAC-MAN games, the respondents have had sufficient access. Additionally, he found striking similarities between the domestic Rally-X game and its imported counterpart.

The RALLY-X game and the games allegedly copied from it display identical graphics in similar colors in both the play and the attract modes. The accompanying audio effects including the initial melody, the tones repeated during a game, and the explosion effect when cars collide in the maze are also identical. There is a slight difference in the attract modes of the RALLY-X and the allegedly infringing games, in that the player cars follow somewhat different routes, but the difference is difficult to detect without placing a copy adjacent to an original. Portions of the playmodes of the games including the display congratulating "High Score of the Day" with the word "you did it, now go for world record" against a sky-blue background, are exactly the same.

RD, at 82.

With respect to respondents' games corresponding to PAC-MAN, the ALJ characterized his finding of copying as "unavoidable."

Throughout the attract and the play modes, the colors and configurations of the characters and the maze through which they race are identical. The effect of the round yellow PAC-MAN on the red, yellow and pink monsters, the reaction of the PAC-MAN and the monsters to the PAC-MAN's consumption of power capsules, and the apparent deflation of the PAC-MAN by the attacking monsters cannot be distinguished in any of the games. The attract mode and certain other sequences of the games are also identical. In the play mode, not only are all reactions to play-instigated movements identical, but also all games respond identically in the play mode when the players do not institute any movement and leave the controls idle. Moreover, the audio effects in both modes of the games are exactly alike, producing identical sounds in response to identical movements of the characters.

RD at 82-83. We agree with the ALJ and specifically adopt his finding of infringement by particular respondents. See R.D. Findings of Fact 51-72.

This conclusion accords with that recently reached by the Seventh Circuit in Atari, Inc., v. North American Phillips Consumer Electronics, Corp., supra. There, the audiovisual work of a game entitled "K.C. Munchkin" was found to be a copy of the audiovisual work in the PAC-MAN game despite numerous differences. K.C. Munchkin included moving dots, maze variations, and changes in features found in PAC-MAN. Nevertheless, the court found copying and ordered temporary relief. Atari, supra, at 17-20. Therefore, a finding of copying is appropriate here where the games in question are nearly identical.

2. Trademark Infringement

Complainant alleges that respondents have infringed its common-law trademark rights to the names "PAC-MAN" and "Rally-X." The acquisition of a common-law trademark results from its actual use by one merchant to distinguish his goods from those of another. George Washington Mint, Inc. v. Washington Mint, Inc., 349 F.Supp. 255 (S.D.N.Y. 1972).

In addition to priority of use, complainant must demonstrate four elements in order to establish the existence of a common-law trademark:

1. The mark must be distinctive;
2. The mark must be arbitrary and created for the express purpose of serving as a trademark;
3. The mark, if a design, must be nonfunctional; and
4. The mark must have achieved secondary meaning, unless the mark is either "suggestive" or non-descriptive.

Games I, supra, p. 7; Certain Novelty Glasses, inv. No. 337-TA-55, USITC Pub. 991 (1979).

Complainant has demonstrated extensive use of both marks. It has used the "PAC-MAN" name on games and on numerous other articles. Tr. 441; CX 16. And it has the "Rally-X" name on games and on other articles. CX 134. Additionally, complainant has spent large sums of money on advertising these trademarks. The ALJ found complainant's trademarks to be arbitrary, fanciful, and created for the purpose of serving as a mark. He also found that the marks have achieved a secondary meaning. CX 184; CX 192. We concur in his judgment.

To establish trademark infringement, complainant must also show "a likelihood of confusion" among the consuming public. The ALJ finds that the virtual identity of the domestic and imported games assures such confusion. RD at 89. The respondent Artic does not take a contrary view.

Respondent Artic opposes complainant's trademarks on three grounds. First, Artic asserts that the complainant has failed to establish its marks in each of the 50 states. We note, however, that complainant's nationwide advertising obviates the need for complainant to establish its mark in all 50

states separately. Second, Artic contends that the terms "PAC-MAN" and "Rally-X" are not proper common law trademarks because they are the actual titles of the games in question. The ALJ correctly rejected this contention by noting that the terms "PAC-MAN" and "Rally-X" are not merely descriptive of the artistic content of the games, rather they are the names by which the games are traded. RD at 87. Finally, Artic argues that the terms "PAC-MAN" and "Rally-X" describe functional aspects of the games and, therefore, cannot be trademarks. The ALJ concluded that the terms in question have not become generic, but remain arbitrary and distinctive. RD at 88. We agree.

