Signal Piracy: The Theft of United States Satellite Signals SATELLITE SIGNALS

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Abstract

This Note examines the problem of the unauthorized interception and transmission of United States programming, specifically concentrating on programming intercepted in the Caribbean Basin and Canada.
SIGNAL PIRACY: THE THEFT OF UNITED STATES SATELLITE SIGNALS

INTRODUCTION

Advances in communications technology have enabled United States cable television companies\(^1\) and networks\(^2\) to place their program signals\(^3\) on satellites\(^4\) and send them to

1. At present there are six United States domestic satellite systems carrying cable and other television services. Motion Picture Exporting Association of America, Inc., Memorandum on the Uses of Satellite Technology 23 (Jan. 30, 1984) (available from the Motion Picture Exporting Association of America) [hereinafter cited as MPEAA Memo]. These are SATCOM III-R and SATCOM IV (owned by the Radio Corporation of America (RCA)); WESTAR IV and WESTAR V (owned by Western Union); COMSTAR D-4 (owned by American Telephone and Telegraph Company (AT&T) and General Telegraph & Electronics (GTE)); and GALAXY I (owned by Hughes Communications). Id. Most of the major cable companies and networks are carried by SATCOM III-R (ARTS, Cable News Network, Cinemax, Entertainment and Sports Programming Network (ESPN), Music Television Network (MTV), Nickelodeon, Spotlight, Showtime, USA Network, The Weather Channel, WGN-TV Chicago, and the Ted Turner Broadcasting Service (WTBS)); SATCOM IV (Bravo, ESPN, the Financial News Network, and the Playboy Channel); and WESTAR V (ARTS, Madison Square Garden Television, Satellite News Channels, and WOR-TV). Id.

The marriage of cable and satellites began in 1975 when Home Box Office (HBO), a distributor of premium television entertainment to cable television systems, began to distribute its television programming via the satellite RCA SATCOM I. Smith, The Birth of a Wired Nation, Channels of Communication, May 1981, at 53. Satellite distribution gave HBO greater distribution capacity at a fraction of the costs faced by the major networks, namely the American Broadcasting Company (ABC), the Columbia Broadcasting System (CBS), and the National Broadcasting Company (NBC). Schubin, Satellites: First They Went Beep, Home Video, April 1980, at 54. HBO placed its signals on SATCOM I. Then cable television systems bought earth stations to receive the signals. As other programmers put more signals on the satellite, and more cable systems bought earth stations to receive the signals, a continuing cycle began. Id. Since 1975, other domestic satellite systems have been launched, new cable television companies have been established, and the industry seems well on its way to wiring American society. Id.

2. Independent metropolitan television networks specializing in cable’s two most popular types of programming, sports and movies, are also filling channels by satellite. Smith, supra note 1, at 35. By means of cable and satellites, these local stations have become nationally broadcast “superstations.” Id. Examples of such independent networks are WTBS Atlanta, WOR-TV New York, and WGN-TV Chicago. Id.

3. A program is a “body of live or recorded material consisting of images, sounds, or both, embodied in signals emitted for the purpose of ultimate distributions.” Convention Relating to the Distribution of Programme-Carrying Signals Transmitted by Satellite, opened for signature, May 21, 1974, art. I, 13 I.L.M. 1444, 1447 [hereinafter cited as Brussels Satellite Convention].

A signal is “an electronically-generated carrier capable of transmitting program-
viewers' homes in areas that had once been too remote to receive such signals.\(^5\) However, satellite technology has not progressed to the point where a satellite's "footprint"\(^6\) may be

mes." Brussels Satellite Convention, supra, art. 1. An emitted signal "is any programme-carrying signal that goes to or passes through a satellite." \(\text{Id.}\) The signal is transmitted to the satellite or "up-linked." MPEAA Memo, supra note 1, at 8. A derived signal is "obtained by modifying the technical characteristics of the emitted signal." Brussels Satellite Convention, supra, art. 1. Transmissions from the satellite are "down-linked." MPEAA Memo, supra note 1, at 8.

4. For a list of United States domestic satellites carrying cable and other television services, see supra note 1.

A satellite is any device capable of transmitting signals that is situated in or whose orbit is at least partially described in extraterrestrial space. Brussels Satellite Convention, supra note 3, art. 1; MPEAA Memo, supra note 1, at 8. Satellite transmission and distribution of cable signals involves a number of steps beginning with the programs themselves. The programs originate by live or taped performance at the network origination center. Technology, HBO Orientation Manual, 2-4 (1983) (HBO training manual) (available on file at the offices of the Fordham International Law Journal).

Programs are sent by cable or microwave from the pay-tv network studio to the satellite "up-link"—that is, an earth station or "dish," capable of beaming signals to one of the communications satellites in a fixed orbit 22,300 miles above the equator. Each satellite has a number of "transponders," or channels, to carry the signals of the different program services. The signal is amplified at the satellite and beamed back down to earth, and can be picked up by a receiving earth station located at the cable system that is aligned to pick up that particular signal. The signal is sent by cable or microwave from the receiving station to the cable system's head-end, the location of the system's signal processing and distribution equipment, where the signals on all the channels the cable system offers are processed for balance and clarity. From the head-end, the signals are transmitted on main trunk cables, and then on to smaller cables leading to the customer's home.

\(\text{Id.}\)

The component parts of a satellite system are those in the "space segment" and those in the "earth segment." MPEAA Memo, supra note 1, at 2. The former consists of the power source (solar batteries), the positioning and orientation system, the control telemetry, the transponders and the antennas. \(\text{Id.}\) The latter consists of earth stations. Each earth station includes an antenna system (or dish), a low noise amplifier/converter (or "front end"), and a receiver (or "demodulator"). \(\text{Id.}\) at 4. The earth station receives transmissions from the satellite. \(\text{Id.}\) at 5.

5. Cable television service began as a means of bringing a clear television picture and a greater selection of over-the-air television channels to areas of poor reception. Smith, supra note 1, at 32. When it was discovered that wiring could provide a greater number of channels than could the airwaves, the uses for cable increased dramatically. \(\text{Id.}\) However, because the cost of "laying hard wire" is substantial and almost prohibitive in sparsely settled regions, urban areas as well as those portions of the country not widely covered by cable are served instead by satellite. \(\text{Id.}\)

6. A "footprint" is the area of the earth's surface in which satellite transmissions can be received. MPEAA Memo, supra note 1, at 9. Size depends on the technical aspects of the satellite, receiving dish, and environmental conditions. \(\text{Id.}\).
limited to the area it is intended to reach. On the contrary, a significant amount of signal “spillover” occurs in large territories within the Western Hemisphere. As a consequence, countries in the Western Hemisphere are engaging in the unauthorized interception and broadcasting of United States satellite signals.

This Note examines the problem of the unauthorized in-

7. See Canadian Copyright Problems Focus of Hill Hearing, Broadcasting, Nov. 21, 1983, at 54; Dealing with the Footprint’s Fallout, Broadcasting, July 4, 1983, at 66. At present, signal spillover is confined to the Caribbean Basin countries and Canada because only these areas are within the footprint of the signals. See id; see also Canadian Copyright Problems Focus of Hill Hearing, supra. As satellites proliferate around the globe, however, and as more and more United States signals are transmitted by these satellites, it can be expected that unauthorized distribution of intercepted signals will occur on a global basis. Hearing Before the Subcomm. on Patents, Copyrights and Trademarks of the Comm. on the Judiciary, 98th Cong., 1st Sess. 124 (1983) [hereinafter cited as Fairness Bill Hearing].

8. Fairness Bill Hearing, supra note 7, at 122. Producers and distributors of theatrical motion pictures in the United States and the world are in most cases the owners of the copyrights in their works. They negotiate licenses for the products with pay television programmers such as HBO and Showtime. The programmers then transmit the product to United States cable systems by means of domestic satellites. Id. Most programmers also license out the product to “superstations” whose signals are transmitted by satellite to cable systems throughout the United States. In addition, licenses are negotiated with United States television networks. The networks transmit programs to their affiliate stations by means of domestic satellite systems. Id. Some producers and distributors actually own or lease transponders (channels) on domestic satellites in order to transmit to United States television and cable systems. Id.

Licensing is the means by which a copyright owner expressly authorizes a distributor or originating organization to transmit the program to members of the viewing public. See generally MPEAA Memo, supra note 1, at 9 (explaining licensing procedures). An originating organization is the legal entity which decides that the transmission of the derived signals to the general public or any section thereof should take place. Id.

The Motion Picture Exporting Association of America (MPEAA) takes the position that the originating organization is the entity which has received express authorization from the program owner to distribute the program by satellite. Id. The distributor is the entity which has received express authorization from the program owner or licensee to transmit the program to members of the viewing public. Id.

To illustrate: Suppose the satellite owner is RCA, the copyright owner is Paramount, the licensee is Showtime, and a common carrier which merely “up-links” a “free” signal is Southern Satellite Systems. The originating organization would be Showtime, and the cable system which has contracted with Showtime to carry its programming would be the distributor. See id.

A number of licensing approaches exist in the area of cable retransmissions of over-the-air broadcasts which may also apply to the reception and retransmission of satellite signals. These are the following:

1) Statutory license whereby the cable operator or broadcaster is given a compulsory license to retransmit subject to a standard fee fixed by statute, negotiation or
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terception and transmission of United States programming, specifically concentrating on programming intercepted in the Caribbean Basin and Canada. Part I contains a brief introduction to and analysis of existing international copyright law, focusing on inadequacies in the law. A discussion of the Brussels Satellite Convention, which attempts to address these inadequacies follows. In Part II, the problem of unauthorized signal interception and distribution in the Caribbean Basin and Canada is examined against a backdrop of possible solutions. These solutions involve both international copyright law and United States implementation programs, such as the Caribbean Basin Initiative (CBI) and the International Copyright Fairness Bill (Copyright Fairness Bill). Finally, in Part III, a

by a statutory collection society. This approach tends to distort the real market value of the work. Id. at 29.

