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LEAD ARTICLES

SONY, NAPSTER, AND AIMSTER: AN ANALYSIS OF DISSIMILAR APPLICATION OF THE COPYRIGHT LAW TO SIMILAR TECHNOLOGIES

Jeffrey R. Armstrong

INTRODUCTION

In 1984, in the landmark case of Sony Corp of America v. Universal City Studios, Inc.,\(^1\) the U.S. Supreme Court determined that a manufacturer of a videocassette recorder machine ("VCR") could not be held responsible for the copyright infringement of users of the VCR as a "contributory infringer." The particular technological advance that was the subject of Sony was the development of a machine that allowed consumers to create a permanent and exact copy of a copyrightable video work.

In 2001, in A & M Records, Inc. v. Napster, Inc.;\(^2\) the Ninth Circuit determined that the owner of an internet website, which facilitated the sharing, between consumers, of MP3 digital files, which are permanent and exact copies of copyrightable audio works, could be held responsible for copyright infringement as a

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"contributory infringer." In 2002, in the case of *In re Aimster*, the court, confronting a software-based system that was similar in basic function to the system addressed in *Napster*, also held the system owner liable as a "contributory infringer."

Clearly, some explanation is necessary to ascertain why it is that these courts, all addressing seemingly similar technologies, would come to exactly opposite results. This paper intends to address this quandary. Part I of the paper will offer a brief history of the U.S. Copyright Act with regard to the right to copy and distribute copyrighted material, and will also examine in detail the U.S. Supreme Court decision in *Sony*. Part II of the paper will examine the legal reasoning of the courts in the *Napster* and *Aimster* decisions, and will also examine the technology which was under review in the two cases, in order to determine what, if any, factual and/or legal distinctions between these cases can be drawn. Part III will examine the effect of this precedent on other emergent forms of file copying and distribution products and systems and offer alternative theories for the determination of contributory copyright infringement for the manufacturers and suppliers of these new technologies.

I. THE SONY DECISION AND ITS HISTORY

It has been dryly observed by at least one commentator that, since its inception, American copyright law has shown what has seemed to be outright hostility toward new technologies that could be viewed as a challenge to a content owner's ability to enforce his or her copyright. But in true capitalistic spirit, copyright law has always seemed to adjust to the new use - and often has created in the process a new and lucrative source of revenue for the very copyright holders who had been so opposed to the new technology. Examples of legally resolved controversies

5. Id. at 1763.
concerning such new technology which in fact have opened new opportunities for copyright content owners include early court contests involving piano rolls,\(^6\) the phonograph,\(^7\) and cable television.\(^8\) So it should have come as no surprise when controversy erupted over the development of the VCR in the early 1970's.

This dispute came at an interesting time in the development of copyright law, as the U.S. Congress had in 1976 just passed a comprehensive overhaul of the thoroughly antiquated 1909 law. One of the most noteworthy aspects of the 1976 revision was the statutory codification of the “fair use” defense.\(^9\) Section 107 of the new statute provides as follows:

“Notwithstanding the provisions of Section 106 and 106A, the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include -

- the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- the nature of the copyrighted work;

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6. White-Smith Music Publishing Co. v. Apollo Co., 209 U.S. 1 (1908), (holding the creation of piano rolls based from copyrighted musical compositions, without more, did not violate the Copyright Law).

7. Stern v. Rosey, 17 App.D.C. 562 (1901), (holding that no actionable infringement occurred because the newly developed wax cylinders at issue were no different than the “metal cylinder of the old and familiar music box” which “had never been regarded as infringing upon the copyright of authors and publishers”).

8. Fortnightly Corp. v. United Artist Television, Inc., 392 U.S. 390 (1968), (holding the transmission of copyrighted broadcast television material was not infringement because no “performance”, as required under the U.S. Copyright Act, occurred. Note, however, that this case has been statutorily abrogated by the Copyright Revision Act of 1976, 90 Stat. 2541).

the amount and substantiality of the portion used in relation to
the copyrighted work as a whole; and
the effect of the use upon the potential market for or value of the
copyrighted work.”
Interestingly, even though VCR technology was in common use
by the time of the 1976 codification of the fair use defense, review
of the statute reveals that Congress did not explicitly address the
emerging VCR technology within the statutory definition of fair
use. In fact, it appears that Congress had chosen to ignore the
budding VCR controversy.10 It was therefore left to the courts to
determine whether and to what extent fair use applied to VCR
copying of copyrighted material.