One issue raised during the temporary relief phase of this investigation concerns the alleged prior use of the PAC-MAN trademark by respondent K & K Industrial Services (KK) in Hawaii. The Commission initially determined that KK was a good faith prior user of the PAC-MAN trademark in Hawaii and that the complainant could not therefore claim any trademark rights in that jurisdiction.

After the permanent relief hearing, the ALJ found that KK's use, even if prior, was not in good faith. KK's supplier was an illegal copier of Namco's Puckman game in Japan. KK had reason to believe that its supplier was not a licensee of Namco and that it was exporting Puckman boards into the United States illegally. As found in Stern Electronics, supra, when the prior use of a trademark is not bona fide, the prior user does not obtain any rights in the mark vis a vis a later valid user.

Additionally, the deposition testimony of Andy Kaoh, president of KK, reveals that KK has abandoned any rights it may have had to the PAC-MAN trademark.

While Midway continues to urge that KK's stipulation to a preliminary injunction is sufficient evidence of abandonment, additional evidence is present in the instant record clearly supporting a finding of abandonment. Specifically, Mr. Andy Kaoh, President of KK, testified that KK does not claim any rights in the Puckman mark. 8/

Complainant's Prehearing Brief at 15-16.

3. Domestic Industry

The ALJ adopted the traditional definition of the domestic industry, viz., as that portion of complainant's business devoted to the exploitation of the intellectual property rights in issue. However, he applied this definition only to those facilities making and selling games under the PAC-MAN and Rally-X copyrights and trademarks. We agree with the ALJ's finding that the domestic industry does not include complainant's facilities devoted to the manufacture and sale of certain collateral products (shirts, board-games, etc.) which utilize the copyrights and trademarks in question. 9/

8/ The testimony cited by complainant is found at CX 192-Part II, pp. 24-26.

9/ Although reaching the same conclusion regarding the scope of domestic industry, Commissioner Stern adopts a different analysis. She notes that the legislative history of the 1974 Trade Act indicates that in a patent-based section 337 investigation, "the industry in the United States generally consists of the domestic operations of the patent owner, his assignees and licensees devoted to such exploitation of the patent." H. Rep. No. 93-571, 93d Cong., 1st Sess. 78 (1973). Given the narrow scope of an industry which is defined by the claims of a patent, this passage suggests a Congressional intent to limit the scope of the domestic industry to those facilities producing a narrow range of articles.

However, neither the statute nor the legislative history addresses the problem of defining the domestic industry in a trademark or copyright case. In such cases, the mechanical application of a definition of the domestic industry which encompasses all of the exploitation of the intellectual property right in question could result, not in a narrow industry, but in an industry potentially as broad as the entire economy. Since the exploitation of copyright or trademark privileges may involve wholly unrelated articles, a domestic industry defined by those privileges would have little resemblance to the industries apparently contemplated by Congress. It is therefore

(Footnote continued)

As noted in Certain Headboxes and Papermaking Machine Forming Sections for the Continuous Production of Paper, and Components Thereof, inv. No. 337-TA-82, USITC Pub. 1138 (April 1981), for the ordinary intellectual property investigation--

the scope of the domestic industry encompassed virtually all facilities devoted to producing articles made in accordance with the subject patent(s), since the allegedly infringing imports were in direct competition with all domestically-produced articles under the patent.

At 28. However, "our focus under section 337 in patent cases is on injury caused by infringing imports to the domestic industry producing articles, covered by the patent, which compete with the subject imports." Headboxes, supra, at 29. The Commission noted in Headboxes that it must--

focus on the actual point at which the infringing imports have an adverse impact . . . we must identify specifically that portion of complainant's facilities which produces articles under the patents in suit and which is adversely affected by the infringing imported articles--namely, in this case, the complainant's production facilities for multi-ply headboxes. Upon that segment only should we assess the economic impact which the unauthorized importations and sales have on the legal monopoly of the patent holder.

Id.

The need to limit the domestic industry to business operations devoted to an article which is competitive with the imports in question is particularly

(Footnote continued)

appropriate in copyright and trademark cases to limit the domestic industry to those facilities which produce an article which is covered by the intellectual rights in question and which compete with the imports in question. This investigation is the first to present copyrights and trademarks which are exploited in areas beyond that of the imported product. Further, this approach --i.e., consideration of the scope of the intellectual right as limited by the extent of competition between the domestic and imported products--is consistent with the previous trademark and copyright cases. In Games I and Stoves for instance, the complainant did not exploit its intellectual property rights in areas beyond that of the complained of importation.

evident in a copyright or trademark case where the exploitation of the property right may extend to entirely unrelated products.