2) The negotiated license under which the cable system or broadcaster bargains freely for the right to retransmit. Id. Bargaining may be on an individual basis or for a blanket license. Id.

3) The clearinghouse system whereby cable systems or broadcasters choose whether or not to retransmit programming for which there is a predetermined fee. A central clearinghouse quotes prices set by the originators or copyright holders, approves retransmission, and collects and distributes payments. Id.

Any transmission and distribution of a signal carrying unlicensed programming is unauthorized and in violation of the owner's copyright in the work. See Copyright Act § 101, 17 U.S.C. § 501(c) (1976) [hereinafter cited as Copyright Act].

United States satellite signals are captured by means of receiving antennas. See Technology, supra note 4, at 2-4. The signals are either transmitted by conventional broadcast or cable systems. For discussion of technical aspects of broadcasting, see supra note 4. The signals may also be recorded on cassettes for later sale.

In order to prevent the reception of satellite signals by people who have not subscribed to pay television service, many broadcasting and cable systems "scramble" the signals. See id. Scrambling is the process of distorting the television picture and/or signal so that it cannot be viewed or heard. Id. at 17. The signal is encoded, and authorized viewers are provided with a descrambling device enabling them to decide the scrambled signal. Id.

Scrambling, like licensing, is a means of protecting the copyright owner's exclusive right to exploit his or her work. However, members of the Motion Picture Association of America (MPAA) believe that the cost of scrambling systems may be too prohibitive for most broadcasters to use. Kerr, Foreign Piracy of TV Signals Stirs Concern, N.Y. Times, Oct. 13, 1983, at A1, col. 6, C23, col. 5. In addition, the systems may be inefficient in thwarting highly professional "pirates." Id.

9. See infra notes 112-205 and accompanying text.
10. See infra notes 82-99 and accompanying text.
number of general options and recommendations are proposed.

I. A CRITIQUE OF INTERNATIONAL COPYRIGHT TREATIES

A. Background

Current treaties involving international copyright law generally contain anachronistic language relative to satellite reception and retransmission, if they contain such provisions at all. As a consequence, it is difficult to interpret and apply existing treaty language to satellite signal disputes. In addition, a particular treaty may be inapplicable because the United

13. See infra notes 22-81 and accompanying text. All of the treaties discussed are currently in force. Countries may be members of more than one treaty because the treaty provisions overlap. Therefore, the newer treaties complement, rather than conflict with their older counterparts.


The International Telecommunications Satellite Organization, Aug. 20, 1971, 23 U.S.T. 3813, T.I.A.S. No. 7532 [hereinafter cited as INTELSAT] is not discussed at length because it pertains to technical rather than copyright issues in telecommunications. However, because INTELSAT represents a major international telecommunications governing body, the following brief background of the organization is included.

INTELSAT owns and governs the "space segment." For definition of "space segment," see MPEAA Memo, supra note 1, at 2. It regulates the establishing of facilities, operations and services in the global satellite system. INTELSAT facilitates the policy of building and operating a commercial communications satellite system with the cooperation of the 109 member nations. S. Rep. No. 94, 98th Cong., 1st Sess. 9 (1983). Member states must first coordinate their international satellite communications with INTELSAT to ensure technical compatibility with its system and to avoid significant economic harm to the INTELSAT system. INTELSAT, supra, art. 14. The system is composed mostly of government departments of post, telegraph and telephone. Id. annex D.

14. See infra notes 23-99 and accompanying text.
States or another disputing country has not ratified it.\textsuperscript{15} Finally, the relevant treaty may be difficult or impossible to enforce because a member country may have inadequate or ineffective domestic implementing legislation.\textsuperscript{16}

Countries adhering to a treaty which contains a national treatment provision must afford the same copyright protections to foreign nationals that they afford to their own citizens.\textsuperscript{17} Ideally, a country which grants its authors exclusive rights to exploit their own works should likewise extend this same treatment to foreign nationals whose works are exploited abroad. In reality, such balance rarely occurs due to the interpretation, application and enforcement problems which characterize existing copyright law.\textsuperscript{18} Moreover, the national treatment principle contained in many of the treaties often provides lopsided protection.\textsuperscript{19} In the United States, production of copyrighted works and exports generally tends to exceed those of other nations.\textsuperscript{20} As a consequence, United States copyright law has evolved to meet the needs of its copyright owners, while the copyright law of other nations has not. In nations which produce fewer commercially popular copyrighted exports, more elaborate copyright protection does not yet exist.\textsuperscript{21}

\begin{footnotesize}
\begin{enumerate}
\item The United States has not ratified the Berne Convention, supra note 13, the Brussels Satellite Convention, supra note 13, or the Rome Convention, supra note 13.
\item See infra notes 100-11 and accompanying text.
\item See, e.g., U.C.C., supra note 13, art. II. This provision provides that: "Published works of nationals of any Contracting State and works first published in that State shall enjoy in each other Contracting State the same protection as that other State accords to works of its nationals first published in its own territory." Id. Berne Convention, supra note 13, art. 5(1). The relevant article provides that: Authors shall enjoy, in respect of works for which they are protected under this Convention, in countries of the Union other than the country of origin, the rights which their respective laws do now or may hereafter grant to their nationals, as well as the rights specially granted by this Convention.
\item See generally Fairness Bill Hearing, supra note 7, at 128 (discussion of problems in existing treaties).
\item See id. at 16, 19; infra notes 23-111 and accompanying text.
\item Fairness Bill Hearing, supra note 7, at 17-18. "In the telecommunications field—particularly program production—the United States is already the largest copyright exporting state." Id.
\item See, e.g., id. at 19-22 (comparison of United States and Canadian copyright law).
\end{enumerate}
\end{footnotesize}
B. International Copyright Treaties

1. The International Telecommunications Convention

One of the basic sources of international copyright protection is the International Telecommunications Convention\(^2\) (I.T.C.) which addresses a wide range of telecommunications issues.\(^2\) First drafted in 1932, the I.T.C. has undergone a series of revisions, the most recent of which occurred in 1973.\(^2\) In the course of these revisions, attempts have been made to address current telecommunications technology problems.\(^2\) Presently, however, the I.T.C. contains many gaps causing problems of interpretation, application, and enforcement.\(^2\)

The I.T.C. is administered in part by its accompanying Radio Regulations.\(^2\) Article 42(1) of the I.T.C. provides: "The provisions of the Convention are completed by the Administrative Regulations which regulate the use of telecommunications and shall be binding on all Members."\(^2\) Therefore, members of the I.T.C. are bound to follow article 17 of the Radio Regulations,\(^2\) which deals with the prevention of unauthorized interception of radio signals.\(^2\) The language of article 17, however, is ambiguous concerning satellite signal theft. For example, article 17 provides that members of the I.T.C. are

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22. I.T.C., supra note 13.
23. Id. art. 4. The stated purposes of the I.T.C. are:
   a) to maintain and extend international cooperation for the improvement and rational use of telecommunications of all kinds;
   b) to promote the development of technical facilities and their most efficient operation with a view to improving the efficiency of telecommunications services, increasing their usefulness and making them, so far as possible, generally available to the public;
   c) to harmonize the actions of nations in the attainment of those ends.
Id.

About 135 countries are signatories to the 1973 Convention, including the United States. Id. annex 1.
24. The I.T.C. is the constitution of the International Telecommunications Union (I.T.U.). The constitution is open for revision and readoption by the member states in circa seven-year intervals. The most recent Convention was held in Malaga-Torremolinos in 1973. I.T.C., supra note 13.
25. Id. art. 4; see supra note 23.
26. See infra notes 27-42 and accompanying text.
27. See Radio Regulations, supra note 13. The Radio Regulations are intended to "complete the provisions" of the I.T.C. I.T.C., supra note 13, art. 82.
28. I.T.C., supra note 13, art. 42(1).
29. Radio Regulations, supra note 13, art. 17.
30. Id.
bound to prohibit and prevent "(a) the unauthorized interception of radiocommunications not intended for the general use of the public," and "(b) . . . publication or any use whatsoever, without authorization, . . . obtained by the interception of the radiocommunications mentioned [in paragraph (a) above]." Problems arise in interpreting this language and in applying it to satellite signal theft. The dispute focuses on the definition of broadcasting. There is an inherent conflict in the Regulations, which refer to broadcasting for the use of the public, in article 17, and broadcasting for direct reception by the public in article 1.

Article 1 defines the term "Broadcasting-Satellite Service" as a "radiocommunication service in which signals transmitted or retransmitted by space stations are intended for direct reception by the general public. . . . [T]he term 'direct reception' [encompasses] both individual reception and community reception." Some member nations of the I.T.C. argue that under article 1, they are entitled to transmit or retransmit any signals made available to the public. They
maintain that these transmissions are intended for the general public and are, therefore, outside the article 17 prohibitions.\footnote{35} To counter this argument, those who look to the I.T.C. for copyright protection maintain that the term "broadcasting" applies to satellite signals in general.\footnote{36} Therefore, copyright holders are protected at both the transmission and reception ends of the broadcast.\footnote{37} While satellite signals may be intended for reception by the public generally, they are not necessarily intended for use by the general public.\footnote{38} Rather, use of the signals is confined to those authorized to receive the signals.\footnote{39}

In addition to its interpretation and application problems, the I.T.C. contains ambiguous provisions regarding its enforcement. Although the I.T.C. may proscribe certain conduct, it does not provide sanctions and may therefore be unenforceable.\footnote{40} Article 50 of the I.T.C.\footnote{41} regarding dispute settlement provides:

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types of transmissions are possible. \textit{Id.} Therefore, the term "broadcasting-satellite services" does not refer exclusively to DBS.

