DIGITAL AUDIO RECORDING

HEARING

BEFORE THE

SUBCOMMITTEE ON
COMMERCE, CONSUMER PROTECTION, AND
COMPETITIVENESS

OF THE

COMMITTEE ON
ENERGY AND COMMERCE
HOUSE OF REPRESENTATIVES

ONE HUNDRED SECOND CONGRESS

SECOND SESSION

ON

H.R. 4567

A BILL TO IMPLEMENT A ROYALTY PAYMENT SYSTEM AND A SERIAL COPY MANAGEMENT SYSTEM FOR DIGITAL AUDIO RECORDING, AND TO PROHIBIT CERTAIN COPYRIGHT INFRINGEMENT ACTIONS

MARCH 31, 1992

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DIGITAL AUDIO RECORDING

TUESDAY, MARCH 31, 1992

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ENERGY AND COMMERCE,
SUBCOMMITTEE ON COMMERCE, CONSUMER PROTECTION,
AND COMPETITIVENESS,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:05 a.m., in room 2322, Rayburn House Office Building; Hon. Cardiss Collins (chairwoman) presiding.

Mrs. COLLINS. This hearing of the Energy and Commerce Subcommittee on Commerce, Consumer Protection, and Competitiveness will come to order. Today's hearing will address the commerce, consumer protection and competitiveness issues regarding the "Audio Home Record Act of 1992."

Digital audio recording technology marks a revolution in the recording and electronics fields. Unlike the common analog recorders, digital audio recorders make virtually perfect copies of source music. With analog records, the sound quality eventually deteriorates, but with digital audio recorders, multi-generational copies, from the first generation to the 100th generation, sound as good as the original.

To date, American consumers have not had wide access to this revolutionary technology due to litigation and disagreements between the electronics industry, the recording industry, music publishers and songwriters. This dispute stems from the music industry's fear that the technology will lead to reduced sales and royalties.

To their credit, the concerned parties have spent years attempting to resolve this issue. Fortunately, on July 11, 1991, a compromise was reached. This compromise is embodied in the legislation before us. The legislation is designed to end the stalemate and facilitate the wide scale introduction of digital audio recording technology to the American consumer.

There are three basic provisions of the legislation: First, it prohibits the bringing of any copyright infringement suit based on the manufacture, importation or distribution of a digital or analog audio recorder or medium, or the use of the recorder or medium to make copies.

Second, it requires all manufacturers and importers to pay a small royalty fee for every digital audio recorder and digital audio recording medium made available to American consumers. This money is eventually distributed to copyright holders via the U.S. Copyright Tribunal.

Third, it requires all digital audio recorders and interface devices imported, manufactured or distributed in the United States to incorporate the Serial Copy Management System, which permits unlimited recording of original material but can prevent recording of copied material.

I commend the various industries for reaching this compromise. When previous bills proved to be too contentious, Congress urged the parties to go back to the drawing board and reach a true compromise. That is what the parties did.

While in many respects this legislation is a model compromise, there are still some issues that need to be and will be addressed at this hearing. They are as follows: First, in the area of consumer protection, do the benefits to consumers of the legislation—release from liability regarding home copying and eventual access to digital recording technology—outweigh the burdens having to indirectly pay royalties and having limits on taping through technological fixes?

Second, to what extent do the technical and other requirements of the legislation represent a burden or a benefit to American and smaller consumer electronics manufacturers?

Third, 16 nations impose fees on recording media. Six of those nations also impose fees on recording equipment. Australia, Finland and Iceland have already enacted home recording legislation which contains reciprocity provisions. It appears that since the United States does not have a similar royalty provision Americans are not allowed to benefit from these royalty funds. The question is, will the legislation achieve a desired reciprocal effect?

Those are the kinds of things we are going to be asking about in our hearing today and expect to get answers to those concerns.

Mr. McMillan for an opening statement.

Mr. MCMILLAN. Thank you, Madam Chairwoman. I commend you for convening today's hearing on the Audio Home Recording Act and welcome our witnesses to the subcommittee.

It is both pleasing an unusual that after years of negotiation between artists, electronic equipment manufacturers, music publishers and consumers an agreement has been reached. This agreement is now before us in the legislation that we address today.

This legislation contains a modest royalty provision for the protection of artists and publishers. It allows consumers to make copies of audio works for their own enjoyment and mandates the inclusion of the Serial Copy Management System in digital audio recorders to reduce piracy.

The bill reflects a commitment to the protection of intellectual property. Studies have indicated that American consumers copy about a billion musical pieces each year. Under the proposed legislation artists will receive compensation without compromising the rights of consumers.

Finally, the legislation will allow an important technology to enter the marketplace. With digital audio technology music lovers will enjoy precise studio quality recordings.

Madam Chairwoman, I have heard today's proposed legislation characterized as a win-win-win proposition. I look forward to the testimony of today's witnesses to see if they concur. It's rare up here to produce something that so many agree on. I commend the

Chair for her work on this important issue and yield back the balance of my time.

Mrs. COLLINS. Thank you.

[Testimony resumes on p. 65.]

[The text of H.R. 4567 follows:]

I

102D CONGRESS
2D SESSION

H. R. 4567

To amend title 17, United States Code, to implement a royalty payment system and a serial copy management system for digital audio recording, to prohibit certain copyright infringement actions, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MARCH 25, 1992

Ms. COLLINS of Illinois introduced the following bill; which was referred jointly to the Committees on the Judiciary, Energy and Commerce and Ways and Means

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A BILL

To amend title 17, United States Code, to implement a royalty payment system and a serial copy management system for digital audio recording, to prohibit certain copyright infringement actions, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Audio Home Recording Act of 1992".

SEC. 2. IMPORTATION, MANUFACTURE, AND DISTRIBUTION OF DIGITAL AUDIO RECORDING DEVICES AND MEDIA.

Title 17, United States Code, is amended by adding at the end the following:

"CHAPTER 10—DIGITAL AUDIO RECORDING DEVICES AND MEDIA

"SUBCHAPTER A—DEFINITIONS, PROHIBITION OF CERTAIN INFRINGEMENT ACTIONS, AND RULES OF CONSTRUCTION

"Sec.
"1001. Definitions.
"1002. Prohibition on certain infringement actions.
"1003. Effect on other rights and remedies with respect to private home copying or otherwise.

"SUBCHAPTER B—ROYALTY PAYMENTS

"1011. Obligation to make royalty payments.
"1012. Royalty payments.
"1013. Deposit of royalty payments and deduction of expenses.
"1014. Entitlement to royalty payments.
"1015. Procedures for distributing royalty payments.
"1016. Negotiated collection and distribution arrangements.

"SUBCHAPTER C—THE SERIAL COPY MANAGEMENT SYSTEM

"1021. Incorporation of the serial copy management system.
"1022. Implementing the serial copy management system.

"SUBCHAPTER D—REMEDIES

"1031. Civil remedies.
"1032. Binding arbitration.

"SUBCHAPTER A—DEFINITIONS, PROHIBITION OF CERTAIN INFRINGEMENT ACTIONS, AND RULES OF CONSTRUCTION

"§ 1001. Definitions

"As used in this chapter, the following terms and their variant forms mean the following:

"(1) An 'audiogram' is a material object—

"(A) in which is fixed, by any method now known or later developed, only sounds (and not, for example, a motion picture or other audio-visual work even though it may be accompanied by sounds), and material, statements, or instructions incidental to those fixed sounds, if any, and

"(B) from which the sounds and material can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.

"(2) A 'digital audio copied recording' is a reproduction in a digital recording format of an audiogram, whether that reproduction is made directly from another audiogram or indirectly from a transmission.

"(3) A 'digital audio interface device' is any machine or device, now known or later developed, whether or not included with or as part of some other machine or device, that supplies a digital audio signal through a nonprofessional interface, as the term 'nonprofessional interface' is used in the Digital Audio Interface Standard in part I of the tech-

nical reference document or as otherwise defined by the Secretary of Commerce under section 1022(b).

"(4) A 'digital audio recording device' is any machine or device, now known or later developed, of a type commonly distributed to individuals for use by individuals, whether or not such machine or device is included with or as part of some other machine or device, the recording function of which is designed or marketed for the primary purpose of, and that is capable of, making a digital audio copied recording for private use, except for—

"(A) professional model products, and

"(B) dictation machines, answering machines, and other audio recording equipment that is designed and marketed primarily for the creation of sound recordings resulting from the fixation of nonmusical sounds.

"(5)(A) A 'digital audio recording medium' is any material object, now known or later developed, in which sounds may be fixed, in a form commonly distributed for ultimate sale to individuals for use by individuals (such as magnetic digital audio tape cassettes, optical discs, and magneto-optical discs), that is primarily marketed or most commonly used by consumers for the purpose of making digital audio

copied recordings by use of a digital audio recording device.

"(B) Such term does not include any material object—

"(i) that embodies a sound recording at the time it is first distributed by the importer or manufacturer, unless the sound recording has been so embodied in order to evade the requirements of section 1011; or

"(ii) that is primarily marketed and most commonly used by consumers either for the purpose of making copies of motion pictures or other audiovisual works or for the purpose of making copies of nonmusical literary works, including, without limitation, computer programs or data bases.

"(6) To 'distribute' means to sell, resell, lease, or assign a product to consumers in the United States, or to sell, resell, lease, or assign a product in the United States for ultimate transfer to consumers in the United States.

"(7) An 'interested copyright party' is—

"(A) the owner of the exclusive right under section 106(1) of this title to reproduce a sound recording of a musical work that has been em-

bodied in an audiogram lawfully made under this title that has been distributed to the public;

"(B) the legal or beneficial owner of, or the person that controls, the right to reproduce in an audiogram a musical work that has been embodied in an audiogram lawfully made under this title that has been distributed to the public; or

"(C) any association or other organization—

"(i) representing persons specified in subparagraph (A) or (B), or

"(ii) engaged in licensing rights in musical works to music users on behalf of writers and publishers.

"(8) An 'interested manufacturing party' is any person that imports or manufactures any digital audio recording device or digital audio recording medium in the United States, or any association of such persons.

"(9) To 'manufacture' means to produce or assemble a product in the United States or abroad.

"(10) A 'music publisher' is a person that is authorized to license the reproduction of a particular musical work in a sound recording.

"(11)(A) A 'professional model product' is an audio recording device—

"(i) that is capable of sending a digital audio interface signal in which the channel status block flag is set as a 'professional' interface, in accordance with the standards and specifications set forth in the technical reference document or established under an order issued by the Secretary of Commerce under section 1022(b);

"(ii) that is clearly, prominently, and permanently marked with the letter 'P' or the word 'professional' on the outside of its packaging, and in all advertising, promotional, and descriptive literature, with respect to the device, that is available or provided to persons other than the manufacturer or importer, its employees, or its agents; and

"(iii) that is designed, manufactured, marketed, and intended for use by recording professionals in the ordinary course of a lawful business.

"(B) In determining whether an audio recording device meets the requirements of subparagraph (A)(iii), factors to be considered shall include—

"(i) whether it has features used by recording professionals in the course of a lawful business, including features such as—

"(I) a data collection and reporting system of error codes during recording and playback;

"(II) a record and reproduce format providing 'read after write' and 'read after read';

"(III) a time code reader and generator conforming to the standards set by the Society of Motion Picture and Television Engineers for such readers and generators; and

"(IV) a professional input/output interface, both digital and analog, conforming to standards set by audio engineering organizations for connectors, signaling formats, levels, and impedances;

"(ii) the nature of the promotional materials used to market the audio recording device;

"(iii) the media used for the dissemination of the promotional materials, including the intended audience;

"(iv) the distribution channels and retail outlets through which the device is disseminated;

"(v) the manufacturer's or importer's price for the device as compared to the manufacturer's or importer's price for digital audio recording devices implementing the Serial Copy Management System;

"(vi) the relative quantity of the device manufactured or imported as compared to the size of the manufacturer's or importer's market for professional model products;

"(vii) the occupations of the purchasers of the device; and

"(viii) the uses to which the device is put.

"(12) The 'Register' is the Register of Copyrights.

"(13) The 'Serial Copy Management System' means the system for regulating serial copying by digital audio recording devices that is set forth in the technical reference document or in an order of the Secretary of Commerce under section 1022(b), or that conforms to the requirements of section 1021(a)(1)(C).

"(14) The 'technical reference document' is the document entitled 'Technical Reference Document for Audio Home Recording Act of 1992 that is set forth in the report of the Committee on Energy and Commerce to the House of Representatives to accompany the Audio Home Recording Act of 1992.

"(15) The 'transfer price' of a digital audio recording device or a digital audio recording medium is—

"(i) subject to clause (ii)—

"(I) in the case of an imported product, the actual entered value at United States Customs (exclusive of any freight, insurance, and applicable duty), and

"(II) in the case of a domestic product, the manufacturer's transfer price (FOB the manufacturer, and exclusive of any direct sales taxes or excise taxes incurred in connection with the sale); and

"(ii) in a case in which the transferor and transferee are entities subject to section 482 of the Internal Revenue Code of 1986, the transfer price shall not be less than a reasonable arms-length price under the principles of the

regulations adopted pursuant to such section, or any successor provision to such section.

"(16) A 'transmission' is any audio or audio-visual transmission, now known or later developed, whether by a broadcast station, cable system, multipoint distribution service, subscription service, direct broadcast satellite, or other form of analog or digital communication.

"(17) The 'Tribunal' is the Copyright Royalty Tribunal.

"(18) A 'writer' is the composer or lyricist of a particular musical work.

"(19) The terms 'analog format', 'copyright status', 'category code', 'generation status', and 'source material', mean those terms as they are used in the technical reference document.

"§ 1002. Prohibition on certain infringement actions

"(a) CERTAIN ACTIONS PROHIBITED.—

"(1) GENERALLY.—Subject to paragraph (2), no action may be brought under this title, or under section 337 of the Tariff Act of 1930, alleging infringement of copyright based on the manufacture, importation, or distribution of a digital audio recording device or a digital audio recording medium, or an analog audio recording device or analog audio re-

cording medium, or the use of such a device or medium for making audiograms.

"(2) EXCEPTION.—(A) Paragraph (1) does not apply with respect to any claim against a person for infringement by virtue of the making of one or more audiograms, or other material objects in which works are fixed, for direct or indirect commercial advantage.

"(B) For purposes of this paragraph, the copying of an audiogram by a consumer for private, noncommercial use is not for direct or indirect commercial advantage.

"(b) EFFECT OF THIS SECTION.—Nothing in this section shall be construed—

"(1) to create or expand a cause of action for copyright infringement except to the extent such a cause of action otherwise exists under provisions of this title other than this chapter or under section 337 of the Tariff Act of 1930, or

"(2) to limit any defenses that may be available to such cause of action.

"§ 1003. Effect on other rights and remedies with respect to private home copying or otherwise

"Except as expressly provided in this chapter with respect to audio recording devices and media, neither the enactment of this chapter nor anything contained in this chapter shall be construed to expand, limit, or otherwise affect the rights of any person with respect to private home copying of copyrighted works, or to expand, limit, create, or otherwise affect any other right or remedy that may be held by or available to any person under chapters 1 through 9 of this title.

"SUBCHAPTER B—ROYALTY PAYMENTS

"§ 1011. Obligation to make royalty payments

"(a) PROHIBITION ON IMPORTATION AND MANUFACTURE.—No person shall import into and distribute in the United States, or manufacture and distribute in the United States, any digital audio recording device or digital audio recording medium unless such person—

"(1) records the notice specified by this section and subsequently deposits the statements of account and applicable royalty payments for such device or medium specified by this section and section 1012, or

"(2) complies with the applicable notice, statement of account, and payment obligations under a

negotiated arrangement authorized pursuant to section 1016.

"(b) FILING OF NOTICE.—

"(1) GENERALLY.—Subject to paragraph (2), the importer or manufacturer of any digital audio recording device or digital audio recording medium, within a product category or utilizing a technology with respect to which such manufacturer or importer has not previously filed a notice under this subsection, shall file a notice with the Register, not later than 45 days after the commencement of the first distribution in the United States of such device or medium, in such form as the Register shall prescribe by regulation.

"(2) EXCEPTION.—No notice shall be required under paragraph (1) with respect to any distribution occurring before the effective date of this chapter.

"(3) CONTENTS.—A notice under paragraph (1) shall—

"(A) set forth the manufacturer's or importer's identity and address,

"(B) identify such product category and technology, and

"(C) identify any trademark or other trade or business name that the importer or manufac-

turer uses or intends to use in connection with the importation, manufacture, or distribution of such device or medium in the United States.

"(c) FILING OF QUARTERLY STATEMENTS OF ACCOUNT.—

"(1) GENERALLY.—Any importer or manufacturer that distributed during a given quarter of a calendar or fiscal year (in accordance with an election under paragraph (2)) any digital audio recording device or digital audio recording medium that it manufactured or imported shall file with the Register, in such form as the Register shall prescribe by regulation, a quarterly statement of account specifying, by product category, technology, and model, the number and transfer price of all digital audio recording devices and digital audio recording media that it distributed during such quarter.

"(2) PERIOD COVERED.—The quarterly statements of account may be filed on either a calendar or fiscal year basis, at the election of the manufacturer or importer.

"(3) STATEMENTS OF ACCOUNT FOR THE FIRST 3 QUARTERS.—For the first 3 quarters of any calendar or fiscal year, such statement shall—

"(A) be filed no later than 45 days after the close of the period covered by the statement, except that any quarterly statement that would be due within 3 months and 45 days after the effective date of this chapter shall not be filed until the next quarterly statement is due, at which time a statement shall be filed covering the entire period since the effective date of this chapter;

"(B) be certified as accurate by an authorized officer or principal of the importer or manufacturer; and

"(C) be accompanied by the total royalty payment due for such period pursuant to section 1012.

"(4) STATEMENT OF ACCOUNT FOR THE FOURTH QUARTER.—The quarterly statement for the final quarter of any calendar or fiscal year shall be incorporated into the annual statement required under subsection (d), which shall be accompanied by the royalty payment due for such quarter.

"(d) FILING OF ANNUAL STATEMENTS OF ACCOUNT.—

"(1) GENERALLY.—Any importer or manufacturer that distributed during a given calendar or fis-

cal year (as applicable) any digital audio recording device or digital audio recording medium that such importer or manufacturer imported or manufactured shall also file with the Register a cumulative annual statement of account, in such form as the Register shall prescribe by regulation.

"(2) TIMING AND CERTIFICATION.—Such statement shall be filed no later than 60 days after the close of such calendar or fiscal year, and shall be certified as accurate by an authorized officer or principal of the importer or manufacturer.

"(3) INDEPENDENT REVIEW AND CERTIFICATION.—The annual statement of account shall be reviewed and, pursuant to generally accepted auditing standards, certified by an independent certified public accountant selected by the manufacturer or importer as fairly presenting the information contained therein, on a consistent basis and in accordance with the requirements of this chapter.

"(4) RECONCILIATION OF ROYALTY PAYMENT.—The cumulative annual statement of account shall be accompanied by any royalty payment due under section 1012 that was not previously paid under subsection (c).

"(e) VERIFICATION.—

"(1) GENERALLY.—

"(A) The Register shall, after consulting with interested copyright parties and interested manufacturing parties, prescribe regulations specifying procedures for the verification of statements of account filed pursuant to this section.

"(B) Such regulations shall permit interested copyright parties to select independent certified public accountants to conduct audits in order to verify the accuracy of the information contained in the statements of account filed by manufacturers and importers.

"(C) Such regulations shall also—

"(i) specify the scope of such independent audits; and

"(ii) establish a procedure by which interested copyright parties will coordinate the engagement of such independent certified public accountants, in order to ensure that no manufacturer or importer is audited more than once per year.

"(D) All such independent audits shall be conducted at reasonable times, with reasonable advance notice, and shall be no broader in scope

than is reasonably necessary to carry out the purposes of this subsection in accordance with generally accepted auditing standards.

"(2) INDEPENDENT CERTIFICATION.—The results of all such independent audits shall be certified as fairly presenting the information contained therein, on a consistent basis and in accordance with the requirements of this chapter and generally accepted auditing standards, by the certified public accountant responsible for the audit. The certification and results shall be filed with the Register.

"(3) ACCESS TO DOCUMENTS IN EVENT OF DISPUTE.—In the event of a dispute concerning the amount of the royalty payment due from a manufacturer or importer resulting from a verification audit conducted under this section—

"(A) any interested manufacturing party audited pursuant to this subsection, and its authorized representatives, shall be entitled to have access to all documents upon which the audit results under this subsection were based; and

"(B) any representative of an interested copyright party that has been approved by the Register under subsection (h)(2) shall be enti-

tled to have access to all documents upon which the audit results under subsection (d) were based, subject to the limitations of subsection (h)(2).

"(f) COSTS OF VERIFICATION.—

"(1) The costs of all verification audits that are conducted pursuant to subsection (e) shall be borne by interested copyright parties, except that, in the case of a verification audit of a manufacturer or importer that leads ultimately to recovery of an annual royalty underpayment of 5 percent or more of the annual payment made, the importer or manufacturer shall provide reimbursement for the reasonable costs of such audit.

"(2) Except as may otherwise be agreed by interested copyright parties, the costs of a verification audit conducted pursuant to subsection (e) shall be borne by the party engaging the certified public accountant. Any recovery of royalty underpayments as a result of the audit shall be used first to provide reimbursement for the reasonable costs of such audit to the extent such costs have not otherwise been reimbursed by the manufacturer or importer pursuant to this subsection. Any remaining recovery shall be deposited with the Register pursuant to section

1013, or as may otherwise be provided by a negotiated arrangement authorized under section 1016, for distribution to interested copyright parties as though such funds were royalty payments made pursuant to this section.

"(g) INDEPENDENCE OF ACCOUNTANTS.—Each certified public accountant used by interested copyright parties or interested manufacturing parties pursuant to this section shall, as determined by the Register, be in good standing and not be financially dependent upon interested copyright parties or interested manufacturing parties, respectively. The Register may, upon petition by any interested copyright party or interested manufacturing party, prevent the use of a particular certified public accountant on the ground that such accountant does not meet the requirements of this subsection.

"(h) CONFIDENTIALITY.—

"(1) GENERALLY.—The quarterly and annual statements of account filed pursuant to subsections (c) and (d), and information disclosed or generated during verification audits conducted pursuant to subsection (e), shall be presumed to contain information the disclosure of which is subject to the penalties set forth in section 1905 of title 18. Except as provided in paragraphs (2), (3), and (4), neither

the Register nor any member, officer, or employee of the Copyright Office or the Tribunal may—

"(A) make available to the public audit information furnished under this section or information contained in quarterly or annual statements of account, except that aggregate information that does not disclose, directly or indirectly, company-specific information may be made available to the public;

"(B) use such information for any purpose other than to carry out responsibilities under this chapter; or

"(C) except as provided in subparagraph (A), permit anyone (other than members, officers, and employees of the Copyright Office and the Tribunal who require such information in the performance of duties under this chapter) to examine such information.

"(2) PROCEDURES FOR ACCESS TO BE PRESCRIBED BY REGISTER.—(A) The Register, after consulting with interested manufacturing parties and interested copyright parties, shall prescribe procedures for disclosing, in confidence, to representatives of interested copyright parties and representatives of interested manufacturing parties information con-

tained in quarterly and annual statements of account and information generated as a result of verification audits.

"(B) Such procedures shall provide that only those representatives of interested copyright parties and interested manufacturing parties who have been approved by the Register shall have access to such information, and that all such representatives shall be required to sign a certification limiting the use of the information to—

"(i) verification functions under this section, and

"(ii) any enforcement actions that may result from such verification functions.

"(3) ACCESS BY AUDITED MANUFACTURER.—Any interested manufacturing party that is audited pursuant to subsection (e), and its authorized representatives, shall be entitled to have access to all documents filed with the Register as a result of such audit.

"(4) ACCESS BY CONGRESS.—Nothing in this section shall authorize the withholding of information from the Congress.

"§ 1012. Royalty payments

"(a) DIGITAL AUDIO RECORDING DEVICES.—

"(1) AMOUNT OF PAYMENT.—The royalty payment due under section 1011 of this title for each digital audio recording device imported into and distributed in the United States, or manufactured and distributed in the United States, shall be 2 percent of the transfer price. Only the first person to manufacture and distribute or import and distribute such device shall be required to pay the royalty with respect to such device.

"(2) CALCULATION FOR DEVICES DISTRIBUTED WITH OTHER DEVICES.—With respect to a digital audio recording device first distributed in combination with one or more devices, either as a physically integrated unit or as separate components, the royalty payment shall be calculated as follows:

"(A) If the digital audio recording device and such other devices are part of a physically integrated unit, the royalty payment shall be based on the transfer price of the unit, but shall be reduced by any royalty payment made on any digital audio recording device included within the unit that was not first distributed in combination with the unit.

"(B) If the digital audio recording device is not part of a physically integrated unit and

substantially similar devices have been distributed separately at any time during the preceding 4 quarters, the royalty payment shall be based on the average transfer price of such devices during those 4 quarters.

"(C) If the digital audio recording device is not part of a physically integrated unit and substantially similar devices have not been distributed separately at any time during the preceding 4 quarters, the royalty payment shall be based on a constructed price reflecting the proportional value of such device to the combination as a whole.

"(3) LIMITS ON ROYALTIES.—Notwithstanding paragraph (1) or (2) of this subsection, the amount of the royalty payment for each digital audio recording device or physically integrated unit containing a digital audio recording device shall not be less than $1 nor more than the royalty maximum. The royalty maximum shall be $8 per device, except that for a physically integrated unit containing more than one digital audio recording device, the royalty maximum for such unit shall be $12. During the 6th year after the effective date of this chapter, and not more than once each year thereafter, any interested copyright

party may petition the Tribunal to increase the royalty maximum and, if more than 20 percent of the royalty payments are at the relevant royalty maximum, the Tribunal shall prospectively increase such royalty maximum with the goal of having not more than 10 percent of such payments at the new royalty maximum; except that the amount of any such increase as a percentage of the royalty maximum shall in no event exceed the percentage increase in the Consumer Price Index of the Department of Labor during the period under review.

"(b) DIGITAL AUDIO RECORDING MEDIA.—The royalty payment due under section 1011 for each digital audio recording medium imported into and distributed in the United States, or manufactured and distributed in the United States, shall be 3 percent of the transfer price, except that only the first person to manufacture and distribute or import and distribute such medium shall be required to pay the royalty with respect to such medium.

"(c) RETURNED OR EXPORTED MERCHANDISE.—

"(1) DEDUCTION.—In calculating the amount of royalty payments due under subsections (a) and (b) of this section, manufacturers and importers may deduct the amount of any royalty payments already made on digital audio recording devices or

media that are returned to the manufacturer or importer as unsold or defective merchandise within 2 years after the date on which royalty payments under subsections (a) and (b) are paid on such devices or media.

"(2) TIMING OF CREDIT.—Any such credit shall be taken during the period when such devices or media are returned or exported, and the basis for any such credit shall be set forth in the statement of account for such period filed under section 1011(c).

"(3) CARRYOVERS AND ADDITIONAL PAYMENTS.—Any such credit that is not fully used during such period may be carried forward to subsequent periods. If any returned or exported merchandise for which a credit has been taken is subsequently distributed, a royalty payment shall be made as specified under subsection (a) or (b) of this section, based on the transfer price applicable to such distribution.

"§ 1013. Deposit of royalty payments and deduction of expenses

"The Register shall receive all royalty payments deposited under this chapter and, after deducting the reasonable costs incurred by the Copyright Office under this

chapter, shall deposit the balance in the Treasury of the United States, in such manner as the Secretary of the Treasury directs. All funds held by the Secretary of the Treasury shall be invested in interest-bearing United States securities for later distribution with interest under section 1014, 1015, or 1016. The Register may, in the Register's discretion, 4 years after the close of any calendar year, close out the royalty payments account for that calendar year, and may treat any funds remaining in such account and any subsequent deposits that would otherwise be attributable to that calendar year as attributable to the succeeding calendar year. The Register shall submit to the Copyright Royalty Tribunal, on a monthly basis, a financial statement reporting the amount of royalties under this chapter that are available for distribution.

