

GAO

Congressional Record,  
101st Congress,  
Extension of Remarks

<b>Bill</b> H.R. 4096	<b>Date</b> Feb 22, 1990 (14)	<b>Page(s)</b> E348-51
-----------------------	-------------------------------	------------------------

**Remarks:** INTRODUCED BY MR. WAXMAN AND MR. SWIFT

**DIGITAL AUDIO TAPE  
RECORDER ACT OF 1990**

**HON. HENRY A. WAXMAN**

OF CALIFORNIA

IN THE HOUSE OF REPRESENTATIVES

*Thursday, February 22, 1990*

Mr. WAXMAN. Mr. Speaker, I am pleased to join my colleagues Messrs. SWIFT, COOPER, BOUCHER, OXLEY, FIELDS, RITTER, BRUCE, BARTON, and TAUKE on the Energy and Commerce Committee in introducing the Digital Audio Tape Recorder Act of 1990.

Digital audio tape [DAT], like compact discs, was developed with the state-of-the-art digital technology that has revolutionized the quality of music recordings available to consumers. While compact discs only allow prerecorded music to be played back, DAT goes one step further and allows it also to be recorded. And, unlike copies on analog tape, DAT copies, whether they are the first or thousandth generation, have the same master copy quality as the original recording.

This recording technology, which was developed a number of years ago in Japan and is just now being introduced to the United States market, has reignited the debate on copyright protections for creators and owners of music. Neither Congress nor the courts have addressed this issue. But as taping has increased, the men and women who write music have effectively lost their ability to protect their creative works. This is wrong. Congress must pass legislation that protects copyrighted material and properly compensates writers and artists when it is taped.

To understand the threat DAT poses to copyright holders, we need only look at the impact current recording technology has had on the music industry. Since cassette recorders were introduced more than 10 years ago, blank tape sales have grown by 345 percent. The recording industry estimates losses of approximately \$1.5 billion annually in lost sales.

In 1987 I introduced H.R. 1384, the Digital Audio Recorder Act, to address the threat to copyright holders of the imminent entry of DAT machines into the United States. H.R. 1384 would have required all DAT machines sold in the United States, for one year after the bill's enactment, to contain a copy-code scanner system to prevent copies of prerecorded music from being made. This bill would have given Congress time to consider the best way to balance the benefits of home taping with the rights of copyright holders. Key provisions of H.R. 1384 were included in the omnibus trade bill but were removed for procedural reasons before it was considered by the full House.

After H.R. 1384 failed to pass, many Members of Congress encouraged the consumer electronics and recording industries to work to resolve their differences on copyright issues. Representatives of these industries worked together for almost 2 years to find a common legislative solution to copyright problems.

The negotiators could not agree on much. They did not agree, for instance, on whether consumers have a right to tape prerecorded music. Nor could they agree on whether a royalty system should be created to compensate copyright holders when their works are taped. They did, however, reach agreement on one major issue; The problem of serial copying, that is, copying from copies on DAT recorders. They also made joint recommendations to world governments on the format for DAT. The Digital Audio Tape Recorder Act, which my colleagues and I are introducing today, embodies this landmark compromise.

The Digital Audio Tape Recorder Act would require all DAT recorders to contain a serial copy management system [SCMS]. This technology would not prevent a DAT recorder from making first-generation digital-to-digital copies of original prerecorded music, but it would prevent serial copying. Home taping on conventional analog tape recorders would not be subject to this legislation.

Some members of the creative community have expressed concern that the enactment of the DAT agreement could implicitly establish a legal right to first-generation home taping. To allay these concerns, this legislation explicitly states that no new taping rights are created, and that this bill will have no effect on existing copyright laws as they pertain to home taping.

I have been a longstanding supporter of a royalty system as the fairest and most efficient way to compensate creators and owners of music for their copyrighted work. I know that many in the creative community are deeply disappointed that this bill contains no such system. I share that disappointment and wish a compromise were in hand. Unfortunately, it is not.

It may be that Congress will be ready to enact a royalty system in the near future. I certainly will do all I can to make that a reality. But in the interim, I believe this bill provides real and important protection to copyright holders. It is not a comprehensive solution, but it does guarantee that the creative community will be protected against unauthorized serial DAT copies of their copyrighted musical works.

The Digital Audio Tape Recorder Act represents the first time, after many years of debate, that the recording and consumer electronics industries have found some common ground on intellectual property rights. It also demonstrates that the protection of intellectual property can be possible without impeding the development of new recording technologies. I urge my colleagues to join me in cosponsoring this important legislation.

Printed below is a section-by-section description of the Digital Audio Tape Recorder Act.