Furthermore, "direct reception" under article 1 of the Radio Regulations includes both community and individual reception. \textit{See supra} note 32 and accompanying text. Direct reception, then, refers to satellite-to-cable system-to-home reception in addition to the more direct satellite-to-home reception. \textit{MPEAA Memo, supra} note 1, at 6. Community reception, therefore, includes the transmissions sent to cable systems for further delivery to subscribers accomplished through distribution by the cable system. \textit{Id.} at 36.

\footnote{35} \textit{See MPEAA Memo, supra} note 1, at 36. For pertinent provisions in article 17, \textit{see supra} text accompanying note 31. For a discussion of transmissions intended for the general public, \textit{see supra} note 34.

\footnote{36} \textit{See supra} note 34.

\footnote{37} \textit{Id.}

\footnote{38} \textit{See supra} text accompanying note 30.

\footnote{39} \textit{Id.} \textit{See supra} note 31.

\footnote{40} \textit{Caribbean Basin Initiative Hearing on S. 544 Before the Comm. on Finance, 98th Cong., 1st Sess. 395 (1983)} [hereinafter cited as \textit{CBI-1983 Hearing}]. Barbara Ringer, former United States Register of Copyrights and then delegate of the United States to the Brussels Conference in 1974 stated at the conference:

\begin{quote}
\text{[O]ne of the alternatives discussed for solving the problem . . . was whether the [I.T.C.] and the Radio Regulations . . . are capable of controlling the problem. . . . [T]his alternative was rejected partly on the grounds that the ITU Convention and the Regulations, to the extent that they actually cover the problem as a technical matter, have no enforcement machinery, and it was doubtful whether they could be made an effective means to combat satellite piracy.}
\end{quote}

\textit{Id.}

\footnote{41} I.T.C., \textit{supra} note 15, art. 50.
Members may settle their disputes or questions relating to the interpretation or application of this Convention or of the Regulations through diplomatic channels, or according to procedures established by bilateral or multilateral treaties or by any other method mutually agreed upon. If none of these methods of settlement is adopted, any Member party to a dispute may submit the dispute to arbitration in accordance with the procedure defined in the General Regulations or in the Optional Additional Protocol.\textsuperscript{42}

This article contains no specific implementing provisions. Instead, it leaves the general enforcement of the I.T.C. up to the disputing parties, without really providing the parties with any incentives to negotiate or to seek arbitration.

\section*{2. The Berne Convention}

In contrast to the I.T.C., the Berne Convention for the Protection of Literary and Artistic Works\textsuperscript{43} (Berne Convention) grants specific protection to the owners of copyrights in literary and artistic works in addition to providing protection to "authors" of these works.\textsuperscript{44} Due to new technological developments in telecommunications, copyright owners may be unable to prevent the unauthorized use of their works, notwithstanding the I.T.C.\textsuperscript{45} The Berne Convention, however, grants additional copyright protection to authors of literary and artistic works, giving them the \textit{exclusive} right to authorize the broadcasting or any other communication of their work to the public.\textsuperscript{46} In addition, the Berne Convention permits member countries to implement compulsory copyright licenses in connection with telecommunications.\textsuperscript{47} All sanctions for violations of the Berne Convention are pursuant to national implementation legislation.\textsuperscript{48}

\begin{itemize}
\item\textsuperscript{42} \textit{Id.}
\item\textsuperscript{43} Berne Convention, \textit{supra} note 13.
\item\textsuperscript{44} \textit{Id.} arts. 1, 2, 14bis.
\item\textsuperscript{45} See \textit{supra} notes 23-42 and accompanying text.
\item\textsuperscript{46} Berne Convention, \textit{supra} note 13, art. 11bis. The principal import of the Berne Convention is that it is the only international copyright treaty expressly granting protection directly to \textit{authors}, rather than merely protecting against the unauthorized use of their copyrighted works. \textit{Id.} art. 1; see MPEAA Memo, \textit{supra} note 1, at 48.
\item\textsuperscript{47} Berne Convention, \textit{supra} note 13, art. 11bis.
\item\textsuperscript{48} \textit{Id.} art. 36.
\end{itemize}
The United States and a number of Latin American states have not ratified the Berne Convention because adherence to the Convention would require the contracting states to revise their domestic copyright law.\(^{49}\) This fact makes the Berne Convention unappealing to many nonmember nations. Unlike the I.T.C., states adhering to the Berne Convention must provide national treatment, i.e. the same protection to foreign authors as they provide to their own nationals.\(^{50}\) Regardless of the national treatment a contracting state may provide, it is also bound by a number of regulations governing its discretion in affording copyright protection to foreign works.\(^{51}\) Member nations must subscribe to these regulations.\(^{52}\) Therefore, many states have been prompted to forego adherence to the Berne Convention.\(^{53}\)

The Berne Convention seems to fill in some of the gaps inherent in the I.T.C. by providing prohibitions against the unauthorized use of an author's or copyright owner's work.\(^{54}\) However, the term "broadcasting" in the Berne Convention poses interpretation and application problems similar to those contained in the I.T.C.\(^{55}\) In addition, there is some dispute as to whether the provisions of the Berne Convention apply to satellite telecommunications at all.\(^{56}\) While the Berne Convention attempts to address the enforcement problems present in

\(^{49}\) Id. arts. 2, 2bis. The only Latin American nations which have ratified the Berne Convention are Argentina, Brazil, Chile, Costa Rica, Mexico, and Uruguay. WIPO, Berne Convention for the Protection of Literary and Artistic Works (Texts), § H2 at 1 (1982).

The Berne Convention has been viewed as embodying concepts in conflict with United States copyright law. These concepts include the "automatic recognition of copyright without any formalities, the protection of 'moral rights' and the retroactivity of copyright protection with respect to works which are already in the public domain in the United States." S. REP. No. 5, 83rd Cong., 1st Sess. 3 (1953) [hereinafter cited as Senate Report on Copyright].

\(^{50}\) Berne Convention, supra note 13, art. 5; see supra note 17 (national treatment provision in the Berne Convention).

\(^{51}\) See Berne Convention, supra note 13, arts. 2, 2bis, 7(4) (examples of types of regulations).

\(^{52}\) See id. arts. 5, 6, 6bis, 18. But see id. arts. 7, 17 (allowing member states to reserve certain rights and protections).

\(^{53}\) See supra note 49 and accompanying text.

\(^{54}\) See Berne Convention, supra note 13, art. 2.

\(^{55}\) See supra notes 34-39 and accompanying text.

\(^{56}\) Article 11bis of the Convention specifically addresses broadcasting and communications by "wireless diffusion of signs, sounds or images" without referring to satellite telecommunications. Berne Convention, supra note 13, art. 11bis. Within
the I.T.C., its stricter and more detailed provisions tend to discourage membership.57 The I.T.C. may be too general in its enforcement measures, but the Berne Convention may be just as ineffectual in its inflexibility.

3. The Universal Copyright Convention

The Universal Copyright Convention58 (U.C.C.) was drafted in 1952 in reaction to the failure of the United States and other Latin American states to ratify the Berne Convention.59

Article IV, section (1) of the U.C.C. requires states to protect the copyright owner's right to authorize the reproduction of their works by any means.60 However, interpretation and application problems similar to those encountered in the I.T.C. and Berne Convention characterize the U.C.C. as well.61 Whether the term "broadcasting" under the U.C.C. applies to satellites remains unclear.62

As a reaction to the strict compliance terms in the Berne Convention, the drafters of the U.C.C. endeavored to include as many states as possible in a simple, multinational copyright agreement that would not require major amendments to the domestic law of the contracting states.63 For this reason, although the U.C.C., like the Berne Convention, provides for national treatment,64 its regulations generally lack the details

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57. See supra notes 49-53 and accompanying text.
58. U.C.C., supra note 13.
59. Seventy-four member countries are adherents to the Convention, including the United States. Senate Report on Copyright, supra note 49, at 3.
60. U.C.C., supra note 13, art. IV (1). Article 4bis of the U.C.C. grants authors of literary and artistic works protected by the Convention "the exclusive right to authorize the reproduction by any means." Id. art. 4bis. Article 3 includes under the protection of the Convention, "works published . . . whatever may be the means of manufacturing the copies . . . [including] the communication by wire or the broadcasting of literary or artistic works . . . ." Id. art. 3; cf. id. art. V (protection afforded but no mention of broadcasting).
61. See supra notes 34-39 and accompanying text; see also supra text accompanying note 55 (for discussion of the problems posed by term broadcasting).
62. See supra notes 34-39 and accompanying text; see also supra text accompanying note 55.
63. See Fairness Bill, supra note 12, at 29.
64. Compare U.C.C., supra note 13, art. II with Berne Convention, supra note 13,
that characterize the Berne Convention. As a result, the U.C.C. suffers from the same enforcement and implementation problems as the I.T.C.

Enforcement under both the U.C.C. and the Berne Convention is governed by the International Court of Justice (I.C.J. or Court), the body to which disputes between member states are brought. The significance of I.C.J. jurisdiction is diminished considerably by the fact that the Court may not decide any dispute between two parties unless the parties have specifically empowered the Court to do so. A party may consent to third party settlement or may succumb to political pressure to settle. However, the parties in dispute are usually "judges in their own cause."