"§ 1014. Entitlement to royalty payments

"(a) INTERESTED COPYRIGHT PARTIES.—The royalty payments deposited pursuant to section 1013 shall, in accordance with the procedures specified in section 1015 or 1016, be distributed to any interested copyright party—

"(1) whose musical work or sound recording has been—

"(A) embodied in audiograms lawfully made under this title that have been distributed to the public, and

"(B) distributed to the public in the form of audiograms or disseminated to the public in transmissions, during the period to which such payments pertain; and

"(2) who has filed a claim under section 1015 or 1016.

"(b) ALLOCATION OF ROYALTY PAYMENTS TO GROUPS.—The royalty payments shall be divided into two funds as follows:

"(1) THE SOUND RECORDINGS FUND.—66⅔ percent of the royalty payments shall be allocated to the Sound Recordings Fund. The American Federation of Musicians (or any successor entity) shall receive 2⅝ percent of the royalty payments allocated to the Sound Recordings Fund for the benefit of nonfeatured musicians who have performed on sound recordings distributed in the United States. The American Federation of Television and Radio Artists (or any successor entity) shall receive 1⅜ percent of the royalty payments allocated to the Sound Recordings Fund for the benefit of nonfeatured vocalists who have performed on sound recordings distributed

in the United States. The remaining royalty payments in the Sound Recordings Fund shall be distributed to claimants under subsection (a) who are interested copyright parties under section 1001(a)(6)(i). Such claimants shall allocate such royalty payments, on a per sound recording basis, in the following manner: 40 percent to the recording artist or artists featured on such sound recordings (or the persons conveying rights in the artists' performances in the sound recordings), and 60 percent to the interested copyright parties.

"(2) THE MUSICAL WORKS FUND.—(A) 33⅓ percent of the royalty payments shall be allocated to the Musical Works Fund for distribution to interested copyright parties whose entitlement is based on legal or beneficial ownership or control of a copyright in a musical work.

"(B) Notwithstanding any contractual obligation to the contrary—

"(i) music publishers shall be entitled to 50 percent of the royalty payments allocated to the Musical Works Fund, and

"(ii) writers shall be entitled to the other 50 percent of the royalty payments allocated to the Musical Works Fund.

"(c) DISTRIBUTION OF ROYALTY PAYMENTS WITHIN GROUPS.—If all interested copyright parties within a group specified in subsection (b) do not agree on a voluntary proposal for the distribution of the royalty payments within such group, the Tribunal shall, pursuant to the procedures specified in section 1015(c), allocate such royalty payments based on the extent to which, during the relevant period—

"(1) for the Sound Recordings Fund, each sound recording was distributed to the public in the form of audiograms; and

"(2) for the Musical Works Fund, each musical work was distributed to the public in the form of audiograms or disseminated to the public in transmissions.

"§ 1015. Procedures for distributing royalty payments

"(a) FILING OF CLAIMS AND NEGOTIATIONS.—

"(1) During the first 2 months of each calendar year after the calendar year in which this chapter takes effect, every interested copyright party wishing to receive royalty payments to which such party is entitled under section 1014 shall file with the Tribunal a claim for payments collected during the preceding year in such form and manner as the Tribunal shall prescribe by regulation.

"(2) All interested copyright parties within each group specified in section 1014(b) shall negotiate in good faith among themselves in an effort to agree to a voluntary proposal for the distribution of royalty payments. Notwithstanding any provision of the antitrust laws, for purposes of this section such interested copyright parties may agree among themselves to the proportionate division of royalty payments, may lump their claims together and file them jointly or as a single claim, or may designate a common agent to receive payment on their behalf; except that no agreement under this subsection may modify the allocation of royalties specified in section 1014(b).

"(b) DISTRIBUTION OF PAYMENTS IN THE ABSENCE OF A DISPUTE.—Within 30 days after the period established for the filing of claims under subsection (a), in each year after the year in which this section takes effect, the Tribunal shall determine whether there exists a controversy concerning the distribution of royalty payments under section 1014(c). If the Tribunal determines that no such controversy exists, the Tribunal shall, within 30 days after such determination, authorize the distribution of the royalty payments as set forth in the agreements regarding the distribution of royalty payments entered into pursuant

to subsection (a), after deducting its reasonable administrative costs under this section.

"(c) RESOLUTION OF DISPUTES.—If the Tribunal finds the existence of a controversy, it shall, pursuant to chapter 8 of this title, conduct a proceeding to determine the distribution of royalty payments. During the pendency of such a proceeding, the Tribunal shall withhold from distribution an amount sufficient to satisfy all claims with respect to which a controversy exists, but shall, to the extent feasible, authorize the distribution of any amounts that are not in controversy.

"§ 1016. Negotiated collection and distribution arrangements

"(a) SCOPE OF PERMISSIBLE NEGOTIATED ARRANGEMENTS.—

"(1) AUTHORITY TO NEGOTIATE.—Interested copyright parties and interested manufacturing parties may at any time negotiate among or between themselves a single alternative system for the collection, distribution, or verification of royalty payments provided for in this chapter.

"(2) SCOPE OF ALTERNATIVE ARRANGEMENT.—Such a negotiated arrangement may modify the collection, distribution, and verification procedures and requirements that would otherwise apply

under sections 1011 through 1015, including the time periods for payment and distribution of royalties, but shall not alter the requirements of section 1011 (a), (b), or (h)(4), section 1012(a), or section 1014(a).

"(3) RESOLUTION OF DISPUTES.—Such a negotiated arrangement may also provide that specified types of disputes that cannot be resolved among the parties to the arrangement shall be resolved by binding arbitration or other agreed upon means of dispute resolution.

"(4) INAPPLICABILITY OF ANTITRUST LAWS.—Notwithstanding any provision of the antitrust laws, for purposes of this section interested manufacturing parties and interested copyright parties may negotiate in good faith and voluntarily agree among themselves as to the collection, allocation, distribution, and verification of royalty payments, and may designate common agents to negotiate and carry out such activities on their behalf.

"(b) IMPLEMENTATION OF A NEGOTIATED ARRANGEMENT.—

"(1) DETERMINATION BY THE TRIBUNAL.—(A) No negotiated arrangement shall go into effect under this section until the Tribunal has deter-

mined, after full opportunity for comment by interested persons, that participants in the negotiated arrangement include—

"(i) at least ⅔ of all individual interested copyright parties that are entitled to receive royalty payments from the Sound Recordings Fund,

"(ii) at least ⅔ of all individual interested copyright parties that are entitled to receive royalty payments from the Musical Works Fund as music publishers, and

"(iii) at least ⅔ of all individual interested copyright parties that are entitled to receive royalty payments from the Musical Works Fund as writers.

"(B) For purposes of subparagraph (A), the determination with respect to ⅔ participation shall be based on annual retail sales of audiograms in which musical works or sound recordings of musical works are embodied. One or more organizations representing any of the types of individual interested copyright parties specified in the first sentence of this subparagraph shall be presumed to represent ⅔ of that type of interested copyright party if the membership of, or other participation in, such orga-

nization or organizations includes ⅔ of that type of interested copyright party based on annual retail sales of phonorecords in which musical works or sound recordings of musical works are embodied.

"(C) The implementation of the negotiated arrangement shall include all necessary safeguards, as determined by the Tribunal, which ensure that all interested parties who are not participants in the negotiated arrangement receive the royalty payments to which they would be entitled in the absence of such an arrangement. Such safeguards may include accounting procedures, reports, and any other information determined to be necessary to ensure the proper collection and distribution of royalty payments.

"(2) PARTIES NOT SUBJECT TO NEGOTIATED ARRANGEMENT.—Notwithstanding the existence of a negotiated arrangement that has gone into effect under this section, any interested manufacturing party that is not a party to such negotiated arrangement shall remain subject to the requirements of sections 1011 and 1012 and may fully satisfy its obligations under this subchapter by complying with the procedures set forth in such sections.

"(c) MAINTENANCE OF JURISDICTION BY TRIBUNAL.—If a negotiated arrangement has gone into effect under this section, the Tribunal shall maintain jurisdiction over the arrangement and shall—

"(1) hear and address any objections to the arrangement that may arise while it is in effect;

"(2) ensure the availability of alternative procedures for any interested manufacturing party or interested copyright party that is not a participant in the negotiated arrangement;

"(3) ensure that all interested copyright parties who are not participants in the arrangement receive the royalty payments to which they would be entitled in the absence of such an arrangement;

"(4) ensure that it has adequate funds at its disposal, received either through the Copyright Office or through the entity administering the negotiated arrangement, to distribute to interested copyright parties not participating in the arrangement the royalty payments to which they are entitled under section 1014(c) or 1015(b), including applicable interest; and

"(5) ensure that the requirements of section 1016(b)(1)(C) are met.

"(d) JUDICIAL REVIEW.—The Tribunal may seek injunctive relief in an appropriate United States district court to secure compliance with the requirements of subsection (c).

"SUBCHAPTER C—THE SERIAL COPY MANAGEMENT SYSTEM

"§ 1021. Incorporation of the serial copy management system

"(a) PROHIBITION ON IMPORTATION, MANUFACTURE, AND DISTRIBUTION.—

"(1) GENERALLY.—No person shall import, manufacture, or distribute any digital audio recording device or any digital audio interface device that does not conform to the standards and specifications to implement the Serial Copy Management System that are—

"(A) set forth in the technical reference document;

"(B) set forth in an order by the Secretary of Commerce under section 1022(b) (1), (2), or (3); or

"(C) in the case of a digital audio recording device other than a device subject to part II of the technical reference document or an order issued by the Secretary pursuant to sec-

tion 1022(b), established by the manufacturer (or, in the case of a proprietary technology, the proprietor of such technology) so as to achieve the same functional characteristics with respect to regulation of serial copying as, and to be compatible with the prevailing method for implementation of, the Serial Copy Management System set forth in the technical reference document or in any order of the Secretary issued under section 1022.

"(2) ORDER RELATING TO COPYING THROUGH ANALOG CONVERTER.—If the Secretary of Commerce approves standards and specifications under section 1022(b)(4), then no person shall import, manufacture, or distribute any digital audio recording device or any digital audio interface device that does not conform to such standards and specifications.

"(b) PROHIBITION ON CIRCUMVENTION OF THE SERIAL COPY MANAGEMENT SYSTEM.—No person shall import, manufacture, or distribute any device, or offer or perform any service, the primary purpose or effect of which is to avoid, bypass, remove, deactivate, or otherwise circumvent any program or circuit which implements, in whole or in part, the Serial Copy Management System in

a digital audio recording device or a digital audio interface device.

"(c) ENCODING OF INFORMATION ON AUDIOGRAMS.—

"(1) PROHIBITION ON ENCODING INACCURATE INFORMATION.—No person shall encode an audiogram of a sound recording with inaccurate information relating to the category code, copyright status, or generation status of the source material so as to adversely affect the operation of the Serial Copy Management System.

"(2) ENCODING OF COPYRIGHT STATUS NOT REQUIRED.—Nothing in this subchapter requires any person engaged in the importation, manufacture, or assembly of audiograms to encode any such audiogram with respect to its copyright status.

"(d) INFORMATION ACCOMPANYING TRANSMISSIONS IN DIGITAL FORMAT.—Any person who transmits or otherwise communicates to the public any sound recording in digital format is not required under this subchapter to transmit or otherwise communicate the information relating to the copyright status of the sound recording. Any such person who does transmit or otherwise communicate such copyright status information shall transmit or communicate such information accurately.

"§ 1022. Implementing the serial copy management system

"(a) PUBLICATION OF TECHNICAL REFERENCE DOCUMENT AND CERTIFICATION.—Within 10 days after the date of the enactment of this chapter, the Secretary of Commerce shall cause to be published in the Federal Register the technical reference document, together with the certification from the National Institute of Standards and Technology, as such certification appears in the report of the Committee on Energy and Commerce to the House of Representatives to accompany the Audio Home Recording Act of 1992, that the technical reference document sets forth standards and specifications that adequately incorporate the intended functional characteristics to regulate serial copying and are not incompatible with existing international digital audio interface standards and existing digital audio technology.

"(b) ORDERS OF SECRETARY OF COMMERCE.—The Secretary of Commerce, upon petition by an interested manufacturing party or an interested copyright party, and after consultation with the Register, may, if the Secretary determines that to do so is in accordance with the purposes of this chapter, issue an order to implement the Serial Copy Management System set forth in the technical reference document as follows:

"(1) FUNCTIONALLY EQUIVALENT ALTERNATIVES.—The Secretary may issue an order for the purpose of permitting in commerce devices that do not conform to all of the standards and specifications set forth in the technical reference document, if the Secretary determines that such devices possess the same functional characteristics with respect to regulation of serial copying as, and are compatible with the prevailing method for implementation of, the Serial Copy Management System set forth in the technical reference document.

"(2) REVISED GENERAL STANDARDS.—The Secretary may issue an order for the purpose of permitting in commerce devices that do not conform to all of the standards and specifications set forth in the technical reference document, if the Secretary determines that—

"(A) the standards and specifications relating generally to digital audio recording devices and digital audio interface devices have been or are being revised or otherwise amended or modified such that the standards and specifications set forth in the technical reference document are not or would no longer be applicable or appropriate; and

"(B) such devices conform to such new standards and specifications and possess the same functional characteristics with respect to regulation of serial copying as the Serial Copy Management System set forth in the technical reference document.

"(3) STANDARDS FOR NEW DEVICES.—The Secretary may issue an order for the purpose of—

"(A) establishing whether the standards and specifications established by a manufacturer or proprietor for digital audio recording devices other than devices subject to part II of the technical reference document or a prior order of the Secretary under paragraph (1) or (2) comply with the requirements of subparagraph (C) of section 1021(a)(1); or

"(B) establishing alternative standards or specifications in order to ensure compliance with such requirements.

"(4) MATERIAL INPUT TO DIGITAL DEVICE THROUGH ANALOG CONVERTER.—

"(A) GENERALLY.—Except as provided in subparagraphs (B) through (D), the Secretary, after publication of notice in the Federal Register and reasonable opportunity for public com-

ment, may issue an order for the purpose of approving standards and specifications for a technical method implementing in a digital audio recording device the same functional characteristics as the Serial Copy Management System so as to regulate the serial copying of source material input through an analog converter in a manner equivalent to source material input in the digital format.

"(B) COST LIMITATION.—The order may not impose a total cost burden on manufacturers of digital audio recording devices, for implementing the Serial Copy Management System and the technical method prescribed in such order, in excess of 125 percent of the cost of implementing the Serial Copy Management System before the issuance of such order.

"(C) CONSIDERATION OF OTHER OBJECTIONS.—Before issuing the order, the Secretary shall take into account comments submitted by interested parties with respect to the order.

"(D) LIMITATION TO DIGITAL AUDIO DEVICES.—The order shall not affect the recording of any source material on analog recording equipment and the order shall not impose any

restrictions or requirements that must be implemented in any device other than a digital audio recording device or digital audio interface device.

"SUBCHAPTER D—REMEDIES

"§ 1031. Civil remedies

"(a) CIVIL ACTIONS.—Any interested copyright party or interested manufacturing party that is or would be injured by a violation of section 1011 or 1021, or the Attorney General of the United States, may bring a civil action in an appropriate United States district court against any person for such violation.

"(b) POWERS OF THE COURT.—In an action brought under subsection (a), the court—

"(1) except as provided in subsection (h), may grant temporary and permanent injunctions on such terms as it deems reasonable to prevent or restrain such violation;

"(2) in the case of a violation of section 1011 (a) through (d) or 1021, shall award damages under subsection (d);

"(3) in its discretion may allow the recovery of full costs by or against any party other than the United States or an officer thereof;

"(4) in its discretion may award a reasonable attorney's fee to the prevailing party as part of the costs awarded under paragraph (3) if the court finds that the nonprevailing party has not proceeded in good faith; and

"(5) may grant such other equitable relief as it deems reasonable.

"(c) RECOVERY OF OVERDUE ROYALTY PAYMENTS.—In any case in which the court finds that a violation of section 1011, involving nonpayment or underpayment of royalty payments has occurred, the violator shall be directed to pay, in addition to damages awarded under subsection (d), any such royalties due, plus interest calculated as provided under section 1961 of title 28.

"(d) AWARD OF DAMAGES.—

"(1) SECTION 1011.—

"(A) DEVICE.—In the case of a violation of subsection (a), (b), (c), or (d) of section 1011 involving a digital audio recording device, the court shall award statutory damages in an amount between a nominal level and $100 per device, as the court considers just.

"(B) MEDIUM.—In the case of a violation of subsection (a), (b), (c), or (d) of section 1011 involving a digital audio recording me-

dium, the court shall award statutory damages in an amount between a nominal level and $4 per medium, as the court considers just.

"(2) SECTION 1021.—

"(A) IN GENERAL.—In any case in which the court finds that a violation of section 1021 has occurred, the court shall award damages calculated, at the election of the complaining party at any time before final judgment is rendered, pursuant to subparagraph (B) or (C), but in no event shall the judgment (excluding any award of actual damages to an interested manufacturing party) exceed a total of $1,000,000.

"(B) ACTUAL DAMAGES.—A complaining party may recover its actual damages suffered as a result of the violation and any profits of the violator that are attributable to the violation that are not taken into account in computing the actual damages. In determining the violator's profits, the complaining party is required to prove only the violator's gross revenue, and the violator is required to prove its deductible expenses and the elements of profit attributable to factors other than the violation.

"(C) STATUTORY DAMAGES.—

"(i) DEVICE.—A complaining party may recover an award of statutory damages for each violation of section 1021(a) or (b) in the sum of not less than $1,000 nor more than $10,000 per device involved in such violation or per device on which a service prohibited by section 1021(b) has been performed, as the court considers just.

"(ii) AUDIOGRAM.—A complaining party may recover an award of statutory damages for each violation of section 1021(c) in the sum of not less than $10 nor more than $100 per audiogram involved in such violation, as the court considers just.

"(iii) TRANSMISSION.—A complaining party may recover an award of damages for each transmission or communication that violates section 1021(d) in the sum of not less than $10,000 nor more than $100,000, as the court considers just.

"(3) WILLFUL VIOLATIONS.—

"(A) In any case in which the court finds that a violation of subsection (a), (b), (c), or (d) of section 1011 was committed willfully and for purposes of direct or indirect commercial advantage, the court shall increase statutory damages—

"(i) for a violation involving a digital audio recording device, to a sum of not less than $100 nor more than $500 per device; and

"(ii) for a violation involving a digital audio recording medium, to a sum of not less than $4 nor more than $15 per medium, as the court considers just.

"(B) In any case in which the court finds that a violation of section 1021 was committed willfully and for purposes of direct or indirect commercial advantage, the court in its discretion may increase the award of damages by an additional amount of not more than $5,000,000, as the court considers just.

"(4) INNOCENT VIOLATIONS OF SECTION 1021.—The court in its discretion may reduce the total award of damages against a person violating

section 1021 to a sum of not less than $250 in any case in which the court finds that—

"(A) the violator was not aware and had no reason to believe that its acts constituted a violation of section 1021, or

"(B) in the case of a violation of section 1021(a) involving a digital audio recording device, the violator believed in good faith that the device complied with section 1021(a)(1)(C), except that this subparagraph shall not apply to any damages awarded under subsection (d)(2)(A).

"(e) MULTIPLE ACTIONS.—

"(1) GENERALLY.—No more than one action shall be brought against any party and no more than one award of statutory damages under subsection (d) shall be permitted—

"(A) for any violations of section 1011 involving the same digital audio recording device or digital audio recording medium; or

"(B) for any violations of section 1021 involving digital audio recording devices or digital audio interface devices of the same model, except that this subparagraph shall not bar an action or an award of damages with respect to

digital audio recording devices or digital audio interface devices that are imported, manufactured, or distributed subsequent to a final judgment in a prior action.

"(2) NOTICE AND INTERVENTION.—Any complaining party who brings an action under this section shall serve a copy of the complaint upon the Register within 10 days after the complaining party's service of a summons upon a defendant. The Register shall cause a notice of such action to be published in the Federal Register within 10 days after receipt of such complaint. The court shall permit any other interested copyright party or interested manufacturing party entitled to bring the action under section 1031(a) who moves to intervene within 30 days after the publication of such notice to intervene in the action.

"(3) AWARD.—

"(A) GENERALLY.—Except as provided in subparagraph (B), the court may award recovery of actual damages for a violation of section 1021 pursuant to subsection (d)(2)(B) to each complaining party in an action who elects to recover actual damages.

"(B) LIMITATIONS.—

"(i) If more than one complaining party elects to recover actual damages pursuant to subsection (d)(2)(B), only a single award of the violator's profits shall be made, which shall be allocated as the court considers just.

"(ii) If any complaining interested copyright party or parties elect to recover statutory damages pursuant to subsection (d)(2) in an action in which one or more other complaining interested copyright parties have elected to recover actual damages, the single award of statutory damages permitted pursuant to paragraph (1) shall be reduced by the total amount of actual damages awarded to interested copyright parties pursuant to subsection (d)(2)(B).

"(f) PAYMENT OF OVERDUE ROYALTIES AND DAMAGES.—The court may allocate any award of damages under subsection (d) between or among complaining parties as it considers just. Any award of damages that is allocated to an interested copyright party and any award of overdue royalties and interest under subsection (c) shall be deposited with the Register pursuant to section 1013,

or as may otherwise be provided pursuant to a negotiated arrangement authorized under section 1016, for distribution to interested copyright parties as though such funds were royalty payments made pursuant to section 1011.

"(g) IMPOUNDING OF ARTICLES.—At any time while an action under this section is pending, the court may order the impounding, on such terms as it deems reasonable, of any digital audio recording device, digital audio interface device, audiogram, or device specified in section 1021(b) that is in the custody or control of the alleged violator and that the court has reasonable cause to believe does not comply with, or was involved in a violation of, section 1021.

"(h) LIMITATIONS REGARDING PROFESSIONAL MODELS AND OTHER EXEMPT DEVICES.—Unless a court finds that the determination by a manufacturer or importer that a device is a device described in subparagraph (A) or (B) of section 1001(4) was without a reasonable basis or not in good faith, the court shall not grant a temporary or preliminary injunction against the distribution of such device by the manufacturer or importer.

"(i) REMEDIAL MODIFICATION AND DESTRUCTION OF ARTICLES.—As part of a final judgment or decree finding a violation of section 1021, the court shall order

the remedial modification, if possible, or the destruction of any digital audio recording device, digital audio interface device, audiogram, or device specified in section 1021(b) that—

"(1) does not comply with, or was involved in a violation of, section 1021, and

"(2) is in the custody or control of the violator or has been impounded under subsection (g).

"(j) DEFINITIONS.—For purposes of this section—

"(1) the term 'complaining party' means an interested copyright party, interested manufacturing party, or the Attorney General of the United States when one of these parties has initiated or intervened as a plaintiff in an action brought under this section; and

"(2) the term 'device' does not include an audiogram.

"§ 1032. Binding arbitration

"(a) DISPUTES TO BE ARBITRATED.—Any dispute between an interested manufacturing party and an interested copyright party shall be resolved through binding arbitration, in accordance with the provisions of this section, if—

"(1) the parties mutually agree; or

"(2) before the date of first distribution in the United States of the product which is the subject of the dispute, an interested manufacturing party or an interested copyright party requests arbitration concerning whether such product is or is not a digital audio recording device, a digital audio recording medium, or a digital audio interface device, or concerning the basis on which royalty payments are to be made with respect to such product.

"(b) ARBITRAL PROCEDURES.—

"(1) REGULATIONS FOR COORDINATION OF ARBITRATION.—The Register shall, after consulting with interested copyright parties, prescribe regulations establishing a procedure by which interested copyright parties will coordinate the arbitration of disputes. No interested copyright party shall have the authority to request, agree to, or (except as an intervenor pursuant to subsection (c)) enter into, binding arbitration unless that party has been authorized to do so pursuant to the regulations prescribed by the Register.

"(2) PANEL.—Except as otherwise agreed by the parties to a dispute that is to be submitted to binding arbitration under subsection (a), the dispute shall be heard by a panel of 3 arbitrators, with one

arbitrator selected by each of the 2 opposing parties to the dispute and the third arbitrator selected by mutual agreement of the first 2 arbitrators chosen.

"(3) DECISION.—The arbitral panel shall render its final decision concerning the dispute, in a written opinion explaining its reasoning, within 120 days after the date on which the selection of arbitrators has been concluded. The Register shall cause to be published in the Federal Register the written opinion of the arbitral panel within 10 days after receipt thereof.

"(4) TITLE 9 PROVISIONS TO GOVERN.—Except to the extent inconsistent with this section, any arbitration proceeding under this section shall be conducted in the same manner, subject to the same limitations, carried out with the same powers (including the power to summon witnesses), and enforced in the courts of the United States as an arbitration proceeding under title 9.

"(5) PRECEDENTS.—In rendering a final decision, the arbitral panel shall take into account any final decisions rendered in prior proceedings under this section that address identical or similar issues. The failure of the arbitral panel to take into account such prior decisions may be considered imperfect

execution of arbitral powers under section 10(a)(4) of title 9.

"(c) NOTICE AND RIGHT TO INTERVENE.—Any interested copyright party or interested manufacturing party that requests an arbitral proceeding under this section shall provide the Register with notice concerning the parties to the dispute and the nature of the dispute within 10 days after formally requesting arbitration under subsection (a). The Register shall cause a summary of such notice to be published in the Federal Register within 10 days after receipt of such notice. The arbitral panel shall permit any other interested copyright party or interested manufacturing party who moves to intervene within 20 days after such publication to intervene in the action.

"(d) AUTHORITY OF ARBITRAL PANEL TO ORDER RELIEF.—

"(1) TO PROTECT PROPRIETARY INFORMATION.—The arbitral panel shall issue such orders as are appropriate to protect the proprietary technology and information of parties to the proceeding, including provision for injunctive relief in the event of a violation of such order.

"(2) TO TERMINATE PROCEEDING.—The arbitral panel shall terminate any proceeding that it has good cause to believe has been commenced in bad

faith by a competitor in order to gain access to proprietary information. The panel shall also terminate any proceeding that it believes has been commenced before the technology or product at issue has been sufficiently developed or defined to permit an informed decision concerning the applicability of this chapter to such technology or product.

"(3) TO ORDER RELIEF.—In any case in which the arbitral panel finds, with respect to devices or media that were the subject of the dispute, that royalty payments have been or will be due under section 1011 through the date of the arbitral decision, the panel shall order the deposit of such royalty payments pursuant to section 1013, plus interest calculated as provided under section 1961 of title 28. The arbitral panel shall not award monetary or injunctive relief, as provided in section 1031 or otherwise, except as is expressly provided in this subsection.

"(e) EFFECT OF ARBITRATION PROCEEDING ON CIVIL ACTIONS AND REMEDIES.—

"(1) GENERALLY.—Subject to paragraph (2), and notwithstanding any provision of section 1031, no civil action may be brought or relief granted under section 1031 against any party to an ongoing

or completed arbitration proceeding under this section, with respect to devices or media that are the subject of an arbitration proceeding under this section.

"(2) EXCEPTION.—Paragraph (1) does not bar—

"(A) an action for injunctive relief at any time based on a violation of section 1021; or

"(B) an action or any relief with respect to those devices or media distributed by their importer or manufacturer following the conclusion of such arbitration proceeding, or, if so stipulated by the parties, prior to the commencement of such proceeding.

"(f) ARBITRAL COSTS.—Except as otherwise agreed by the parties to a dispute, the costs of an arbitral proceeding under this section shall be divided among the parties in such fashion as is considered just by the arbitral panel at the conclusion of the proceeding. Each party to the dispute shall bear its own attorney fees unless the arbitral panel determines that a nonprevailing party has not proceeded in good faith and that, as a matter of discretion, it is appropriate to award reasonable attorney's fees to the prevailing party.".

SEC. 3. TECHNICAL AMENDMENTS.