A. The Sony Decision

The case of Sony Corp. of America v. Universal City Studios11
centred a claim by representatives of the film industry against a
manufacturer of the VCR, which was based on theories of
contributory and vicarious copyright infringement. Universal
alleged that defendant Sony was liable for the direct copyright
infringement of those customers by its manufacture and sale of
VCR machines to consumers which provided those consumers
with the ability to duplicate copyright material, thereby allegedly
infringing the content owner’s copyright. The U.S. Supreme Court
held in favor of Sony. First, in a factual holding that would have
great significance in later years, the Court determined that the
“principal” use of the VCR by customers was the “time-shifting”
of copyrighted television broadcasts (i.e. a taping of a program by
the consumer with the VCR so that the consumer could watch the
broadcast at a different time).12 The Supreme Court noted that the
lower court had found as a factual matter that there was a
significant likelihood that copyright holders would not object to
having their broadcast “time shifted” by consumers.13 The Court

10. See Sony, 464 U.S. at 431.
12. Id. at 421.
13. Id. at 443-445.
then determined that it was unlikely that such time shifting would cause harm to the market for, or value of, the copyrighted work. Therefore, according to the Court, the VCR's were capable of a "substantial non-infringing use", which qualified for fair use protection. This fair use by consumers, held the Court, had the consequence of shielding Sony from liability against contributory or vicarious copyright infringement because the consumer using the VCR was principally using it for a legal use (i.e. time shifting) and as a result Sony should not be held contributorily liable, even if a consumer went beyond fair use and actually used the VCR to directly infringe a copyright owner's right.

In order to arrive at this holding of substantial non-infringing use, the Court decided to borrow and apply to this copyright law case an arcane patent law doctrine known as the "staple article of commerce" theory. The doctrine had previously been used to insulate the manufacturers of products, which might be used by customers to infringe another's patent rights, from liability so long as the product was a "staple article or commodity of commerce suitable for substantial non-infringing use." The Court held that application of this patent doctrine to a copyright case was appropriate because in both patent and copyright law the contributory infringement doctrine was grounded on the recognition that adequate protection of a monopoly may require the courts to look beyond actual duplication of a device or publication to the product or activities that made such duplication possible. The staple article of commerce doctrine, the Court held, struck an appropriate balance between a copyright holder’s legitimate demand for effective protection of the statutory monopoly and the right of others to freely engage in substantially

14. Id. at 453-455.
15. 464 U.S. at 456.
16. Id. at 436-442.
18. 464 US at 441. See also, Dogan, supra note 17 at 944.
19. Id. at 442.
unrelated areas of commerce.\textsuperscript{20}

As will be seen, the adoption of the staple article of commerce doctrine as a method to define liability in Sony has created significant repercussions as the judicial treatment of copying technology, and the technology itself, began to evolve.

II. THE NAPSTER AND AIMSTER DECISIONS

In order to adequately explain Napster, this paper first must define two technologies. The first technology is referred to as MPEG Audio Layer III ("MP3") file compression; the second is "Peer to Peer" ("P2P") file sharing.

A. MP3 File Compression

MP3 is the shortened name for MPEG-1 Layer III, which is an audio subset of the MPEG industry standard for the compression of certain digital computer files.\textsuperscript{21} The use of this compression technology has greatly simplified the copying and distribution of digital music files. Specifically, each commercial CD sold contains songs in a digital format known as a .WAV file; because the MP3 compression technology compresses these large (typically 40 to 100 MB) .WAV sound files at a 12:1 ratio, it thereby creates much smaller files that can be transferred from computer to computer, either directly or through downloading via the Internet, quickly and inexpensively. Moreover, the sound quality of these MP3 files can often be of a very high caliber and nearly indistinguishable from the original.\textsuperscript{22}

B. P2P File Sharing

Peer to Peer file sharing (sometimes also referred to as "file-

\textsuperscript{20} Id. at 442.