4. The Rome Convention

The International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (Rome Convention), drafted in 1961, differs from the treaties previously discussed in that it concerns "neighboring rights," i.e. the copyright protection granted to performers, producers of phonograms (records) and broadcasters, rather than the protection afforded the actual copyright owner of the work.

The Rome Convention grants broadcasting organizations a limited, exclusive right to control the use of their broad-

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65. Compare U.C.C., supra note 13 with Berne Convention, supra note 13.
66. See supra notes 34-39 and accompanying text (discussing enforcement and implementation problems of the I.T.C.).
67. Berne Convention, supra note 13, art. 33.
68. I.C.J. Stat. art. 36(2).
71. Protection of Performers, supra note 70, at 35. Neighboring rights have been defined as "the exclusive rights of a private character, in more or less creative activities, granted in connection with the exploitation of copyrighted works." Fairness Bill Hearing, supra note 7, at 30.
casts. However, the broadcasts themselves are not copyrightable works, and the broadcasters are not considered authors, except if they create the work or purchase the rights thereto. Furthermore, the application of the Rome Convention to cable television and satellite transmission is disputed and unclear.

Enforcement problems vary with the nature of the neighboring rights conferred. The Rome Convention is based both on national treatment and material reciprocity. The latter allows a member state to provide for certain "reservations" to and limitations on its national treatment. No uniformity of national treatment currently exists among member states under the Rome Convention. Rather, the protection afforded by each contracting state varies according to its reservations to a particular treaty and its national legislation.

C. The Brussels Satellite Convention

The Convention Relating to the Distribution of Programme Carrying Signals Transmitted by Satellite (Brussels Satellite Convention) presents the most promising alternative for countries seeking protection for the copyrighted product of

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73. Rome Convention, supra note 13, art. 13. Article 13 provides: "Broadcasting organisations shall enjoy the right to authorise or prohibit: a) the rebroadcasting of their broadcasts; b) the fixation of their broadcasts; c) the reproduction . . . of their broadcasts . . . ; d) the communication to the public of their television broadcasts. . . ." Id.

74. MPEAA Memo, supra note 1, at 50.

75. Fairness Bill Hearing, supra note 7, at 30. The Rome Convention does not contain provisions explicitly defining the technical aspects of broadcasting and does not mention satellite transmissions. See Rome Convention, supra note 13, art. 3.

76. See supra notes 72-74 and accompanying text.

77. Rome Convention, supra note 13, art. 2. "For purposes of this Convention, national treatment shall mean the treatment accorded by the domestic law of the Contracting State in which protection is claimed . . . ." Id.

78. See id. Material reciprocity allows a member country to provide "reservations" and limitations to its national treatment. Id. Article 2 § 2 provides: "National treatment shall be subject to the protection specifically guaranteed, and the limitations specifically provided for, in this Convention." Id.; see id. arts. 15-17 (examples of reservations).

79. Id. arts. 5, 6, 15-18, 31, 34.

80. MPEAA Memo, supra note 1, at 50.

81. Id.

82. Brussels Satellite Convention, supra note 13. Adopted in 1974, the Convention has been ratified by only eight nations, and the United States is not included among these nations. Id.
their satellite transmissions.\textsuperscript{83} It was designed specifically to address problems raised by transmissions via space satellites.\textsuperscript{84}

At a series of preparatory meetings\textsuperscript{85} which led to the development of the Brussels Satellite Convention, the delegates considered a number of alternatives pertaining to the problem of satellite piracy, including:

1) a revision of the I.T.C. or its accompanying Radio Regulations;
2) a revision of the Rome Convention protecting “neighboring rights”;
3) the adoption of a new multilateral treaty; and
4) other options, such as reliance on existing international agreements or the adoption of a simple resolution condemning satellite piracy.\textsuperscript{86}

As the meetings progressed, the delegates clearly favored the third option.\textsuperscript{87} Therefore, debate mainly focused on drafting provisions for a new and independent multilateral treaty which eventually became the Brussels Satellite Convention.\textsuperscript{88}

In drafting this new treaty, the central issue was whether the Brussels Satellite Convention should grant to broadcasters an exclusive right of authorization, or whether the notion of establishing uniform private property rights should be aban-

\textsuperscript{83} See infra text accompanying notes 95-97.

\textsuperscript{84} International conference of States on the distribution of programme-carrying signals transmitted by satellite, U.N. Doc. UNESCO/WIPO/CONFSAT.42 para. 5, at 1 (1974) [hereinafter cited as Brussels Conference]. The stated purpose of the Brussels Conference was to consider “problems in the field of copyright and the protection of performers, producers of phonograms and broadcasting organizations raised by transmission via space satellites.” \textit{Id.}


\textsuperscript{86} Brussels Conference, \textit{supra} note 84, para. 9, at 2.

\textsuperscript{87} \textit{Id.}

\textsuperscript{88} See \textit{id.}
doned altogether.\textsuperscript{89} The latter option would leave the decision to the contracting states to determine and implement the most appropriate means for suppressing piracy in their territory.\textsuperscript{90} The final draft adopted this approach.\textsuperscript{91}

The Brussels Satellite Convention creates an affirmative obligation for its ratifying members to take "adequate measures to prevent the distribution on or from its territory of any programme-carrying signal by any distributor for whom the signal emitted to or passing through the satellite is not intended."\textsuperscript{92} It contains no implementing provisions. Implementation is left to the discretion of each ratifying state,\textsuperscript{93} and member nations are free to choose enforcement measures.\textsuperscript{94} The Brussels Satellite Convention attempts to fill gaps in the body of international law relevant to satellite telecommunications.\textsuperscript{95} It contains definitions and technical terminology that are recent enough to adequately address the issue of satellite signal interception.\textsuperscript{96} Its vagueness in directing contracting states to take "adequate measures" to achieve this desired aim has both positive and negative ramifications. On the positive side, it permits states to take decisive action against signal piracy and grants states autonomy in determining which particular notion of copyright law to accept.\textsuperscript{97} On the negative side,

\begin{footnotesize}
\begin{enumerate}
\item For reports of debates, see id. paras. 35-43, at 6-7; Nairobi Conference, supra note 85, para. 54, at 559; Lausanne Conference, supra note 85, paras. 14-19, at 4-5.
\item Brussels Conference, supra note 84, para. 12, at 3.
\item See infra text accompanying note 92.
\item Brussels Satellite Convention, supra note 3, art. 2(1).
\item Brussels Conference, supra note 84, para. 79, at 15.
\item Id. These may include the creation of private rights in domestic copyright law, sanctions in the penal code, or regulatory controls in telecommunications law.
\item See supra notes 82-94 and accompanying text.
\item For definitions and terminology, see supra notes 3-4. Interpretation problems may still arise. Article 3 excludes from protection, signals from the satellite intended for the direct reception by the general public. Brussels Satellite Convention, supra note 3, art. 3. One may interpret this to mean that DBS transmissions are not protected under the Brussels Satellite Convention. MPEAA Memo, supra note 1, at 45. At the time of its drafting, no DBS satellites were in operation, but with their advent, this may develop into a broad exception siphoning the potency from the Convention. The MPEAA takes the position that the article 3 exclusion refers to those transmissions which are intended to be received and used by anyone in the public. Id. This interpretation excludes from the article 3 exception those transmissions to be received by exclusive (or paying), particular members of the public. Id. at 45.
\item Fairness Bill Hearing, supra note 7, at 30-31.
\end{enumerate}
\end{footnotesize}
the Convention has a limited membership, and no clear and successful mode of implementation currently exists.

D. National Implementation and Remedies Under International Copyright Law

Foreign states that are members of the international copyright treaties providing for national treatment and those countries adhering to the Brussels Satellite Convention provisions requiring "adequate measures" must implement these provisions through their domestic law in order for the treaties to be effective. National implementation poses problems because many states have ineffectual or nonexistent implementing legislation if they are adherents to international treaties at all.

United States domestic provisions implementing the international copyright treaties may be found in the Communications Act of 1934 and the Copyright Act of 1976. How-

98. Id. States have been unwilling to ratify the Convention for a number of reasons. In the United States, domestic private sector support has been minimal because:

First, national program producers and distributors believed that the obligations of the member states . . . were weak and could be circumvented . . . through the optional limitations on protection provided for in Article 4 and Article 8(3) concerning uses by developing countries of educational or informational parts of programs . . . and possible reservations with respect to cable distribution respectively; [They] hoped that time would allow for the creation of a new Convention with stronger provisions. Second, during the early years following the establishment of the Convention, there was little use of satellites for the delivery of programming and, . . . limited availability of satellite reception earth stations. Finally, educational groups within the United States believed that the optional limitations on protection were not broad enough.

Id. at 31-32.

99. In the Brussels Satellite Convention itself, no implementing provisions exist. However, in the United States, § 605 of the Communications Act, Communications Act of 1934, 47 U.S.C. § 605 (1982), when read in conjunction with United States copyright law provisions, Copyright Act, supra note 8, has been viewed as "adequate implementing legislation." Fairness Bill Hearing, supra note 7, at 32-33. For discussion of the Communications Act and the Copyright Act, see infra notes 104-06 and accompanying text.