**SECTION-BY-SECTION DESCRIPTION OF THE  
DIGITAL AUDIO TAPE RECORDER ACT OF 1990**

Section 1 sets forth the title of the bill.

Section 2 sets forth certain findings that help put the legislation in perspective. Most of the findings describe the development of the serial copy management system (SCMS) for digital audio tape (DAT) recorders and how this system works. Other findings indicate that—

Enactment of the legislation will fulfill the constitutional power of Congress to promote the progress of science and the useful arts by encouraging the development of new

technologically advanced products while providing protection for creators of copyrighted works;

Congress expects representatives of the consumer electronics and music industries to discuss copyright issues resulting from new technologies, including recordable and erasable compact disc players, to study possible approaches, and to make legislative recommendations for applying SCMS or another system with greater copying restrictions than SCMS to these new technologies; and

Enactment of the legislation will not address or affect the legality of private home copying under copyright law and will not prejudice consideration of whether or not royalties should be levied for private home copying of copyrighted music.

As a group, the findings provide background helpful for interpreting the SCMS standards and specifications mandated for DAT recorders and help put congressional consideration of the legislation into context.

Under SCMS, the circuitry which controls the functions of a DAT recorder will be programmed to read certain coding information accompanying the source material and, based on the particular combination of codes it reads, will not prevent unrestricted copying, will not prevent copying but label the copy with a code to restrict further digital-to-digital copying, or disallow such copying. Under this system, a DAT recorder will not prevent the making of first-generation digital-to-digital copies of original prerecorded music and other material from compact discs, prerecorded DAT cassettes, digital broadcasts, and other digital sources entering through a digital input, but will prevent the making of second-generation digital-to-digital copies of the copies. In recognition of the fact that a DAT recorder is presently unable to determine whether original prerecorded music or other material entering through an analog input has been coded for copyright protection, a DAT recorder will not prevent the making of a first-generation and a second-generation digital-to-digital copy of the source material, but will prevent the making of a third-generation digital-to-digital copy of the second-generation copy. In the event that technological developments permit the circuitry of a DAT recorder to identify copyrighted material entering through an analog input, equivalent limitations on digital copies of copies should apply, but there will be no limitation on serial digital copying of analog material not coded for copyright protection.

Home taping on conventional analog tape recorders will not be subject to SCMS. Thus, home taping on analog tape recorders will remain unaffected by this legislation.

Section 3 governs the manufacture and distribution of DAT recorders and phonorecords. Subsection (a)(1) provides that no person may manufacture or distribute a DAT recorder or digital audio interface device that does not conform to the standards and specifications to implement SCMS set forth in the technical reference document or established under an order by the Secretary of Commerce. (For purposes of this section, "manufacture or distribute" is defined broadly in subsection (f) to mean to manufacture, assemble, sell, resell, lease, or distribute in commerce, or to offer to do any of these in commerce.)

Subsection (a)(2) provides that, if the Secretary of Commerce approves standards and specifications under section 4(b)(3) to implement SCMS for source material in the analog format, then no person may manufacture or distribute a DAT recorder or digital audio interface device that fails to conform to such standards and specifications. At present, a DAT recorder is unable to de-

termine whether original prerecorded music or other material entering through an analog input has been coded for copyright protection. Industry representatives are at work, studying the technical feasibility of implementing a system that would carry the copyright code in the analog, as well as the digital, format. If they develop a technical solution and if the Secretary then makes the required determination, future models of DAT recorders will have to implement the new technology before they may be sold in the United States.

Subsection (b) proscribes circumvention of SCMS. It provides that no person may manufacture or distribute a device, or offer to perform a service, the primary purpose or effect of which is to avoid, bypass, remove, deactivate, or otherwise circumvent any program or circuit that implements, in whole or in part, SCMS in DAT recorders. Thus, the legislation is aimed at the sale of so-called "black boxes" and computer programs that will defeat the system, as well as at persons operating a service to circumvent the system.

Subsection (c) exempts professional model DAT recorders from the coverage of the legislation. This subsection contains a number of criteria for determining whether a particular device qualifies as a professional model. The intent is threefold: to ensure that recording professionals, such as musicians, recording studio engineers, broadcasters, and cable operators, may purchase DAT recorders that are not limited in their recording ability; to provide manufacturers with guidance for designing and marketing models for use by recording professionals; and to ensure that this exception does not become a loophole by which the unscrupulous seek to market "professional" models to consumers through traditional consumer outlets.

Subsection (d) provides that no person may encode a phonorecord of a sound recording with inaccurate information relating to the category code, copyright status, or generation status of the source material so as to improperly affect the operation of SCMS. This provision, however, does not require any person to encode a phonorecord so as to claim copyright protection. That remains a decision for each copyright holder to make.

