

## **A Brief Primer on U. S. Copyright Protection for Works on the Internet**

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This primer is intended to be a brief review of some of the more significant legal developments in the United States dealing with the unique problems posed in protecting intellectual property on the Internet. Because of the rapid growth of the Internet, and the advances in such new communication techniques as peer to peer communication, law in the United States is changing on an accelerated basis to meet the challenges posed by these rapid advances. Because of the special issues posed by the Internet, the United States has developed new theories and new statutes for the protection on intellectual property on the Internet. Among the new statutes which will be discussed in this primer is the Digital Millennium Copyright Act, and some of the challenges posed by its solution to the issue of copyright protection in the Digital Age.

This primer should be considered as merely a snapshot view of present US protection trends in the area. It is intended some of the most important developments in the law, but is not intended to be a comprehensive discussion of all the issues and cases in the area. It is also not intended to take the place of consultation with qualified lawyers regarding the application of US law to any particular action or situation.

### **The Challenge of Technology**

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The rapid development of the Internet, combined with the widespread availability of personal computers, and advances in the software and other technology that supports the Internet, have created new opportunities for intellectual property owners on a global basis. These new opportunities include new methods for advertising products and services, and for their distribution (including digitally) to far flung customers. The rapid reproduction and distribution of IP-protected works, however, permitted by such technological advances has also helped to fuel an increasing global piracy problem. Thus, the Internet poses unparalleled opportunities for commercial growth and global communication. However, it also poses unparalleled opportunities for abuse by pirates, counterfeiters and other free riders.

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## **US Copyright Law and the Internet**

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### **A General Introduction**

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Under US copyright law, copyright protection is extended to “original works of authorship fixed in any tangible medium of expression now known or later developed from which they can be perceived, reproduced or otherwise communicated...” (17 U.S.C. §102(a)) Copyright protection does not extend to “any idea, procedure, process, system, method of operation, concept, principle or discovery.’ (17 U.S.C. §102(b)) In essence, so long as a work has been recorded, filmed, written or otherwise set out in a tangible form, it may be subject to protection under US copyright law. Consequently, literary, dramatic, musical, artistic or other intellectual works, including original collections of information may be protected. Thus, under US copyright law, such diverse works as computer software, paintings, choreography, maps, poetry and sound recordings may be protected so long as such works are “original” and contain “expression.” Such protection applies to both published and unpublished works. Furthermore, no registration or notice on the work is required for the work to be protected. Instead, creation of the work alone is sufficient.

Upon the creation of a copyright protectable work the author (or copyright owner) is entitled to a bundle of six rights. These rights include the exclusive right to do or authorize the following acts:

- The right to reproduce, in whole or in part, the work in copies;
- The right to prepare derivative works based upon the original;
- The right to distribute copies of the work to the public;
- The right to perform the work publicly;
- The right to display the work publicly;
- In the case of sound recordings, the right to perform the work publicly by means of a digital audio transmission.

While copyright registration is not required for protection, US authors are required to register their works before seeking legal relief for infringement. Copyright registration is controlled by the US Copyright Office and can be done over the Internet. Moreover, where litigation is imminent, registration may be obtained on an expedited basis. In order to prove copyright infringement, a plaintiff must prove the following

- That he is the copyright owner;
- That the work is copyright protected
- That the copyright in the work has been infringed.

For example, if the claim is that the work has been reproduced without authorization, then the copyright owner must demonstrate that the work has been copied without permission. Such copying does not have to be verbatim to qualify

as infringement. Instead, it is sufficient if an ordinary observer would consider the expressive elements “substantially similar.”

US Copyright law provides for a complete panoply of remedies for copyright infringement, including injunctive relief, seizure and destruction of the infringing copies as well as all plates, molds, matrices, masters, tapes, film negatives, or other articles by means of which infringing copies or phonorecords may be created, actual damages (including lost profits), statutory damages, up to \$150,000 per infringement for willful infringement., costs and reasonable attorneys’ fees. The parties that may be held liable for copyright infringement include the party which committed the infringing act (referred to as a “direct infringer”), the party which knew of the infringing activity and induces, causes or materially contributes to it (referred to as a contributory infringer) and the party which has the right and ability to supervise the parties engaged in the infringing activities and who had a direct financial interest in the exploitation of the copyrighted material (referred to as “vicarious liability”).

One of the most significant defenses to a claim of copyright infringement is the defense of “fair use.” To consider whether an unauthorized use of a copyrighted work qualifies as a fair use, courts consider the following four statutory factors. They are:

- 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;
- The amount and substantiality of the portion used in relation to the copyrighted work as a whole;
- The effect of the use upon the potential market for or value of the copyrighted work.