100. See supra notes 77-78 (a discussion of national treatment).
101. See supra text accompanying note 93.
102. See infra notes 103-11 and accompanying text.
103. Communications Act of 1934, supra note 99, §§ 605, 501-502. Section 605 prohibits the unauthorized publishing or interception of any communications by wire or radio to the public. Id. § 605. Sections 501 and 502 provide penalties for violations of any act under the statute. Id. §§ 501-502.
104. Copyright Act, supra note 8, §§ 111, 501-506, 509. Under § 111(b) the un-
ever, there is some question as to whether these implementing provisions are adequate without certain revisions and amendments.\textsuperscript{105} In Canada, domestic implementation is accomplished through the Copyright Statute and the Canadian Radio-television and Telecommunications Commission\textsuperscript{106} (CRTC). The Canadian Copyright Statute\textsuperscript{107} does not afford copyright protection to cable retransmissions or satellite transmissions.\textsuperscript{108} The CRTC regulations contain no provisions authorized secondary transmission to the public of a primary transmission of a work is actionable as an infringement and subject to the remedies provided by §§ 502-506, 509. \textit{Id.} § 111(b).

\textsuperscript{105} Although § 605 of the Communications Act of 1934, \textit{supra} note 99, and the relevant provisions in the Copyright Act, \textit{supra} note 8, may be regarded as adequate implementing legislation, see \textit{MPEAA Memo, supra} note 1, at 44, two bills were proposed by the 97th Congress to incorporate certain revisions in both of the acts. See H.R. REP. No. 559, 97th Cong., 2nd Sess. 1 (1982) [hereinafter cited as \textit{Report on Proposed Copyright Amendments}]; H.R. REP. No. 5158, 97th Cong., 1st Sess. 1 (1981) [hereinafter cited as \textit{Proposed Bill to Amend the Communications Act}]. Proponents of the bills believe that changes in technology have made compulsory licensing systems unnecessary and inappropriate on both national and international levels. See \textit{Report on Proposed Copyright Amendments, supra, at 45.} The proposed amendments would revise the compulsory licensing section of the Copyright Act and § 605 of the Communications Act. The amendments would allow copyright owners freedom to negotiate licensing arrangements in a competitive marketplace in lieu of the Copyright Royalty Tribunal's predetermined licensing fee system.

The MPEAA also believes that § 605 of the Communications Act may represent "substantial compliance" with the "adequate measures" requirements of the Brussels Satellite Convention, but that the section could be further "strengthened." \textit{MPEAA Memo, supra} note 1, at 44.

In addition, the MPEAA adopts the position that the relevant sections of the Copyright Act satisfy the obligations imposed by the Brussels Satellite Convention. \textit{Id.} Section 501(b) of the Copyright Act gives copyright owners standing to sue, and §§ 501-506 and 509 provide remedies for infringement. Copyright Act, \textit{supra} note 8, §§ 501-506, 509. However, the MPAA believes that satellite transmissions challenge the basic concepts of the compulsory licensing section of the Act because satellite technology has expanded the once exclusively local market upon which the system was initially based. See \textit{Hearings Before the Subcomm. on Courts, Civil Liberties, and the Administration of Justice of the Comm. on the Judiciary House of Representatives, 96th Cong., 1st Sess., at 47-48, Serial No. 28 (1979) (MPAA position on cable retransmissions) [hereinafter cited as \textit{Compulsory Licensing Hearing}.} Therefore, the MPAA advocates certain amendments to the Copyright Act which would affect the compulsory licensing system. See \textit{id.} For discussion of proposed amendments, see \textit{infra} notes 206-220 and accompanying text.

\textsuperscript{106} Copyright Act, \textit{Can. Rev. Stat.} ch. C-30, § 1; \textit{MPEAA Memo, supra} note 1, at 56.


\textsuperscript{108} \textit{MPEAA Memo, supra} note 1, at 56.
prohibiting the unauthorized interception of satellite signals and cable television programming. The copyright laws of many Caribbean Basin nations offer even less protection than Canadian law. Furthermore, because they have not enacted copyright statutes, many Caribbean Basin nations provide no copyright protection.

II. SIGNAL THEFT IN FOCUS: CANADA AND THE CARIBBEAN BASIN

The following discussion focuses on the specific problem of United States signal theft by Canada and nations in the Caribbean Basin. The spillover of pay programs, primarily entertainment, news, and sports programming has been the gain of entrepreneurs in Canada and the Caribbean. It becomes difficult to reach solutions among governments because

109. Id.
110. See id. at 56-61 (comparison of copyright laws of Canada and Caribbean Basin nations).
111. For example, Costa Rican copyright law does not address the issue of protection granted to cable or satellite transmissions. Id. at 59. Antiquated copyright statutes in many of the Caribbean countries have not kept up with radical technological advances in the delivery of programming. Fairness Bill Hearing, supra note 7, at 126. Belize has no copyright laws, nor do the Cayman Islands. MPEAA Memo, supra note 1, at 60.
112. See supra note 7; infra notes 114-204 and accompanying text.
113. Canadian cable systems, including Cancom, a new expanded service of Canadian Satellite Communications, Inc., are intercepting United States broadcast signals and distributing them to Canadian viewers. Fairness Bill Hearing, supra note 7, at 144-45. No compensation is paid to United States copyright holders whose works are embodied in those signals. United States cable operators on the other hand must pay Canadian copyright owners for similar use of their copyrighted works. Id.
114. The government-owned Jamaican broadcast company has screened “Poltergeist,” “Missing,” “Victor/Victoria,” “Rocky III,” and other films that have not yet reached Jamaican movie theatres. Kerr, supra note 8, at A1, col. 6. The television broadcasts, which were distributed without authorization from United States cable networks caused a 50% drop in revenues for Jamaican theatres. Id. at C26, col. 3.

In the Central American nation of Belize, seven privately run television stations rely for their programming on unauthorized transmissions taken from United States satellites. Id. Broadcasts include programs from HBO, Cinemax, Spotlight, CNN, Satellite News Channel and the “superstations,” WGN-TV Chicago and WOR-TV in Secaucus, New Jersey. Id. Likewise, a cable television service in Haiti transmits news and other American cable television programs to 7,000 customers. Id. at C26, col. 4.

In SanJosé, Costa Rica, a cable company with more than 4,000 subscribers offers United States movies and sports programs. In addition, Costa Rican television viewers receive American cable programs on five VHF and one UHF channel. Id. at C26, col. 6. In Antigua, Haiti and Saint Kitts, government controlled over the air broadcasts have been distributing unscrambled television programs free of charge. The
many governments not only license signal theft, but in some
cases become involved in it themselves. 5

State Department officials, as well as the motion picture
and television industries in the United States concerned about
signal theft, have labelled the practice "piracy." 6 The situation
is seen as a serious threat to overseas markets for United
States films which now earn more than $1.25 billion a year, or
30% of the revenue of United States movie
makers. 7 The
"piracy" of United States programming could critically affect
film companies which depend for their profits on foreign sales
of their motion pictures. 8 Furthermore, the market for works
by United States copyright owners has diminished because
cable television companies and television networks may now
bypass the originators or owners of the programming. 9

States involved in signal theft have countered the accusa-
tions of "piracy" and copyright infringement by arguing that
their own copyright and satellite communications laws are
often ambiguous or nonexistent and that the United States
may not impose its own laws on the rest of the world. 10 They
argue that United States signals are part of a "common heri-
tage that should be provided to developing countries without
charge." 11 Therefore, some states feel entitled to take advan-

programming is derived from several sources including HBO. Fairness Bill Hearing,
supra note 7, at 23.

Programming similar to the above has been broadcast by private subscription
television stations located in Belize and Honduras. These stations differ from over
the air broadcast stations in that the intercepted programming is in scramble form.
Potential viewers must pay a subscription fee to the stations to descramble the sig-

A number of privately owned cable television companies operate in the Domini-
can Republic, Guatemala and Panama. These systems have a wider channel capacity
than either over the air broadcasting or subscription television. They can, therefore,
distribute programming from a wider variety of sources. These include CNN, ESPN,
HBO, MTV, SIN, USA Network and the resale version feeds of WGN and WTBS. Id.

In the Bahamas and the Cayman Islands, hotels catering to English speaking
tourists have constructed "television receive only" earth stations which intercept var-
ious United States satellite program services. Id.

115. See supra note 114 (specifically discussing the governments of Jamaica, Antig-
ua, Haiti and Saint Kitts).
117. Id.
118. Id.
119. See id.
120. Id. at C26, cols. 3-4.
121. CBI-1983 Hearing, supra note 41, at 397.
tage of the signal "spillover" which offers them a chance to share in the information and entertainment programming that was until recently only available to wealthier states or states that produce a great amount of copyrighted works.\(^{122}\)

On a national scale, the United States government has taken steps to fill gaps in the protection afforded by the international copyright law.\(^ {123}\) The Motion Picture Association of America (MPAA) takes the position that "United States programs emanate from a greater sensitivity on the part of our government as to the value of our copyright industries and a willingness to demand respect for that property as part of our foreign and trade policies."\(^ {124}\) This reference to United States programs involves both unilateral action on the part of the United States as well as bilateral agreements between disputing countries.\(^ {125}\) The former is exemplified by the International Copyright Fairness Bill,\(^ {126}\) a proposed program which addresses signal theft in Canada, as well as other nations.\(^ {127}\) The latter is illustrated by provisions in the Caribbean Basin Initiative\(^ {128}\) which has been enacted and implemented by the United States.\(^ {129}\) While both programs seek to address the same problem, their approaches in creating incentives to discourage signal theft differ. The Copyright Fairness Bill proposes to amend United States copyright law.\(^ {130}\) The Caribbean Basin Initiative is a foreign aid program tying trade sanc-