\textsuperscript{21} The History of MP3 and How Did It All Begin? at http://www.mp3-mac.com/Pages/History_of_MP3.html (last visited Nov. 21, 2002).

\textsuperscript{22} Mary Jane Frisby, Rockin' Down the Highway: Forging a Path for the Lawful Use of MP3 Digital Music Files, 33 IND. L. REV. 317, 319 (1999).
swapping") technology is a sub-set of software applications which enable one internet user to directly access the hard drive of another internet user’s computer and directly download any files that are available for sharing on that second user’s hard drive without the need for a central server acting as a storage site for the file.\footnote{A & M Records, Inc. v. Napster, Inc., 239 F. 3d 1004, 1011-12 (9th Cir. 2001).}

C. The Napster Decision

MP3 music files first began to be traded over the Internet beginning in the early 1990’s. Hundreds, and then thousands of websites sprang up, which were hosted by internet-savvy music enthusiasts who had “ripped” (i.e. used a software program which converted .WAV files from commercially purchased CD’s to MP3’s) unauthorized MP3 copies of popular songs and then posted them on their websites for free download by any other internet user who visited the site.\footnote{Corey Rayburn, After Napster, 6 VA J. L. & TECH. 16 (2001).}

Then, in 1994, an enterprising 19 year old college student named Shawn Fanning developed and made available to internet users (free of charge, of course) on his website a software program which bypassed what were then cumbersome search methods used by internet users to locate particular songs that were posted on these internet websites. Fanning dubbed his new system “Napster.” His software allowed users to upload the name of the songs stored on his or her hard drive to a centralized database and thereby allow other users to select songs for download from that index. Under this system, no MP3 file was ever present on a Napster-owned server.\footnote{A & M Records, Inc. v. Napster, Inc., 114 F. Supp. 2d 896, 902 (N.D. Cal. 2000).} This system understandably aroused the ire of the music industry and a lawsuit which alleged contributory and vicarious copyright infringement against Napster’s owner ultimately ensued.

On February 12, 2001 following a lengthy battle in the lower courts, the Ninth Circuit, in a lawsuit filed by the Recording
Industry of America, and other music industry stakeholders, upheld an injunction which required that Napster block the file transfer traffic of all copyrighted sound recordings whose title and artist name were identified by the plaintiff.

The *Napster* Court first determined that Napster users themselves clearly infringed the distribution rights of owners of musical works when they downloaded MP3 files that contained copyrighted material. The Court then determined that because Napster knowingly encouraged and assisted its users in such illegal activity, and materially assisted the infringing activity, it was liable for contributory infringement.

The key issue addressed in *Napster*, as it was in *Sony*, was the issue of the defense of fair use, and specifically the concept of “commercially significant non-infringing use.” Napster’s attorneys argued that Napster users engaged in fair use because: (1) MP3 files that were not protected by copyright were traded over the Napster System; (2) all Napster users were really doing with all this downloading was “sampling,” or making temporary copies of a copyrighted work before purchasing; and (3) in a clever twist on the *Sony* holding, that Napster users were merely “space-shifting” an audio file they already owned in audio CD format. Consequently, according to this logic, Napster, like the Sony VCR, could therefore be used for commercially significant non-infringing uses, and consequently Napster could not be held contributorily responsible.

The *Napster* Court disagreed, disposing of the fair use arguments with the curt observation that while “we are bound to follow *Sony*,” *Sony* was distinguishable because the *Napster* defendants, unlike the defendants in *Sony*, had actual knowledge of infringing activities of its customers, and thus “*Sony*’s holding [is] of limited assistance to Napster.” The *Napster* Court also summarily stated that *Sony*’s staple article of commerce doctrine

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26. *Id.* at 1014.
27. *Id.* at 1020-22.
28. *Id* at 1014.
29. *Id.* at 1014.
30. *Id.* at 1020.
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has no application to the Napster system because of the high level of actual knowledge by the Napster system owners of the illegal activities of its customers and its direct ability to prevent those activities.31