(17 U.S.C. §107) These factors are not exclusive. Instead, courts often consider additional factors, including whether the use in question is protected under the First Amendment’s free speech protections, or whether it qualifies as a “transformative” use of the original work. To qualify as a “transformation” the work in question must not “merely “supersede the objects” of the original creation or instead adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message.” *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569 (1994). If a work is transformative, that does not automatically mean that the use is fair, but it is a strong factor in supporting the fairness of the use in question.

## **The Digital Millenium Copyright Act (DMCA )**

As noted above, one of the major hurdles US Copyright law has faced in recent history is the dawn of the Internet. The Internet allows for works to be displayed quicker and for copies to be created at a faster pace than ever before

and with a higher degree of authenticity. Because of the nature of the Internet, the party which is directly involved in the infringing activity may be an end user. Thus for example, many acts of copyright infringement occur as a result of the unauthorized “uploading” (reproducing onto a web site) of a copyrighted work without the authorization of the copyright owner. While end users may be directly responsible for the infringing activity, their infringing activity most likely would not occur without the help of the Bulletin Board, Internet Service Provider or Peer-to-Peer (P2P) Software Provider. Thus, one of the early issues which the United States faced in dealing with copyright infringement on the Internet was the extent to which service providers, bulletin board operators, and others who allowed third parties to post copyrighted works would be responsible for the infringing acts of their end users.

Early case law provided that, in certain circumstances, bulletin board and Internet service providers might be liable if they gained some type of financial benefit from the unauthorized activities of their end users. Thus, for example, in *Playboy Enterprises, Inc. v. Frena*, 839 F. Supp. 1552 (M.D. Fla. 1993), the court found that the operator of a computer bulletin board was directly liable for copyright infringement when unknown subscribers had both uploaded and downloaded copyrighted photographs from the plaintiff’s magazine without permission.

By contrast, however, in *Religious Technology Center v. Netcom On-Line Communications Services, Inc.*, 907 F. Supp. 1361 (N.D. Cal. 1995), the court declined to find the operator of a computer bulletin board directly liable for the unauthorized uploading and downloading of copyrighted materials by its subscribers. The plaintiff’s organization held the copyright to certain publications which were published by the defendants. The court was not persuaded by the plaintiff’s argument that an individual who stores copied material or makes the copyrighted material available is also guilty of direct infringement, particularly where the service provider did not charge an access fee. The court, however, left the issue of contributory infringement open.

### **Internet Service Provider Liability**

Ultimately, Congress addressed the question of service provider liability, including liability for those who host third party postings of copyrighted materials, in the Digital Millennium Copyright Act, or DMCA, enacted in 1998. Significantly, the statute provided a safe harbor for certain specified activities by service providers. Section 512 of the Act, referred to as the “safe harbor” provision of the statute releases a service provider from liability if it (1) qualifies as a service provider within the meaning of the statute, (2) if it adopts and reasonably implements a policy of terminating in appropriate circumstances the accounts of subscribers who are repeat infringers; (3) it accommodates and does not interfere with “standard technical measures” copyright owners use to identify or protect copyrighted works; and (4) if it meets other specified requirements

regarding the particular activity in question (see below). The four activities for which safe harbor protection exists are:

- Serving As A Conduit For Transitory Communications;
- System Caching;
- Posting Information at the Direction of End Users;
- Hyperlinks and Other Information Location Tools

### *Transitory Communications*

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Section 512(a) of the DMCA provides a safe harbor for ISP's who act as conduits for transitory communications. To qualify as a transitory communication, the transmission must be initiated by a person other than the ISP. The transmission must be carried out through an automatic technical process. The ISP must not select the recipients of the material, or directly copy the material in question, or alter the transmitted material, and must maintain a temporary copy of the material for no longer than reasonably necessary. Moreover, this temporary copy may not be accessible to third parties.

### *System Caching*

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Section 512(b) of the DMCA provides a safe harbor for ISP's who maintain system caches of materials for a limited time to allow the materials to be provided to subscribers who have requested the material previously without the need to retrieve such materials from the system. To qualify for a safe harbor, the material must be available on line by someone other than the ISP. The material must be transmitted without modification; and temporary storage must be carried out through an automatic technical process, using a "generally accepted industry standard data communications protocol." The provider must not interfere with technology that returns "hit" information to the person who posted the material and the provider must limit users' access to the material in accordance with conditions on access (e.g., password protection) imposed by the person who posted the original material. In addition, any caching technology used by the ISP must not "significantly interfere" with the performance of the original provider's system or network. In addition, any material that is posted without the copyright owner's authorization must be expeditiously blocked or removed once notice from the copyright or his/her authorized agent has been received regarding the infringement. (See discussion below regarding "notice and takedown provisions") Such obligations, however, only apply if the material at issue has also been either removed, had its access disabled, at the originating site, or if the originating site has also received a takedown demand.