(a) FUNCTIONS OF REGISTER.—Chapter 8 of title 17, United States Code is amended—

(1) in section 801(b)—

(A) by striking "and" at the end of paragraph (2);

(B) by striking the period at the end of paragraph (3) and inserting "; and"; and

(C) by adding the following new paragraph at the end:

"(4) to distribute royalty payments deposited with the Register of Copyrights under section 1014, to determine, in cases where controversy exists, the distribution of such payments, and to carry out its other responsibilities under chapter 10"; and

(2) in section 804(d)—

(A) by inserting "or (4)" after "801(b)(3)"; and

(B) by striking "or 119" and inserting "119, 1015, or 1016".

(b) DEFINITIONS.—Section 101 of title 17, United States Code, is amended by striking "As used" and inserting "Except as otherwise provided in this title, as used".

(c) MASK WORKS.—Section 912 of title 17, United States Code, is amended—

(1) in subsection (a) by inserting "or 10" after "8"; and

(2) in subsection (b) by inserting "or 10" after "8".

SEC. 4. EFFECTIVE DATE.

This Act and the amendments made by this Act shall take effect on January 1, 1993.

Mrs. COLLINS. I understand that Mr. Morton Gould, the president of ASCAP, is present in the audience today. I would like to recognize him, for two reasons. The first is he is one of the country's most distinguished composers, and the second is because ASCAP is now a constituent of mine through their Chicago membership office located in the Kensbury Center. I look forward to visiting that office sometime in the near future, Mr. Gould. We are glad you are here today.

Our first panel is going to be Mr. Michael Kirk, who is the Assistant Commissioner for External Affairs for the U.S. Patent and Trademark Office. He is here because Mr. Manbeck, who we expected to have here, has had a problem in his family and he has to be at the hospital this morning. We are also going to have Dr. Robert Hebner, who is the Deputy Director of the Electronics and Electrical Engineering Laboratory, National Institute of Standards and Technology, with the Department of Commerce.

Let me say to all of the witnesses that we operate under the 5-minute rule in the House of Representatives, as you very well know, Mr. Kirk, and so do others who are here. Which means that you are entitled to have 5 minutes to summarize your statement with the full knowledge that your entire statement will be made a part of the record.

We have been joined by Mr. Towns. Would you like to make an opening statement at this time?

Mr. TOWNS. Madam Chair, I will just include it in the record.

Mrs. COLLINS. Without objection, so ordered.

OPENING STATEMENT OF HON. EDOLPHUS TOWNS

Madam Chairwoman, members of this committee, ladies and gentlemen, I am pleased to join in these proceedings and to see the productivity which comes when divergent interests bring collective resolve to solve problems.

We stand on the threshold of exploding technological advancements, and this bill embodies clear examples of both subtle and glaring questions of equity and fairness in contrast to the mere fiscal bottom line. Global competitiveness demands that we learn from this experience, so that the American marketplace, this industry and its artists do not fall victim to the politics of free enterprise. I hope this measure will find broad support and quick dispatch in this subcommittee and at the full committee level.

However, as important as this legislation is, and the implementation of its attendant protection, I come here today to join you in another quest for equity and fair play. The panels and individuals appearing here today, effectively and purposefully reflect the full range of perspectives on digital audio recorders; Serial Copy Management Systems, and an array of complex legal and technical issues. Male and female, Black and White—each an expert in their own right. This is America and this is the way it should be.

Madam Chair, I bring my voice and advocacy to your efforts to have this industry, reflect this same diversity at every level—not only in front of the microphone or as expert technicians, but in their legal departments, advertising, marketing and management divisions. There must be respect for consumer activity in the marketplace—reflected by the absence of niche placements or glass ceilings for women and minority industry executives.

I know the commitment of the leadership of RIAA to this issue and I applaud you. I can only hope that the total industry and related manufacturers of hardware and software make this goal a priority for the 1990's.

Mrs. COLLINS. You may begin now, Mr. Kirk.

STATEMENTS OF MICHAEL K. KIRK, ASSISTANT COMMISSIONER, PATENT AND TRADEMARK OFFICE, DEPARTMENT OF COMMERCE, ACCOMPANIED BY ROBERT HEBNER, DEPUTY DIRECTOR, ELECTRONICS AND ELECTRICAL ENGINEERING LABORATORY, NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY; AND MICHAEL S. KEPLINGER, OFFICE OF LEGISLATION AND INTERNATIONAL AFFAIRS

Mr. KIRK. Thank you, Madam Chairwoman and members of the subcommittee, Mr. Manbeck asked that I convey his sincere apology for his inability to be here this morning, but as the chairwoman has said, he was unfortunately called to a hospital this morning and was not able to be here.

I am pleased to present the administration's views on the pending digital audio recorder legislation, the Audio Home Recording Act of 1992. For nearly a decade the recording industry, songwriters, music publishers, performers, recorder and media manufacturers have debated the effects of personal copying, first in the analog world and now in the digital world.

Because digital audio recorders permit the making of perfect copies, the parties have now recognized, as pointed out by the chairwoman, that this poses a real threat to the continued vitality of our world-class music and recording industries. In response, they have developed a balanced, comprehensive solution to the problem of personal copying. The solution is supported by consumer groups as well.

The administration agrees that digital audio recorders should be required to include circuitry that implements the Serial Copy Management System, SCMS, as specified in the technical reference document that is part of this legislation.

We are also persuaded that because SCMS permits first generation digital copying, placing a reasonable royalty on digital audio recording media is necessary. We believe that requiring use of SCMS and a royalty system as provided in the Audio Home Record Act is the right way to go. Its adoption will preserve consumer choice, encourage the development and dissemination of technology, and protect the legitimate interests of copyright owners and beneficiaries.

The United States has led the world in adapting intellectual property laws and policies to meet many of the challenges posed by new technologies. Congress has led the way by confirming in our copyright law that computer programs are properly protected as literary works. Recognizing that the rental of some works leads to their copying, Congress has provided rental rights for copyright owners of sound recordings and computer programs. Our trading partners enjoy the benefits of this protection in the United States on the basis of national treatment.

However, we have not taken the lead in private copying legislation. Until now, disagreement among the affected parties and deficiencies in earlier proposals have blocked the path to legislative action.

How private copying royalties are collected and distributed is becoming a matter of international significance. In an effort to ensure fairness for U.S. creators and rights owners whose works

suffer worldwide copying, we sought to have included in the proposed Uruguay Round agreement on the Trade-Related Aspects of Intellectual Property Rights, known by the acronym TRIPS, language that would have required royalties to be shared with foreigners on a national treatment basis. We encountered tough opposition in particular from the European Community, which opposed our initiative on the basis that such royalties should only be available on a reciprocal basis.

We not only sought to have these royalties made available on a national treatment basis, but we also sought provisions that would have required equitable distribution of the royalties collected without regard to whether the rights to these royalties were acquired by operation of copyright law, of neighboring rights law, or by contract.

Reciprocity already is a feature of the private copying laws of several of our trading partners. For example, the French audio royalty system works to deny national treatment to U.S. record companies. The situation is much the same in Germany and is expected to be repeated when Australia implements its reciprocity-based private copying law. The EC's proposed directive on private copying also follows the reciprocity model.

The amounts collected under these royalty systems are significant. In 1988 collections in France and Germany alone totalled $34 million. The advent of digital audio recording devices promises to spur the sale of blank recording media and expand foreign royalty pools.

The situation as it exists is unfair. U.S. music is listened to, enjoyed and copied throughout the world. Yet U.S. record producers and performers are being denied their share of private copying royalties. We believe that unless the United States provides for private copying royalties we will have little credibility as a force for ensuring equitable treatment and building international consensus in this area.

We recommend that this committee and the Congress adopt the solution that has been developed by the private parties concerned. We are pleased to note, Madam Chairwoman, that with your recently introduced H.R. 4567, you have moved to address some concerns of the computer industry which we think are appropriate, and we also think that it would be important to address issues of how foreign rights holders will be treated under this legislation in the United States.

This concludes my statement. Dr. Hebner, Mr. Keplinger and I would be pleased to answer any questions you may have. Thank you.

[The prepared statement of Harry F. Manbeck, Jr., was submitted for the record:]

STATEMENT OF HARRY F. MANBECK, JR., ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS, DEPARTMENT OF COMMERCE

I am pleased to present the administration's views on H.R. 3204, a bill to implement a royalty payment system and to impose restraints on the serial copying of sound recordings fixed in any digital audio recording medium.

The administration advocates strong protection of intellectual property, and wants to ensure that U.S. consumers have access to the newest and best technology. The Department supports this bill because it affords several advantages to consum-

ers and industry, but we also have concerns that changes made to take into account matters affecting the computer industry have not been made in H.R. 3204, and that there should be further consideration of some of the provisions common to the House and Senate bills.

Whether, and how, to compensate copyright owners for the widespread and unauthorized personal copying of their sound recordings and musical works has been among the most controversial issues facing copyright policymakers for more than a decade. The development and introduction of digital audio recording technology has lent urgency to the debate. Digital audio recording devices make perfect copies of digital sound recordings, without the inevitable degradation of recording quality that is inherent in the analog recording process. Many believe that the ability to make high-quality digital copies will encourage even more home copying.

H.R. 3204 and S. 1623, the companion bill in the Senate, both require that digital audio recording devices incorporate the Serial Copy Management System (SCMS). SCMS encodes a "no-copy" signal on all copies made from an original, copyrighted digital audio recording.

As SCMS is to be implemented, there would be no limit on the number of first-generation copies that could be made from a digital original (called an "audiogram" in the bill as passed by the Senate), but second-generation copying of the copies would be blocked by the signal. Both bills include provisions to compensate performers, producers of sound recordings, and copyright owners of the underlying music for the first-generation copying of their works permitted by SCMS. Compensation will come from royalties paid by the manufacturer or importer of digital audio recording devices or media. Professional model products are not required to include the SCMS and are exempt from royalties.. The bills expressly acknowledge that the private, noncommercial copying of sound recordings using conventional analog recording devices is permissible. They also permit the Secretary of Commerce to review the technical specifications for the anti-copying system to ensure that the system remains effective and applicable to new technologies.

Important amendments were added to the version of the bill reported by the Senate Judiciary Committee to take into account concerns of the computer industry. These concerns include matters such as device and media definitions. We encourage the Congress to address those issues in H.R. 3204.

As drafted, both bills raise a potential technical problem in respect of the method by which royalties collected will be paid to foreign claimants. I will discuss this potential problem in greater detail later in my statement, and suggest that Congress may wish to consider the policy questions it raises as this bill progresses.

The principal parties affected by the unauthorized personal copying of copyrighted music and sound recordings are performers, producers of sound recordings, songwriters, music copyright owners, and the producers of audio recording equipment. Performers are represented by the American Federation of Musicians and the American Federation of Television and Radio Artists. Sound recording producers are principally represented by the Recording Industry Association of America (RIAA). RIAA's major members include U.S. producer (Time-Warner) and several foreign-owned producers (MCA and Sony Music, formerly CBS records—Japanese; Polygram-Dutch; Capitol/EMI -UK; and RCA -German). Songwriters and music rights owners are represented by the American Society of Composers, Authors and Publishers (ASCAP), Broadcast Music, Inc. (BMI), The Songwriters Guild (SGA), and the National Music Publishers' Association (NMPA). The producers of recording equipment (predominantly Japanese) have been represented in the private copying debate by the Home Recording Rights Coalition (HRRC). These diverse—and often divergent—interests all now support H.R. 3204.

The controversy over the legal status of personal copying of copyrighted sound recordings has spawned several generations of legislative proposals. Nearly a decade ago, sound recording producers and music copyright owners advocated placing a royalty on the sale of all tape recorders and blank recording media (at that time only analog tape) to compensate them for unauthorized copying of their works. Similar systems were in place in France, the Federal Republic of Germany, Hungary and Austria. Legislation to establish a similar system in the United States was not enacted for several reasons: it faced strong opposition from the HRRC and certain consumer groups, and the practice of personal copying with the conventional analog cassette recorders in American homes was already widespread. Congress was reluctant to interfere with consumers' expectations with regard to analog recorders already owned.

With the advent of digital audio tape (DAT) recorders, sound recording copyright owners continued to press for adoption of the royalty approach. The Reagan administration was concerned that setting royalties on the sale of machines and tapes

would require the Government to intervene unnecessarily in the market by setting the royalty rates. There was also concern that the royalty might be unfair to those not using the recorders or tapes to copy copyrighted works.

As an alternative to royalties, the recording industry proposed the use of an anti-copy system called Copy Code. Recordings encoded using this system could not be copied on recorders equipped with Copy Code circuitry, while non-encoded recordings could be freely copied. By using this system, sound recording producers could sell copyable recordings at a higher price, and market forces would determine the value of copying. The administration recognized that the unauthorized copying of sound recordings harmed the legitimate economic interests of music creators and other copyright owners. It endorsed the Copy Code approach because the system seemed to offer a way to protect copyrighted sound recordings with minimal Government intervention in the market, and without penalizing those who do not engage in unauthorized copying.

Because of technical concems with Copy Code, the parties agreed to jointly fund its testing by the National Bureau of Standards (NBS) (now the National Institute for Standards and Technology). NBS found Copy Code's performance unacceptable because the system was easily bypassed, it sometimes prevented the copying of unencoded sound recordings, and the encoding process sometimes degraded the sound quality of the recordings to which it was applied.

After these findings, the Copy Code system was rejected and efforts to enact personal copying legislation lay dormant for a time. Perhaps a turning point was the purchase of CBS Records by Sony, one of the DAT pioneers. With interests in the vitality of both the sound recording and the hardware sides of the industry Sony and a major Dutch company, Phillips, demonstrated a new willingness to explore creative ways to resolve the personal copying impasse.

In June of 1989, representatives of the European and U.S. recording industries, including the RIAA, and DAT manufacturers (all foreign) reached an agreement to seek implementation by governments of provisions requiring SCMS in DAT recorders. The recording industry wanted the United States, the European Community (EC), and Japan to adopt SCMS because it believed that this would establish the principle that personal copying injures the economic interests of the sound recording industry, and that legislative measures to address the problem are appropriate. Because the parties also agreed to study a system that would use 'debit cards' (which would only permit copying of copyrighted recordings for a fee), the recording industry believed that adopting SCMS could lay the basis for incorporating the debit card system in a future generation of digital recording devices. However, music copyright owners, such as those represented NMPA, had serious reservations about this option because of concern that the hardware manufacturers would be reluctant to go forward with the debit card approach for reasons of cost and difficulty in administration.

The SCMS agreement was not acceptable to the NMPA, SGA, and ASCAP. These groups were not party to the negotiations between the sound recording producers and the hardware manufacturers, and they claimed that their interests were not taken into account. NMPA, the songwriters, and ASCAP agreed that legislation resolution of the private copying issues must take into account the interests of all creators and copyright owners and ensure them compensation for the unauthorized copying of their works. These groups urged that Congress not approve the SCMS system so that negotiations could continue, this time including all affected parties. The 101st Congress did not approve the SCMS-only bills before it.

The United States has led the world in adapting its intellectual property laws and policies to meet many of the challenges posed by new technologies. For example, in 1980, Congress rejected calls for limited, *sui generis* protection of computer programs in favor of protection as literary works under copyright. In 1984, Congress recognized that the proliferation of record rental shops with inventories of virtually indestructible and easy-to-copy compact discs would pose an unacceptable threat to the legitimate economic interests of copyright owners in sound recordings and musical works. It responded by granting these rights owners the exclusive right to authorize or prohibit the rental of copies of sound recordings. Most recently, Congress perceived a similar threat to computer program copyright owners and in 1990, it amended the Copyright Act to include an exclusive rental right in computer programs as well. Our trading partners enjoy the benefits of this protection in the United States on the basis of national treatment.

The administration has actively urged our trading partners to embrace these important principles and is pleased that similar provisions are embodied in the Dunkel text of the Proposed Uruguay Round Agreement on the Trade Related Aspects of Intellectual Property Rights (TRIPS).

Private copying, however, is one area in which the United States has not taken the lead. As I have noted, disagreement among the affected parties and deficiencies in earlier proposals blocked the path to legislative action.

While debate on private audio taping has continued in the United States, other countries have moved to establish royalty systems in respect of sound recordings. Some of these countries now cite the unavailability of private copying royalties in the United States as grounds for denying certain U.S. rights owners a share of the royalties collected within their borders. The result is lost revenues for important U.S. industries, and a distortion in the balance of payments.

As our recent experience in the TRIPS negotiations demonstrates, the availability and distribution of private copying royalties are rapidly emerging as questions of international significance. In an effort to ensure fairness for U.S. creators and rights owners whose works enjoy worldwide popularity—and suffer worldwide copying—the United States sought to have the TRIPS agreement include language that would require nations establishing systems for the collection and distribution of royalties for personal copying to share those royalties with foreign nationals on a national treatment basis. We encountered tough opposition, in particular from the EC.

We pressed without success for national treatment provisions that would have required equitable distribution of revenues collected to foreign rights holders, without regard to whether their rights were acquired by operation of copyright law, of neighboring rights law, or by contract. Our EC counterparts were quick to assert that the Emperor had no clothes: in their view the United States was demanding rights in foreign markets that it did not see fit to grant at home. Where, they charged, was the "fairness" to foreign rights owners whose works are copied in the United States? EC negotiators further argued that many private copying systems are grounded in neighboring rights laws, and that the Rome Convention, the international agreement governing such rights, permits countries to require reciprocity as a basis for extending benefits to foreign nationals. And, additionally, they argued that as the United States does not belong to the Rome Convention, we are in a poor position to assert a claim to moneys collected on the basis of Rome Convention rights.

The demand for reciprocity already is a feature of the private copying laws of several of our trading partners. For example, the French audio royalty system works to deny national treatment to U.S. record companies. Its law divides collections into four funds: an "authors" fund; a "phonogram producers" fund; a "performers" fund; and a fund to promote cultural development. While distributions from the authors' fund are subject to the national treatment obligations of the Berne Convention for the Protection of Literary and Artistic Works (Berne) and, therefore, flow to U.S. songwriters and music copyright owners, the French take the position that the phonogram producers' share is subject only to the reciprocity requirements of the Rome Convention. The situation is much the same in Germany, and is expected to be repeated when Australia implements its reciprocity-based private copying law. The EC's proposed directive on private copying also follows the reciprocity model.

The amounts collected under royalty systems in major foreign markets are significant. In 1988, collections in France and Germany alone totaled $34 million. The advent of digital audio recording devices and the introduction of new technologies for "delivering" music to consumers, such as digital audio broadcast and cable pay-per-play services, promise to spur the sale of blank recording media and expand foreign royalty pools.

The situation as it exists is patently unfair. U.S. music is listened to, enjoyed and copied throughout the world, yet U.S. record producers and performers are being denied a share in private copying royalties by our trading partners' calls for reciprocity. To make it worse, the royalties collected in respect of the copying of U.S. works gets divided among those foreign claimants deemed eligible to collect.

The administration does not suggest that U.S. law be amended to mirror the private copying systems in Europe. We will continue to devote our energies to securing national treatment for U.S. rights owners. We do believe, however, that unless and until the United States responds to private copying in a way it deems appropriate, we will have little credibility as a force for ensuring equitable treatment and building international consensus in this area.

H.R. 3204 represents important compromises among the affected interests and addresses many of the concerns raised by Congress and the administration with regard to earlier proposals. The administration supports its enactment with the changes included to reflect the concerns of the computer industry. We recommend, however, that the comprehensive royalty allocation system embodied in the bill be considered in the light of its potential impact on foreign rights holders.

It is entirely appropriate for Congress to enact whatever measures it deems necessary to ensure that domestic parties who arguably possess less clout at the bargaining table receive an appropriate share of royalties collected. However, when it comes to foreign works, it may be appropriate to allow distributions to be made in accordance with the contractual regime under which the work was created, so as not to upset the legitimate expectations of the parties. This approach would be consistent with what the administration and our private sector seek from our trading partners.

The administration advocates strong protection of intellectual property and wishes to ensure that U.S. consumers have access to the newest and best technology. We are pleased, therefore, to support enactment of this legislation with appropriate amendments to take into account the concerns of the computer industry. This legislation is an appropriate solution to a problem faced by this industry at this time. Should other industries be faced with similar problems in the future, whether or not a legislative solution would be appropriate should be evaluated on its own merits at the time that it arises. In addition, Congress may wish, now or later, to address the issue of how foreign rights holders will be treated under this legislation.

After years of debate, the affected parties have developed a balanced, comprehensive solution to the private audio taping problem. We agree that SCMS or an equivalent system which allows first-generation copying for personal use should be adopted for all digital audio recording technologies. We are also persuaded that the attractiveness of the high-quality copies permitted by SCMS warrants the imposition of a reasonable royalty on digital audio recording media. We believe the two-pronged approach of H.R. 3204 will preserve consumer choice, encourage the development and dissemination of technology, and protect the legitimate interests of copyright owners and beneficiaries.

This concludes my prepared statement. I will be pleased to respond to your questions.

Mrs. COLLINS. Thank you very much.

Mr. Kirk, you expressed some reservations that H.R. 3204 doesn't address the concerns of the computer industry whereas Senate bill 1623, as amended, does. You mentioned that S. 1623 should be enacted. H.R. 4567 does incorporate the Senate amendments and is essentially identical to S. 1623. Would you recommend final passage of S. 1623?

Mr. KIRK. In terms of the amendments that have been incorporated in your bill and in the bill reported out by the Senate, it is our understanding that these do adequately address the concerns that have been identified by CBEMA, the Computer and Business Equipment Manufacturers Association, that indeed you have taken care of those concerns.

It is also our understanding, however, that additional computer program interests are looking at the legislation to review it, to ensure that they agree that it creates no problems for other computer program interests. We do not believe that the problems would be insurmountable, and we would encourage that, to the extent they can identify real problems, these be dealt with so that we can move forward with this legislation.

Mrs. COLLINS. Did you happen to have any comments on the royalty provision as it pertains to the foreign taping issue? Are you suggesting that there be some restructuring there?

Mr. KIRK. Yes. There is in the legislation now a very specific formula that requires that particular interests be given shares of the revenues collected under the royalty system. This puts us in a little bit of an inconsistent posture with respect to our efforts in the GATT where we have been urging that foreign interests allow United States rights holders to come to those countries and collect the revenues due them according to the contracts that the rights holders have, so that when they come here, they will not be denied

their full share of the revenues on the basis of some artificial scheme that exists in those foreign countries. To the extent that this legislation might be read to be inconsistent with what we are urging others to do, we think it might merit further study.

Mrs. COLLINS. Sixteen nations impose fees on recording media and 6 of those nations also impose a fee on recording equipment. Australia, Finland and Iceland have already enacted home recording legislation which contains reciprocity provisions which limit participation in the royalty funds. It appears that since the United States doesn't have a similar provision, Americans are not allowed to benefit from those forms of royalty funds. It has been argued that developing a United States royalty fund to compensate for home copying will make it possible for Americans to benefit from royalty funds in other countries.

Are you confident that the legislation before us, which includes a royalty fee on digital recorders and media but not on analog recorders or media, will have the desired reciprocal effect?

Mr. KIRK. I would not categorically state that this legislation will automatically enable United States interests to have access on a reciprocal basis to the revenues collected under these foreign systems. I can tell you from personal experience in negotiations in the GATT that the European negotiators have stated, both during that negotiation and subsequently here in the United States, that if the United States ever hopes to have access to the revenues collected under these levy schemes in Europe that we must have a levy system of our own created. They simply are not going to share their revenues with us unless we adopt such a system, according to their published and private statements.

Having said that, to take the next step, to say that if we pass this legislation we will automatically be guaranteed access to those revenues, I don't know that I would go quite that far, but certainly this will put us on sound footing to then return and to engage in negotiations to get these revenues due U.S. copyright interests.

Mrs. COLLINS. To the knowledge of the National Institute of Standards and Technology, the technical reference document which accompanies the bill incorporates functional characteristics to regulate serial copying so that one could make unlimited copies of an original, but where there is copyrighted material, no copies of a copy. Isn't that correct, Dr. Hebner?

Mr. HEBNER. Yes, that is correct.

Mrs. COLLINS. My time has expired. Mr. McMillan.

Mr. MCMILLAN. Thank you, Madam Chairwoman.

Mr. Kirk, when you say that the provisions with respect to collection of royalties overseas might need further work, as I understand it, you are suggesting that the language in the Senate bill or in this bill is satisfactory for current negotiating purposes. Is that correct?

Mr. KIRK. Mr. McMillan, the problems that we experienced in our negotiations in the Uruguay Round were as follows. We wanted to achieve two things. We wanted the revenues collected under these royalty systems to be made available on a national treatment basis, not reciprocity, number one.

Second, we wanted the revenues to be distributed on the basis of the contract between the rights holder who appeared before the ap-

propriate European body and not on the basis of some artificial formula that existed in a foreign law.

It is in this latter regard that there is some language in the pending legislation that appears to earmark certain of the revenues, looking at this only on a national basis without looking out to how this would look with respect to foreigners coming to the United States. We don't want to be in a position where when we go to Europe or wherever and ask them for the appropriate share of the revenues due to the owner of the rights involved that they can say we're not going to do this and you do the same thing, look at your bill where you reserve certain of these moneys for interests that are not represented.

We think this deserves a careful look to make sure that we don't put ourselves in the kind of situation that we are criticizing our European counterparts about.

Mr. MCMILLAN. They obviously have a tremendous stake in what we do here. Probably no other product enjoys a more international market than this does.

Mr. KIRK. That is exactly right. The balance of trade of our copyright industries exceeds $22 billion annually and over 10 percent of that comes out of tape and record sales abroad. As former Secretary of Commerce Baldrige once said in a hearing, "The world boogies to American music."

Mr. MCMILLAN. It does some other things too. "Boogies" is a little bit outdated.

Has your office done anything on estimating the cost of administering this program, and is that adequately addressed in the legislation that we are looking at?

Mr. KIRK. We have not looked at that. This would be handled primarily by the Copyright Office and the Copyright Royalty Tribunal under the legislation. So we have not really looked into this. The Copyright Office and the Royalty Tribunal have responsibilities under the existing copyright law today for the collection and distribution of revenues. At least at first blush it would seem not to be an unsurmountable problem, but we have not looked into the details of that.

Mr. MCMILLAN. Would it be fair to say that it is designed to be for the most part self-funding?

Mr. KIRK. Yes.

Mr. MCMILLAN. In your written testimony you explain that the administration favors the implementation of SCMS for all recording devices. Does this include analog recorders?

Mr. KIRK. No, sir, it does not. We do not take that view. We think that the bill is appropriately limited to requiring this in digital audio recording devices.

Mr. MCMILLAN. Are you satisfied that this agreement adequately protects the rights of copyright holders even though it makes an exception from the SCMS requirement for analog recorders?

Mr. KIRK. Mr. McMillan, I think we in the administration, and I know that the private interests, for years were concerned about how to appropriately compensate copyright owners for the copying of their recordings on analog devices. It may perhaps be one of those situations where technology got ahead of the law and circumstances got to the point where it was simply not feasible to really

go back and try to recapture that. We think we are now at a unique situation where we are moving into a new technology. It is not inconceivable that analog recording will go the same way as records have in the past and that we will be into a new situation. Now is the time to deal with this new situation. So we think this is an appropriate opportunity in history to address this problem and provide appropriate compensation to the creative community of the United States.

Mrs. COLLINS. The time of the gentleman has expired.

Mr. MCMILLAN. I thank you very much.

Mrs. COLLINS. Mr. Towns.

Mr. TOWNS. Thank you very much, Madam Chair.

Mr. Kirk, are there any pending patents from U.S. firms? I'm concerned about Japan. I'm thinking in terms of what is happening with our music and music companies. As you know, just recently we had a hearing to regulate foreign transplants in terms of cars. I am wondering if we will have to come to the point where we would have to have a hearing to regulate musical transplant companies. I would like to get your views on it in terms of the amount of patents that are pending and whether we would have to come to this point.

Mr. KIRK. In terms of the pending patent applications in the United States coming out of Japan and what the impact of those patents would be, I would not think that this would be something that we would have to concern ourselves with in terms of trying to regulate this technology. As I think Mr. Roach will testify later today, American ingenuity is fully up to the task of meeting foreign competition once it is given the incentives and without the concerns of potential lawsuits and litigation.