\(^{122}\) Kerr, supra note 8, at C26, col. 4.
\(^{123}\) See infra notes 124-33 and accompanying text.
\(^{124}\) Fairness Bill Hearing, supra note 7, at 129-30.
\(^{125}\) See, e.g., id.
\(^{126}\) Fairness Bill, supra note 12.
\(^{127}\) Id. But see infra note 142 and accompanying text.
\(^{128}\) CBI, supra note 11. The purpose of the CBI is: "To provide that nonresident, foreign nationals not be compensated unless such claimant's country compensates United States citizens for retransmissions of materials they own." Id.
\(^{130}\) See infra notes 138-55 and accompanying text.
tions to copyright protection.\footnote{See infra notes 175-90 and accompanying text.}

In addition to the Copyright Fairness Bill and the Caribbean Basin Initiative, other programs tying trade sanctions to copyright have been proposed in the House and Senate.\footnote{See infra notes 191-205 and accompanying text.} The United States government hopes that foreign nations will not only discourage piracy, but will also be encouraged to enact national copyright laws and participate in international conventions.\footnote{See infra notes 182-90 and accompanying text (dealing with the Caribbean Basin Countries specifically).}

A. Canada and the International Copyright Fairness Bill

Canadian cable systems are able to pick up United States broadcast signals and transmit them to Canadian viewers.\footnote{Canada represents a large market for United States motion picture and television programming. For many years, cable systems in Canada have supplemented conventional antenna reception by delivering to their subscribers copyrighted programming broadcast by United States television stations located near the border. Copyright Fairness Bill Hearing, supra note 7, at 20. Now, the expanded services of Cancom afford the opportunity to broaden the cable coverage of United States border stations. Cancom is now intercepting broadcast signals of selected border affiliates of the ABC, CBS, NBC and PBS network and distributing them via satellite to Canadian cable systems and other reception/distribution entities. Id.} No compensation is being paid by the Canadian systems to United States copyright holders, although United States cable operators must remunerate Canadians for similar exploitation of their works.\footnote{Section 111 of the Copyright Act extends protection to broadcast signals through the compulsory licensing system. See Copyright Act, supra note 8, § 111. Under the system, the Copyright Royalty Tribunal, see infra note 139, collects royalties that United States cable operators pay to television stations for the use of their material. Id. The Tribunal collects royalties for both foreign as well as United States copyright owners whenever their programs are retransmitted by United States cable systems. Therefore, United States copyright law compensates Canadian copyright owners for the use of their works in the United States. Copyright Act, supra note 8, § 111(c).} This lack of reciprocity in regard to copyright protection has engendered a number of concerns in the United States.\footnote{First, the unfairness of the compensation systems is apparent in the fact that United States copyright owners whenever their programs are retransmitted by United States cable systems does not constitute an infringement of the copyrighted works carried by the signals. Copyright Fairness Bill Hearing, supra note 7, at 21. Thus, Canadian distribution of this programming, whether it is Canadian or foreign, is done legally without authorization or compensation. Id.} Although both the United States and Canada
are signatories of the U.C.C., and both nations are in conformity with the treaty, an imbalance in copyright protection exists under the national treatment provision afforded by the treaty.\(^{137}\)

In response to these problems, Senator Patrick Leahy has proposed a solution, an amendment to section 111 of the Copyright Act. The amendment is in the form of a bill, S.736 entitled The International Copyright Fairness Bill.\(^ {138}\) Under the amendment, the Copyright Royalty Tribunal\(^ {139}\) must first find that a royalty claimant’s country provides equivalent compensation to American copyright holders for the use of their material abroad before royalties are disbursed to nonresident foreign nationals for cable retransmissions.\(^{140}\) Otherwise, the Tribunal will retain the foreign royalty claimant’s fees.\(^{141}\) Although the bill would apply to any foreign nation, it is directed mainly at Canada.\(^{142}\) In effect, the bill is designed to

that Canadian copyright owners received almost one-quarter million dollars for United States cable retransmissions of their programming in 1981. Fairness Bill Hearing, supra note 7, at 127. If Copyright Royalty Tribunal statutory rates rise, so will these figures. Id. Second, Canada’s protectionist stance may continue, and United States copyright holders are upset because Canadian cable systems are making money off their products without having to pay for them. Canadian Copyright Problems Focus of Hill Hearing, Broadcasting, Nov. 21, 1983, at 54. At the expense of foreign authors’ rights, limits on exclusive rights may be written into Canadian copyright law to reduce or entirely avoid remuneration to United States copyright owners. Canadian policy makers have not, up until recently, considered recognition of copyright liability for cable retransmission. Solution Evolving to Canadian Copyright Problem, Broadcasting, May 21, 1984, at 42. Third, if this protection is not granted, the United States will be deprived of compensation for or control over a significant commercial exploitation of their works. Fairness Bill Hearing, supra note 7, at 22. Fourth, other nations, especially net importers of copyrighted works, will be aware of the situation between the United States and Canada and will be reluctant to afford greater benefits to the United States and Canadian copyright owners than the United States and Canada do themselves. Id. Although meetings between United States and Canadian officials are being conducted on the issue, Solution Evolving to Canadian Copyright Problem, supra, at 42, there is slim prospect that Canada will revise its copyright law in the near future. Fairness Bill Hearing, supra note 7, at 127.

\(^{137}\) See supra note 17 and accompanying text.

\(^{138}\) Fairness Bill, supra note 12.

\(^{139}\) The Copyright Royalty Tribunal is a “[f]ederal body appointed by the President by and with the advice and consent of the Senate statutorily charged with, among other duties, the adjustment of cable copyright compulsory license fees and the distribution of such collected fees to copyright claimants.” S. REP. No. 94, 98th Cong., 1st Sess. 59 (1983).

\(^{140}\) Copyright Fairness Bill, supra note 12, § 111(c)(5).

\(^{141}\) Id.

restore the balance between United States and Canadian trade practices in copyrighted works, by creating a reciprocal relationship with respect to compensation for their use.143

Advocates of the bill hope that it will provide an incentive for Canada to revise its copyright laws. The presumption underlying this hope is that the United States telecommunications market is sufficiently attractive, so that the bill would encourage Canada to adopt a reasonable system for protecting United States copyright owners in their cable market.144 However, the bill has been vehemently criticized, and it is doubtful that it will be passed.145

Critics of the bill argue that it violates the U.C.C. principle of national treatment because it discriminates against foreign copyright owners.146 In contrast, Canada's activities remain within the U.C.C. provision because Canadian copyright law affords no greater protection for its nationals than it does for foreign copyright owners.147 It has also been argued that the enactment of the bill would harm United States copyright owners.148 By enacting the bill the United States will create greater incentives for foreign states to evade the international treaty principle of national treatment.149

Popular United States movies and television programs comprise a good portion of United States copyrighted exports. Stronger domestic copyright laws encourage the export of copyrighted works. Smaller countries with fewer copyright exports fear that United States copyright owners will benefit from increases in copyright protection to the detriment of their local interests.150 They believe that the United States is already too significant a beneficiary of national treatment throughout the world.151 The Copyright Fairness Bill would

143. Fairness Bill Hearing, supra note 7, at 16.
144. Id.
145. Cohodas, supra note 142, at 140. It has been asserted that Senator Leahy, the proponent of the Bill, may be more interested in getting the Canadians' attention than in getting the legislation passed. Id.
146. Fairness Bill Hearing, supra note 7, at 5.
147. Copyright Act, CAN. REV. STAT. ch. C-30, § 1 (1970); see also Fairness Bill Hearing, supra note 7, at 37.
149. Id.; see infra notes 150-52 and accompanying text.
150. Fairness Bill Hearing, supra note 7, at 39.
151. Id.
therefore discourage, rather than encourage foreign nations to adopt the Berne Convention, the U.C.C., and other international treaties. As a corollary to this, there is a danger that foreign states will resist modernization of their copyright laws to prevent the growth of markets for United States works in their territory. They may also adopt discriminatory programs disfavoring United States works. A revision of Canadian law granting copyright protection to programs retransmitted by cable, or a bilateral agreement for reciprocal compensation may provide more viable solutions to the signal theft dispute between the United States and Canada.

B. The Caribbean Basin Initiative: Tying Copyright to Trade Sanctions and Foreign Aid

Governments, private companies and individual entrepreneurs in the Caribbean Basin area are all involved in the interception of United States domestic satellite signals. These entities are retransmitting the programs from United States signals either to the general public or to a specific group such as cable television paying subscribers or hotel guests. No compensation has been offered to the United States copyright owners for the use of these programs in the commercial marketplace.

The MPAA regards the interception of the satellite signals as "grand theft." The foreign television stations and cable company owners see the practice quite differently and claim

152. Id.
153. Id.
154. Id. Historical realities illustrate that discriminatory policies based on a foreign nation's desire to promote indigenous authorship, to thwart the flood of foreign works, and to defend a distinctive national culture are rarely effective to meet these ends. However, national politics keep them alive. Id. at 37.
155. Id. at 81.
156. Id. at 124-26; Dealing with the Footprint's Fallout, Broadcasting, July 4, 1983, at 66.
157. Fairness Bill Hearing, supra note 7, at 123.
158. Id. These unauthorized transmissions disrupt the established theatrical and television markets in which United States copyright owners have traditionally marketed their product, thereby imposing a two-fold loss on these copyright owners:
1) They are not compensated for the commercial use of their programs;
2) Markets from which they have traditionally garnered revenues have been diminished. Id. at 24.
159. Kerr, supra note 8, at C26, col. 3.
that their actions are legal. They claim that the United States attitude reflects cultural imperialism and hypocrisy. On the one hand, the United States asserts the right to project its programs into foreign territories. On the other hand, the United States communications industry complains that foreign countries intercept and use United States programs for commercial purposes. Yet, the United States has not responded to complaints about the satellite signal spillover.