### *User Postings and Storage*

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Section 512(c) of the DMCA limits the liability of service providers for posting infringing material on websites (or other information repositories) hosted

on their systems. It applies to only to postings and storage at the direction of a user. In order to be eligible for the limitation, the ISP must not have actual knowledge that the material is infringing and must not be aware of facts or circumstances from which such infringing activity is apparent. If the ISP has the ability to control the infringing activity, it must not receive a financial benefit which is directly attributable to the infringing activity. Upon receiving proper notification of claimed infringement, the ISP must expeditiously take down or block access to the material. In addition, a service provider must have filed with the Copyright Office a designation of an agent to receive notifications of claimed infringement and must have posted agent contact information on its website.

### *Hyperlinks and Other Information Research Tools*

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Section 512(d) of the DMCA limits the liability of service providers for posting or providing hyperlinks, online directories, search engines and the like. In order to be eligible for the limitation, the ISP must not have actual knowledge that the material in question is infringing and must not be aware of facts or circumstances from which such infringing activity is apparent. If the ISP has the ability to control the infringing activity, it must not receive a financial benefit which is directly attributable to the infringing activity. Upon receiving proper notification of claimed infringement, the ISP must expeditiously take down or block access to the material. In addition, a service provider must have filed with the Copyright Office a designation of an agent to receive notifications of claimed infringement and must have posted agent contact information on its web site.

### *Other Exceptions*

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In addition to the “safe harbor” provisions listed above, the DMCA provides additional exceptions from liability for non-profit educational institutions, an allowance for technology development through reverse engineering means and encryption research, an exception for technology necessary to protect minors on the Internet, and technology necessary for testing of computer security. Each of these exceptions is narrowly tailored.

### *Notice and Takedown Provisions*

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As noted above, in order for an ISP to qualify for certain safe harbors, it must expeditiously remove infringing material as soon as it has notice of the infringing acts. Where copyright owners become aware of infringing materials, they must provide a written notice to the ISP that includes an authorized signature (which may be an electronic one) of “a person authorized to act on behalf or the owner of an exclusive right that is allegedly infringed,” a clear identification of the copyrighted work allegedly being infringed, a clear identification of the alleged infringing material, “reasonably sufficient” information that will allow the ISP to locate the material at issue, information, such as an email address, that will allow the ISP to contact the subject of the infringing

activity, a statement of good faith on the part of the copyright holder and a statement of accuracy. (17 U.S.C. §512(c)(3)) So long as the notice “substantially complies” with these obligations the ISP make act to take down or disable access to the identified material. If the notice fails to comply substantially with all obligations, so long as it identifies the copyrighted work, the allegedly infringing material and reasonably sufficient identifying information for the complaining party, the ISP must promptly attempt to contact the person making the notification or take “other reasonable steps” to assist in the receipt of the necessary notifications. If it fails to do so, the ISP loses its safe harbor.

These notice provisions allow the copyright owner a clear and concise way to communicate a cease and desist letter to the proper individual so that the infringing activity can be stopped as quickly as possible. This provision also helps puts all parties who may be part of the litigation on notice of allegedly infringing activity, thus eliminating any attempt to claim innocent infringement as a defense to monetary liability. With its reliance on notices that are in “substantial compliance,” the DMCA also signals that absolute formality in notices is not required, merely sufficiency of the information to allow all parties to act expeditiously.

Where an ISP acts in good faith in response to a notice of infringement, it will not be liable to the subscriber whose material has been removed in response to a copyright owner’s notice of infringement so long as the ISP “takes reasonable steps” to notify the subscriber that it has either removed the material at issue, or disabled access to it. The subscriber may send a written counter notification to the ISP challenging the take down. To be effective the notice must be in writing and must be provided to the ISP’s designated agent for notices under the DMCA. The notice must also contain a physical or electronic signature of the subscriber, identification of the removed material, including its location prior to its removal (or to which access has been disabled); a statement of a good faith belief by the subscriber under penalty of perjury that the material was removed as a result of “mistake or misidentification,” the subscriber’s name, address, and telephone number, and a consent to federal court action in the judicial district where the address is located. If the subscriber’s address is outside the United States, he must consent to jurisdiction in any federal judicial district in which the ISP is found. This last requirement is to allow the parties to remove the dispute over whether the materials were properly removed to court. (17 USC § 512 (g))