At least one commentator32 has observed that the two courts’ analysis of the staple article of commerce doctrine is the key to understanding the distinction between the holdings in the two cases. Since Sony involved a one-time product sale, it never addressed what became a core issue in Napster: whether the staple article of commerce doctrine would apply to a defendant whose continuing relationship with the direct infringer gave the defendant at least the theoretical ability to prevent acts of infringement as they occur.33

This observation may well be of great significance. The next (and at this writing, most recent) case to grapple with peer to peer MP3 file distribution systems was the September 4, 2002 decision of the U.S. District Court for the Northern District of Illinois, Eastern Division, entitled “In Re: Aimster Copyright Litigation.”34 As will be seen, how Sony and Napster treated the staple article of commerce theory is critically important to the court’s ultimate decision in Aimster.

D. The Aimster Decision

The Aimster system (later renamed “Madster” by its owner, Johnny Deep, following a dispute with America Online) was a software program, which, after download and installation on a user’s computer, allowed that user to communicate with other Aimster users by “instant messaging” and thereby transfer MP3 files. Significantly, unlike the Napster system, no central file server owned by Aimster was ever used as the repository of an index of song names; the users communicated the names of their stored songs entirely through the software program, although the

32. Dogan, supra note 17.
33. Id., at 949.
34. Supra note 3.
court found as a factual matter that the Aimster file servers did facilitate user file distribution by other means.\(^{35}\)

Like Napster, Aimster was soon the target of the Recording Industry of America with a lawsuit filed which alleged liability based on contributory copyright infringement. The court, while taking surprising pains to state that it did not consider Napster of precedential value,\(^ {36}\) held against Aimster. It found as a factual matter that there "can be no doubt" that the Aimster system owners either knew or should have known that their users infringed copyright holders' rights.\(^ {37}\) The court explicitly held that Aimster directly, and in a material way, contributed to the infringing activities of its users, memorably stating, "Defendants managed to do everything but actually steal the music off the store shelves and hand it to Aimster's users."\(^ {38}\)

The Aimster court, like the panel in Napster, took great pains to distinguish Sony. The Aimster court placed heavy emphasis on the stated factual determination of the Sony court that the "principal use" of VCRs recorders was time-shifting and therefore a non-infringing use.\(^ {39}\) Second, it held that Sony applied only to a "staple article of commerce." Importantly, the Aimster court extensively explained that Sony had really centered on the fact that the VCR was a "product" sold by the defendant that provided the means for copying and thus created no ongoing relationship between Sony and the users of the product. The Aimster system, the court held, was very different than Sony in that it was a service, not a product being sold, and it involved an ongoing relationship rather than a single sale.

Thus Aimster essentially held that a VCR was different than the Aimster file swapping software program, and should be treated differently under the law, because (1) The VCR was a product

\(^{35}\) *Id.* at 17054.

\(^{36}\) The Napster Court explicitly observed that "our decision today need not rest on the legal reasoning of factual findings of the Napster Courts"; *See In re* Aimster, *supra* note 3 at 17058.

\(^{37}\) *Id.* at 17089.

\(^{38}\) *Id.* at 17096.

\(^{39}\) *Id.* at 17097.
which, after its sale, involved no continuing relationship between manufacturer and user, and the Aimster software program was not; and (2) The VCR was principally used for time swapping which is a substantially non-infringing use, while the Aimster software program was not principally used for time swapping and thus did not have a substantially non-infringing use.

Unfortunately, it can be argued that the logical predicates upon which both factual distinctions rely are wrong. First, while there is no doubt that the VCR is a product, it can also be plausibly argued that the Aimster software program is also a product. Clearly, the most important item that Aimster supplied to its customers was a single software program which, standing alone, enables one user’s computer to communicate with another user’s computer. No real “system” was ever really created by Aimster, although, to be fair, the Aimster court undeniably stressed that Aimster greatly facilitated the communication between users with such centrally operated features as “chat rooms,” “message boards” and other services hosted on the Aimster website. However, in a critical difference, Aimster, unlike Napster, did not use a central server as a repository of song titles; the users traded this information directly between themselves through “instant messages”. Furthermore, and despite the Aimster court’s pronouncement that Aimster “controls” its users, it appears that the Aimster software program, after download by customers, can no longer be controlled by anyone, including Aimster. Therefore as long as there are at least two computers connected to the internet that have the Aimster software program running, those users themselves can continue, perhaps indefinitely, to communicate and distribute files with each other, regardless of Aimster.