Most of the Caribbean nations are members of the I.T.C. The I.T.C. contains provisions prohibiting member states from the unauthorized taking of satellite signals. The Caribbean nations, by their actions, are violating this provision, whether or not the United States disclaims responsibility for the spillover. As the discussion in Part I illustrated, however, difficulties in interpretation, application and enforcement of the treaty provisions render it ineffective.

Efforts by a number of MPAA companies to bring legal action protecting their copyrights in Caribbean Basin countries engaging in the practice of signal theft have proved frustrating. Scrambling poses another possible solution, but it is

160. Id.; see also supra notes 120-22 and accompanying text (discussion of Caribbean Basin countries' objections).
162. See generally Kerr, supra note 8.
163. In response to the argument that satellite signal spillover threatens the integrity of national cultures, one commentator has written: "Should we take seriously the allegation that [satellite television] broadcasting represents an active threat to the integrity of national cultures? It is hard to do so when we are aware that there is no imminent prospect of [broadcasts] to countries that do not wish to receive them." De Sola Pool, Direct Broadcast Satellites and the Integrity of National Cultures, in NATIONAL SOVEREIGNTY AND INTERNATIONAL COMMUNICATION 120 (K. Nordenstreng & H. Schiller eds. 1979).
164. The governments of Canada and the receiving countries in the Caribbean Basin seem to be cooperating if not participating in the signal theft. See supra note 115.
165. See, e.g., Radio Regulations, supra note 13, art. 23; supra notes 22-42 and accompanying text.
166. See supra notes 27-42 and accompanying text.
167. Fairness Bill Hearing, supra note 7, at 126.
168. Id. A variety of legal obstacles frustrate the MPAA's efforts to protect their copyrights. Antiquated statutes in many of the countries do not reflect the new technology. Id. In addition, case law is developing very slowly in these countries. For example, an MPAA lawsuit against a hotel in the Bahamas has been postponed for over a year because the local court is unable to decide the characteristics of a protected public performance. Id. Finally, plaintiffs in many Caribbean countries are up
not certain whether scrambling systems will become inexpensive enough for most broadcasters to use and effective enough to thwart highly professional pirates.\textsuperscript{170} Licensing\textsuperscript{171} is another proposed solution, but Caribbean Basin countries lack incentives to negotiate licensing terms.\textsuperscript{172} The United States and the Jamaican Broadcasting Service have begun good faith negotiations to reach a licensing agreement.\textsuperscript{173} Other governments have not initiated any action which addresses the problem.\textsuperscript{174}

It appears that most available solutions are either inadequate, impractical, or ineffectual. However, the United States has entered into a foreign aid program with the Caribbean Basin countries which may prove to be a viable alternative.\textsuperscript{175} This program, entitled the Caribbean Basin Initiative,\textsuperscript{176} appears to be working in Jamaica.\textsuperscript{177} Under the program, certain Caribbean countries are eligible for preferential access to United States markets if they adequately and effectively protect United States intellectual property.\textsuperscript{178}

The Caribbean Basin Initiative "seeks to promote the strength and resiliency of twenty-seven countries in the Caribbean Basin by affording eligible states economic and United States' tariff benefits."\textsuperscript{179} Eligibility depends upon an evaluation against certain statutory criteria, some mandatory and some discretionary.\textsuperscript{180} The Caribbean Basin Initiative includes the offer of valuable trade concessions by the United States as an incentive to prevent piracy.\textsuperscript{181} The CBI encourages nations

\begin{itemize}
  \item Against procedural difficulties to the point where litigation becomes an inefficient, costly and ineffectual way to enforce ownership of copyrights. \textit{Id.}
  \item See supra note 8 and accompanying text.
  \item Kerr, \textit{supra} note 8, at C26, col. 5.
  \item See supra notes 8 and accompanying text.
  \item \textit{Dealing with the Footprint's Fallout, supra note 156, at 66.}
  \item \textit{Id.}
  \item \textit{Id.}
  \item CBI, \textit{supra} note 11.
  \item \textit{Id.}
  \item Kerr, \textit{supra} note 8, at C26, cols. 3-4. Jamaica, probably the largest recipient of CBI benefits, has agreed to discontinue United States satellite interception, while negotiating for appropriate licenses limited to material available for broadcast television. \textit{Fairness Bill Hearing, supra note 7, at 126.}
  \item CBI-1983 Hearing, \textit{supra} note 41, at 390.
  \item \textit{Fairness Bill Hearing, supra note 7, at 44.}
  \item \textit{Id.}
  \item \textit{Id.}
\end{itemize}
to enact both domestic laws protecting intellectual property\textsuperscript{182} as well as laws favorable to United States copyright exports.\textsuperscript{183} This last criterion calls for modernization of international copyright law.\textsuperscript{184} It is apparent why the Caribbean Basin Initiative has been termed the "carrot and stick approach."\textsuperscript{185}

The Caribbean Basin Initiative is effective where the Copyright Fairness Bill fails for a number of reasons.\textsuperscript{186} Many states lack incentive to enter into copyright treaties or licensing agreements\textsuperscript{187} because using copyright law as the sole basis for negotiations is tactically ineffective. It is not in the interests of less wealthy nations to strengthen their copyright laws where their exports of copyrighted works are greatly exceeded by those of the United States. The United States must therefore balance its desire for copyright protection against the developing countries’ desires for benefits of comparable worth.\textsuperscript{188} It becomes necessary to link the copyright issue to an overall trade "fit" with a particular state, thereby obtaining greater negotiating leverage than would be the case with traditional bilateral or multilateral treaties.\textsuperscript{189} In effect, the United States’ concern with protecting its copyright exports will be

\begin{flushright}
182. Id.
183. Id.
184. Id. at 45.
185. Id. "The 'carrot and stick' approach taken by [the] CBI in the case of copyright infringements of satellite distributed works may be justified by the relative newness of the problem . . . and the gravity of the dangers of the practices if not checked." Id.
186. See infra notes 187-90 and accompanying text.
187. See supra notes 18-21 and accompanying text.
188. Caribbean countries engaging in piracy import much United States copyrighted material while the United States imports very little of theirs. See Copyright Fairness Bill Hearing, supra note 7, at 42. Therefore while the CBI is effective in the Caribbean, it would not necessarily be an appropriate solution to the problem in Canada, a comparatively wealthy nation, containing a healthy market in copyrighted exports. The CBI is acceptable where the Copyright Fairness Bill fails because it furthers United States domestic copyright interests without compromising the basic structure of international copyright law and the principle of national treatment. See supra notes 77-78 and accompanying text. If the Bill were adopted, it might be effective in dealing with piracy, but it is not necessarily fair in keeping with the national treatment philosophy of international copyright law. It would not encourage the development of copyright relations in all countries, which is the overall aim of international copyright law. Id. The CBI presents an alternative means to protect and promote the United States copyright export industries while the United States waits for international copyright law to catch up with technology. It is a positive approach and gives incentives to Caribbean Basin countries to change their laws. Id.
189. Id.
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readily apparent in its overall trade relationship with other countries. 190

Two additional United States programs similarly tying copyright protection to trade sanctions and foreign aid have been proposed by Congress. Like the Caribbean Basin Initiative, these programs involve action on the part of the executive and legislative branches which would offer immediate remedial measures until international copyright law catches up with technology. 191

The first program is a bill to renew the Generalized System of Preferences 192 (GSP). Under this system, developing states are permitted to introduce their products into United States markets duty free on the condition that certain copyright protections are afforded to United States intellectual properties. 193 In determining whether a country receives beneficiary status, the President "must take into account the extent to which a country is providing under its law adequate and effective means for foreign nationals not only to secure, but also effectively to exercise and to enforce, exclusive rights in intellectual property." 194

The second program, the International Security and Development Cooperation Act of 1983 195 (ISDCA) links copyright protection to foreign aid. 196 The President is directed, in determining the assistance level of a country, to consider the extent to which the foreign government permits a government-owned entity or national of that country to engage in the broadcast of copyrighted material belonging to United States copyright owners without their express consent. 197

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190. Id.
191. See infra notes 192-205 and accompanying text.
193. See id. at 9.
194. Id.
195. H.R. REP. No. 2992, 98th Cong., 2nd Sess. 1 (1983) [hereinafter cited as ISDCA Bill] is the bill authorizing appropriations for the fiscal year in the forms contemplated by the ISDCA.
196. Id. The ISDCA Bill is designed to provide economic development assistance, food for the hungry, special humanitarian assistance, and trade opportunities. H.R. REP. No. 192, 98th Cong., 1st Sess. 4 (1983) [hereinafter cited as Report on ISDCA Bill].
197. Report on ISDCA Bill, supra note 196, § 904. ISDCA Bill, supra note 195. Section 904 pertains to international copyright protection. Its terms are phrased in much the same language as the GSP. See Report on ISDCA Bill, supra note 196, § 904.
In addition, the ISDCA addresses the matter of the Federal Communications Commission's\textsuperscript{198} (FCC) Transborder decisions.\textsuperscript{199} Under these decisions a number of satellite resale carriers\textsuperscript{200} have applied and received authorization by the FCC to extend their services to foreign regions\textsuperscript{201} located within their footprint.\textsuperscript{202} The FCC authorization is subject to two conditions: 1) the consent must be obtained from the state of delivery; and 2) a waiver from Intelsat is required.\textsuperscript{203} Furthermore, the ISDCA conditions the FCC authorization of transborder delivery of domestic satellite signals on the State Department's efforts to obtain assurances from the foreign countries concerned that they will negotiate the appropriate licensing fees and authorizations with American copyright holders.\textsuperscript{204} These assurances are important, for without them, it is doubtful that American copyright owners would receive

\textsuperscript{198} The Federal Communications Commission (FCC), created by Congress in 1934, is the administrative agency which regulates broadcasting in the United States. Communications Act of 1934, supra note 99, § 151. The FCC's basic regulatory guidelines can be found in the Communications Act of 1934. Id. The FCC also creates much law itself in administering the Act. The FCC has developed a body of regulations which bind broadcasters as a result of its interpretations and rulings on the Act. D. Pember, Mass Media Law 13 (1981).