Upon receipt of the counter notification, the ISP must send a copy of it to the complaining party with a notification that it will replace the removed material, and stop disabling access within 10 to 14 days of receipt of the counter notice, unless the ISP receives notice from the original complaining party that it has filed a lawsuit regarding the material in question. (17 U.S.C. §512(g))

Any person who “knowingly materially misrepresents” either that material is infringing or that the material was removed or disabled by mistake is liable for damages, including costs and attorney’s fees incurred by the alleged infringer, by the copyright owner (including the copyright owner’s authorized licensee), or by a service provider “injured by such misrepresentation.” (17 USC §512(f)). Most recently, in a case involving the removal of a video from the Youtube website containing the unauthorized use of copyrighted music, *Lenz v. Universal Music Corp*, 572 F. Supp. 2d 1150 (ND Cal 2008), the court considered the role of claims of fair use in notice and take down cases. The subscriber (plaintiff) sought relief under Section 512(f) claiming that the copyright owner had misrepresented her conduct as infringing because it had failed to consider whether her use qualified as a fair use. The court rejected defendant’s motion to dismiss the claim. In a case of first impression (first decision) on this issue, the trial court held that part of a party’s claim for a good faith belief that material on the internet is infringing requires an analysis by the copyright owner of any potential fair use defenses the subscriber might raise. This does not mean that any potential claim for a fair use defense would prohibit the successful application for takedown, merely that a good faith belief must include an analysis that such a defense would not be successful. The case remains on-going.

#### *Subpoenas to Obtain End User Identifying Information*

To further facilitate the protection of copyright owner’s works from unauthorized uses on the internet, the DMCA also provides for an abbreviated procedure for the copyright owner to obtain the identity of alleged infringers from the relevant ISP for the purpose of initiating a civil action for copyright infringement. Such subpoenas are necessary because while present technology may be able to locate infringing files being uploaded or downloaded from either internet websites or through Peer-To-Peer (P2P) file trading, often such technology only retrieves the Internet Protocol Address. These addresses are generally assigned to subscribers on an as needed basis. Consequently, often the ISP is the only entity who would be able to identify the subscriber engaged in allegedly illegal conduct while using its services, through the logs the ISPs maintain. There is a strong need to issue subpoenas rapidly to prevent information regarding the identity of a particular Internet Protocol Address at a particular time from being lost. Consequently, the DMCA provides for an abbreviated (and rapid) process for the issuance of subpoenas seeking subscriber identification information.

Under Section 512(h), a copyright owner, or a person authorized to act on the owner’s behalf may request a US District Court to issue a subpoena to an ISP for the identification of an alleged infringer. The subpoena is issued under an expedited procedure by a clerk of the court. The request must contain a copy of the notification for take down described above, a proposed subpoena (containing both a demand for expedited disclosure as well as an identification



of the information being sought) and a sworn declaration that the identity is being sought, and will only be used, for purposes of enforcing the copyright owner's rights.

Upon receipt of an issued subpoena, the ISP must "expeditiously disclose to the copyright owner or his authorized agent, the information required by the subpoena. These subpoenas often form the basis for demands by copyright owners, including organizations acting as their agent, such as the Recording Industry Association of America (RIAA), to send letters to the infringing party to demand cessation of their illegal acts prior to instituting civil action. They have been most effectively used to pursue individuals who are engaged in illegal Peer to Peer (P2P) file trading, including against individuals who operate web hosting sites for such file trading.

In a case against a transitory service provider, *RIAA v. Verizon Internet Services, Inc.*, 351 F.3d 1229 (DC Cir. 2003), the court held that the shortened subpoena process was only available for ISPs which stored materials on their services. For transitory service providers, such as those that provide the communication services for Peer-To-Peer (P2P) file trading, copyright owners must use the same subpoena processes available for other civil actions. Such subpoenas remain available on an expedited basis, but require court review before a subpoena will issue.