Mr. TOWNS. So you don't think that's a problem that we have to concern ourselves with?

Mr. KIRK. I would not think that is a problem at this point. No, Mr. Towns, I would not.

Mr. TOWNS. I have no further questions, Madam Chairwoman.

Mrs. COLLINS. The time of the gentleman has expired.

Dr. Hebner, could you describe briefly for the record specifically how the Serial Copy Management System is going to operate?

Mr. HEBNER. Fundamentally, as outlined in the technical reference document, the information concerning the serial copying will be included in what is called header information, or fundamentally, in the instruction manual, that is sent to the piece of equipment which is to record. Properly encoded information will tell the recorder whether or not a copy can be made and whether or not this is a first or second generation and whether or not copyright protection is asserted. All this information is included in the non-audio portion of the signal.

Mrs. COLLINS. Is there any reason to believe that the Serial Copy Management System doesn't provide adequate serial copy protection due to its ability to be bypassed or avoided or removed or deactivated or otherwise circumvented?

Mr. HEBNER. The ease with which one could bypass or circumvent a copy protection scheme would really have to be looked at on a case-by-case basis. The technical reference document specifies what needs to be accomplished and provides the designer great

flexibility in how to make that happen. The ease would really have to be looked at on a case-by-case basis after specific implementations are in place.

It would be naive to assume that one could make a copy scheme that could never be circumvented, but it is not anticipated that this would necessarily be a trivial circumvention activity. So it appears to be adequate.

Mrs. COLLINS. Mr. Kirk, a final question. Is there any concern that the restriction of only allowing into U.S. commerce digital audio recorders that have the Serial Copy Management System circuitry will cause retaliatory problems with some foreign manufactures?

Mr. KIRK. I don't know that we have focused on that in terms of retaliation. It is my understanding that with the agreement that now exists between the hardware manufacturers around the world that SCMS is being placed in this equipment for consumer devices today and therefore to the extent that it exists in consumer devices everywhere, I am not at this point able to see how this could lead to retaliation.

Mrs. COLLINS. Thank you very much. I have no further questions. Mr. Towns.

Mr. TOWNS. No further questions, Madam Chair.

Mrs. COLLINS. Thank you.

I thank you gentlemen for appearing before us this morning. I very much appreciate the openness with which you responded to our questions.

Our next panel will be Ms. Dionne Warwick, BMI songwriter and Arista recording artist, who we all know very well; Mr. John V. Roach, chairman and chief executive officer of Tandy; Mr. Gary Shapiro, group vice president, Consumer Electronics Group, Electronic Industries Association, representing the Home Recording Rights Coalition; Mr. Jason S. Berman, who is the president of Recording Industry Association of America; Mr. Edward P. Murphy, president and CEO of the National Music Publishers' Association; and Mr. Frank Beacham, who is a journalist and producer of audio programming.

We are going to begin with you, Ms. Warwick.

STATEMENTS OF DIONNE WARWICK, BMI SONGWRITER AND ARISTA RECORDING ARTIST; JOHN V. ROACH, CHAIRMAN, TANDY CORP.; GARY J. SHAPIRO, VICE PRESIDENT, ELECTRONIC INDUSTRIES ASSOCIATION, ON BEHALF OF HOME RECORDING RIGHTS COALITION; JASON S. BERMAN, PRESIDENT, RECORDING INDUSTRY ASSOCIATION OF AMERICA, INC.; EDWARD P. MURPHY, PRESIDENT, NATIONAL MUSIC PUBLISHERS ASSOCIATION, ON BEHALF OF COPYRIGHT COALITION; AND FRANK BEACHAM, JOURNALIST AND PRODUCER OF AUDIO PROGRAMMING

Ms. WARWICK. Madam Chairwoman, members of the subcommittee, my name is Dionne Warwick and I am here before you today in my role as a BMI songwriter and an Arista recording artist. It is a great honor to testify before your committee today on the Audio Home Recording Act, and I thank you for this opportunity. In my

remarks this morning I would like to outline for you why this bill is so important to me and to thousands of other songwriters, performers and musicians.

First, the bill provides compensation to the creators, producers and performers of prerecorded music for the home copying of our musical works. And it contains a provision to limit serial copying, that is, the making of digital copies from digital copies. Second, it provides consumers access to exciting new digital audio recording technologies. And finally, it protects consumers from copyright infringement lawsuits for the home copying of music for their personal use.

This legislation also moves the music and consumer electronics industry away from what has been a decade-long stalemate. Manufacturers will be able to introduce their wondrous new digital audio recording equipment into the marketplace free from fear of copyright suits and we in the music community can produce our work in new digital formats with the comfort of knowing that we will be compensated for the home copying that occurs. And, perhaps most importantly, consumers will be able to enjoy the best sound quality for our music that technology has to offer.

I would like to personalize my interest and support for this bill. My family instilled in me my love for music. And never did I dream that I'd reach the heights that I have. I've been very fortunate, for success in the music industry is a rarity. Thousands of songwriters, performers and musicians will never know the thrill of being in the studio recording a song, winning a Grammy, or seeing their name on a marquee. Had it not been for Burt Bacharach and Hal David, who noticed me during my college days as I was working as a backup singer in New York City, I might not be here today. I'd be one of the faceless and nameless individuals struggling to earn a living making music. Or, worse yet, I'd be in another career.

Frankly, it was a little easier back then to make a record. The costs were a lot lower and the hits sold more copies because people had to buy them. They couldn't copy them. As success is so rare, we must do everything in our power to remove the obstacles that litter the long road to success. You have the opportunity to do so and do it for thousands of fledgling songwriters, recording artists and musicians by passing this legislation. Your support, Madam Chairwoman, means a great deal to all of us in the music community.

If you will permit me to return to the benefits that this bill provides. First, the legislation before you today protects my music and preserves the incentive to continue to create and record music. All of us on the creative side—songwriters, recording artists, musicians, performers, and even record companies—make our living from our music literally pennies at a time. Every time a record sells we earn a royalty of a few cents. Every time a record is taped instead of bought we lose that royalty. You can imagine our frustration in seeing our salaries made up of these royalties whittled away copy by copy.

I personally cannot complain. I'm very fortunate to have had the success I've had. I'm just concerned now that the young artists and writers might have their opportunities whittled away before they

get to feel the joy of success and before we're blessed to hear their music. We know this bill won't stop all copying of our music and we don't want to deny our fans the opportunity to hear our music in whatever format they may choose, but it will help to stem the loss of revenues that we songwriters, artists and others would otherwise be receiving for use of our creative works.

Madam Chairwoman, I have been in this business for a long time. It will be 30 years, to be exact, in November. And I've seen the dawn of the digital age as compact discs with their tremendous clarity of sound have taken the place of the long-playing vinyl albums. The music community welcomed this new digital technology over 10 years ago because it brought our listeners as close to studio sound as possible. Note, however, that compact disc players are just that, players, not recorders.

Technology can be a double-edged sword. Today new digital audio recording machines for consumer use will permit the consumer to make perfect copies of our music, and with digital technology every copy is as perfect as the first.

Thus digital audio recording technology, without the protection this bill offers, could strike a fatal blow to the careers of songwriters, recording artists, music publishers, and performers. However, with the passage of this bill, the music community can once again welcome new technologies.

This leads me to the second point I'd like to make. Namely, this bill will provide benefits to the consumer. Consumers will now have access to the same level of digital audio sophistication and sound quality that my colleagues and I have access to every day in the studio. In the past, the consumer has been denied access to new products because of the confusion surrounding the introduction of DAT. This bill changes that landscape. The choice will rest with the consumer as to which digital audio format he or she may purchase. And I'm excited about the possibilities that await us.

And most importantly for the consumer, this bill finally resolves the unanswered questions about home taping. If one of my kids or yours chooses to make a copy of our music for their car, this bill states clearly and emphatically that he or she is allowed by law to do so without fear of copyright infringement liability.

In conclusion, everyone wins with this legislation. As my friend Gladys Knight said last week when she spoke at a Congressional Arts Caucus briefing in support of this bill, we artists are in show "business." Unfortunately, the business end does not take care of itself. If you as Members of Congress will pass this legislation, musicians and artists can get back to the business that we do best, making music. Your support for this legislation is very, very important to me and to all of us. We thank you.

Mrs. COLLINS. Thank you.

I am interested in why we have all this equipment here. Are we going to hear something from Dionne Warwick?

Ms. WARWICK. Yes, we are.

Mr. KYLE. Madam Chairwoman and members of the subcommittee, on behalf of Tandy Corporation and our chairman, I would like to thank you for having us here today. The equipment I have here is just your standard off-the-shelf Radio Shack stereo components, a CD player, an analog cassette player, an amplifier, and a proto-

type unit of our DCC player. What I will do is take a piece of Dionne Warwick's music and play it on the three different technologies and I'll switch between the three and hold up the format so you'll know which one I'm playing, and I'll let the music speak for itself.

Mr. TOWNS. And I'll copy it.

[Laughter.]

Mrs. COLLINS. That's why we've got to pass our bill.

[Demonstration given.]

Mrs. COLLINS. Thank you very much. We certainly can hear the difference there. It's a tremendous demonstration.

There's another part to the demonstration?

You may do whatever it is you are going to do.

Mr. BLEDSOE. My name is Dale Bledsoe. I'm here today representing the Sony Corporation. My position at Sony is that of National Training Manager. In that position I have many opportunities to experience and use the new digital recording technologies, but more importantly, I have many opportunities to talk with the end user, the consumer of digital technology.

Digital recording, we have found, is used in a variety of different ways. Many consumers use it to archive analog recordings, maybe their records or tapes that they have previously purchased, so they don't deteriorate from being used. The DAT tape is also very effective as a personal type of stereo. You can jog with it without any interference in sound. It's also very popular for car stereos. We have also found a lot of consumers who are struggling young musicians that are using it in a garage type of band so they can make a full fidelity recording of themselves.

What I would like to do very briefly is demonstrate two things. I took the liberty this morning of recording a DAT tape. I'd like to first play a brief portion of the CD that I recorded it from and then compare it to the DAT, and I'd also like to demonstrate that the digital recording that I made is prohibited from being copied by the Serial Copy Management System.

First let me play the CD.

[Demonstration given.]

Mr. BLEDSOE. As you can hear, it is literally a perfect copy. I have connected two DAT recorders together. If I try to put this deck into the record mode to record from this digital tape, the first thing you see here on the front panel is "prohibit," and it will not go into the record mode. I am prohibited from making a copy of that digital tape. So that's a quick look at how the Serial Copy Management System will prohibit serial copying.

Thank you.

Mrs. COLLINS. I have a question for you. The mere fact that it has the word on there doesn't mean a person isn't going to try it. What happens to keep them from doing it?

Mr. BLEDSOE. The deck that I attempt to record onto will not go into the record mode. It just will not make a recording. "Prohibit" is just to let you know that you are attempting to do something that it is not designed to do.

Mrs. COLLINS. Fine. Thank you very much.

Now, Mr. Roach, you may begin your testimony at this time.

STATEMENT OF JOHN V. ROACH

Mr. ROACH. Clearly you can see from the various demonstrations the exciting aspects of the technology that we are dealing with.

We are America's largest consumer electronics company, with 22 U.S. manufacturing plants all opened in the last 22 years while much of the consumer electronic business was moving out of the United States and spread throughout the United States, with eight States having some of our manufacturing plants, including the State of Illinois, and we operate 7,400 retail stores, including the Radio Shack retail.

If we look at some of the history of consumer electronic technology, the VCR was invented in the United States. It took a very sophisticated mechanical mechanism in order to record on tape. That mechanism was one along with other factors that was a technology that was not very exciting in the United States at that point in time, one that we were not very good at, and yet some of our friends in Japan certainly were very interested in that type technology, had a lot of capability, and they in fact seized the opportunity to develop what has become one of the hallmark products of our industry and one that has taken a lot of the initiative away from the U.S. consumer electronics industry.

Today, though, we are talking about a new digital audio technology. Now we are talking about something that in fact the United States is very good at. Things like digital signal compression, which is important to these recording techniques. Things like fixed computer type heads, which is a technology that we have been a leader in.

Our industry has grown up in recent years, driven in part by the computer industry to be very digitally oriented. This new change in technology, new frontier in technology, offers the United States an opportunity to once again be a player. In fact, the digital compact cassette technology, or DCC, which you saw demonstrated this morning will be manufactured in our plant in Fort Worth, TX, beginning this June. The manufacture will begin this June. I hope the legislation moves along so that it is in synch with the ability to bring this technology to market.

One of the things that makes this interesting is it's the first new consumer electronic product for all practical purposes to be manufactured from its initial introduction in the United States in the last 15 years or so. We anticipate that other U.S. manufacturers in the semiconductor and head manufacturing business will also participate in this technology from the initial times.

Unfortunately there has been a great impasse. It has been well described already. When DAT, which was demonstrated by Sony a few minutes ago was introduced, a lawsuit at the same time really inhibited its acceptance in the market. The advent of the impasse, the lawsuit, and the urging of Congress that we get together has brought all elements of our industry together behind this legislation.

The proposed legislation very much benefits the consumer, because it says that if you record an analog tape that you have an absolute right to do that for your own private purposes, something that has been in question both for the manufacturer and the con-

sumer in the past. And as well, if you record a digital tape for your own personal use, that is absolutely legal.

It also says that new technology can be developed and introduced without fear that you're going to spend most of your time in the courthouse instead of in the engineering lab and in the marketing of the product. So there are many benefits to the manufacturers, including U.S. manufacturers, and to the music industry.

I think it returns the focus of the industry to the end user that enjoys great music and lets all elements of industry quit spending their efforts in litigation. In our case, we can focus on design, manufacturing and retailing of the product. Yes, it does require payment of a royalty. I do not relish royalties, but it is not uncommon to do so in our industry, and certainly it gets us in the position where we do not have to worry about infringement. We think it adequately protects the technology. We feel that the passage of this legislation on a very timely basis is very, very important. We have all become friends in this industry—maybe that's what friends are for—as a result of this, and we urge your speedy consideration.

Mrs. COLLINS. Thank you, Mr. Roach.

[The prepared statement of Mr. Roach follows:]

STATEMENT OF JOHN V. ROACH, CHAIRMAN, TANDY CORPORATION

Madam Chairwoman and Members of the Subcommittee: My name is John Roach. I am chairman of the board and chief executive officer of Tandy Corporation. We are based in Fort Worth, Texas, and are proud of our distinction as the largest American consumer electronics company. In the United States we employ over 27,000 people and have 20 factories nationwide. We do business with more than 50 million Americans each year. Last year, Tandy's sales exceeded $4.5 billion.

With 7,400 stores and dealers we are also the Nation's largest consumer electronics retailer. Our stores, which you may know as Radio Shack, Scott, McDuff, and VideoConcepts, sell everything from audio recorders to word processors. In 1990 we opened a new chain—the Edge in Electronics—with a more upscale image and only state-of-the-art products. And just last fall we opened our first Computer City Supercenter, featuring America's best selling brands of computers—the Tandy models that we manufacture ourselves, plus IBM, Apple, Compaq, AST and others.

Madam Chairwoman, today I want to share with you our excitement at Tandy about the competitive opportunities we see. To do this I want to talk about some technological history, and how technology is now evolving to our advantage—if we are quick enough to exploit it.

The present consumer electronics era has been defined by the consumer VCR, a product of the 1970's. Video recorders were invented in the 1950's by Ampex, a California company. The challenge in recording video was essentially mechanical, rather than electronic. A video signal has a very wide bandwidth, much greater than even a digital audio signal. To record it on tape you either had to make the tape run very fast, or put your recording heads on a wheel and rotate the heads in synchronization with the moving tape.

Ampex mounted four recording heads on a ferris wheel, and turned the wheel at right angles to the path of the tape. They used a tape two inches wide, and recorded in vertical stripes, one after another. These machines were mechanically elegant, made gorgeous pictures, and were affordable only by the three TV networks.

Next, Ampex decided to transistorize their circuitry. At that time, the leaders in transistorizing "analog" devices like TV's, radios and recorders were in Japan. So Ampex made a deal with Sony, to help turn Ampex's vacuum tube circuits into solid state circuits.

The next fundamental breakthrough was made in 1959 by an engineer working for Toshiba. He took the heads off the ferris wheel and put them on a flat little cylinder that could turn inside a loop of tape, at just a small angle to the tape path. Although still highly mechanical, this arrangement was more compact and more reliable, and the tape did not need to be 2 inches wide. This rotating cylinder method, Madam Chairwoman, devised about 33 years ago, is still the way video recording and digital audio recording are done today on magnetic tape. Until now.

Tandy is part of an international consortium that has developed a new digital audio recording product, the Digital Compact Cassette, or DCC. You will hear DCC demonstrated today, and we plan to go to market with DCC hardware and software later this year.

DCC uses very recent advances in digital electronics to dispense with specialized mechanical and analog devices. It utilizes a breakthrough in digital signal compression to pare the amount of data that needs to be recorded down to where a fixed, computer-type recording head can be used. By using a fixed recording head, we can also use high-tech to go low-tech: we can make the digital magnetic tape the same size, and run at the same speed, as in a conventional analog cassette deck. So we were able to design DCC to play back standard analog cassettes as well. You will be able to buy our new digital recorder and it will play back your old analog tapes, too.

Madam Chairwoman, so long as consumer recorders were going to be mechanically complex and rely on specialized analog circuitry, there was little opportunity for American or European-based manufacturers to become competitive in manufacturing them. In Japan there has been an infrastructure of firms designing and producing analog semiconductors and mechanical devices for decades. By contrast, the U.S. electronics industry was investing in a different direction, concentrating on the computer and military markets. These products called for digital electronics and generally used fixed recording heads designed to handle digitized data.

So today, our corporate strengths are in manufacturing exactly the sort of product the DCC will be. Of course there are other new products, and new formats, that will exploit similar technological breakthroughs. Some are proprietary to Tandy, some are not. The point is, we are fully competitive. But we still do face a major obstacle.

Introducing new consumer audio products has become risky business. Two weeks after DAT recorders went on sale in 1990, a group of music publishers and songwriters sued Sony for contributory copyright infringement. Even today, the DAT format still lacks full software support from the music industry.

Madam Chairwoman, it seems crazy that our marketing budget should have to include an out-of-scale contingency for legal fees and court costs. Now, when we think we have regained a competitive advantage as a manufacturer, this impasse has become intolerable. So we've done a lot of negotiating. The result is legislation that both manufacturers and music producers can support.

The Audio Home Recording Act affords everyone a share in the digital audio revolution. It enables consumers to make recordings for private, noncommercial use; eliminates manufacturer or retailer liability for alleged copyright infringement; and fosters music industry support for, rather than opposition to, new technology. This will allow us to concentrate on our design teams and production lines, rather than on our legal teams and defense lines.

The bill requires manufacturers to pay a royalty on the sale of digital recorders and blank digital media. We do not relish this. But Tandy, like other manufacturers, pays and receives royalties under circumstances where the company paying has not been convinced that it infringes. Like light and electricity, reasonable royalties are a cost of doing business.

Finally, Madam Chairwoman, Tandy is fully aware that different technological streams are merging. Our determination to manufacture digital audio recorders and tape in the United States is based on this convergence. We are a video company; we are a computer company; and we are a multimedia company. From our very first discussions, we and other interested parties have been determined that this legislation should apply to audio products and only to audio products. In my opinion the legislative drafters have been very successful in adhering to this objective.

Of course, just as the mechanical recording process in a DAT was derived from the mechanism in VCR's, many components and techniques will be shared among digital audio products and other digital products. Indeed, the "interoperability" among new digital products will be truly exciting. But as a matter of efficiency, and of identifying and serving consumer needs and wants, products designed to record digital audio will remain easily distinguishable from products designed to record video, computer, or multimedia data—just as VCR's and video tapes have remained clearly distinguishable from DAT's and audio tapes.

Madam Chairwoman, we can never stay ahead of technology and we can seldom keep up with it. This legislation offers us a rare chance to seize the moment. If we can put aside our theoretical copyright debates, put aside our legal threats and posturing, and simply be permitted to get on with business, we can create a lot of jobs: manufacturing jobs, making new recorders, tapes and discs. Music jobs, writing, recording and producing new albums. And retailing jobs, selling these new products across the Nation.

The digital revolution is global. Manufacturers and consumers the world over are in a position to benefit from these new products. But at long last, there are also American high-technology manufacturers lining up in front, looking forward to the race.

We are not requesting, nor do we need, any advantage or special consideration. Just fire the starting gun, Madam Chairwoman. Please pass this bill. Thank you.

Mrs. COLLINS. Mr. Shapiro.

STATEMENT OF GARY J. SHAPIRO

Mr. SHAPIRO. Madam Chairwoman and members of the subcommittee. My name is Gary Shapiro. I am group vice president for the Consumer Electronics Group of the Electronic Industries Association, one of the industry groups that participated actively in working towards the compromise embodied in the bill before you.

I also am the chairman of the Home Recording Rights Coalition of which EIA is a member. Thank you for inviting me to testify today. I am pleased to convey the unqualified support of both EIA and the Home Recording Rights Coalition for the Audio Home Recording Act.

The Consumer Electronics Group of the EIA represents the leading manufacturers of electronic products that entertain and inform American consumers. The project which most of our staff has spent the most time on this past year is an event held each year in your district. The International Summer Consumer Electronics Show, set for the end of May in McCormick East and McCormick North in the Chicago Hilton, will employ thousands of Chicago workers and pump some $60 million into the Chicago economy.

To celebrate the 25th anniversary of the Consumer Electronics Show, we are taking a step unprecedented for a U.S. trade show. We are opening the show to the public. Consumers from Chicago and around the world have been invited to share the excitement of the consumer electronics industry and experience all the new digital technologies. With the support of Chicago area government officials, we have undertaken this experiment which may serve as a model for other trade shows to expand in Chicago. We have spent an additional $2 million to make this work and we have used almost exclusively Chicago area vendors. Many of the companies exhibiting in this show indicated that they will use this Chicago event to show consumers the new digital recording technology that you have just heard demonstrated.

At this show and at every previous CES for the past decade a group called the Home Recording Rights Coalition has been an exhibitor. The Home Recording Rights Coalition was formed more than 10 years ago after a court decision suggested that consumers might not have the right to make home recordings for private use. HRRC is committed to preserving consumers' rights to engage in private, non-commercial home recording, and to receive the benefits of new technology. It is a broad coalition of consumers and consumer groups, retailers and retail groups, and manufacturers of recording products.

The act is a compromise that offers clear and obvious benefits for consumers. Once this Act is passed, no one can claim a copyright violation for the manufacture or sale or use of analog or digital

audio recorders. The debate about home audio taping will finally be over.

The act will encourage record companies and music publishers to enthusiastically support new digital audio technologies. The act means that new digital audio recorders will be appearing on retailers' shelves as products rather than in courtrooms as exhibits. It is the consumer that ultimately pays the costs of this controversy and suffers by the absence of new products.

The royalty rates are much lower than anything proposed in the past and are limited to new consumer model digital audio recorders and media. Further, the Act does not interfere with the right or ability of any consumer to make a first generation digital audio recording of any lawfully acquired signal. For us this right is and was a fundamental consideration in our decision to support the bill.

I don't think anyone can speak for American consumers as to what sort of products they will want to buy once they can choose among the best products technology and creativity can offer. So far the main problem has been that consumers have not had a choice.

Recent history shows us that the last two revolutionary consumer electronics products, the VCR and the compact disc player, were initially introduced at prices in 1992 dollars of about $2,000 a piece.

To what can we attribute the remarkable price declines of some 90 percent or more? Based on my 12 years in the industry and my discussions with its leaders, I believe the answers are consumer confidence, mass production, and software industry support.

We didn't sell that many color TV's until NBC started broadcasting in color. The same argument can be made for CD players until it received support from the CD software industry. Clearly, when an industry sells 12 million units a year, particularly of an electronic device relying on mass produced integrated circuits, you can sell it much more cheaply than if you sell just a few a year. In my personal opinion, the difference between very expensive digital audio recorders with little or no available software and mass market digital audio recorders with abundant software will be determined entirely by whether or not this bill passes. All we have to do is eliminate the uncertainty, instill the confidence, and encourage the support of the music community. These are precisely the aims of the Audio Home Recording Act.

Audio retailers need new products and will support this legislation, and do. A key member of the Home Recording Rights Coalition is the National Association of Retail Dealers of America. They have been an early and vigorous supporter of this act. Like EIA and other members of the HRRC, NARDA has opposed previous legislation that would have imposed royalties on consumer recorders and blank media. However, NARDA and other retailer members of the HRRC support the act because it promises to transform the market, giving them new products to sell at reasonable prices.

It is very important to us, Madam Chairwoman, that this compromise legislation not address or affect anything other than consumer digital audio recording. We believe this legislation makes it very clear that other consumer, business and professional technologies are not affected either directly or in terms of precedent.

The bill only covers consumer model digital audio recording devices that are designed or marketed for the primary purpose of making copies of recordings. The bill does not apply to analog cassette tape recorders, personal computers, VCR's, multimedia devices, answering and dictating machines, or professional products.

Madam Chairwoman, the broad support for the Audio Home Recording Act in the HRRC constituency is based largely on section 1002 of the act. This section provides that no legal action may be brought alleging infringement of copyright based on the manufacture, importation, or distribution of digital audio recording devices or media, or of analog audio recording devices or media that are not used for commercial purposes. The act specifically states that audio recording by a consumer for private, noncommercial use is not actionable.

We believe that the clear benefits of the Audio Home Recording Act are worth the compromise that it entails. It promotes certainty in the courts, predictability in the marketplaces, and new choices for consumers. We believe it's both a consumer protection bill and a competitiveness bill. We ask the subcommittee to move speedily towards its enactment.

Thank you.

[The prepared statement of Mr. Shapiro follows:]

STATEMENT OF GARY J. SHAPIRO, VICE PRESIDENT, ELECTRONIC INDUSTRIES ASSOCIATION, ON BEHALF OF HOME RECORDING RIGHTS COALITION

Madam Chairwoman and Members of the Subcommittee: My name is Gary J. Shapiro. I am Group Vice President for the Consumer Electronics Group of the Electronic Industries Association. I am also Chairman of the Home Recording Rights Coalition (HRRC), of which the EIA is a member. On behalf of the HRRC, I thank you for inviting me to testify today. I am pleased to support the Audio Home Recording Act.

The HRRC was formed more than 10 years ago, after an appellate court decision suggested that consumers might not have any right to engage in home taping. HRRC is committed to preserving consumers' rights to engage in private, noncommercial home recording, and to receive the benefits of new technology. We are a broad coalition of consumers and consumer groups, retailers and retail groups, and manufacturers of recording products. Today I would like to focus on why consumers support the Audio Home Recording Act.

The Act provides that copyright owners cannot sue consumers for private, noncommercial home audio recording. It also requires manufacturers of digital audio recorders and blank media to pay a relatively small royalty to a fund established for record and music copyright holders. It is a compromise that offers clear and obvious benefits for consumers:

Once this Act is passed, no one can object on grounds of copyright to making, selling or using analog or digital audio recorders and blank media for private, noncommercial home audio recording. The debate about home audio taping will finally be over.

The Act will encourage record companies and music publishers to enthusiastically support new digital audio technologies. When the music industry feels they have a stake in new devices, their support clearly benefits consumers, as we learned with the phenomenal growth and acceptance of the digital compact disc.

The Act means that new digital audio recorders will be appearing on retailers' shelves as products, rather than in court as exhibits. It is the consumer that ultimately pays the costs of controversy, and suffers by the absence of new products.

The royalty rates are much lower than anything proposed in the past, and are limited to new consumer-model digital audio recorders and media. The royalty specifically does not apply to analog audio recorders and tape, or to video recorders and computers. The basic rates of 2 percent of manufacturers' cost for digital audio recorders (with an adjustable $8 "cap") and 3 percent of cost for blank media cannot be raised absent another act of Congress.

The Audio Home Recording Act does not interfere with the right or ability of any consumer to make a first-generation digital audio recording of any lawfully acquired signal. For HRRC, this right is a fundamental consideration in its decision to support the bill.