Section 337 requires that the Commission find that unfair acts found to exist "destroy or substantially injure an industry, efficiently and economically operated, in the United States. . . ." As the ALJ recommended, it is necessary to define two discrete domestic industries: one consisting of the manufacture, distribution and sale of PAC-MAN games and another consisting of the manufacture, distribution, and sale of Rally-X games since these two games are distinct products.

With respect to PAC-MAN, there is an industry currently involved in the production, distribution, and sale of the product covered by the trademark and copyright. Thus, a domestic PAC-MAN industry currently exists. In contrast, with respect to Rally-X, we determine that there is no domestic industry. We agree with the ALJ that the popularity of the Rally-X game is in a state of permanent decline. ^{10/} Currently, there are no facilities being used to produce an article competitive with the imported Rally-X games. Complainant is no longer actively engaged in the distribution or sale of Rally-X games. Complainant's inventory of Rally-X games numbered only 13 games as of November 30, 1981. There is nothing in the record to indicate that complainant will resume the manufacture and marketing of the games even if the Commission were to find a violation of section 337 and issue a general exclusion order as requested by the complainant.

^{10/} See Certain Audisovisual Games and Components Thereof, inv. No. 337-TA-87, USITC Pub. 1160, pp. 25-27 (1981) for a discussion of the life-cycle of such games.

Although complainant continues some servicing activity, we disagree with the ALJ's conclusion that such servicing is sufficient to establish the existence of a domestic industry. This activity is not part of an ongoing commercial operation related to any current domestic production, distribution, or sale of the games. 11/ Finally, complainant's ownership alone of the Rally-X copyright and trademark does not constitute a domestic industry. The Commission has stated that--

[d]efining "industry" as the mere ownership or licensing of patent rights would be contrary to Commission precedent, legislative history, and the logical construction of the statute's working.

Certain Ultra-Microtome Freezing Attachment, USITC Pub. 171, p. 9 (1976). 12/

4. Efficient and economic operation

The ALJ determined that there are two domestic industries in this investigation. He did not distinguish them for the purpose of assessing the "efficient and economic operation" issue. 13/ He notes that complainant: (1) employs about 1200 workers; (2) utilizes modern equipment which is continually updated; (3) invests heavily in research; and (4) maintains a "quality assurance plan." The ALJ thereby concludes that the domestic industries are

11/ There is no information on the record indicating that the servicing of this product after its sale is a significant part of complainant's ongoing economic activity. For example, there is no indication that such servicing generates significant revenue to the complainant. Compare with Certain Airtight Cast-Iron Stoves, inv. No. 337-TA-69, USITC Pub. 1126 (1981), (major portion of complainant's function was to repair and test stoves); Certain Airless Paint Spray Pumps, inv. No. 337-TA-90, USITC Pub. 1199 (1981), (frequent servicing pursuant to a warranty over lifetime of product sufficient to include U.S. distributors of complainant's foreign licensee as part of the domestic industry). In both the above cases, the servicing activity was taking place in conjunction with ongoing sales activity.

12/ Although that investigation concerned a patent, the same analysis would apply to copyright and trademark cases.

13/ We note Artic did not take exception to the ALJ's analysis.

efficiently and economically operated. On the basis of the record as developed, we agree with his conclusion.

We find unpersuasive respondent Artic's contention that the complainant is inefficient because it refuses to sell "kits" or printed circuit boards to other U.S. manufacturers, forcing these manufacturers to discard games which are no longer popular.

5. Injury

a. PAC-MAN

We conclude that the unfair acts alleged have the effect or tendency of substantially injuring the domestic PAC-MAN industry. At the outset, it must be conceded that the PAC-MAN industry has enjoyed considerable success.

Complainant sold games from January through November 1981. Although the pace of its sales has slowed somewhat since that period, it is expected that PAC-MAN's market-life will continue, at least through the end of 1982, and possibly longer. Tr. 872.

Nevertheless, the traditional indicia of injury indicate that the subject imports have had the effect or tendency of substantially injuring the domestic industry. Imported infringing PAC-MAN games have increased as a percentage of domestic sales. CX 193, p. 25.

During the temporary relief phase of this investigation, complainant reported that it was able to sell all the games which it produced, and carried an inventory of only games. Tr. 853. However, since that time, complainant has begun to accumulate a more substantial inventory, now standing at games. This increase in inventory does not appear to have been

occasioned by any expansion of complainant's capacity. In fact, complainant's capacity utilization has evidently declined in recent months. Although the ALJ does not cite any specific data on capacity utilization, such a decline may be inferred from complainant's furlough of approximately 200 to 225 production employees in late 1981. Tr. 853, 856-857. Complainant attributes these furloughs to the unfair import competition.