Subsection (e) provides that a person who transmits or otherwise communicates to the public in digital form the copyright status of a sound recording must do so accurately. This provision does not require broadcasters or cable operators to transmit sound recordings in a particular digital format or to otherwise transmit information about the category code, copyright status, or generation status of a sound recording. Rather, it only requires that information about the copyright status of a sound recording be accurate if it is transmitted or otherwise communicated.

Section 4 sets forth the mechanisms for implementing SCMS in DAT recorders and digital audio interface devices. Subsection (a) provides that within 10 days following enactment of the legislation, the Register of Copyrights must publish the technical reference document in the Federal Register. The proposed text of this document is attached to this section-by-section description. It is a technical reference document that adopts certain of the standards proposed to the International Electrotechnical Commission (IEC) in "IEC 958: Digital Audio Interface" and "IEC XXX Part 6: Serial copy management system for consumer audio use DAT recorders." Irrespective of how the proposals are treated by the IEC, the standards and specifications set forth in the technical reference document are intended to be

determinative for purposes of defining the technical requirements of this legislation.

The technical reference document establishes two sets of standards and specifications. The first set governs the composition and specifications. The first set governs the composition of digital audio signals being sent to and received by a DAT recorder, known as the "Digital Audio Interface Standard." The second set governs the recording functions of consumer model DAT recorders, to be known as the "Serial Copy Management System Standard" or the "SCMS Standard."

Subsection (b) contains three "safety valve" mechanisms, all triggered upon petition of an interested party, to implement SCMS differently than provided for in the technical reference document. Upon receipt of a petition and before issuing an order under this provision, the Secretary of Commerce must consult with the Register of Copyrights. The first mechanism provides the Secretary with the authority to issue an order permitting in commerce DAT recorders that possess the functional characteristics of SCMS and are compatible with SCMS as prescribed under the technical reference document, but which do not meet all of the standards and specifications set forth in the technical reference document. The intent is to have a mechanism by which the Secretary can remedy any technical problems that develop in implementing SCMS using the technical reference document and to permit other technologies which may be developed which implement SCMS in some other way. The second provision gives the Secretary the authority to issue an order permitting in commerce DAT recorders that meet a new set of standards and specifications to implement SCMS, in the event that the overall standards for DAT recorders or digital audio interface devices are no longer applicable and are revised in the future. The third provision provides the Secretary with the authority to approve standards and specifications for applying SCMS to source material in the analog format in an equivalent manner as source material in the digital format.

Section 5 establishes remedies for violations of the legislation. Subsection (a) provides that an aggrieved person or the Attorney General may bring a civil action to redress a violation of section 3. Subsection (b) provides the court with authority to grant injunctions, award damages, direct the recovery of costs, and grant such other equitable relief as it may deem reasonable.

Subsection (c) sets forth mechanisms for calculating damages, subject to a limit of \$1 million per judgment as established under paragraph (1). An aggrieved person has the option of recovering actual damages or statutory damages, subject to this limit. Paragraph (2) provides the court with the authority to make an additional award of damages, up to a maximum of an additional \$5 million, if it determines that a violation of section 3 was committed willfully and for purposes of direct or indirect commercial advantage or private financial gain. Paragraph (3) gives the court the discretion to lower the damage award to \$250 if it finds that the violator was not aware and had no reason to believe that his or her acts constituted a violation of section 3.

Subsection (d) provides the court with authority to impound devices that the court has reasonable cause to believe do not comply with section 3.

Subsection (e) limits the authority of a court to issue a temporary or preliminary injunction against the distribution of DAT recorders labeled as professional models. The court only may do so if it finds that the

labeling and distribution of the devices by a manufacturer were without a reasonable basis or not in good faith. The intent is to permit a manufacturer to continue to distribute devices in commerce pending resolution of the case, unless it is clear that it could not reasonably or in good faith have labeled and distributed a device as a professional model.

Subsection (f) permits the court to order the remedial modification of any device or phonorecord that does not comply with section 3. The court also is given authority to order destruction of any device or phonorecord that does not comply with section 3.

Section 6 defines terms used in the legislation. Of these definitions, the most important one defines a DAT recorder. The intent is to limit the applicability of this legislation only to devices that are intended or marketed to consumers for the primary purpose of making a sound recording in a digital format on magnetic tape. The "primary purpose" test is intended to ensure that only those products expected to be used principally for making audio recordings contain the circuitry or program to implement SCMS. In addition, by stating that the legislation covers devices included with or as part of some other device, the bill is intended to cover devices like "boom boxes" and to ensure that the requirements of the legislation may not be avoided merely by incorporating a DAT recorder into another device.