I don't think anyone can speak for American consumers as to what sort of products they will want to buy, once they can choose among the best products technology and creativity can offer. So far, the main problem has been that consumers have not had such a choice.

Let us for a moment look forward to the Act having passed, the uncertainty having ended, and a mass market having developed in digital audio recorders and media. What can we expect the market to offer consumers?

Let us look at recent history. The last two revolutionary consumer electronics products, the VCR and the compact disc player, were initially introduced at price points that, in 1992 dollars, were about $2,000. An ad in last Thursday's Washington Post offered a 110 channel VCR, with remote control, for $159.97, and a portable CD player, complete with carrying case, headphones, AC adaptor, and power cords, for $99.97.

To what can we attribute the remarkable price declines of 90 percent or more in the price of these products? Based on my 12 years in the industry, and my discussions with its leaders, I believe the answers are: consumer confidence, mass production, and software industry support.

We didn't sell that many color TV's until NBC started broadcasting in color. We sold VCR's right from the start, because consumers had never been able to time shift programming, and quickly recognized that the VCR would enhance their enjoyment of television. VCR's became household commodities, however, when the movie industry recognized them as a potential new market, and began to support the video software industry actively.

Clearly, when you sell 12 million units a year—particularly of an electronic device relying on mass-produced integrated circuits—you can sell it much more cheaply than if you sell 100,000 a year. In my personal opinion, the difference between very expensive digital audio recorders, with little or no available software, and mass market digital audio recorders, with abundant software, will be determined entirely by whether or not this bill passes. I know of no technological or economic reason why the incredible values represented by today's VCR's and CD players should not be available, or exceeded, in digital audio recorders. All we have to do is eliminate the uncertainty, instill the confidence, and encourage the support of the music community. These are precisely the aims of the Audio Home Recording Act.

When I am asked, therefore, how much "extra" consumers will pay as a result of manufacturers' royalty obligations under this bill, I say, "Who knows?" This bill will dramatically slash manufacturers' long-term costs by encouraging economies of scale and avoiding contingencies, and greatly enhance their markets by providing an incentive for software support. It will also marginally raise the manufacturers' costs by a few percent. So to me the real question is, "How much will consumers save?" Based on consumer electronics history, I would say 90 percent or more.

While my focus has been on our consumer members, I should point out that even before the present recession, consumer electronics retailers were having a particularly tough time. Their customers were reading about new technologies and prototypes. This made those customers somewhat less interested in the many excellent recording products already presently available. Yet the new, more sophisticated products have not generally been available either.

A key member of the HRRC is the National Association of Retail Dealers of America (NARDA). NARDA was an early and vigorous supporter of the Audio Home Recording Act. Like EIA and other HRRC members, NARDA has opposed previous legislation that would have imposed royalties on consumer recorders and blank media. However, NARDA, and other retailer members of the HRRC, support the Act because it promises to transform the market, giving them new products to sell at reasonable prices. Retailers also insist that legislation not embroil their stores or their customers in paperwork, or the collection of funds. The Act avoids any such entanglements.

It is very important to us, Madam Chairwoman, that this compromise legislation not address or affect anything other than consumer digital audio recording. We believe this legislation makes it very clear that other consumer, business and professional technologies are not affected, either directly or in terms of precedent.

The bill covers consumer model "digital audio recording devices" that are designed or marketed for the primary purpose of making copies of recordings. Digital audio recording devices are required by the bill to implement the Serial Copy Man-

agement System, and are subject to the bill's royalty provisions. It therefore is especially important to recognize what is not a "digital audio recording device" under the bill:

Analog cassette tape recorders are not digital audio recording devices.

Personal computers, videocassette recorders and multimedia devices also are exempt because, although they may be capable of recording sound, they are not designed or marketed primarily for that purpose.

The definition expressly excludes answering and dictating machines, which are used primarily to record nonmusical sounds.

The definition also explicitly exempts such professional products as would be used by professional musicians or recording studios.

Finally, the bill defines a category of devices known as "digital audio interface devices." This definition assures that, if a product is designed to send digital audio signals that can be recorded on digital audio recording devices, the product must pass through the few bits of data necessary to the operation of the Serial Copy Management System.

Madam Chairwoman, the broad support for the Audio Home Recording Act in the HRRC constituency is based largely on section 1002 of the Act. This section provides that no legal action may be brought alleging infringement of copyright based on the manufacture, importation, or distribution of digital audio recording devices or media, or of analog audio recording devices or media, that are not used for commercial purposes. The Act specifically states that audio recording by a consumer for private, noncommercial use is not actionable.

This protection against any suits that might be based on consumer audio home taping means that retailers can order stocks of new generations of home recorders without any concern that supplies might suddenly be cut, or prices sharply elevated, as a result of a judge's adverse ruling. It means that manufacturers can plan large scale product development, introduction and marketing campaigns without worrying about sudden and uncontrollable changes in their schedules and costs. And, therefore, it means that consumers can rest assured that new formats will be supported and will remain available, so long as the marketplace demands them. These are assurances that, in the world of audio home recording, no one has had for several years.

The HRRC firmly believes that the clear benefits of the Audio Home Recording Act are worth the compromise that it entails. It promotes certainty in the courts, predictability in the marketplace, and new choices for consumers. We believe it is both a consumer protection bill and a competitiveness bill. We ask this subcommittee to move speedily toward its enactment.

Thank you.

Mrs. COLLINS. Mr. Berman.

STATEMENT OF JASON S. BERMAN

Mr. BERMAN. Madam Chairwoman, members of the subcommittee. My name is Jay Berman and I'm president of the Recording Industry Association of America. Our member companies create, manufacture and distribute over 95 percent of the prerecorded music sold in the United States and about half of all of the music sold worldwide.

I want to begin this morning by thanking you, Mrs. Collins, for holding this hearing and taking the initiative in introducing H.R. 4567, the Audio Home Recording Act of 1992.

American music touches the hearts and minds not only of millions of Americans, but it also reaches those far from our shores. When American music is played abroad, our ideals and culture are exported just as surely as the tangible product itself. In a very real sense, therefore, the ideal of political freedom is being exported. I think that was nowhere more evident than in the demise of the Soviet Union's influence over Eastern Europe, for in virtually every case it was the radio station that the insurgents took first and it was American music that was played on it and played as a symbol of freedom.

In addition, American recordings are truly one of our Nation's trade jewels, contributing greatly to our balance of trade. I've traveled all over the world seeking greater copyright protection for recorded music. Everywhere I go it's American records that are being broadcast, sold, pirated, and, unfortunately, copied. We must protect U.S. recordings both at home and abroad. The legislation before this subcommittee today helps achieve both of these goals.

In addition, it will almost certainly serve as a guide to other countries to increase their levels of protection for sound recordings. Japan, for example, is already considering similar legislation, and hopefully Canada will as well.

But, Madam Chairwoman, the question of home taping and the solution embodied in this measure are not new to the international copyright debate. Many other countries have considered this issue and 17 nations have already enacted royalty systems. U.S. record companies and their performing artists are definitely disadvantaged by the lack of a domestic blank tape royalty. In countries like France, Finland, Iceland and others there is a royalty on blank recording media or on recording hardware in exchange for the privilege of copying for personal use prerecorded music. In most cases the prerecorded music being copied is ours. Yet American record companies and performers do not always share in that revenue. Rather, the money either goes directly to local creators and companies, or it flows to government organizations who are charged with promoting local production. Passage of this bill will make it more difficult for those countries to continue to deny payment to U.S. creators and should help end this discriminatory treatment.

As you heard, it was no easy task to arrive at the compromise before you today. I've detailed in my written statement the long agonizing history of the struggle between the consumer electronics industry and the music industry. What brings us here today is the realization finally that we are all in this together, together in the sense that we are all in the business of bringing music into people's lives, into their homes, their cars, and wherever else they listen to our recordings.

For the music industry there have been risks as well as benefits inherent in this new digital technology. The result of digital copying is a perfect clone with the same brilliant sound quality as the original. And unique to digital copying, every subsequent copy of that copy, whether the first or the thousandth, will be as perfect as the prerecorded material we would produce.

H.R. 4567 will facilitate access by consumers to new generations of digital technologies, because it removes the possibility of infringement lawsuits, and it will encourage the creation and production of new music, first, by providing creators and copyright owners with modest compensation for the copying of their music, and second, by protecting against serial copying, the copying of copies.

From my perspective, Madam Chairwoman, it means that record companies will continue to have the resources to invest in those recordings that don't make any money: classical, jazz and folk. It is a risk business. Eighty-five percent of all recordings do not return their investment. Unfortunately, it's the 15 percent that do that get copied.

Madam Chairwoman, I hope that you and this committee will act expeditiously on this bill. We need to have the law in place as soon as possible because new digital audio recording equipment is arriving in the U.S. already, as you heard John Roach say. Several manufacturers have made announcements about new product launches for later in 1992.

Finally, swift action is needed to demonstrate to the European Community, to Japan, and to the rest of the world that America retains its leadership role in protecting intellectual property. The benefits of this legislation, both at home and abroad, will serve to strengthen a uniquely American product.

Thank you.

Mrs. COLLINS. Thank you.

[The prepared statement of Mr. Berman follows:]

STATEMENT OF JASON S. BERMAN, PRESIDENT, RECORDING INDUSTRY ASSOCIATION OF AMERICA, INC.

Madam Chairwoman and Members of the Subcommittee, my name is Jason S. Berman, and I am the President of the Recording Industry Association of America. RIAA is the trade organization representing the interests of American record companies. Our member companies create, manufacture and distribute over 95 percent of the prerecorded music sold in the United States and nearly half of all sound recordings created worldwide.

I am pleased to have the opportunity to appear before you today with my colleagues on the subject of digital audio recording technology and to urge your support for the Audio Home Recording Act. As you already know, or certainly will surmise from the witnesses seated here with me, Dionne Warwick, Gary Shapiro of the Electronic Industries Association, John Roach of the Tandy Corporation, and Ed Murphy of the National Music Publishers Association, the bill reflects negotiation and compromise among constituencies who have not always been on the same side of the home taping issue.

I've always viewed our past feuds with a sense of irony because I don't know of two more interdependent industries than the consumer electronics and music industries. Without music, the consumer electronics and the recorded music industry's products would be no more than boxes of chips and circuits. Without their equipment, the public would have no way to enjoy our recordings. That's what brings us here today—our mutual interest in making sure that our customers can have access to recorded music through the latest technologies.

Madam Chairwoman, for many years, the record industry has been gravely concerned about what we believe to be the devastating impact of home taping on the economics of our industry. The harmful effects of home taping hit hardest those on the front lines of the music industry—the musicians, producers, record retailers, songwriters, artists, music publishers and record companies—whose livelihoods are directly dependent on sales of prerecorded music. The impact is acutely felt by record companies because retail record sales are virtually the companies' only source of income and because of the substantial investment they must make in each record without knowing in advance, of course, whether it will soar to the top of the charts or languish, unsold, on the retailers' racks or in our warehouses. Madame Chairwoman, only 15 percent of all recordings released recoup their costs, thus putting enormous pressure on the "hits" to subsidize new artist development. It is the hits, of course, that are most commonly taped.

It is our view that home taping presently displaces about one-third of the industry's sales. A 1989 report by the Office of Technology Assessment concluded that one billion musical pieces are copied every year in this country. Although there are many interpretations of the results of that study, even conservative estimates of the extent of the damage caused by home taping calculate the possible lost revenues at nearly $1 billion per year. By any measure, the problem is bad enough with existing analog tape recording technology. About 5 years ago, however, there emerged a new technology, digital audio tape ("DAT"), that threatened to exacerbate the home taping problem even more unless Congress acted.

DAT is, in essence, the tape version of compact disc ("CD") technology. It was the first wave of digital audio recording technology—to be closely followed by digital compact cassettes ("DCC"), mini-disk technology ("MD") and recordable compact

disc ("CD-R") machines and other formats that, quite possibly, haven't even been conceived of yet. All of these devices record and play digitally. The use of digital codes means that the musical sounds you hear when you play a digitally recorded work are remarkably pure and noise-free—no static, no distortion.

The particular potential threat that digital audio recording technology poses from the music industry's perspective is that it permits digital-to-digital home copying—the transfer of digital codes from a digital recording, such as a CD, onto a digital audio tape. The result will be a new copy—a perfect clone—with the same brilliant sound quality as the original. And every subsequent copy of that copy, whether the first, the hundredth, or the thousandth, will be just as perfect as the prerecorded original.

This potential for making perfect clones from a digital recording and for making exact copies of those perfect clones is unique to digital technology. In contrast, the sound quality of copies made on the analog audio cassette recorders that most people have in their homes today quickly degrades from one generation to the next, so that analog serial copying has a built-in quality limitation that discourages it.

Prior to the time we became aware of the imminence of DAT technology, the record industry had, for many years, been urging Congress to enact a royalty bill that would compensate for revenue losses due to home taping. The opposition of the consumer electronic manufacturers, at that point, proved formidable. We moved on to explore the possibility of technological solutions. We did not find any solution that could be implemented unilaterally by the recording industry, so we turned to Congress for legislation that would require the consumer electronics manufacturers to place certain circuitry in their DAT machines. Once again, our efforts were stymied by a lack of consensus among the affected industries on the need to do something technologically about the home taping problem.

By that time it had become clear that the issue had reached a stalemate: the debate over the legal status of home taping had introduced sufficient uncertainty into the marketplace to have discouraged consumer electronics manufacturers from bringing their new products to consumers. The impasse was keeping new technology out of the hands of consumers and some record companies indicated that they were reluctant to introduce their works in digital formats where these same machines could be used to destroy the prerecorded market. Both sides began hearing from their friends in Congress urging us to attempt to work out a legislative solution cooperatively—to suggest to Congress a compromise that would address the legitimate concerns of the stakeholders—and, most importantly, bring the benefits of these digital audio technologies to the public. Both sides realized the urgency of acting.

At that point, in 1988, representatives of the recording industry sat down to talk with representatives of the consumer electronics industry to see whether there was sufficient common ground between us to reach a mutually satisfactory solution. For more than a year, we talked through our respective concerns and our mutual interests. That process culminated in the so-called Athens Agreement in June of 1989 in which we and our one-time opponents agreed to work together for passage of legislation that would address the problem of digital serial copying on DAT and, importantly, to continue to talk about the problem of home taping and the challenges presented by future technologies as they evolved. In our view, royalty compensation, additional technical limitations, and new technologies were all to remain on the table while we tried the DAT legislative experiment. This was the first step in a process of growing cooperation between the two industries.

Madame Chairwoman, not everyone concurred that our agreement jointly to advance Serial Copy Management System ("SCMS") legislation—last Congress' S. 2358—represented substantial progress, but it was the right first step. Some, including our partners in the songwriting and music publishing community and a number of our friends in Congress, felt that the legislation did not go far enough, soon enough, for two reasons: first, it addressed only DAT's, rather than digital audio recording technology generically; and, second, it did not provide for royalties.

It became clear, later in that year, particularly as the new DCC technology was revealed during consideration of that legislation, that a step-by-step approach to legislation was not practical for the marketplace or for Congress. So we joined hands with our colleagues in the music industry and sat down once again with our new friends in the consumer electronics industry. As you can see today, that exercise was successful.

The bill that you are considering today addresses all digital audio recording technology—present and future ones alike. It establishes a royalty system that will help offset financial losses due to home taping. The royalties will be distributed through the Copyright Office and the Copyright Royalty Tribunal to the various constituen-

cies affected by home taping including the artists, songwriters and backup musicians and vocalists, record companies and music publishers.

The royalty is a modest one: 2 percent of the wholesale price or customs value of nonprofessional digital audio recording equipment (with a cap generally of $8 per unit and a floor of $1 per unit) and 3 percent of the wholesale price or customs value of blank digital audio recording media, such as digital audio tape. Analog recording devices and analog tape would not be affected by the royalty.

The bill also requires nonprofessional digital audio recording equipment to contain Serial Copy Management System ("SCMS") circuitry that would prevent the making of second and subsequent generation digital copies of copyrighted recordings—no digital copies of digital copies. We need the SCMS prohibition because the royalties provided for in the bill will not even approach what we believe to be our actual financial losses—and, of course, would do nothing to prohibit digital cloning. SCMS defuses this uniquely dangerous threat posed by digital audio recording devices.

Madame Chairwoman, enactment of this legislation will benefit all of the affected constituencies. Others will speak today about how the bill will affect their own industries. I will confine most of my remarks to the benefits that we see accruing to the music industry, but first, a few words about the benefits to the music industry's customers—consumers in general—are in order.

The Audio Home Recording Act will eliminate the legal uncertainty about home audio taping that has clouded the marketplace. The bill will bar copyright infringement lawsuits for both analog and digital audio home recording by consumers, and for the sale of audio recording equipment by manufacturers and importers. It thus will allow consumer electronics manufacturers to introduce new audio technology into the market without fear of infringement lawsuits, and it will help encourage the creation and production of new music by providing creators and copyright owners of prerecorded music modest compensation for the digital audio copying of their music.

In short, the legislation will facilitate access by consumers to new generations of digital audio technologies and music. It ends the impasse between the music industry and the consumer electronics industry. A compromise is in everybody's interest, most especially the consumer interest.

The American recording industry also stands to benefit in numerous ways from passage of this legislation.

First and foremost, the Audio Home Recording Act acknowledges the seriousness of the home taping issue and addresses it in a comprehensive way. The royalty, combined with SCMS, goes fight to the heart of the two basic problems—loss of revenue and digital cloning. The royalty system will not completely offset losses due to home taping, but it helps.

Further, this bill is a "generic" solution in that it applies across the board to all digital audio recording technologies. Congress will not be in the position after enacting this bill, as it might have been with prior bills, of having to enact subsequent bills for new forms of digital audio technologies. Moreover, enactment of this legislation will ratify the whole process of negotiation, and compromise that Congress encouraged us to undertake.

I want to emphasize, Madame Chairwoman, the broad support enjoyed by the Audio Home Recording Act. It is supported by the organizations represented on this panel and by many others including the National Consumers League, the Home Recording Rights Coalition, the American Federation of Musicians, the American Federation of Television and Radio Artists, the National Association of Recording Merchandisers, which represents the retailers, the National Association of Independent Record Distributors, and the Department of Professional Employees of the AFL-CIO. A complete list of music industry organizations and others that support the legislation is attached to this statement.

Congress has, in the Audio Home Recording Act, a unique opportunity to protect our musical heritage—and our musical future—by preserving creative incentives within the framework of new technologies.

Enactment of this legislation will bring U.S. law into line with that of over a dozen other countries such as France, Germany and Australia, where prerecorded music is a major consumer product, and where royalty systems are already in place.

But, Madame Chairwoman, the question of home taping and the solution embodied in this measure, are not recent arrivals to the international copyright debate. Many other countries have considered this issue and, as of August 1991, 17 nations have enacted legislative solutions. Unfortunately, the mere presence of these laws on the books of foreign countries does not ensure that the laws are fully implemented.

U.S. record companies are greatly harmed by the lack of a domestic blank tape royalty with respect to their foreign counterparts. In countries like France, Finland, Iceland and others, consumers pay a royalty on blank recording media or on recording hardware in exchange for the privilege of copying, for personal use, prerecorded music. In most cases, the prerecorded music they copy is American, yet American record companies and performers do not share in that revenue. Rather, the money either goes directly to local creators and companies, or it flows to government organizations who are charged with promoting local production. Passage of this bill will make it difficult for those countries to continue to deny payment to U.S. creators and should put an end to this discriminatory treatment.

Of the 17 countries that have legislated private copying royalties, only a few are fully implemented and functional, so it is not possible to measure the prejudice to U.S. interests by virtue solely of the status quo. Japan, the European Community, the EFTA countries, and the associate members of the E.C. are likely to all legislate private copying royalties in the near term, and we expect similar developments in South-East Asia and Latin America. International organizations administering copyright conventions are proposing new rules that would mandate such legislation. The United States produces approximately half of the recordings listened to and copied by consumers around the world. What this legislation promises is that we will not be left out in the cold when it comes to enjoying the fruits of our worldwide success.

As the world's leading producer of prerecorded music, it is fitting that the United States join the ranks of those countries affording such protection to prerecorded music. Indeed, the principle of national treatment embodied in this bill will enhance U.S. efforts to share in the collected royalties from overseas home copying pools.

For all of these reasons, we urge your support for the Audio Home Recording Act.

Thank you, Madame Chairwoman and members of the subcommittee. I would be happy to answer any questions you may have.

Mrs. COLLINS. Mr. Murphy.

STATEMENT OF EDWARD P. MURPHY

Mr. MURPHY. Thank you, Madam Chairwoman. I am president and CEO of the National Music Publishers' Association. The National Music Publishers' Association, NMPA, is the trade association of the American music publishing industry. I am here today to describe why the Circle C Copyright Coalition enthusiastically supports swift passage of the Audio Home Recording Act.

We deeply appreciate this opportunity to testify in favor of this bill which means so much for the U.S. consumers, for the writers and artists who create American music, and for those entities such as the music publishers that nurture creativity and bring the music to the marketplace, and for the consumer electronics companies whose products we all enjoy.

The Circle C Copyright Coalition was formed in October 1989 and consists of over 30 copyright advocacy groups, including the National Music Publishers' Association, ASCAP, BMI, the Songwriters Guild of America, the Authors Guild, the Dramatists Guild. All told, the Circle C Copyright Coalition represents tens of thousands of individuals and businesses that share the goal of promoting the protection of copyrights in musical works.

The Coalition's enthusiastic support for the Audio Home Recording Act stems from its comprehensive approach to the audio home taping issues. The proposed legislation incorporates the critical royalty component, and it extends to all digital audio recording technologies, not just to DAT.

Previously I've characterized this as a win-win-win situation, and I think, Madam Chairwoman, if enacted this bill would be an all-around victory. First, the music copyright owners will receive some compensation for digital home copying of their works and will be

safeguarded against multi-generational copying which will be provided through the incorporation in each digital recording device of the SCMS technology. Second, the legal cloud that has hung over digital recording technology is removed.

Madam Chairwoman, it is especially appropriate that your Subcommittee on Commerce, Consumer Protection, and Competitiveness is holding a hearing on this bill. The economic ramifications of this bill as a tool both to stimulate the American economy and to bolster U.S. competitiveness in international marketplaces is substantial.

The implications of the Act on American international competitiveness are even more profound. Intellectual property-based industries currently account for a major segment of the U.S. GNP. It is vital that the United States remain an international leader in the protection of intellectual property rights.

By enacting this legislation, the United States will join more than a dozen other nations that have already adopted royalty systems to provide fair compensation for the home recording of musical works and sound recordings protected by copyright.

With the adoption of this legislation, we will be able to argue more forcefully and persuasively that similar legislation should be adopted in countries where no royalty systems for audio home recording currently exists.

By acting soon, the United States can play a major role in sparking the adoption of home audio taping legislation in Japan, Canada, the U.K. and elsewhere, and can influence the content of a uniform royalty system to be adopted in the European Community.

It is important to note that certain nations have already enacted audio home taping laws, providing royalty benefits to U.S. music creators and copyright owners only on a reciprocal basis. Such nations include Australia, Finland and Iceland.

Similar reciprocity requirements may soon be adopted in other places, including the European Community. Indeed, the European Commission recently decided in favor of a reciprocity requirement in connection with the extension of the term of copyright protection in the European Community. There appears to be a high likelihood that a reciprocity requirement will appear in the EC directive on home taping, which is expected later this year.

How do we explain this reciprocity threat? In essence, the feeling shared by many foreign government officials is that the United States, which is by far the largest exporter of intellectual property, stands to benefit the most from the adoption of higher levels of protection. Why should other countries extend new rights to American creators and copyright owners, the argument goes, when the United States declines to grant such rights itself?

By enacting the Audio Home Recording Act, Congress will help to ensure that American music creators and copyright owners will be able to collect the millions of dollars worth of foreign home taping royalties that are rightfully due them. Moreover, the national treatment principle incorporated in the proposed legislation will encourage other countries to reject the idea of reciprocity in this area.

As always in the case of difficult compromise, each party gave up some of what it sought in order to achieve something that all can

support. This bill is not absolutely perfect from any group's perspective, but it has the enthusiastic support of composers, lyricists, music publishers, record companies, recording artists, electronic manufacturers, and importers, and various consumer groups, including the Home Recording Rights Coalition and the National Consumers League.

Thank you, Madam Chairwoman.

[The prepared statement of Mr. Murphy follows:]

STATEMENT OF EDWARD P. MURPHY, PRESIDENT, NATIONAL MUSIC PUBLISHERS ASSOCIATION, INC., ON BEHALF OF COPYRIGHT COALITION

Madam Chairwoman and members of the subcommittee, my name is Edward P. Murphy. I am president and CEO of the National Music Publishers' Association, Inc., and of The Harry Fox Agency, Inc., and I also serve as Chairman of the Copyright Coalition. The National Music Publishers' Association ("NMPA") is the trade association of the American music publishing industry, and The Harry Fox Agency ("HFA") is NMPA's wholly-owned licensing subsidiary. HFA licenses rights in the musical compositions owned or controlled by its more than 10,000 music publisher principals for use in recordings, in films, on television, and in other media. HFA collects and distributes royalties for such uses and audits licensees on behalf of its publisher principals and their songwriter partners.

I am here today to describe why the organizations I represent enthusiastically support swift passage of the Audio Home Recording Act. We are deeply appreciative of this opportunity to urge swift passage of the Act, which means so much for U.S. consumers; for the writers and artists who create American music; for those entities that nurture creativity and bring the music to the marketplace; and for the consumer electronics companies whose products convert the music into the listening pleasures that surround us.

My purpose today is to explain, along with my colleagues on this panel, why this proposed legislation is important to so many people and how it achieves a consensus between the parties before you today. In so doing, I am hopeful it will become clear to the subcommittee that a delicate balance has been struck between the need to get exciting new technologies in the hands of consumers, on the one hand, and the need to protect vital interests of music creators and copyright owners on the other hand. This balancing of interests represents an historic achievement, which—if enacted into law—will put to rest a decade-long controversy that has delayed the availability to the public of exciting new means for the enjoyment of music.

The breadth of the Coalition in support of the Audio Home Recording Act is a strong testament to the benefits the bill would bring to both commerce and consumer protection. This legislation would promote the introduction of a new wave of digital audio recording technology; it would promote the creative efforts of songwriters, music publishers, performers, and record companies; it would promote the ability of consumers to engage in noncommercial home taping activities; and it would promote the leadership position of the United States in the battle to strengthen international protection for intellectual property rights.

And now, Mr. Chairman, I would like to describe briefly the Copyright Coalition; the concerns raised by digital audio home taping; the background on our historic compromise; and the "win-win-win" nature of the legislation before you.

The Copyright Coalition was founded in October 1989, and consists of over thirty copyright advocacy groups, including the National Music Publishers' Association, the American Society of Composers, Authors and Publishers, Broadcast Music, Inc., The Songwriters' Guild of America, the Authors' Guild, and the Dramatists, Guild. All told, the Copyright Coalition represents tens of thousands of individuals and businesses that share the goal of promoting the protection of copyrights in musical works.

The Coalition was originally founded to give a new and distinct voice to a segment of the creative music community that has long sought what it views as fair compensation for home taping of copyrighted musical works. Initially, we organized to oppose legislation introduced in the last Congress which would have relied solely on technical restrictions to address the copyright issues raised by digital audio tape (or "DAT") technology. In part due to our objections, Members of Congress urged the various interests to go back to the negotiating table, and to return when we had a consensus in hand.

The Coalition's enthusiastic support for the Audio Home Recording Act stems from its comprehensive approach to audio home taping issues. The proposed legislation incorporates the critical royalty component, and it extends to all digital audio recording technologies, not just to DAT.

I will not recount for this subcommittee the long history of legal and economic charges and countercharges that have surrounded the issue of audio home taping—the competing studies and reports, the competing interpretations of those studies and reports, and so on. The witnesses before you strongly believe that it is time to move beyond those charges and countercharges. Indeed, it is essential to do so if we are to convince Members of Congress that the Audio Home Recording Act should become the law of the land.