Further, as noted by the ALJ, the complainant has lost approximately PAC-MAN sales to infringing imports. 14/ 15/ The primary basis for his finding is a series of invoices recording sales of imported games. The ALJ's inference of lost sales from these invoices is supported by the virtual identity of the imported games with complainant's game. The purchasers disclosed in the invoices were undeniably in the market for complainant's product. Additionally, the percent figure by which imported

14/ The ALJ believes that the estimate of lost sales may be unduly low. According to the ALJ, the default of most of the respondents in this investigation has precluded an accurate measure of lost sales and import penetration. Given the multiplicity of defaulting respondents and the popularity of the game, we believe it likely that the figure of lost sales is, in fact, an underestimation.

15/ Commissioner Stern emphasizes that this is a default case. Only one respondent, Artic International, participated in this proceeding at all, and that respondent offered no evidence on the question of injury. Because of this situation, the exact magnitude of imports is impossible to determine as is import penetration. With respect to profits, complainant supplied data on the amount of profit lost for each infringing game sold, but there is no information supplied upon which to evaluate the overall profitability of the PAC-MAN industry. Nor has the complainant attempted to correlate its profit levels to the rise and fall of competition. However, by the nature of a default case, the injury information which has been provided by complainant stands unrefuted. Therefore, lacking any analysis to the contrary, I accept complainant's arguments regarding lost sales and profits and the ability of importers to further penetrate the U.S. market and find that the domestic PAC-MAN industry is suffering injury by reason of unfair imports. It is important for my analysis of injury to be able to consider all economic factors relating to injury of an industry and, therefore, encourage all future parties to present as complete a record on injury as they do on infringement.

games undersell the domestic product is strong evidence of a tendency to substantially injure the domestic industry. Tr. 386-388.

There are also certain market conditions which indicate that the importation of infringing games will increase. One witness estimated that there may be 100 companies in Japan alone making PAC-MAN type games. Tr. 606. These companies have a very large capacity to produce audiovisual games. CX 142. In fact, there is evidence that these companies now have a large surplus of infringing games. Tr. 424. Extensive advertising by these foreign companies in the United States suggests their intent to export infringing games to the United States.

b. Rally-X 16/

If an industry were found to exist, we would agree with the ALJ's conclusion that the industry has not been substantially injured by the subject imports. There is no evidence in the record that the decline in sales of Rally-X games is due to import competition, or that, in absence of import competition, domestic production of the Rally-X game would have continued.

Complainant argues that domestic Rally-X industry has been substantially injured by infringing imports. Complainant contends that the level of injury necessary to constitute violation of section 337 is lower at the permanent relief stage of an investigation than at the temporary relief stage.

Complainant then contests the ALJ's factual determination that the market for the Rally-X game no longer exists. According to the complainant, respondents continue to advertise and sell in the United States infringing Rally-X games. CX 190; CX 194. Additionally, complainant maintains that its decision to

16/ Commissioner Eckes, having found that there is no domestic industry regarding Rally-X, does not reach the issue of injury.

discontinue production of the Rally-X game is not the result of a decline in popularity, but rather the result of lower-priced unfair import competition. Complainant further asserts that the price of its Rally-X game has been suppressed by the presence of infringing products and that the good will attaching to the Rally-X trademark has been diluted by the imported games which have a similar appearance but are of inferior quality.

We agree with the ALJ that the popularity of the Rally-X game is in a state of permanent decline which is characteristic of such games. See Certain Coin-Operated Audiovisual Games and Components Thereof (Viz., Rally-X and PAC-MAN), inv. No. 337-TA-105, USITC Pub. 1220, at 15-16 (Temporary Relief Phase, February 1982). Moreover, complainant cannot argue that it has been injured merely as a result of lost royalties. For "[d]efining 'industry' as the mere ownership or licensing of patent rights would be contrary to Commission precedent, legislative history, and the logical construction of the statute's wording." Ultra-Microtome Freezing Attachments, inv. No. 337-TA-10, USITC Pub. 771, pp. 8-9 (1976).

D. Relief, Public Interest and Bonding

1. Relief

In the event that the Commission determines that a violation of section 337 exists, both the complainant and the IA request that the Commission issue a general exclusion order covering all coin-operated audiovisual games which infringe complainant's copyrights and/or trademarks. Complainant's principal argument in support of a general exclusion order is that cease and desist orders would apply only against respondents to this investigation. Such a

limitation would leave the domestic industry unprotected against other importers of infringing games who are as yet unknown to the complainant. In this regard, complainant argues that with "no real economic or technological bars to entry into the market," the emergence of many additional infringers is likely.