The bill defines a digital audio interface device as any machine or device, whether or not developed as of the date of the enactment of the Act, and whether or not included with or as part of some other device, that supplies a digital audio signal through a "non-professional interface" as that term is used in the Digital Audio Interface Standard in Part I of the technical reference document or in an order of the Secretary of Commerce pursuant to section 4(b)(1) or (2).

For drafting simplicity, the bill refers to the "technical reference document," the document appearing in the Congressional Record that sets forth the standards and specifications for implementing SCMS in DAT recorders and digital audio interface devices.

Finally, this section states that all other terms in the bill will have the same meanings as those set forth in the Copyright Act of 1976, as amended. Such terms as "phonorecord" and "sound recording" appear throughout the bill. These and other terms have developed particular meanings through statutory amendments to the law and through judicial precedent. This provision preserves the interpretations developed under the Copyright Act.

Section 7 provides that the legislation is not intended to affect any right or remedy, or any limitation on any such right or remedy, held by or available to any person under the Copyright Act of 1976, as amended. Section 7 also provides that nothing in the legislation creates or affords any greater or lesser rights with respect to private home copying of a copyrighted work than any rights afforded under the Copyright Act.

Section 8 amends the Copyright Act to include the language set forth in section 7 in statutory form.

Finally, section 9 of the bill establishes the date of enactment as the effective date for the legislation, but specifies that the requirements for implementing SCMS do not apply to devices or phonorecords manufactured or assembled prior to that date. Thus, all devices and phonorecords currently in the hands of consumers or in the chain of distribution prior to enactment of the legislation will not be subject to it.

## DIGITAL AUDIO TAPE RECORDER ACT OF 1990

HON. AL SWIFT

OF WASHINGTON

IN THE HOUSE OF REPRESENTATIVES

Thursday, February 22, 1990

Mr. SWIFT. Mr. Speaker, I take great pleasure in joining my friend and colleague Mr. WAXMAN and our House colleagues in introducing the Digital Audio Tape Recorder Act of 1990. He and I came to this proposal from different directions, but we agree that it is both necessary and important.

Two years ago we were on different sides of a knock-down, drag-out legislative battle. Ultimately, we did not legislate on DAT in the 100th Congress. However, as a result of our activity, several House Members, including my friend, the gentleman from Wisconsin [Mr. KASTENMEIER], suggested to the recording and consumer electronics industries that perhaps the best legislative approach to DAT might be arrived at through negotiation between these two industries. We were not the only ones. In the other body and, indeed, around the world, leaders of government and industry made the same request: Won't you please work something out on DAT?

I am pleased to be able to join my colleagues in introducing a bill based on the compromise that these industries reached. The heart of this compromise is agreement that a circuit called the Serial Copy Management System, or SCMS, should be legally required to be built into every DAT manufactured after the effective date of the legislation. Very simply, the SCMS would not interfere with the ability of DAT's to make pure digital copies of albums, but would not allow these copies to be themselves copied digitally. This provides protection from chain-letter type duplication of the recording industry's very valuable digital master tapes, but, in my view does not materially interfere with the legitimate needs of consumers. I say this as an avid home taper myself.

I very much hope we can pass this legislation this year. While the technology is a bit complicated, I think expert testimony will show that for engineers it is fairly straightforward and quite feasible. I think there has been regulatory uncertainty about DAT long enough. Consumers are entitled to the newest technology while it is still new.

Some who applauded my stand 2 years ago have wondered why I should support any legislation now. After all, they point out, the restrictive legislation of 2 years ago never passed. Why regulate a product that I believe is already legal?

First, even if DAT's with SCMS built in may soon be available for purchase, the only sound course is to support this bill. What this product needs is confidence and stability. The only agreement between these industries was to recommend measures to governments. If the compromise is never officially adopted, there is nothing to prevent either its lawful circumvention by those who would sell machines without SCMS protection, or the ultimate adoption of measures inconsistent with SCMS. Moreover, consumers might be hesitant to invest in a format that remains controversial.

Second, we should recognize that while this bill is very narrowly drawn so as to regulate DAT only, its significance extends well beyond

its scope. For years, we in Congress have held hearings and commissioned studies about the march of technology and our inability to keep the law abreast of it. In this instance we asked the industries that developed the technology to work out a reasonable compromise on some very difficult issues, and they actually have done so. They did it in a commendably specific way: This bill does not change the copyright law as it pertains to any product, including DAT; nor does it theoretically or specifically impinge on other advanced technologies. In other words, this bill represents a noble yet safe experiment. Those who care about applying the law to advanced technologies have every reason to wish it to succeed.

I look forward to working with my colleagues to have this legislation expeditiously enacted into law.