Since the interests I represent would be beneficiaries under the proposed legislation, however, it is important for me to note that, in our view, the bill is founded upon the need to uphold the intellectual property rights and economic well-being of the American music industry. In a nutshell, we believe that the threat posed to the music industry by unrestrained, uncompensated digital home taping is enormous.

Unlike the copies created by analog recording devices found in most American homes today, digital copies are perfect clones of the original—even after many generations of copies have been made. Thus, a copy of a copy of a copy sounds as good as the original source material. We believe that analog home taping already causes great damage to music industry sales and income; we also believe that the new era of digital audio recording technology would, without appropriate safeguards, dramatically increase the harm to such sales and income.

Since the introduction of digital audio recording technologies promised substantial new product sales for the consumer electronics industry, the economic stakes were raised on both sides. In the past, individual record companies and music publishers generally declined to support digital audio recording technologies such as DAT, and refused to voluntarily license the release of prerecorded music in such formats. They acted out of a fear of furthering the unregulated advance of technologies that they believed were capable of putting them out of business. In the absence of prerecorded music, and facing the prospect of copyright infringement lawsuits, consumer electronics manufacturers understandably chose to limit the sale of digital audio recording products in the United States—products that became available overseas, especially in Japan.

Everyone was a loser in this confrontational scenario: the consumer electronics manufacturers that wanted to market new technologies in which they had already invested substantial sums of money; the music creators and copyright owners that saw an exciting new means of delivering music to the public; and, last but far from least, the American consumer, who was being denied the benefits of the new digital age of audio technology. Our challenge, then, was to find a way out of this impasse.

As I mentioned earlier, after a contentious hearing in June 1990 on the so-called "SCMS bill," which took place before the Senate Commerce Committee's Subcommittee on Communications, a number of Members of Congress urged music industry and consumer electronics representatives to put aside their differences, go back to the bargaining table, and return to Congress with a compromise that included all interested parties.

Thereafter, representatives of the Copyright Coalition, the recording industry, and the consumer electronics industry began regular meetings to determine if such a compromise was possible. I must say that the initial meetings were very difficult and did not leave much room for optimism that a solution was possible. Because of the importance of resolving these issues, however, we pressed on through many hours of frank—and sometimes heated debate.

I think it is fair to say that, especially as time went on, the various interested parties were not unmindful of the stakes involved in a copyright infringement lawsuit filed by certain songwriters and music publishers in July 1990. The lawsuit had been brought with the support of the Copyright Coalition, and followed clear warnings from music publisher and songwriter interests that legal action would be taken against any company importing digital audio recorders in large numbers prior to the enactment of adequate safeguards. When one consumer electronics company began importing DAT hardware into the United States, songwriters and music publishers sued to preserve what we viewed as our fundamental rights.

Whether because of or in spite of the lawsuit, these hundreds of hours of talks among the interested groups ultimately produced a broad compromise, which was announced in July of last year. Under this compromise, the various parties announced their joint support for a "comprehensive and detailed legislative solution to the U.S. audio home taping problem." At the same time, an announcement was made that the lawsuit had been withdrawn by the plaintiffs without prejudice,

thereby clearing the way for a joint effort by all parties in support of the legislative compromise.

The Audio Home Recording Act embodies the compromise agreed upon by the Copyright Coalition, the recording industry, and the consumer electronics manufacturers. As such, the bill represents a "win-win-win" proposition. First, music copyright owners will receive some compensation for digital home copying of their works, and safeguards against multi-generational copying will be provided through the incorporation of the Serial Copy Management System in nonprofessional digital audio recorders. Second, the legal cloud that has hung over digital audio recording technologies is removed, and manufacturers and importers will be free to market new products without concern over copyright infringement lawsuits.

As a result of this carefully balanced package, consumers are big winners too. By removing the fear of infringement actions against manufacturers, importers, and consumers, the bill paves the way for widespread distribution of exciting new digital audio recording products and prerecorded music as soon as they become available. Indeed, the legislation provides immunity against infringement lawsuits not only in the area of digital audio copying, but also in the area of analog audio copying. Yet no royalty obligations or serial copying restrictions are placed upon manufacturers or importers of analog recorders or blank media.

In addition, the bill reflects the U.S. commitment to Berne Convention principles and to strong international protection for intellectual property rights. Intellectual property-based industries currently account for a major segment of the U.S. GNP, and it is vital that the United States remain an international leader in the protection of intellectual property rights. By enacting this legislation, the United States will join more than a dozen other nations that have already adopted royalty systems to provide fair compensation for home recording of musical works and sound recordings protected by copyright. Such nations include Germany, France, Austria, the Netherlands, and Italy.

With the adoption of this legislation, we will be able to argue more forcefully and persuasively that similar legislation should be adopted in countries where no royalty system for audio home recording currently exists. By acting soon, the United States can play a major role in spurring the adoption of audio home taping legislation in Japan, and can influence the content of a uniform royalty system to be adopted in the European Community.

It is also important to note that certain nations that have already enacted audio home taping laws provide royalty benefits to U.S. music creators and copyright owners only on a reciprocal basis. Such nations include Australia, Finland, and Iceland. Similar reciprocity requirements may soon be adopted in other places, including the European Community. Indeed, the European Commission recently decided in favor of a reciprocity requirement in connection with extension of the term of copyright protection in the European Community. Based on available evidence, there appears to be a high likelihood that a reciprocity requirement will appear in the EC directive on home taping, which is expected later this year.

How do we explain this "reciprocity" threat? In essence, the feeling shared by many foreign officials is that the United States—which is by far the largest exporter of intellectual property—stands to benefit the most from the adoption of higher levels of protection. Why should other countries extend new rights to American creators and copyright owners, the argument goes, when the United States declines to grant such rights itself? Representatives of a number of countries with home recording laws have expressed resentment over the export of millions of dollars in home taping royalties to the United States, without any reciprocal protection or payments.

By enacting the Audio Home Recording Act, Congress will thus help to ensure that American music creators and copyright owners will be able to collect the millions of dollars worth of foreign home taping royalties that are rightfully due them. Moreover, the national treatment principle incorporated in the proposed legislation will encourage other countries to reject the idea of reciprocity requirements in this area.

As domestic industry after domestic industry has fallen victim to increasingly rigorous international competition, musical products remain a flagship of American exports, and one of the few consistent areas of trade surplus. It is, and should be, a matter of great national pride that American music is dominant throughout the world. Of course, this is not preordained. It comes about because the environment here in the United States encourages creativity through the protection of intellectual property rights. Absent continuation of such an environment, this important U.S. industry could suffer the same fate as others whose leadership position has eroded over time.

While the Audio Home Recording Act is a complex piece of legislation, careful drafting has limited the bill to home audio copying. The proposed legislation specifically excludes from its scope non-audio technologies, where copyright and technical concerns are different from those raised by audio recording technologies. Even in the area of audio recording technologies, the bill excludes audio recording devices which do not implicate the home taping of copyrighted works, such as dictating machines and telephone answering machines.

As is always the case in a difficult compromise, each party gave up some of what it sought in order to achieve something that all can support. The bill is not absolutely perfect from any group's perspective. But it has the enthusiastic support of composers and lyricists, music publishers, record companies, recording artists, electronics manufacturers and importers, and various consumer groups (including the Home Recording Rights Coalition and the National Consumers League).

In sum, this bill represents a comprehensive solution to a complicated legal and economic problem. There will be no cost to the U.S. Government associated with the proposed legislation, and the benefits to music creators, copyright owners, electronics manufacturers, and consumers will be enormous. Without the bill, consumer access to digital audio recording technologies in the United States will remain uncertain at best. In our view, the Audio Home Recording Act possesses all the characteristics of a piece of legislation that serves the public good.

We look forward to working with the members of this subcommittee to address any questions or issues that may arise, and, hopefully, to achieve enactment of this vital addition to the Copyright Act. Thank you, Madam Chairwoman.

Mrs. COLLINS. Mr. Beacham.

STATEMENT OF FRANK BEACHAM

Mr. BEACHAM. Representative Collins and members of the subcommittee. The Federal Government has no business imposing a tax on consumers that exclusively benefits private industry. The Audio Home Recording Act is the creation of special interest groups who are intent on gouging the consumer and restricting the use of the next generation of recording technology.

The question is simple: Does the very possession of recording technology capable of piracy mean the owner is in fact a tape pirate? By passing this legislation, the Congress answers this question with a resounding "yes."

In addition to its utter contempt for the audio consumer, this legislation is like a huge broom which will sweep broadcast, business, creative and educational users of tape recorders into its wide net. It is a big myth that the Audio Home Recording Act will not affect professional users of tape recorders.

Let me give you an example. Sony recently unveiled its new Scoopman digital tape recorder in Japan. Its release is planned later this year in the United States. Scoopman is an ultra miniature, pocket sized broadcast quality stereo digital tape recorder which uses a postage stamp sized cassette. It is designed for use by radio news reporters, business and educational recordists. Sony's U.S. publicists say the device is not intended for or marketed to consumers. However, Scoopman is equipped with SCMS copy protection. Why? I'm told the reason is Sony wants to keep within the spirit of the DAT Pact agreement and the pending legislation.

Wait a minute. Supposedly this legislation covers only recording equipment designed or marketed primarily for the purpose of private consumer copying of prerecorded music. So why is Scoopman, a product clearly not in the scope of the legislation, limited with SCMS circuity? Are the news broadcasters and businesses who will use Scoopman tape recorders not professionals? How will a radio broadcaster digitally edit a tape restricted by SCMS circuity?

If you argue that a radio broadcaster or business user is considered a professional under the legislation, does Sony have the right to arbitrarily employ SCMS in this product? Since Sony is both an equipment manufacturer and a music company, is it not a conflict of interest to allow Sony to exclusively decide when and when not to use SCMS on a piece of equipment?

And what about tape stock? No distinction is made in this bill between professional and consumer recording media. Often the same tape manufactured for consumers is also used by professionals. Are we going to pay the music industry a tax on every tape sold for any recording purpose?

Though Congress may not intend for business users to be caught in the web of this legislation, how do you prevent equipment manufacturers from arbitrarily adding SCMS to products designed for business use? If these manufacturers are allowed to have it their way, what is to keep them from manufacturing a piece of professional equipment in two configurations, one with SCMS and one without, and charging the business user $500 more for the non-SCMS version? By passing this bill, Congress is writing a prescription for the gouging of business and professional recordists by the equipment manufacturers.

And what about the so-called "royalty"? By definition, a royalty is a payment for the use of property. But whose property am I using when I purchase a digital tape recorder and blank tape to produce an audio documentary or drama?

Also hurt by this legislation is the growing group of home recording musicians known as project recordists. SCMS will severely limit their creative use of digital recording technology. The same is true for the amateur creators of desktop audio-video presentations for home and business.

As Members of Congress, you probably have gotten very little feedback from constituents regarding this legislation. This is due to a virtual blackout of media scrutiny of these issues due to the artful public relations machine run by Mr. Shapiro and his EIA. The press has been spoonfed a pro-consumer portrait of this bill. The consumer audio press has bought it hook, line and sinker, while the mass media has failed to spend the necessary time to thoroughly scrutinize this complex legislation.

I urge you to stop listening to these special interest groups for a moment. Think about this legislation. Why was it written? What does it do to improve the quality of our lives? Is it any more than a government run slush fund for a few rich corporations? How will you explain your vote to the people at home? Consult your own constituents who use tape recorders and ask their opinion of this legislation. Chances are they have never heard of it, and chances are when they understand it they will tell you to vote no.

Thank you.

[The prepared statement of Mr. Beacham follows:]

STATEMENT OF FRANK BEACHAM

Chairwoman Collins and members of the subcommittee. As a writer/journalist and producer of audio programming, I am against passage of both House versions of the proposed Audio Home Recording Act. Beyond all of the other issues involved in

this legislation, I think it is fundamentally wrong for the government to mandate a tax on consumers that exclusively benefits private industry.

The question here is simple: Does the very ownership of recording technology capable of piracy mean the owner is in fact a tape pirate? By passing this legislation, the Congress answers this question with a resounding "yes." That would be a real slap in the face of consumers.

Because this hearing focuses on the issues regarding commerce and consumer protection, I will limit my remarks to how the broad sweep of the Audio Home Recording Act hurts those of us who use tape recorders in professional and creative activities.

So-called "professional" audio equipment is supposedly exempt from the provisions of the legislation. But, in fact, that is not true. The problem for broadcasters, business, creative and educational recordists lies in the distinction made between "professional" and "consumer" equipment in the legislation. In order to determine whether or not a recording device is really designed for pros or consumers, the bill lists several factors including the type of error detection system, input/output interfaces, sales literature, distribution channels and, curiously, the occupation of the user and the application to which the recorder is put.

This criteria is not only vague, but is already obsolete. Certain of the so-called "pro" features mentioned in the bill, such as read-after-write, time code functions and professional connectors, are already appearing on some high-end consumer model DAT decks. Many of the Nation's top professional recording engineers and producers use this consumer-grade gear in their homes and offices for reviewing their work. Consumer model DAT machines (some professionally modified) are found in hundreds of radio stations and have even been used to record commercial CD releases and motion picture soundtracks.

How will the Audio Home Recording Act affect commercial users of tape equipment? I offer Sony's "Scoopman" tape recorder as an example. Scoopman is a new digital recording technology, released on the Japanese market in February, 1992, and scheduled for release later this year in the United States. It offers a clear illustration of how the broad sweep of this legislation will damage many professional recordists.

"Scoopman," an ultra miniature, pocket-sized broadcast-quality stereo digital tape recorder (with postage stamp-sized cassette) is designed for use by radio news reporters, business and educational users (see attached product description, Exhibit 1). Sony's U.S. publicists say the device is not intended for or marketed to consumers. However, "Scoopman" is restricted with SCMS copy protection circuitry. Why? I'm told that the reason is the manufacturer wants to keep within the spirit of the "DAT Pact" agreement and the pending legislation.

This raises some interesting questions. Supposedly the Audio Home Recording Act covers only recording equipment designed or marketed primarily for the purpose of private consumer copying of prerecorded music. So why is "Scoopman"—a product clearly not in the scope of the legislation—limited with SCMS circuitry? Are the news broadcasters and businesses who will use "Scoopman" tape recorders "consumers" or "professionals?" How will a radio broadcaster digitally edit a tape restricted by SCMS circuitry?

If you argue that a radio broadcaster or other business user is considered a "professional" under the legislation, does Sony have the right to arbitrarily employ SCMS in this product? Since Sony is both an equipment manufacturer and music company, is it not a conflict of interest to allow Sony to decide which equipment will or will not be subject to the provisions of the legislation? And what about the companies that modify consumer DAT machines for radio station use? Will they be prohibited by Federal law from tinkering with SCMS capabilities?

And what about the tape stock? No distinction is made in the legislation between "professional" and "consumer" recording media. The same tape that "is primarily marketed or most commonly used by consumers for the purpose of making digital audio recordings" is also used for professional recording. Are we going to pay the music industry a tax on every tape sold for any recording purpose? Will radio broadcasters who use "Scoopman" in the newsroom or to record commercial announcements going to make a payment to the music industry for every digital tape purchased for the device? It sure looks that way.

Though Congress may not intend for broadcast and business/education/creative users to be caught in the web of this legislation, how do you keep equipment manufacturers from arbitrarily adding SCMS to products designed for business use? If these manufacturers are allowed to have it their way, what is to keep them from manufacturing a piece of professional equipment in two configurations—one with

SCMS and one without—and charging the business user $500 more for the non-SCMS version?

As you can see, all this gets very confusing. That's because the legislation is vague. It's written to favor the special interest groups it benefits. Congress is writing a prescription for the gouging of business and professional recordists by the equipment manufacturers.

What about the so-called "royalty?" By definition, a "royalty" is a payment for use of property. I pay a royalty when I use a piece of background or theme music for a broadcast program I am producing. But whose property am I using when I purchase a digital tape recorder and blank tape to produce an audio documentary or to record a live musical performance in my living room?

For those who argue the royalty amount is modest and will never affect end user prices, it should be noted that significant accounting and record keeping activities go along with this legislation. Only the most naive believe the manufacturers won't pass all of the costs along to the consumer in the form of higher retail prices.

The value of digital recording equipment as a legitimate recording tool is significantly diminished by the use of SCMS circuitry. In the April, 1990 issue of TV Technology magazine, Mario Orazio discussed the implications of SCMS on consumer recorders. After noting SCMS would do absolutely nothing to stop pirating, he spotlighted a group of creative consumers who will be damaged by the copy protection scheme.

"There's one group for whom it is devastating, and that is the semi-pros—the garage recording studios, perhaps. Semi-pros, almost by definition can't afford professional equipment. If they buy digital audio gear, it's probably because they like its multigenerational performance. With the asinine forced copyright assertion through analog inputs, however, they'll be restricted to two generations, which is hardly enough to edit anything. As far as I can tell, this is the function of SCMS: to prevent entry-level production facilities from using digital audio."

Of course, SCMS affects many other potential applications. It, in effect, limits the use of digital recording devices anytime multiple generations of a recording are needed. In the coming age of multimedia computers, SCMS could become a major disabling factor in the production of desktop audio/video presentations for home and business.

In a brief conversation on October 29, 1991 with John Roach, Chairman of Tandy Corporation, I suggested a future scenario in which an SCMS-restricted recording (possibly from a Tandy DCC-format recorder) could thwart the use of a Tandy multimedia computing system.

I proposed to Mr. Roach that I want to make an electronic album in which I take the digitally-recorded voices of family members and edit them with digitized photographs to make a "multimedia" family history which I can display on my Tandy computer computer. I asked Mr. Roach how I can go past two generations of digital audio editing on his Tandy system if SCMS is employed in my digital audio tape recorder.

Mr. Roach responded that he considers multimedia production a professional application which should not be done on consumer equipment. If this is so, I question why Tandy's 1992 Radio Shack catalog is promoting the multimedia PC "revolution" for consumers. The advertising slogan says: "At Radio Shack, the future of multimedia is here today."

Touting that multimedia offers tremendous possibilities for "even the average consumer," the Radio Shack advertising proclaims "in addition to furnishing superb, photographic-quality images and sparkling animation, multimedia PC's are able to play and mix digital audio, recorded stereo sounds and MIDI music. In fact, multimedia is the next step in the evolution of the PC."

I suspect that if this bill becomes law and the upcoming generation of consumer recorders fail in the marketplace (which is highly likely due to their limitations) that Mr. Roach and others supporting this industry compromise will be back before Congress asking that the Audio Home Recording Act be repealed. They might argue SCMS is limiting the capabilities of consumer multimedia computer products.

Shortsighted, ineffective and crippling technologies like SCMS are being promoted in order that a few people can make a quick buck over the next decade. SCMS will not stop a single tape pirate and will limit the legitimate and creative use of digital recording technology by consumers.

If the music industry's actual goal is to stop the piracy of digital audio media, it can do so immediately without the aid of new legislation. A "flag" can be placed in any commercial digital recording that will block anyone from making a digital copy. This method is foolproof and inexpensive. So why isn't the recording industry taking this step to prevent piracy?

The answer may be found in a 1989 study titled "Copyright and Home Taping" by the U.S. Office of Technology Assessment. The report found that about one-quarter of pre-recorded music purchases were made after the consumer first heard the artist or recording on a home-made tape.

This prompts one to think that the music industry likes a little piracy, but not too much.

The world is turning "digital." We are not discussing some exotic technology for the elite. The analog equipment we buy today will be as obsolete 3 years from now as tube technology is now in radio and TV receivers. All tape recorders—including those for video—will soon be digital.

When the truth about this bill is known to the public, I predict there will be a huge outcry. So far the legislation has been misrepresented as a pro-consumer solution to break the deadlock between the music and electronics industries. The issues involved here have been well-disguised from most of the people who use tape recorders in their business. There's been virtually no balanced press coverage of the issues involved here due to the strong influence on the consumer electronics trade media by such organizations as the Electronic Industries Association and its consumer shill, the Home Recording Rights Coalition.

The mass media has avoided covering this legislation due to its complexity and their inability to reduce it to a single "high concept" lead for the man on the street. As a result, you, as the people's representatives, might think there is no public opposition to this legislation. That is a dangerous assumption to make.

I urge you to send copies of this bill—without the interpretation of the lobbyists to a few HiFi buffs, project musicians, broadcasters and business/educational users of tape recorders in your congressional district for their opinion of the Audio Home Recording Act. I will bet every single person who honestly evaluates the bill will oppose it.

Please ignore the special interest groups backing the Audio Home Recording Act and take a hard look at these matters from the viewpoint of the consumer. Thank you.

Mrs. COLLINS. Thank you.

Ms. Warwick, in your testimony you state that manufacturers, those in the music community, and consumers are going to benefit from this bill. If this legislation is not enacted, in your opinion, what can we expect?

Ms. WARWICK. We are going to get more copies of music that is not representative of what we do. I speak for myself and I know I speak for quite a few of my constituents in our industry. We pride ourselves in the work that we do. In so doing, when it is copied and if it is copied, then it should be copied in the best quality that is possible to be copied, and it is not being done so at this point in time.

Mrs. COLLINS. Mr. Berman, are there lawsuits that might continue to be instituted because of this copying that is going on?

Mr. BERMAN. You mean if this bill is not enacted?

Mrs. COLLINS. Yes.

Mr. BERMAN. I think my colleague Mr. Murphy can speak to the lawsuits. I threatened mine a long time ago. His are much more recent. The fact is that a number of record companies, labels, not only in the United States but around the world, find that the recording capability of digital technology threatens their very existence.

In order to improve the environment in which technologies are launched, it seems to me that you do need to have the cooperation of the people whose product it is that is being used. That includes the songwriter, the music publisher, the performer, and the record company. It seems to me that that is what this bill is designed to do. It's to provide that right kind of environment.

In the absence of this kind of legislation, I think the only experience that we have would be the unfortunate circumstances surrounding the introduction of DAT into the United States. Experience tells us that unless everybody is on board, we are not going to be able to launch a new recording technology that reaches a mass market consumer.

Mrs. COLLINS. Mr. Murphy, do you agree with Mr. Beacham?

Mr. MURPHY. No, I do not.

Mrs. COLLINS. Tell me why.

Mr. MURPHY. I think there are a number of points that I would like to address. Beacham said in essence that the constituents out there wouldn't agree with our advocacy of this particular bill. I don't think that is true at all. I think you would find, as Jay just mentioned before, the overall availability of product will be enhanced so much greater with the solving of this particular problem.

It is has been going on for some 10 years, and very intensely for the last 1 or 2 years with the legal problems which were raised by writers and publishers who brought this issue before the courts. Each individual publisher decided and each individual record company decided maybe not to support those technologies, and, of course, the consumer wasn't able to get that product. Now that everybody has gotten together we have a basis of moving forward so the consumer will be able to have that product.

Mr. Beacham also said that he wouldn't be able to get product made and not have to pay a royalty for products which are copied. There is a lot of analog material that is available and is not subject to this bill. There will be no royalties attached to it on the tapes or the equipment, of course. So if anybody wants to make a tape of text material, they can do so on analog products. There are a vast variety of products which are available which are not subject to this bill at all.

Mr. BERMAN. Madam Chairwoman, I do want to respond to one thing that Mr. Beacham said about the cost. If one were to look closely at those countries around the world that have actually implemented royalty systems and where they have been in operation over a period of time, it is interesting to note, for example, that in the case of France the actual price of blank tape has not even kept pace with inflation despite the fact that France has a royalty and has had a royalty on blank tape.

Mr. MURPHY. That is absolutely correct. There has been no detrimental effect at all to Germany and France where they have opted to put this into being. It has been in existence for a very, very long time, and. I might add, it's on analog, not just digital there. It's across the board, on hardware in Germany, and on tape, on analog and digital products.

Mrs. COLLINS. Ms. Warwick, I think that everybody would agree that when one works they ought to be paid for what they do. It seems that if a songwriter or if a songstress or a singer does work that that singer or songwriter or the other people who are involved should be paid. When someone like my son comes over to the house and copies a CD or even a small cassette, he in effect is reducing the amount of the monetary value of your work. Is that not the case?

Ms. WARWICK. Exactly.

Mrs. COLLINS. If this bill were to pass, what would be the ultimate benefit to both you and the American consumer?

Ms. WARWICK. Obviously it would be the compensation that would be coming to the artist that would be involved. From the consumer point of view, I think you were privileged to hear what benefit they would get from it.

Mrs. COLLINS. Which I think is access to a technology that is certainly, to my ears at least, superior to what we have today.

Ms. WARWICK. Absolutely.

Mrs. COLLINS. Mr. Berman, I have a concern that is not directly related to this, but some people have suggested that the primary beneficiaries of this legislation are the recording industry companies which are increasingly changing ownership. Concerns have been raised that with these changes there may also be less concern for fair employment practices relating to minorities. When I look around and ask some questions, I seem to perceive that there is an apathetic attitude toward equal employment opportunities for minorities and women in this industry.

Because of the concern that I have, I wrote some letters in November to a long list of RIAA companies, and to my disappointment, as late as February, last month, I hadn't received any responses with the exception of two, and even those two were incomplete. As this hearing approached I started to receive more responses, but they were also incomplete, leaving me to wonder whether or not there is some thought within the industry that we are not very seriously considering looking at the employment opportunities for minorities and women as they now exist in these industries.

I also requested that an executive from the recording industry appear here today and no one offered to do so. Of course, we weren't trying to subpoena anyone, although we might do that in the future. I hope you are going to convey my very serious disappointment with these responses.

I'm not willing to say at this time how good or bad their employment practices are, but I'm going to be looking at them. Only their responses are going to begin to answer that question, and I'm prepared to say that their inadequate responses to date have shown a serious disrespect for Congress on this issue. Again, I hope I can count on you to convey this message to them.

Mr. BERMAN. I think from what you know and from what the staff knows that you can count on me, and I have put myself in that role.

Mrs. COLLINS. Thank you.

Mr. BERMAN. Let me answer the first part of your question. It's impossible for me to control the fact that American record companies are attractive investments, and since it's impossible for the Japanese to miniaturize it or make it better, they may end up buying it. So the fact that there are foreign owned record companies is simply a commercial fact of life. I don't think, Madam Chairwoman, that the question of ownership has anything to do with or any implications for the issues that you raise.

Mrs. COLLINS. You are absolutely right. That's a separate issue all together.

Mr. BERMAN. I'm as troubled as you are by the fact that it took so long to get the responses, and I've indicated that I'm prepared to do what is necessary to get the right responses, and I think you will be getting the right responses.

Mrs. COLLINS. Thank you very much.

Mr. BERMAN. You're welcome.

Mrs. COLLINS. Mr. Roach, in your testimony you state that as long as consumer recorders are going to be mechanically complex and rely on specialized analog circuitry there is little opportunity for American manufacturers to become competitive in manufacturing them, and you contend that a window of opportunity has been opened for U.S.-based manufacturers that are competent in digital circuitry and consumer products. Will the enactment of the Audio Home Recording Act help to open this window wider?

Mr. ROACH. Madam Chairwoman, it absolutely will. As I indicated, it will permit Tandy, for instance, to begin manufacturing this summer in Fort Worth, TX, one of these digital compact cassette products. It will permit a U.S. head manufacturer to provide heads for DCC, for instance, to not only U.S. companies, but foreign companies as well. It offers the opportunity for the U.S. semiconductor industry to enter this business on the ground floor, you might say.

Whether you are talking about manufacturing jobs, which certainly it will address, and the United States having a role, which it certainly provides the opportunity for, a wide group of other people in the retail business and in the music industry in the United States will also benefit from this.

Mrs. COLLINS. Mr. Beacham raised some question about the royalties and you told the subcommittee that for years you've strongly advocated against proposals to make the consumers subject to royalty payments, and you stated that if you thought the consumer would not accept the royalty provisions that are in this bill you would never have agreed to the industry compromise. Why have you changed your mind and now support the legislation that does require a royalty fee system?

Mr. ROACH. Certainly Tandy along with some others have felt very strongly about the right to record, but in view of the total compromise that has been reached, the benefits that the consumer receives, the benefits that the manufacturer receives, the benefits that the music industry receives, we think that the royalties are somewhat in line with what are typically paid for technologies in this industry; they are paid at the manufacturer's level, which was indicated in previous testimony may or may not be passed along in full to the end user of equipment. We think that the level of royalties in the totality of this package are certainly reasonable.