Thus, there is a very real factual issue whether, from a purely technological point of view, Aimster should be deemed, like Sony, to have supplied a “product” to users that after “manufacture” involved no continuing relationship between manufacturer and user. Interestingly, in November of 2002, the Recording Industry of America apparently filed a contempt proceeding against

40. Id. at 17063.
Aimster alleging that it has violated the injunction that was issued in September 2002; Aimster has filed papers in opposition, asserting the defense that it is powerless to stop its users due to the technical structure of the software program.\footnote{41}

Moreover, while it is probably undisputable that the Aimster software program is not principally used for "time-swapping" or some other non-infringing use, it is also certainly arguable that VCR's are also not principally used for time swapping, at least not now, 20 years after the Sony decision. While time-swapping could have been one of the uses of a VCR in 1984 that use presupposes that the tape was thereafter destroyed. It is submitted that, in fact, the principal use of a VCR was, or at least certainly has become, the creation of a permanent and unquestionably illegal copy of copyrighted video content. Moreover, with today's premium video content distributed via digital cable systems, it is highly likely that a VCR in 2002 is predominantly used to make and keep a perfect copy of a favorite movie so as not to have to purchase another one for repeated home viewing. Is this really "substantially non-infringing use?"

III. THE ROAD AHEAD

Critical examination of the legal reasoning of the Aimster decision brings the flaws of the Sony decision into sharp focus. In Sony, the Supreme Court was confronted with an undeniably vexing issue without the benefit of adequate statutory guidance. Perhaps even more frustrating to the Court was the fact that Congress had, just eight short years before, completely revised the Copyright Law and had unmistakably refused to deal with the impending problem that VCR technology would unquestionably become. So, the Court went ahead, as it had to, and made new law on the fly, borrowing the arcane patent law concept of the "staple article of commerce" and grafting it onto copyright law. In order to logically use the "staple article of commerce" doctrine,

\footnote{41. See Jeremy Boyer, Group Pushes to Stop Madster, ALBANY TIMES UNION, November 22, 2002.}
however, the Court had to find as a factual matter that the principal use of this copying devise was in fact a non-infringing one. The Court therefore seized on the idea that all that was happening was that users were “time-shifting” copyrighted material and there was nothing inherently illegal about that.

Unfortunately, things change. Technological advances now provide virtually every consumer with the ability to make flawless copies of copyrighted audio and video material, and to freely distribute this material to any other user in any other country in the world over the internet in minutes or even seconds. Television and motion picture habits have also dramatically changed in the past 20 years, with DVD and VCR viewing now dwarfing actual motion picture attendance; according to recent surveys, box office revenues make up less than a quarter of a film’s total take, with the largest amount coming from rental and sales of DVD’s.42

There is, of course, no doubt that there is a very real difference between the Sony case on the one hand and the Napster and Aimster decisions on the other. Clearly, a manufacturer of a VCR probably should not, from a social policy point of view, be held liable for the possibly infringing use by customers of that product. Napster and Aimster, on the other hand, as one commentator has vividly noted, represent the “dark side” of peer to peer technology,43 and probably should, from a social point of view, be held liable for contributory copyright infringement. It is probably indisputable that the systems in Napster and Aimster, unlike Sony’s manufacture of a VCR, were created for the sole purpose of assisting its users to infringe.

The next legal battle over peer-to-peer file transfer technology will probably involve systems that are completely decentralized; file systems such as KaZaa and Gnutella are completely software-based, with absolutely no central server involved in any way.44

42. See Frank Ahrens, Hollywood Sees the Picture with DVD’s, Washington Post, October 7, 2002.
44. Id. at 56-57.
Are these new technologies a “product” or are they a “service?” Can the makers of these software programs be deemed to have “control” over the activities of their users, and, if so, what factors should be utilized to examine whether such control is present? Can liability ever be rationally imposed upon an individual who merely devises a software program that can be used by another to infringe?