\textsuperscript{200} A satellite resale carrier is a private satellite system used to deliver signals to cable television systems. See Fairness Bill Hearing, supra note 7, at 25. For example, International Satellite, Inc., which is 15% owned by the parent company of WTBS, has applied for authorization to construct and operate a private satellite system to deliver signals across national borders. Id. This is the so-called "transborder delivery."

\textsuperscript{201} The regions included are: Costa Rica, Mexico, Haiti, Jamaica, the Bahamas, Bermuda and Canada. Id.

\textsuperscript{202} See supra note 199.

\textsuperscript{203} Fairness Bill Hearing, supra note 7, at 25. For example, RCA seeks approval to transmit an entertainment and sports programming network on Satcom III-R to the Caribbean. First it applies to the FCC, then it coordinates with Intelsat and finally it receives clearance with the receiving country through the State Department which acts as a conduit. Id.

\textsuperscript{204} Report on ISDCA Bill, supra note 196, at 82. Meanwhile, the Department of State and the National Telecommunications and Information Administration in the Department of Commerce have requested that the FCC delay final implementation of the extension of services to a Bermudan cable company until the copyright question is resolved. The MPAA contends that authorization by the FCC of transborder delivery does not adequately address the international copyright implications of the decision. The FCC focuses more on telecommunications and regional communications networks than on intellectual property issues. CBI-1983 Hearing, supra note 41, at 397-98.
any remuneration for the retransmission of their works abroad. 205

III. OPTIONS AND PROPOSALS

The complementary proposals that follow represent a combination of efforts to 1) adopt workable international laws specifically dealing with copyright and communications satellites; 206 2) enforce and implement the provisions of international copyright treaties on a national scale; 207 and 3) encourage incentives for foreign countries to increase the copyright protections afforded by their domestic laws and to ratify international copyright treaties. 208

The previous discussion of the signal theft in Canada and the Caribbean Basin, focused on short-term preventive measures tailored to meet the particular relationships existing between the United States and these states. 209 The United States should further develop bilateral arrangements similar to the Caribbean Basin Initiative, which tie copyright protection to trade sanctions and foreign aid. 210

The United States should also enter into agreements or undertakings with neighboring states which plan to receive transborder signals originating in the United States. 211 Foreign distributors of United States satellite signals should agree to obtain permission from the program originators and/or owners before distributing copyrighted programs. 212

205. Under United States copyright law these retransmissions are public performances put within the exclusive control of owners of copyrights in the programming. Copyright Act, supra note 8, § 106(4). Section 111 of the Copyright Act exempts and limits the owner's public performance rights to secondary transmissions by cable television systems and resale carriers who serve them. Therefore, resale carriers are exempt from copyright liability under the compulsory licensing system. The foreign distributors planning to receive signals originating from the United States via resale carriers should be required to obtain permission from program originators/owners prior to distribution. Otherwise, the foreign distributors have an unfair advantage. Under the compulsory licensing system, only the resale carriers would pay authorization fees. Fairness Bill Hearing, supra note 7, at 25. 206. See infra notes 213-15 and accompanying text. 207. See infra notes 217-19 and accompanying text. 208. See infra notes 219-20 and accompanying text. 209. See supra notes 112-205 and accompanying text. 210. See Fairness Bill Hearing, supra note 7, at 48. 211. MPEAA Memo, supra note 1, at 64. 212. Id.
The United States should consider a number of long-range options and proposals in addition to the short-term measures mentioned previously. Therefore, the United States should ratify the Berne Convention, while also providing the requisite national implementing legislation.\textsuperscript{213} If the United States indicates a willingness to conform its domestic law to the standards set forth in the international copyright conventions, other nations may be encouraged to fashion their national laws accordingly. The United States should ratify the Brussels Satellite Convention.\textsuperscript{214} The Convention merely requires contracting states to take "adequate measures" to provide copyright protection to foreign nationals and does not necessarily require new implementing legislation.\textsuperscript{215} United States law already provides implementing legislation in the form of the Copyright Act of 1976\textsuperscript{216} and the Communications Act of 1934.\textsuperscript{217} However, revision of both of these statutes is advised.\textsuperscript{218} In this way, the enforceability of the Berne and

\textsuperscript{213} Id. at 64; see supra note 13 (discussing Berne Convention provisions which member countries must include in their domestic copyright law).

\textsuperscript{214} The Department of State, the National Telecommunications and Information Administration (NTIA) and the Copyright Office all support United States ratification of the Brussels Satellite Convention. Fairness Bill Hearing, supra note 7, at 32-33. Both the NTIA and the Copyright Office view § 605 of the Communications Act of 1934, taken together with the relevant provisions of United States copyright law, as adequate implementing legislation. Id. In the last two years, representatives of the broadcast and program supply industries have been expressing almost unanimous support for ratification of the Convention by the United States. Id. This is due to: "1. Increased use of satellites for the delivery of programming; 2. Low cost of satellite reception earth stations; 3. Widespread unauthorized international interception of U.S. program-carrying satellite signals; and 4. Realization that a new, stronger Convention would not be created." Id.

\textsuperscript{215} See supra notes 92-94 and accompanying text.

\textsuperscript{216} Copyright Act, supra note 8.

\textsuperscript{217} Communications Act of 1934, supra note 99.

\textsuperscript{218} Section 111(c) of the Copyright Act should be amended "to confer upon broadcast stations exclusive rights to syndicated programming and motion pictures within their respective market areas." Report on Proposed Copyright Amendments Bill, supra note 105, at 5. The Communications Act of 1934 should do away with FCC restrictions on broadcast stations or other video services whose signals may be carried by a cable television system. Id. at 8, 34. Finally, definitional amendments, updating the anachronistic language of the stations, should be applied to both Acts. Id. at 6; Communications Act Bill, supra note 105, at 96-105.

The effect of these amendments is twofold: First, the definitional revisions make it possible to include satellite transmissions as applicable under the statutes. Compulsory Licensing Hearing, supra note 105, at 58-64. Second, increased flexibility in the compulsory licensing system enables copyright owners to receive just compensation for each exploitation of their works. Id. Foreign nations presently receiving royalties
Brussels Conventions would be assu"red. The I.T.C. should be
enforced through the institution of mandatory arbitration pro-
ceedings. Many of the disputing countries which adhere to
the I.T.C. would then be under pressure to negotiate and to
arrive at workable terms. Finally, the United States should
provide specific domestic remedies for its copyright owners in
the form of penal sanctions against theft of satellite services.

CONCLUSION

The unauthorized interception and transmission of United
States satellite signals by foreign countries is one of the more
troublesome results of recent advances in satellite communica-
tions technology. International copyright treaties, drafted
prior to these new technological developments, present insuffi-
cient protection to United States owners of copyrighted pro-
grams. International copyright law, even in its updated
form, is characterized by interpretation, application and en-
forcement problems. Additionally, incentives on the part of
foreign nations to increase the copyright protection afforded
the United States under the treaty principle of national treat-
ment are weak at best.

Solutions to the problem of signal theft in Canada and the
Caribbean Basin have been proposed. The International
Copyright Fairness Bill, a proposal to amend the Copyright
Act, primarily addresses the situation in Canada. The Bill
has not been met with support because it is more of a sanction
than a solution. In contrast, the Caribbean Basin Initiative,
provides a workable solution. It creates incentive on the part
of the Caribbean Basin countries to improve the copyright pro-
tection afforded United States copyrighted exports.

United States programs such as the Caribbean Basin Initi-

under the compulsory licensing system for the use of their works in the United States
would no longer receive statutory compensation. They would have to rely on negoti-
ating licensing arrangements, as do United States copyright owners whose works are
received in foreign countries. See generally id. (for discussion of amendments to the
compulsory licensing system).

219. MPEAA Memo, supra note 1, at 63.
220. Id. at 64.
221. See supra notes 23-81 and accompanying text.
222. See supra notes 17-21 and accompanying text.
223. See supra notes 134-55 and accompanying text.
224. See supra notes 60-191 and accompanying text.
provide pragmatic stop-gap measures to deal with the problem of signal theft. However, additional steps must be taken in order to fill the gaps inherent in current international copyright law. The United States must adopt a combination of complementary, long-term measures to remedy signal theft. These include: 1) the ratification and implementation of conventional international treaties, specifically addressing copyright and signal theft; and 2) the adoption of new, innovative United States programs, derived from legislation and enforced by vigorous executive and administrative agency action. Finally and ideally, ratification of the Brussels Convention would provide a long range solution to the problem of signal theft. Approaching the issue through the direct development of international copyright law would reduce the need for programs like the Caribbean Basin Initiative.

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225. See supra notes 213-19 and accompanying text.
226. See supra notes 209-12 and accompanying text.
227. See supra notes 214-17 and accompanying text.