Mrs. COLLINS. Mr. Murphy, you pointed out in your testimony that "as domestic industry after industry has fallen victim to increasingly rigorous international competition, musical products remain a flagship of American exports, and one of the few consistent areas of trade surplus."

Does the lack of a home taping royalty payment system in the United States affect the music industry's ability to enforce its property rights in other countries?

Mr. MURPHY. I think the passage of the Audio Home Recording Act here in the United States would certainly help enhance us re-

ceiving payments from abroad. As I think I stated before and in my written statement, the considerations that are going on right now within the EC certainly will be weighted very heavily by what actions are taken here in the United States.

Yes, it would be a positive aspect, but there is no way to guarantee that it will make sure, as has been previously stated here, that funds will come. I certainly think it is going a very long, long way towards helping those funds come here on a continuing basis. Not only in this area, but in other areas as well.

Mrs. COLLINS. Sixteen nations impose fees on recording media, Mr. Murphy, and six of those nations also impose a fee on recording equipment. Australia, Finland, and Iceland have already enacted home recording legislation that contains reciprocity provisions which limit participation in the royalties. It appears that since the United States does not have a similar royalty provision, Americans are not allowed to benefit from those royalty funds. It has been argued that developing a U.S. royalty fund to compensate for home copying will make it possible for Americans to benefit from those funds of other countries.

So is it fair to say that you are confident that reciprocity will be achieved by the enactment of this legislation?

Mr. MURPHY. Yes. I think it will go a very long way towards reaching that goal.

Mrs. COLLINS. Mr. Shapiro, concern has been expressed by the recording industry companies and other professionals in the industry that digital audio recorders will encourage consumers to engage in home copying and thereby reduce sales and royalties. On the other hand, many consumer groups have argued that home taping does not lead to reduced sales and indeed can stimulate the sales. These consumer groups contend, and I'm pretty sure Mr. Beacham might agree, that the royalty payment is a tax on consumers, and until the recording industry can prove that it will be harmed by home recording, consumers should not be forced to pay such a tax.

Tell me your response to that argument.

Mr. SHAPIRO. It sounds like a familiar one. We have agreed to disagree on whether home taping hurts or is legal or not. We cannot stay in the status quo situation as some would advocate. The status quo situation is an analog world where the legality of home taping is ambiguous. We are moving into a digital world, and that is where the technology is going. I think you would agree that digital technology is clearly superior to analog technology. To move forward into that world, we require some certainty, and therefore we require Congress to act and change the law so the consumers can have access to the technology.

Mrs. COLLINS. I'm sorry. I didn't hear your last remark.

Mr. SHAPIRO. In order to move forward into the digital world, we cannot preserve the status quo. We must change the law. In terms of whether it's reasonable for consumers, we represent consumer groups as well. Consumer groups have gone on record in favor of the bill. Consumers across the country are a part of our coalition.

They recognize that a very low royalty, which is the case here—it's just a few cents on a blank tape and $1 to $8 on a recorder—is worth the price of access to new technology, access to music, and the legal certainty that the behavior they will be normally engag-

ing in, which is taping for non-commercial purposes in the home, will be perfectly legal.

Congress has the ability to end the ambiguity, to end the legal stalemate, and that is why the legislation is now appropriate.

Mrs. COLLINS. Mr. Beacham, you've heard that the royalty is going to be minimal, and on a recorder with a retail price of, say, $250, the royalty would only be about $2.50. A digital tape with a retail price of $6 would have a royalty payment of about 9 cents. Assuming that the entire royalty is passed on to consumers, how will such a minimal fee be a burden on any consumers?

Mr. BEACHAM. First of all, I think it is more than that because of the bureaucracy that is set up to administer this within the companies. There are accountants; there will probably be departments that will be set up just to keep track of all of this. So I think, first of all, you can't just look at the amount of royalty. I find "royalty" a hard word to use here.

Mrs. COLLINS. What word would you use?

Mr. BEACHAM. I think it's a tax, because royalty is a payment for the use of someone's property. If I in fact am using it in a consumer context of copying music, then one can argue that's a royalty, but I think that what we see here is a big, big sweep of the use of these charges being put on tape and equipment, and it will never be used for home recording. At that point I don't think it's a royalty anymore, because we are not paying for the use of anyone's property.

I think an artist should certainly be compensated for their work and I have no problem paying for a piece of music in a radio production, so to speak, but I don't want to pay when I use that tape for making my own recording of my own creative work. This also applies to this group of project musicians who are the younger people coming up in this industry who are going to be not only paying this, but being limited in what they can do with this technology.

I think it goes far beyond the issue of just home taping and a royalty, and I think the costs are hidden in there in the administration of this program, so I don't think it's that minimal.

Mrs. COLLINS. Mr. Roach, VCR's and CD players used to be too expensive for most consumers to purchase and now the prices are low enough to be readily available for whoever wants to buy these items. Currently there are some digital audio recorders at retail outlets, but they are priced way above most consumers' reach. It would seem that the enactment of H.R. 4567 would lead to increased production so that we can expect the same price decline with digital audio recorders. In fact, even if the entire royalty was passed on to the consumer, wouldn't prices be considerably less than they are today and wouldn't enactment of the legislation actually benefit consumers by facilitating these lower prices?

Mr. ROACH. Absolutely. In fact, the legislation would guarantee high volume production, and high volume production in electronics has traditionally and would in this case lead to much lower prices. So those technologies which the marketplace adopts, those which it enjoys that are acceptable, I would think would be very consumer affordable in a very short period of time when we can worry about

the normal dynamics of business and not the legal questions surrounding music recording.

Mrs. COLLINS. You say that Tandy's consumers have indicated widespread support for the legislation. Yet in 1988 there was a survey by the Office of Technology Assessment concerning audio home copying and it showed that consumers strongly opposed changes in the system that would impose user fees or limit taping through technological fixes. How is that you have gotten a different impression from the consumers today and what evidence do you have to suggest that consumers are in favor of royalties and technological fixes?

Mr. ROACH. Madam Chairwoman, certainly anything has to be reviewed in its total context. In our communication with our customers, which we do through our advertising media that we mail on a monthly basis into the homes, we have addressed the issue of the right to record; we've addressed the issue of this particular legislation repeatedly. The response that we have had has been almost unanimous in favor of this somewhat creative move forward. I have seen nothing from anyone that would indicate a widespread concern. In fact, quite the opposite, a great relief that this impasse is finally being resolved.

Mrs. COLLINS. Thank you.

Mr. Murphy, Dr. Hebner from the National Institute of Standards and Technology testified earlier today that the Serial Copy Management System will adequately prevent serial copying. Yet in the past the creative community has expressed reservations about the adequacy of such technological fixes. Do you still have reservations about the Serial Copy Management System's ability to prevent serial copying, and if so, can you tell us what those reservations might be?

Mr. MURPHY. Yes, we did have some serious concerns in the past, Madam Chairwoman, but I believe there have been some changes in the circuitry. As I understand the circuitry today, any type of circumvention involves a more complex problem than it might have in the past, but of course adding the royalty on to this particular bill and having both components, the SCMS plus the royalty payment, has more than adequately satisfied the creative community.

Mrs. COLLINS. The music publishers and songwriters sued Sony concerning the introduction of the digital audio recorder and that suit was dismissed after the industry compromise was reached. If legislation is not enacted in this Congress, we could see another lawsuit filed. If the legislation before us is not enacted in this Congress, in your estimation, Mr. Murphy, what would be the result?

Mr. MURPHY. It's conceivable.

Mrs. COLLINS. Whatever the result is.

Mr. MURPHY. It's conceivable it could happen. Yes, Madam Chairwoman. It's possible. The National Music Publishers Association did fund a lawsuit which was brought individually by certain songwriters and publishers. Of course we are happy that that was resolved and we are here today to move forward and we are hopeful that what was done in the past certainly would not even be contemplated in the future.

Mrs. COLLINS. If the legislation is not enacted in this Congress, what will happen?

Mr. MURPHY. I think each of the publishers and songwriters as well as the recording industry would have to reflect on what has transpired.

Mrs. COLLINS. I thank all of you for appearing before us this morning. Your testimony today will certainly benefit the subcommittee. With that, this hearing is concluded.

[Whereupon at 11:45 a.m. the hearing was adjourned.]

[The following material was received for the record:]



Motown Record Company, L.P.

Jheryl Busby
President/C.E.O.

March 26, 1992

Congresswoman Cardiss Collins
Chairman, Subcommittee on Commerce
Consumer Protection and Competitiveness
The Ford Building, House Annex #2 - H2-151
Washington, D.C. 20515

Dear Chairman Collins:

As you look toward convening hearings in the next several weeks on the "Audio Home Recording Act of 1991" I wanted to take this opportunity to formally express my support for this legislation. I am certain that the Recording Industry Association of America panel which is slated to offer testimony will make a strong statement on behalf of the record industry. I would hope that this communication might be officially entered into the formal record.

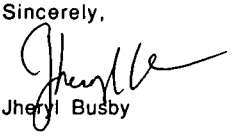
I know that you are very much aware of Motown's commitment to African American artists and their creative work. Since assuming the responsibilities of President and Chief Operating Officer, I have sought to bring our company into its original leadership position in the industry and to raise our advocacy on the crucial issues involving the technologies which shape international debate and give form to our presence in the marketplace. We have a clear responsibility to artists, publishers, and our companies which continue to open avenues for generations of performers and who seek to preserve and protect the legacy of past greats whose catalog inventory will be directly impacted by these technologies.

I thank you for taking the time to hear my views and look forward to having an opportunity to discuss this and related matters at your convenience. I am especially interested in making myself available to you to lend another voice in support of the questions

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you have raised to other record companies regarding minority employment within the industry. While you know of our aggressive efforts to employ and advance minorities within our company, and to retain service and product from minority vendors, the challenge remains that we make these goals industrywide. Number me a compatriot in this cause.

Sincerely,



Jheryl Busby

JB:sd

cc: Jay Berman



JASON S. BERMAN
President

March 27, 1992

The Honorable Cardiss Collins
Chairwoman, Subcommittee on Commerce,
Consumer Protection, and Competitiveness
Committee on Energy and Commerce
United States House of Representatives
Washington, D.C. 20515

Dear Chairwoman Collins:

Thank you for your support of legislation to address the music community's long standing concerns with respect to home copying, and for your introduction of H.R. 4567, the "Audio Home Recording Act of 1992". We appreciate your efforts to move consideration of this important compromise forward quickly. The following are the responses of the Recording Industry Association of America, Inc. to the questions posed in anticipation of your Subcommittee's March 31 hearing on "Digital Audio Recording Technology: Commerce and Consumer Protection Issues":

Question 1: The legislation before this Subcommittee requires all digital audio recorders and interface devices to implement the Serial Copy Management System to prohibit multi-generational copying. How easy is it to make prerecorded digital music that will affect the Serial Copy Management System in a way to prevent copying altogether? To what extent will individuals have an incentive to devise ways to prevent copying altogether?

Answer 1: The insertion of "copyright" and "generation status" flags in prerecorded digital music to implement the Serial Copy Management System ordinarily will be done during the record mastering process. Technically, it will be no more difficult to insert improper flags as it would be to insert the proper flags. Despite this technical ease, however, Section 1021(c) of H.R. 4567, prohibits anyone from encoding a audiogram of a sound recording "so as improperly to affect the operation of the Serial Copy

RECORDING INDUSTRY ASSOCIATION OF AMERICA, INC.
1020 Nineteenth Street, N.W. ■ Suite 200 ■ Washington, D.C. 20036 ■ Phone: (202) 775-0101 ■ Fax: (202) 775-7253

Management System". Under Section 1031(d)(2)(C)(ii), anyone who violates this prohibition would be subject to statutory damages for each violation "in the sum of not less than $10 nor more than $100 per audiogram involved in such violation". Given the volume of audiograms customarily manufactured for the release of a sound recording, the total amount of potential statutory damages available in a particular case would provide a very significant disincentive for anyone seeking to improperly affect the Serial Copy Management System. Moreover, the royalty provision of the legislation is intended to compensate the sound recording and music copyright owners for the consumers' ability to make a copy from the prerecorded original, as permitted by the Serial Copy Management System.

Question 2: How will the legislation affect the cost to consumers of digital audio tapes and other digital media? What are the estimated prices of this new media with and without the royalty payment system?

Answer 2: The marketplace will support both prerecorded digital media and blank media. With respect to prerecorded digital media, enactment of the legislation certainly will have positive benefits to consumers since it will help support the overall health of the recording industry and help produce a wide variety of music, 85% of which never recovers its costs. However, I am unable to provide any specific estimated price information with respect to new prerecorded digital audio products, since prices are determined individually by each record company and have not yet been announced. As to the impact of the royalty on the pricing of blank media, it should be emphasized that the royalty will be assessed against the manufacturers and importers of the blank media, not the consumers of the blank media.

Question 3: Recording companies have expressed concern that digital audio recorders will encourage consumers to engage in home copying and thereby reduce sales and royalties. On the other hand, it has been argued that home taping stimulates sales. What evidence do you have to support the contention that digital audio recorders will cause consumers to engage more home copying? What evidence to you have to support the contention that if American consumers have access to digital audio recording technology, sales will be reduced and royalties will decline?

Answer 3: Since digital audio recording technology, in its varied forms, including DAT (which does not yet have a large consumer base) and DCC and MD (both of which have yet to be marketed), is relatively new, it is difficult, if not impossible, to provide concrete evidence that these technologies will cause consumers to engage in more home copying. What we do know, however, is that a recent study by the Office of Technology Assessment estimated that losses to the music industry from analog home copying were in the range of up to $1.9 billion per year. This is in line with an earlier survey by the recording industry that calculated losses of $1.5 billion per year.

Digital audio recording technology potentially poses an even greater threat for two reasons. First, since digital codes are copied rather than analog wavelengths, a home copy has the very same sound quality as the original. Second, unlike analog recording, which continues to degrade in sound quality from generation to generation of copy made, each and every generation digital copy retains to sound quality as the master recording. As a result, unless controlled through the use of the Serial Copy Management System, digital audio recording could have a far greater exponential impact of sales that analog copying ever could.

Question 4: Several countries including Austria, France, Finland, West Germany, Iceland, Portugal and Hungary impose fees on recording media. West Germany and Iceland also impose a fee on recording equipment. It appears that since the U.S. does not have a similar royalty provision, Americans are not allowed to benefit from those royalty funds.

Answer 4: It is true that U.S. companies and performers are denied access to foreign private copying levies on the basis of reciprocity and, therefore, are prejudiced by the lack of a similar domestic royalty provision. However, the inability to collect royalties is not always the result of the application of reciprocity. Nor is the inability to share absolute. For example, local representatives of U.S. record companies do collect levies for U.S. recorded music in West Germany, and the inability to collect royalties in France is not due to reciprocity in a strict legal sense, but to the unfair requirement in French law that only sound recordings produced in France are entitled to share in the levy.

Question 4(a): To what extent are Americans at a disadvantage since the U.S. currently does not have a royalty payment system for home copying?

Answer 4(a): U.S. companies are greatly harmed by the lack of a domestic home copying royalty with respect to their foreign counterparts. In such countries as France, Finland, and Iceland, consumers pay a royalty on blank recording media or on recording hardware in exchange for the privilege of copying prerecorded music for personal use. In most cases, the prerecorded music they copy is American, yet American performers and record companies are denied a right to share in those revenues. Rather, the monies either go directly to local creators and local record companies, or it flows to government organizations who are charged with promoting local cultural activities. Passage of this bill will make it more difficult for those countries to continue to deny payment to U.S. creators and producers and should put an end to this discriminatory treatment.

Of the 17 countries that have legislated private copying royalties, only a few are fully implemented and functional, so it is not possible to measure the prejudice to U.S. interests by virtue solely of the status quo. Japan, the European Community, the EFTA countries, and the associate members of the E.C. are likely to all legislate private copying levies in the near term, and we expect similar developments in South-East Asia and Latin America. At the same time, international organizations administering copyright conventions are proposing new rules that would mandate such legislation.

The U.S. recording industry produces approximately one-half of the recordings listened to and copied by consumers around the world. What the legislation before you promises is that we will not be left out in the cold when it comes to enjoying the fruits of our worldwide success.

Question 4(b): It has been argued that developing a U.S. royalty fund to compensate for home copying will make it possible for Americans to benefit from royalty funds in other countries. Will the legislation before this Subcommittee which only requires that royalties be paid on digital audio recorders and media and not analog recorders or media, have the desired reciprocal effect?

Answer 4(b): There is a two-fold answer to your question. First, if other countries adopt the U.S. model of grounding the legislation in the principle of national treatment rather than reciprocity, then it will go far in producing the desired effect of having U.S. record companies and performers sharing in overseas revenue pools. In our view, the U.S. has a leadership role to play in establishing the proposition that countries have an obligation to extend fair and even-handed treatment to copyright owners even

when legislating beyond the minimum requirements of our international obligations.

Second, this legislation will not, in and of itself, entitle U.S. creators to share in foreign revenue pools. The establishment of reciprocal relationships will require an act of the executive branches of the relevant governments. In this respect, this legislation provides the necessary tools for the U.S. Administration to aggressively pursue U.S. interests. The lack of an analog royalty will not, in our view, hamper these efforts.

Question 4(c): To what extent are American consumers being denied access to music by certain foreign artists or genre due to this issue?

Answer 4(c): The issues posed in this legislation have no impact on the access of American consumers to foreign music.

Question 4(d): To what extent are American consumers charged higher prices for music by certain foreign artists or genre due to this issue?

Answer 4(d): The issues posed in this legislation have no impact on the access of American consumers to foreign music.

Thank you again for your efforts.

Yours very truly,

Jason S. Berman, President
Recording Industry Association
of America, Inc.

March 30, 1992

The Honorable Cardiss Collins
United States House of Representatives
2264 Rayburn House Office Building
Washington, D.C. 20515

Dear Madam Chairman:

The Recording Industry Association of America, the © Copyright Coalition, and the Electronic Industries Association appreciate your interest in the Audio Home Recording Act and your efforts in introducing H.R. 4567. We offer you our enthusiastic support for the bill as it moves through Congress.

In our preliminary review of the bill, we have noted what appear to be some differences between it and S. 1623. We are in the process of examining these differences, and will contact you or your staff as soon as possible.

We thank you again for your interest and participation and look forward to working with you towards final passage of this very important legislation.

Very truly yours,

John V. Roach, Chairman & CEO
Tandy Corporation

Jason S. Berman, President
Recording Industry Association
of America

Gary J. Shapiro, Group Vice
Vice President
Electronic Industries Association

Edward P. Murphy, President
National Music Publisher's
of America

Home Recording Rights Coalition

March 27, 1992

The Honorable Cardiss Collins
Chairwoman
Subcommittee on Commerce, Consumer Protection
and Competitiveness
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairwoman Collins:

Thank you for your invitation of March 19, 1992, to testify before the Subcommittee on "Digital Audio Technology: Commerce and Consumer Protection Issues."

In addition to my role as Group Vice President of the Consumer Electronics Group of the Electronic Industries Association ("EIA"), I also serve as the Chairman of the Home Recording Rights Coalition ("HRRC"). HRRC is a coalition of consumer electronics and tape manufacturers, retailers, and consumer groups dedicated to preserving the rights of consumers to have and use new recorders privately and noncommercially. My responses to the questions posed in your letter will reflect the HRRC and consumer's point of view. I hope you will find these perspectives helpful to the Subcommittee.

1. A 1988 survey by the Office of Technology Assessment concerning audio home copying showed that consumers "strongly opposed changes in the system that would impose user fees or limit taping through technological fixes." In spite of consumer feelings, you are supporting legislation that requires both fees and limited taping through technological fixes. In view of consumer sentiments, why have you taken this position?

HRRC historically has strongly opposed the imposition of "user fees" on consumer audio taping. Before deciding to support the compromise embodied in the Audio Home Recording Act, HRRC members very carefully considered and debated its provisions and implications. The fact that HRRC now strongly supports this legislation underscores the reasons why the Act is a good compromise that will benefit consumer interests.

First, the bill will bring certainty to the contentious twenty year-old home audio taping debate. Consumers will have the unquestioned right to tape for private use. Home audio tapers will no longer fear that their rights will be divested by the courts, in private battles wherein consumers have no voice. The public will never again unfairly be branded by private interests or government officials as "pirates" or "infringers."

A coalition of consumers, retailers and manufacturers of audio and video recording products
1145 19th Street NW • P.O. Box 33576 • Washington DC 20033 • 800-282-TAPE

Second, the bill assures that undue technological restrictions will not interfere with consumer taping habits. Bills introduced in Congress during the mid-1980s would have mandated technical anti-copying systems to prevent home taping altogether -- the kinds of "technological fixes" described in your letter. The Serial Copy Management System ("SCMS") that would be required by the Act is not an anti-copying system. SCMS allows consumers to copy from original digital sources such as prerecorded compact discs, and only will prevent the making of digital copies from such copies. Surveys have shown that copying from original sources constitutes the overwhelming majority of home taping of copyrighted works. Copying from copies is an infrequent exception. Thus, we do not believe that consumers perceive SCMS as a significant constraint on consumer behavior. For that reason, HRRC also supported legislation in the last Congress that would have required implementation of SCMS in digital audio tape recorders.

Third, the amount of the royalty payments prescribed by the bill is reasonable. Prior legislative proposals would have imposed fees of $1.25 or more per tape, and more than $25 on recorders. Royalty payments under the Act will be only a few cents per tape and $1-8 per recorder.

Fourth, by removing the threat of litigation, the bill improves the environment for investment in and introduction of exciting new digital audio technologies. For the consumer, this translates into better sounding equipment that will appear for sale on store shelves, not as exhibits in a courtroom.

By eliminating the risk and expense of lawsuits, the consumer also will reap the benefit of lower prices. Consumers buy recorders, but they most often use them to play back prerecorded music they have purchased. When the music industry supports new technology with prerecorded discs or tapes, the increase in hardware sales results in reduced costs for the manufacturer, and more competitive prices to the consumer.

Fifth, the bill applies to the new digital recording technologies, which are now only beginning to come to market. The bill specifically does not affect analog recorders that most consumers own and are accustomed to using.

HRRC believes the Office of Technology Assessment ("OTA") survey and report on home audio taping is generally both accurate and up-to-date. Indeed, HRRC was an active participant on the advisory board and survey working group of that OTA report. However, the consumers surveyed by OTA were not presented with the important considerations that I have outlined above concerning the specific provisions and benefits of the Audio Home Recording Act.

Since last June, HRRC has discussed the terms of the compromise with consumers all across the United States. In addition to the feedback HRRC gets at the semiannual Consumer Electronics Shows in Chicago and Las Vegas, HRRC

regularly meets face-to-face with consumer interest groups and individuals. We have responded to consumer questions on radio call-in shows and in telephone calls to our "800" number. We have read the editorials in regional newspapers across America. We can report first-hand the broad base of public support for this compromise.

EIA members also are extremely concerned with the opinions of their customers. Their strong support further confirms my view that the Act embodies a compromise that consumers and business alike believe is fair and workable.

2. As you are aware, the legislation before this Subcommittee requires importers and manufacturers to make royalty payments on each digital audio recorder and digital audio medium that is disseminated to consumers. How much of a price increase can consumers expect per recorder and medium?

EIA is a trade association and, as such, is not privy to the pricing considerations of individual members. I therefore cannot offer a definitive answer as to whether a manufacturer may pass on to the consumer or absorb all or part of the royalty payment.

What I can state is my sincere belief that the amount of the royalty, even if passed on in full, will not be considered unreasonable by consumers. In reaching the compromise embodied in this legislation, it was the goal of EIA and HRRC to ensure that the amount of any payment would not impose a burden on consumers or manufacturers. We insisted that the royalty levels must not be adjustable, and that even the "cap" level must be locked in for at least five years, and not be increased thereafter except for specific reasons and based on a prescribed formula. These goals were achieved. As I observed in response to the previous question, the payment itself should be only a few cents on a blank tape and between $1 and $8 on a machine that may cost upwards of several hundred dollars. This is preferable to limited distribution of expensive recorders, or their being unavailable altogether.

3. Other than the access to the newest digital technology and the release of liability from home taping, how does the legislation before us benefit the consumer?

HRRC places its highest priorities on consumer access to new digital audio technologies, and to the consumer's immunity from suit based on allegations of copyright infringement. However, there are additional consumer benefits from this legislation.

As I observed in my answer to question 1, the Audio Home Recording Act allows the marketplace and not the courts to decide on new technologies. Consumer acceptance means production efficiencies and increased competition, resulting in lower prices. We have seen the pattern before: VCRs and CD

players entered the market at $1,000 or more; they now can be purchased for less than $200. I am optimistic that such price reductions may be repeated for digital audio recording equipment; I am confident that the chances for such reductions will be greatly improved by the passage of this legislation.

As I also stated in response to question 1, the bill assures that there will not be serious technological impediments to the consumer's right to record. SCMS guarantees the consumer's ability to make first-generation digital copies for personal use. Section 1021 of the bill assures that SCMS codes cannot be manipulated to prevent first-generation copying. Unlike some prior proposed technological systems, SCMS works reliably and does not interfere with the sonic quality of the consumer's home-made recordings. Moreover, the technical SCMS specifications may assist manufacturers in making their products compatible, such that signals from one type of product may be recordable on another type of product, and vice versa.

Finally, the Act will apply prospectively to successive generations of digital audio products. Legislation proposed over the last decade was product-specific, reacting to particular problems perceived by the various affected industries. With each new product came a new set of problems, and added delay, expense and uncertainty for the consumer. The Act covers more than just the next generation of digital audio recorders. It is a comprehensive bill that we believe will resolve these issues with finality.

Thank you for the opportunity to address these questions. I am looking forward to addressing these or any other questions from the Subcommittee on March 31.

Respectfully submitted,

Gary J. Shapiro
Group Vice President
Electronic Industries Association and
Chairman
Home Recording Rights Coalition

Tandy Corporation

Executive Offices: 1800 One Tandy Center Post Office Box 17180 Fort Worth, Texas 76102 Telephone (817)390-3700

March 27, 1992

The Honorable Cardiss Collins
Chairwoman
Subcommittee on Commerce, Consumer Protection
and Competitiveness
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairwoman Collins:

Thank you for your March 19, 1992, letter inviting me to testify at the Subcommittee hearing on "Digital Audio Technology: Commerce and Consumer Protection Issues." I am pleased to respond below to the questions set forth in your letter:

1. How much of a price increase can consumers expect per recorder and medium?

Under the Audio Home Recording Act, royalty payments will be made by the manufacturer, so no obligation or liability for these payments falls directly on the consumer. Manufacturers would pay two percent (2%) on their manufacturing cost, referred to as the "transfer price." The minimum payment per unit is $1.00, and there is a maximum or "cap" of $8.00, for units containing a single deck, and $12.00 for units containing more than one digital audio recorder.

The $8.00 "cap" would be reached only if a unit had a transfer price of $400 or more, which, according to usual practice, would indicate a suggested retail list price of about $800. So if the suggested list price were to come down to, say, $250, implying a transfer price of $125, the royalty would be 2% x $125 = $2.50.

For digital audio recording media, the payment is set at three percent (3%) of the transfer price. Assuming a "suggested retail" tape price similar to that for the highest quality consumer analog tapes, or approximately $6.00 per tape, the royalty would be about 3% x $3 (transfer price) = 9 cents.

Please forgive me if I am unable to talk about Tandy's specific pricing plans in what no doubt will be a very competitive market. The fact that this market, at least for our product, exists only in the future, however, is very pertinent. We cannot talk about how much the royalty will increase actual DCC prices because, today, DCC is not on the market. If DCC were to go to market under present conditions, with the threat of expensive and unpredictable

lawsuits and no software industry enthusiasm for supporting such a product, it is difficult to foresee reaching the sort of mass production prices that I have discussed hypothetically above. We would have a low volume, high cost product that is not a very good risk for either manufacturers or consumers.