These questions serve to highlight the fact that this precedent has become unworkable as an effective tool to evaluate the liability of sponsors or manufacturers of file copying and distribution technology. Clearly, there is no rational distinction that can be drawn between a file copying “product” and a file copying “service.” Just as clearly, the issue of whether the liability of a sponsor or manufacturer of a file distribution product or service should be based on the relatively insignificant issue of whether the system or product can be independently operated by an individual after it has left the hands of the sponsor or manufacturer is an equally irrational determinative factor in this analysis.

It can therefore certainly be argued that this precedent should be overturned or statutorily abrogated. In its place, a system could be devised which would place less emphasis on the particular file copying and/or distribution technology employed (and no emphasis on the technologically insignificant issue of whether the file copying system is a “product” or a “system”) and more on the basic question of whether the acts or omissions of the defendant materially contributed to the ultimate infringement by another. Perhaps this analysis could be sharpened by establishing a number of factors that a court should consider in its evaluation. For example, one factor that could certainly be examined is whether the alleged contributory infringer retained any meaningful control over the system/product after sale. Another perhaps more important factor analysis could be a consideration of whether there was a sufficient proximate relationship between the system/product that was created and the resulting infringing activity. So, for example, a manufacturer of a CD RW would not be held responsible for contributory infringement because of a
more perceived remoteness between the manufacture of such a device that can be used for a multitude of purposes and a device which, fairly stated, can be used for only one purpose - infringement. This shift in reasoning would move a court’s analysis away from the less important issue of whether the “principal” use of a product/service is a non-infringing one in favor of the more significant issue of determining whether the infringing use is only one of a multitude of other uses for the product/service, some of which are non-infringing. Another test could be whether the alleged contributory infringer has invented or developed something that causally creates enough infringement activity to have an adverse financial effect on the expected market for the copyrighted content that would typically be infringed by the product/system in question. Perhaps other factors which represent societal interests at stake could also be listed so as to require a balancing analysis such as: whether the product/system has the potential of serving or enhancing other societal goals such as facilitating efficient and inexpensive delivery and distribution of information throughout society; whether the technology itself that is involved in the copying/distribution product/system is independently important from a scientific point of view and should be immune from this potential liability on policy grounds; or whether the imposition of contributory infringement liability could serve to inhibit the advancement of technological development in the field. This list of factors is of course a sampling only; its intent is merely to demonstrate that a system can be devised which could center the attention of the fact finder, whether court or jury, on a more measured analysis of whether the actions of the defendant should legally and factually be viewed as materially contributing to the infringing activities of others. A factor analysis, it is submitted, that does not rely on an artificial distinctions between a “product” versus a “service” on one hand, or trying to freeze a moment in time in order to arbitrarily determine what the “principal use” of a dynamic technology might be, on the other.
CONCLUSION

Perhaps what is revealed most clearly in the analysis of *Sony, Napster and Aimster*, and their efforts to determine the appropriate level of liability for contributory copyright infringement against manufacturers of products/systems which can be used to assist others in violating the Copyright Law, is the inevitable pattern of the legal system once again stumbling into illogical and unsupportable results when it tries to make old law fit new technology. As has become clear, the earnest efforts of the Sony Court to step into the vacuum created by Congress when it ignores the VCR controversy in the late 1970’s in its passage of the new Copyright Law have ultimately served to create a legal framework that has already become unworkable. The logical and legal distinctions that have been made thus far in this line of cases are sharply inconsistent and can therefore be criticized as arbitrary. Logically flawed precedent is the result, with no settled and consistent rules of interpretation provided which could serve to reasonably assist courts in determining what is infringing behavior and what is not. While it is certainly a societal goal to reduce copyright infringement, doing so by the application of flawed legal and factual reasoning may ultimately lead to unintended and even unjust results.

This precedent should be overturned or statutorily abrogated, and in its place, a system should be devised which would place less emphasis on the particular method of file copying employed and more on the more essential question of whether the acts or omissions of the defendant materially contributed to the ultimate infringement by another. Unless this occurs, one thing is quite clear. This battle over file copying and distribution technology will doubtless continue until the highly ambiguous precedent established by *Sony* is revisited and clarified either by the U.S. Supreme Court or by Congress.