The IA arrives at the same conclusion by applying the remedy standard set forth by the Commission in Certain Airless Paint Spray Pumps and Components Thereof, Inv. No. 337-TA-90 (1981). There, the Commission recognized its duty "to balance a complainant's interest in obtaining complete protection from all potential foreign infringers through a single investigation with the inherent potential of a general exclusion order to disrupt legitimate trade" (at p. 18). In striking this balance, the Commission indicated that a complainant seeking a general exclusion order must show "both a widespread pattern of unauthorized use of its patented invention" and such "business conditions" as would suggest that foreign manufacturers other than the respondents to the investigation may attempt to enter the U.S. market with infringing articles (at p. 18).

In this regard, the Commission indicated three factors which would support a widespread pattern of unauthorized use:

- (1) a Commission determination of unauthorized importation into the United State of infringing articles by numerous foreign manufacturers;
- (2) the pendency of foreign infringement suits based upon foreign patents which correspond to the domestic patent in issue; and
- (3) other evidence which demonstrates a history of unauthorized foreign use of the patented invention.

Our consideration of each of these factors supports the issuance of a general exclusion order in this investigation. First, according to the IA, the Commission has already concluded that there is reason to believe that section 337 has been violated with respect to the PAC-MAN copyright and trademark. Second, Namco, the original owner of the PAC-MAN rights is currently involved in litigation in Japan to thwart infringers. Finally, complainant has established in this investigation the importation of infringing articles by a multiplicity of foreign manufacturers.

The Commission also listed in Pumps certain market factors that are evidence of the "business conditions," referred to above, which would suggest that foreign manufacturers other than the respondents may attempt to enter the U.S. market with infringing articles:

- (1) an established demand for the patented product in the U.S. market and conditions of the world market;
- (2) the availability of marketing and distribution networks in the United States for potential foreign manufacturers;
- (3) the cost to foreign entrepreneurs of building a facility capable of producing the patented articles;
- (4) the number of foreign manufacturers whose facilities could be retooled to produce the patented article; or
- (5) the cost to foreign manufacturers of retooling their facility to produce the patented articles. 17/

At 19. These considerations also support the issuance of general exclusion order. The domestic demand for the PAC-MAN game has been high and remains high. Further, the oversupply of the PAC-MAN market in Japan suggests that

17/ Although the passage refers to patent infringement, the same analysis would apply to copyright and trademark cases.

Taiwanese and Japanese companies may try to export slowly-moving inventories of infringing games to the United States.

An extensive marketing and distribution network is already in place in the United States to accommodate the future importation of infringing games.

Additionally, Artic's president testified that hundreds of small companies in Taiwan and Japan have the capacity to produce large numbers of printed circuit boards at a very low cost and within a very short period of time. In conclusion, we determine that a general exclusion order is the appropriate remedy in this investigation.

2. Public Interest

Even where the Commission finds the existence of an unfair act, it will not grant relief where such relief would adversely affect the public interest. ^{18/} Among the factors to be considered in assessing the public interest are "the domestic industry's ability to supply the market in the absence of imports, the availability of substitute products, previous anticompetitive behavior of the complainant, and the industry's likely pricing behavior in the absence of imports." Certain Surveying Devices, Inv. No. 337-TA-68, pp. 36-37 (1980). In examining the effect a general exclusion order would have on the public health and welfare, we note that the United States appears to be well-stocked with coin-operated audiovisual games and that the complainant is capable of satisfying the domestic demand for the games in question. Further, there is no evidence of anticompetitive behavior

^{18/} See Certain Inclined Field Acceleration Tubes and Components Thereof, Inv. No. 337-TA-67, USITC Pub. 1119 (1980); Certain Automatic Crankpin Grinders, Inv. No. 337-TA-60, USITC Pub. 1022 (1979).

on the part of the complainant or of price increases resulting from an exclusion order. We therefore determine that the public interest does not preclude the issuance of a general exclusion order.

3. Bonding

During the Presidential review period, the infringing inserts must be allowed to enter the United States under a bond prescribed by the Commission. The bond should be set at "the amount which would offset any competitive advantage resulting from the unfair act enjoyed by persons benefitting from the importation of the article." S. Rept. No. 93-1298, 93rd Cong. 2d Sess. 198 (1974).

The complainant and the IA have argued, and we agree, that articles subject to the remedial orders discussed above should be entitled to entry under a bond set at 54 percent of the entered value of the games and at 300 percent of the entered value of infringing component parts. These bonds were calculated by subtracting the average wholesale price of respondents' products from the wholesale price of complainants products and dividing the difference by the average wholesale price of respondents' products.