Accordingly, as a business person my considered view is that the passage of this legislation will exert a very significant downward influence on pricing. At the margins, the manufacturer's royalty obligation will add to costs. Overall, however, by eliminating legal contingencies and attracting software support, this legislation will be the major positive influence in reducing consumer prices.

At Tandy we take pride in our close relationship with our customers. If our customers object to something, they vote with their checkbooks. I am very sensitive to their views. For years, I have strongly advocated against saddling the consumer with royalty payment obligations. If I thought that consumers would not accept our assuming these obligations in the nature and amount provided for in this bill, I would never have proposed or accepted any compromise. What Tandy has heard from our customers indicates widespread consumer support for the bill.

2. How many other nations require the incorporation of the Serial Copy Management System in digital audio recorders or interface devices?

The government of Japan has required since June 1990 that SCMS be incorporated into digital audio tape recorders and digital audio interface devices. I believe that other countries currently are moving toward adoption of SCMS through either national legislation or, in the case of the European Community, EC-wide directive. SCMS also has been implemented by consumer electronics manufacturers as a voluntary technical standard.

I am not aware of any non-professional digital audio technology currently offered for sale that does not already incorporate or accommodate SCMS.

3. How easy is it for an individual to avoid, bypass, remove, deactivate, or otherwise circumvent any program or circuit which implements the Serial Copy Management System in digital audio recorders and interface devices?

There are two aspects to this question, one relating to technology and the other to human nature. On a technical level, the average consumer will not be able to defeat SCMS. SCMS is a fairly complex system that was designed by highly skilled digital audio engineers. It has been implemented via circuitry located in several chips and circuit boards in the typical digital audio device. It is not a single chip that can be removed or bypassed, and it is not a switch or wire that can be changed. Of course, engineers who also are skilled in digital audio engineering and have adequate resources probably

could figure out ways to defeat or circumvent SCMS; I know of no "security system" that can boast otherwise.

But on the more basic human level, consumers have extraordinarily little incentive to beat a system that already gives them what they want. Under SCMS, consumers still will be able to make digital copies for personal use, as they have done for years on their analog recorders. The manufacturer's royalty obligation is at a reasonable level, so there is no real economic opportunity for consumers to save by circumventing SCMS. Moreover, the bill has strong deterrents and remedies against commercial enterprises that might consider marketing circumvention devices.

In short, consumers will be able to make copies for private, noncommercial use. Thus, they have very little incentive to spend the time and resources that trying to circumvent SCMS would require.

4. How easy is it to make prerecorded digital music that will affect the Serial Copy Management System in a way to prevent copying altogether? To what extent will individuals have an incentive to devise ways to prevent copying altogether?

Section 1021(c) of the bill addresses this precise concern. That section prohibits anyone from encoding source material so as to prevent all consumer copying. In addition, section 1031 imposes a heavy financial penalty for intentional misencoding, and permits courts to order improperly encoded recordings to be impounded and destroyed.

5. (a) Of the total number of manufacturers that make the items necessary to implement the Serial Copy Management System, how many are American companies and how many are foreign companies?

I do not know specifically how many manufacturers there are at present, or whether they are domestic or foreign. However, I see no obstacle to American businesses from manufacturing or otherwise obtaining the semiconductors or other circuitry to implement SCMS. The current SCMS standard described in the technical reference document that accompanies the Act is publicly available without payment of any royalties. All manufacturers with any potential proprietary interest in SCMS have pledged not to assert any such rights. Already, I have heard American semiconductor manufacturers express interest in obtaining the SCMS specifications so as to manufacture chips for their clients.

(b) To what extent will the items necessary to incorporate SCMS be available?

SCMS is a matter of circuit design, rather than of sourcing any particular component or material. The specifications and standards are open.

Any semiconductor manufacturer wishing to serve this market can incorporate SCMS.

(c) Will smaller American consumer electronics companies be able to easily obtain the necessary items to implement the Serial Copy Management System?

Any company able to buy semiconductors on the open market will be able to buy circuits containing SCMS. (Indeed, for these products, it will probably be more difficult to buy components that do not implement SCMS.)

(d) To what extent will American consumer electronics manufacturers have to re-engineer their digital audio recorders and interfaces to make room for the Serial Copy Management System?

I do not think that there will be any significant need to re-engineer existing products, and I am not aware of any existing products that would require SCMS that do not already have it. SCMS already has been implemented in existing digital audio products such as DAT recorders. Non-recording devices such as CD players already transmit the type of signals that would contain SCMS information, and would need no modification.

Moreover, the Act has been submitted for consideration before digital audio recording products have become generally available to consumers in diverse technologies and configurations. Passage of the bill will assure that the kinds of expense and market confusion foreseen in your question will never come to pass.

(e) Is there any danger that the items necessary to implement the Serial Copy Management System or the re-engineering of existing digital audio recorders and interface devices will be too expensive for smaller manufacturers?

I see nothing inherent in SCMS that would prove too expensive for smaller manufacturers of digital audio recorders and interface devices. As I noted in response to (d), little if any re-engineering effort or expense will be necessary, and the commodity products available from semiconductor manufacturers will be those in which SCMS has already been designed.

(f) To what extent might the requirements in the legislation before the Subcommittee put some American manufacturers out of this line of business?

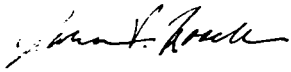
As I will emphasize in my testimony, I anticipate that exactly the opposite will occur. A window of opportunity has been opened for U.S.-based manufacturers that are competent in digital circuitry and consumer products. This bill is, in my opinion, a necessary precondition for our fully taking advantage of this opportunity.

This bill takes the legal uncertainty out of many exciting new digital technologies. Some of these technologies have yet to be invented. The legal climate for consumer digital audio recording products has been a major disincentive to any business investment in these technologies. Despite the promise of these new products in the marketplace, few companies would stake their financial health on a business that could be shut down at any moment by a court injunction or by unfavorable legislation.

By removing the legal impediments to the introduction of new digital audio technologies, the Audio Home Recording Act offers American businesses the opportunity to develop and market new and innovative products. I most sincerely would urge you to give this bill top priority, and to work for its early passage into law.

I look forward to discussing these and other aspects of the Audio Home Recording Act with you and the Subcommittee at the hearing on March 31, 1992.

Very truly yours,



John V. Roach
Chairman and
Chief Executive Officer
Tandy Corporation

UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

MAR 30 1992

Honorable Cardiss Collins
Chairwoman, Subcommittee on Commerce,
Consumer Protection, and Competitiveness
Committee on Energy and Commerce
House of Representatives
Washington, D.C. 20515

Dear Madam Chairwoman:

Thank you for your request to participate in your hearing on "Digital Audio Recording Technology: Commerce and Consumer Protection Issues" on Tuesday, March 31, 1992. I look forward to presenting the Administration's views at that hearing.

In your invitation, you also asked for answers to several questions. As noted in your letter, some of these questions lie outside of the competence of the Patent and Trademark Office and should be answered by other agencies in the Department. As my staff has discussed with your staff, we are responding to questions 2, 3, and 5. The National Institute of Standards and Technology will respond to questions 1, 4, and 7. Our answers to questions 2, 3, and 5 are enclosed with this letter.

Question 6 raises several sub-questions concerning the impact of this legislation on domestic manufacturers. To our knowledge, there are presently no domestic manufacturers of such digital audio recorders. While the Tandy Corporation has been working to develop and market a digital compact cassette recorder, John Roach, Chairman of the Board of Tandy, has stated that Tandy has been hesitant to manufacture and market such a product absent the certainty that this legislation will provide. Consequently, at this time, we are not able to assess what impact this legislation might have on American consumer electronics manufacturers.

I appreciate this opportunity to present our views on this important topic.

Sincerely,

Harry F. Manbeck, Jr.

Harry F. Manbeck, Jr.
Assistant Secretary and Commissioner
of Patents and Trademarks

Enclosure

2. As you are aware, the legislation before this Subcommittee requires importers and manufacturers to make royalty payments on each digital audio recorder and digital audio medium that is disseminated to consumers. How much of a price increase can consumers expect for each recorder and medium?

The legislation provides that the royalty rate of 2% for a digital audio recorder would be calculated on the "transfer" price, generally the wholesale price of the recorder. The legislation sets a minimum royalty of $1.00 on all digital audio recorders and places an $8.00 cap on the royalty for single drive recorders, and a cap of $12.00 for dual drive devices. The royalty rate for digital audio recording media is set at 3% of the transfer price without any minimum or maximum amount.

While we do not have ready access to the manufacturers' cost data, we can discuss how the royalty might be dealt with. In order to make an estimate, we contacted a local retailer who sells DAT recorders. We were advised that they sold only one model at a price of just under $600 and that it was a special order item. Wholesale prices were not available. However, if we assume that the wholesale cost of the recorder is approximately one half of the retail price, in this instance the royalty would be $6.00 (2% of $300). At the same vendor, tapes for a digital audio recorder sell for $10.97 for a 60 minute tape, $15.97 for a 90 minute tape, and $19.97 for a 120 minute tape. Thus, assuming the wholesale price is one-half of the retail price, the royalty would be $0.16 for a 60 minute tape, $0.24 for a 90 minute tape, and $0.30 for a 120 minute tape.

Whether any or all of this $6.00 royalty for the recorder or the various amounts for the tapes would be passed on to consumers is uncertain for a number of reasons. Pricing a product for marketing is a complex process in which the manufacturer must take into account all sorts of costs. These include such diverse items as potential product liability claims, environmental considerations, manufacturing costs and possible liability for infringement of intellectual property rights. For example, in earlier testimony in the Senate, John V. Roach, Chairman of the Tandy Corporation stated that potential litigation expenses had to be included in Tandy's marketing budget for digital audio recorders. If this legislation passes, the royalty will simply be one factor influencing prices. When digital audio recorders enter the market on a large scale, manufacturers will be trying to establish a market for what will be a fairly expensive item. In an attempt to keep prices down, some may choose to absorb this royalty. Also, the initial market price is likely to decrease over time if the experience with other media such as compact disk recorders is any guide. This means that in dollar terms per recorder, the amount of the royalty is likely to decrease over time.

3. How many other nations require the incorporation of the Serial Copy Management System in digital audio recorders or interface devices?

At present, Japan requires the inclusion of the Serial Copy Management System (SCMS) through administratively established standards for the manufacture of digital audio recorders.

The European Community (EC) has proposed the inclusion of a requirement mandating the use of SCMS as part of its directive on harmonizing royalty systems in the 12 EC Member States.

5. Several countries, including Austria, France, Finland, West Germany, Iceland, Portugal and Hungary, impose fees on recording media. West Germany and Iceland also impose a fee on recording equipment. It appears that since the U.S. does not have a similar royalty provision, Americans are not allowed to benefit from those royalty funds.

a) To what extent are Americans at a disadvantage since the U.S. currently does not have a royalty payment system for home copying?

The lack of a royalty system here in the United States and the allocation of royalties on the basis of reciprocity under the laws of our trading partners serves to deny U.S. nationals an appropriate share of the royalties collected abroad. The popularity of U.S. music in foreign markets guarantees that U.S. works are among those most frequently copied. Moreover, collecting royalties in regard to the copying of U.S. works means that more royalties are generated, yielding a windfall for those deemed eligible for distributions under foreign laws. In bilateral and multilateral discussions with our trading partners, U.S. negotiators have stressed the fundamental unfairness of the *status quo*.

The amounts collected under private copying levy systems in major foreign markets are significant. In 1988, collections of audio levies in France and Germany alone totalled $34 million. The advent of digital audio recording devices and the introduction of new technologies for "delivering" music to consumers, such as digital audio broadcast and cable pay-per-play services, promise to spur the sale of blank recording media and expand foreign royalty pools.

As discussed in the Administration statement, U.S. authors of musical works and their successors in interest currently receive a share of private copying royalties under the levy systems of Berne Convention member countries. U.S. recording industry interests do not.

"Musical works" (the music and its lyrics) are universally understood to be copyrightable subject matter under the Berne Convention. Legal regimes for the protection of "sound recordings" (separate works created by the fixation of a particular recorded rendition of a musical work or other sounds) vary among countries. While the United States and a number of other countries protect sound recordings under copyright law, most of the nations of Europe protect sound recording producers under so-called "neighboring rights" regimes.

For the U.S. recording industry, the difference between full copyright protection and neighboring rights protection is far more than semantic; it is economic. While the Berne Convention requires national treatment of the works of foreign authors, the international convention governing neighboring rights, called the Convention for the Protection of

Performers, Producers of Phonograms and Broadcasting Organizations (Rome Convention)--to which the United States does not belong--allows signatories to accord protection to foreign sound recording producers on the basis of reciprocity. Rome Convention signatories with private copying levy systems claim, therefore, to be justified in denying distributions to sound recording producers from the United States and other countries that do not have similar systems in place.

b) **It has been argued that developing a U.S. royalty fund to compensate for home copying will make it possible for Americans to benefit from royalty funds in other countries. Will the legislation before this Subcommittee which only requires that royalties be paid on digital audio recorders and media and not analog recorders or media have the desired reciprocal effect?**

Enactment of H.R. 3204/S. 1623 will ensure that all affected rights owners and beneficiaries will be compensated for the copying of their works on digital audio recording media and that foreign rights owners will be granted national treatment. The establishment of these principles within a U.S. private copying royalty system will greatly strengthen the Administration's ability to deal effectively with this issue in bilateral negotiations and to forge a constructive consensus on this issue in international fora.

It is true that the proposed legislation does not mirror the private copying royalty systems in Europe. H.R. 3204/S. 1623 are prospective in approach, focusing on private copying with digital audio recording technology. Nevertheless, we believe that, from the standpoint of our ability to shape an international consensus on proper treatment of private copying levies, the most salient feature of the legislation is not the type of equipment and media to which it will apply. In the Administration's view, it is far more important that the legislation protects all categories of rights owners and guarantees them national treatment.

c) **To what extent are American consumers being denied access to music by certain foreign artists or genre due to this issue?**

The Administration is not aware that American consumers are being denied access to the music of any particular artist or genre as a result of the absence of a private audio taping royalty system under U.S. law.

As a general matter, collections of private copying royalties, where they do exist, do not begin to approach revenues generated by the sale of prerecorded materials. We believe it is reasonable to assume that, owing to the size of the U.S. market, the opportunity to earn revenues on prerecorded products, and -- at least as to musical works -- to earn public performance royalties, provides ample incentive for foreign record companies and music publishers to make their works available in the United States.

d) **To what extent are American consumers charged higher prices for music by certain foreign artists or genre due to this issue?**

The Administration does not have, and is not aware of the existence of, figures concerning the impact of private copying on the wholesale or retail price of prerecorded music. We believe it reasonable to conclude, however, that just as the price of many goods purchased from retail outlets is adjusted to account for losses due to theft, the price charged for prerecorded music may, in some instances, reflect an adjustment for sales lost to home taping. We stress that this conclusion is not based on information provided by any company or group of companies.

NIST | UNITED STATES DEPARTMENT OF COMMERCE
National Institute of Standards and Technology
Gaithersburg, Maryland 20899
OFFICE OF THE DIRECTOR

March 31, 1992

Honorable Cardiss Collins
Chairwoman, Subcommittee on
Commerce, Consumer Protection,
and Competitiveness
Committee on Energy and Commerce
House of Representatives
Washington, DC 20515

Dear Madam Chairwoman:

Your recent letter requesting our appearance at the March 31, 1992, hearing on "Digital Audio Recording Technology: Commerce and Consumer Protection Issues" also requested the answer to seven questions. We have coordinated our response with the Patent and Trademark Office, agreeing that three of the questions, numbers 1, 4, and 7, are technical and so appropriate for the National Institute of Standards and Technology. The answers to those questions are enclosed. The remainder of the questions will be answered by the Patent and Trademark Office.

Sincerely,

John W. Lyons

Enclosure

Responses to questions posed by
the House Subcommittee on Commerce, Consumer Protection, and Competitiveness

1. The legislation before this committee requires all digital audio recorders and interface devices to implement the Serial Copy Management System to prohibit multi-generational copying. How easy is it to make prerecorded digital music that will affect the SCMS in a way to prevent copying altogether? To what extent will individuals have an incentive to devise ways to prevent copying altogether?

Using the Serial Copy Management System, the information to prevent multi-generational copying is not encoded in the audio portion of the digital signal. In an earlier approach to copy protection, certain types of music could falsely indicate that copyright protection existed where none did. Because of the fundamentally different mode of encoding, a similar situation does not exist in this case. If a recording engineer wanted to distribute tapes which permitted no copies to be made, rather than the specified single copy, it is likely that such a person would have the equipment available to implement that decision.

NIST has no information regarding incentives to prevent copying.

4. How easy is it for an individual to avoid, bypass, remove, deactivate, or otherwise circumvent any program or circuit which implements the Serial Copy Management System in digital audio recorders and interface devices?

The ease with which a copy prevention circuit could be defeated must be determined on a case-by-case basis. It is unreasonable to presume, given the ingenuity of electronic engineers, that a system would be implemented which could not be defeated, but the cost, effort, and expertise needed to defeat a particular implementation is likely to be determined largely by its individual design.

7. Does the technical reference document set forth standards and specifications that adequately incorporate the intended functional characteristics to regulate the serial copying and that are not incompatible with existing international digital audio interface standards and existing digital audio technology?

To our knowledge, the technical reference document incorporates the intended functional characteristics to regulate serial copying. We are not aware of any existing international digital audio interface standards or digital audio technology which are incompatible with the standards and specifications set forth in the technical reference document.



UNITED STATES
DEPARTMENT OF COMMERCE
NATIONAL INSTITUTE OF STANDARDS
AND TECHNOLOGY

U. S. Department of Commerce

Statement of John W. Lyons, Director

National Institute of Standards and Technology

Before the Subcommittee on Commerce, Consumer Protection,

and Competitiveness

House Committee on Energy and Commerce

March 31, 1992

Madame Chairwoman and Members of the Subcommittee, I thank you for the opportunity to provide comments on digital audio recording technology on behalf of the National Institute of Standards and Technology. The National Institute of Standards and Technology is part of the Technology Administration of the Department of Commerce. The Institute is the Government's lead laboratory for measurements and is charged with assisting industry in the rapid commercialization of advanced technology.

The National Institute of Standards and Technology first became involved in digital audio recording in 1987 at the request of responsible Congressional committees and with the financial support of both the Home Recording Rights Coalition and the Recording Industry Association of America, Inc. Then, technology was being developed to permit producers to encode recordings so that they could not be copied without paying appropriate royalties. By 1987, CBS Records had developed a specific copy protection scheme which it was offering to the industry. The Congressional committees asked NIST (at that time named the National Bureau of Standards) to determine if that particular approach worked, if it degraded the recorded material, and if it could easily be defeated. These questions were amenable to laboratory investigation. Staff from the National Institute of Standards and Technology performed the required measurements and reported the results. Following that report, the proposed copy protection scheme was abandoned.

The proposed Serial Copy Management System described in legislation before this Subcommittee differs from the earlier system studied by the National Institute of Standards and Technology in a number of important ways. For example:

1. The previous approach embedded the copy protection information in the audible portion of the signal. The current approach uses a non-audible portion of the signal.

2. In the earlier work, industry had developed a particular implementation of the copy protection requirements which the National Institute of Standards and Technology was asked to evaluate. The proposed legislation specifies performance characteristics, but not circuitry to be used to realize the specified performance.

3. The previous approach resulted from the development, by a single company, of a solution to a perceived problem. The current approach is based on international standards for communications among digital systems and, thus, is inherently consistent with a wide range of current practices.

Consequently, the National Institute of Standards and Technology plays a different role in the present deliberations than it did in the earlier situation. While earlier there was a specific embodiment for the National Institute of Standards and Technology to test, the current proposal could be realized by a wide range of circuits. Any particular approach to meeting the requirements of the Technical Reference Document can be tested for compliance; its cost of manufacture can be estimated; the ease with which the approach can be circumvented could be determined. Such an assessment depends critically on the details of the approach. A general evaluation is not possible at a meaningful level and NIST accord has not carried out any tests or lab investigations relating to the specifications identified in the technology reference document.

The proposed serial copy management scheme is related technically to an existing international standard for the digital audio interface. This international standard is a voluntary consensus standard, a type of standard which is shaped significantly by the affected industry segments. Industrial participation in the development of the standard is one of the mechanisms used to assure that the standard is compatible with industry practice and conventional technology. To assure that the standards keep pace with evolving technology, voluntary standards are typically reviewed, modified as necessary, and reissued. The proposed legislation requires the Secretary of Commerce to track these changes and to permit the commerce in devices which do not conform to all of the present specifications if the standards are evolving, the new devices conform to the new standards, and the new devices possess the same functional characteristics with respect to the regulation of serial copying as the Serial Copy Management System in the proposed legislation. In this way, the proposed legislation can be responsive to, rather than impede, the evolution of digital recording technology.

Thank you Madame Chairwoman. I will be pleased to answer any questions you have.

National Music Publishers' Association • Inc.
and The Harry Fox Agency, Inc.

EDWARD P. MURPHY, *President*
Chief Executive Officer

March 26, 1992

Hon. Cardiss Collins
U.S. House of Representatives
Subcommittee On Commerce, Consumer Protection and Competitiveness
Washington, D.C. 20515

Dear Chairwoman Collins:

Thank you for the opportunity to respond to the inquiries set forth in your letter to me dated March 19, 1992. I will address your questions in the order in which they were posed.

In regard to the international aspects of the audio home recording issue raised in question 1(a), I enclose a chart which lists those foreign nations which have enacted such laws, and which defines the scope of protection in each territory. Please note that Australia, Iceland and Finland have recently enacted home recording laws with reciprocity provisions, limiting participation in royalties to those creators and copyright owners whose own nations extend reciprocal protections to Australian, Icelandic and Finnish nationals, respectively.

There is great concern in the U.S. music community that these three reciprocal laws represent the genesis of a trend, especially in the European Community, to enact home recording legislation that discriminates against American music creators and copyright owners. Representatives of several EC nations with home recording laws already in place have expressed resentment recently over the export of millions of dollars in home recording royalties to the U.S., without receipt of reciprocal protections and payments.

Moreover, the EC and the World Intellectual Property Organization are currently studying the reciprocity issue as it relates to home recording legislation on a formal basis. Unless the United States enacts its own audio home recording legislation, subsequent adoption of reciprocal provisions by foreign nations could result in the annual loss of millions of dollars in royalty income for American creators and copyright owners. Naturally, the U.S. balance of payments deficit would expand as a result.

CABLE ADDRESS: HAFOX
TELEX: 237441 HAFOX UR
FAX: (212) 953-2471
• 205 EAST 42 STREET, NEW YORK, N.Y. 10017 • (212) 370-5330

How real is this "reciprocity" threat? The EC Commission recently studied the issue in connection with a proposal to extend the term of copyright protection in the EC to "life plus 70 years." The Commission concluded that the requirement of reciprocity would be a "positive incentive" for non-EC countries to increase their own levels of protection. The underlying view shared by many foreign officials is that the United States - by far the world's leading exporter of intellectual property - stands to benefit most from the adoption of increased copyright protections. Why should rights be granted as to the works of American creators by other countries, the argument goes, when the U.S. itself declines to grant such rights?

By enacting the Audio Home Recording Act, the U.S. will reassume its position in the forefront of the international copyright community. Since the passage by Congress of the Berne Copyright Convention Implementation Act of 1988, other nations have looked to the U.S. for leadership on copyright matters including the audio home recording issue. The enactment of a U.S. audio home recording law will send a strong, positive signal that countries which have not yet passed home recording bills should do so. It will also ensure that those nations which currently remit home recording royalties to U.S. creators and copyright owners will continue to do so. The laying to rest of the "reciprocity" issue in the home recording context will be of great benefit to American creators and copyright owners.

Question 1(b) poses the inquiry as to whether enactment of a "digital-only" audio home recording law in the United States will satisfy the reciprocity provisions of foreign home recording laws. While each foreign nation would make its own determination on this issue, I would fully expect the Audio Home Recording Act to satisfy these foreign reciprocity requirements. For a foreign nation to adopt the position that "reciprocal" means "identical" would be so extreme as to invite retaliation in the form of U.S. trade sanctions.

As regards questions 1(c) and 1(d), we are not aware of any data or analysis that addresses whether American consumers are denied access to, or are being charged higher prices for, foreign music as a consequence of this country's failure to establish a royalty mechanism to compensate music creators and copyright owners for home recording of copyrighted music.

These questions, however, touch on the broader issue of "specialty" music, i.e. categories of music that do not appeal to a broad consumer market in this country (jazz, blues, gospel, reggae, classical, religious, foreign and "world" music, to name a few).

In our view, the home recording problem is of particular concern to the songwriters, music publishers, performers, and record companies that apply their efforts and resources in specialty areas. Profit margins in these specialty areas are often thin or nonexistent,

and profits from "mainstream" offerings typically subsidize the specialty areas. If digital home recording significantly impairs sales of "mainstream" music, the economic viability of specialty music will be drawn into serious question.

With the enactment of the Audio Home Recording Act, the music industry will be better able to provide the consumer with the same wide variety of musical offerings available today. Without adequate copyright protections, however, specialty categories of music may all but disappear from the marketplace to the great detriment of American consumers and American culture.

With respect to question 2, in the decade long battle between the music industry and the consumer electronics industry over home recording, the available data have been interpreted to support each side's conflicting position. The prospect of digital audio recording, whereby perfect, multi-generational home copying is made possible, has significantly intensified the debate. There are a number of studies and reports (both from the U.S. government and from the music industry) that, in the view of the music industry, support the proposition that digital audio recording technology will lead to far greater home recording and, as a result, greater displacement of phonorecord sales.

Unwavering support of H.R. 3204 by the music and electronics industries stems from the recognition by these industries that it is more constructive to address the issue in a way that is fair to all parties, including the American consumer, than it would be to continue this long debate over the economic effects of home taping and the extent to which home taping constitutes copyright infringement.

Experience teaches that, when conditions permit the music industry and consumer electronics industry to work together, the consumer is the ultimate beneficiary. In the 1980's, compact discs became a very popular form of phonorecord, virtually eliminating the vinyl record. CD technology was a boon to the electronics industry and the music industry alike. The consumer was the biggest winner, as the new technology brought into millions of homes a new level of sound quality at a reasonable price.

When Sony introduced digital audio tape recorders in this country, the result was very different. Individual record companies and music publishers declined to support digital recording technologies for fear of furthering an advance of technologies without appropriate intellectual property safeguards, which they believed threatened their livelihood. In the absence of pre-recorded music, consumer electronics manufacturers understandably chose to limit the sale of digital recording products in the United States -- although they are readily available overseas.

The industries and the American consumer were all losers in this process.

In sum, H.R. 3204 sets forth very constructive terms for the resolution of this decade-long controversy. Enactment of the bill would set the stage for a new generation of consumer electronics and music products at a reasonable cost. It would ensure that the American public will continue to enjoy the highest quality music entertainment available. For that reason, the bill has the enthusiastic support of the music and electronics industries, as well as consumer groups.

Thank you in advance for holding a hearing on this important legislation. I look forward to testifying before the Subcommittee next week. If you have any further questions in advance of the hearing, please feel free to call me.

Sincerely,

Edward P. Murphy

FOREIGN HOME TAPING ROYALTY LAWS
AS OF MARCH 1992

Country	Blank Audio Tape Royalty	Blank Video Tape Royalty	Audio Hardware Royalty	Video Hardware Royalty	Reciprocal Only
AUSTRALIA	X	X			X
AUSTRIA	X	X			
CONGO	X	X			
GERMANY	X	X	X	X	
FINLAND	X	X			X
FRANCE	X	X			
HUNGARY	X	X			
ICELAND	X	X	X	X	X
ITALY	X	X	X		Undecided
NETHERLANDS	X	X			
NORWAY**	X	X	X	X	
PORTUGAL*	X	X	X	X	
SPAIN	X	X	X	X	
SWEDEN**	X	X			
TURKEY	X	X			
ZAIRE	X	X			

* levy provided for in copyright law, but pending decree
** includes levy on pre-recorded video tapes

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