To obtain a subpoena, a copyright owner must generally demonstrate that the individual whose identity is being sought is believed to have engaged in copyright infringement. Subpoenas will generally be granted so long as the copyright owner submits evidence of a valid copyright and establishes a prima facie case of copyright infringement. In cases based on illegal Peer-to-Peer (P2P) file trading of music, a prima facie case of infringement usually is established through affidavits that demonstrate that unauthorized copies of the music in question were found on defendant's computer, and that such copies were available for future distribution. One of the key issues which courts are currently debating is whether under the precise language of the US copyright statute, an offer to distribute copyrighted works, without evidence of receipt by another qualifies as actionable unauthorized distribution. Such claimed offer of distribution, however, has been found sufficient to warrant the grant of a subpoena. As the court in *London-Sire Records, Inc. v. Doe 1*, 542 F. Supp. 2d 153 (DMass 2008), involving a subpoena for the identities of alleged P2P file traders, recognized: "[W]here the defendant has completed all the necessary steps for a public distribution, a reasonable fact-finder may infer that the distribution actually took place." As a result the court granted the requested subpoenas.

## **Anti-Circumvention Devices And Rights Management Information**

The Digital Millennium Copyright Act prohibits the circumvention of a protected technological measure (PTM) to control copying or access to a copyrighted work. Prohibited circumvention includes descrambling a scrambled work, decrypting an encrypted work “or otherwise to avoid, bypass, remove, deactivate, or impair a technological measure without the authority of the copyright owner.” (17 USC §1201(a)(3)(A)) It should be noted that there are two distinct types of technological protection measures that are addressed in Section 1201. Section 1201(a) prohibits circumvention of PTMs designed to prohibit unauthorized access. Section 1201(b) prevents circumvention of PTMs designed to prohibit unauthorized copying or other unauthorized uses protected under copyright law (what is referred to in this paper as “rights restrictive PTMs”). As noted above, these protected “uses” include reproduction, the preparation of derivative works, public distribution, public display, and public performance, including performance by digital audio transmission. The unauthorized making, selling, public offering or other trafficking in a product, device or service to circumvent a protected technological measure (discussed more fully below) is also prohibited. This prohibition applies to circumvention for both access and rights restrictive PTMs. *However*, the act of circumvention of a copy code or other *rights restrictive* measures is *not* prohibited where such circumvention is done in furtherance of a legitimate fair use of the underlying copyrighted work. For circumvention of an *access control* measure, however, no such fair use defense exists. Thus, access control measures cannot generally be lawfully circumvented without permission of the copyright owner, while rights restrictive measures can be circumvented for purposes of fair use. But the person who is circumventing the PTM must be able to circumvent such PTM without resource to circumvention tools, except for the ones he can create himself.

To qualify as a protected access control measure under Section 1201, the PTM must “effectively control[ ] access to a work.” Such PTMs include, for example, passwords, serial numbers and encryption techniques. A PTM does not have to be completely effective to meet the “effectiveness” standard. To the contrary, an access control measure will be considered “effective” under the statute if “in the ordinary course of its operation, it requires the application of information or a process or treatment, with the authority of the copyright owner, to gain access to the work.” (17 USC 1201(a)(3)(B)) Technological measures designed to protect a right of the copyright owner (such as copy codes) must meet a similar “effectiveness” standard. Like access control PTMs, a rights restrictive PTM does not have to be completely effective to meet this standard. Instead, it is sufficient “if the measure in the ordinary course of its operation, prevents, restricts, or otherwise limits the exercise of a right of a copyright owner.” (17 USC§ 1201(b)(2)(A))

As noted above, in addition to prohibiting certain unauthorized acts of circumvention, the DMCA also prohibits the manufacture, importation, offering to the public, provision or any other type of “trafficking” in any “technology, product, service, device, component or part thereof” “primarily designed or produced for

the purpose of circumventing a PTM. (17 USC §1201) To qualify as a prohibited item, the product, service, device, or component must be “primarily designed or produced for the purpose of circumventing” a PTM. It must also have “only limited commercial purpose or use other than to circumvent” a PTM. Trafficking includes the knowing provision of unauthorized circumvention technology such as by posting such technology on a generally accessible website.

These anti-circumvention prohibitions do not apply to the actions of law enforcement, intelligence, and other governmental activities. Non-profit libraries and educational institutions are also excepted. In addition, the prohibitions do not apply to the following activities:

- Reverse engineering
- Encryption research
- To protect minors from access to Internet material
- To protect personal privacy
- To protect the security of a computer, computer system or network (with the authorization of its owner or operator)

It should be noted that the provisions of the DMCA that provide limited protection from liability for copyright infringement by certain ISP's discussed above do *not* apply to claims regarding the trafficking in circumvention products and technologies. The fair use defense also does not apply to actions regarding the trafficking of circumvention products and technologies. In addition, although reverse engineering is allowed under the statute, circumvention of existing technology is prohibited except in the limited circumstance of reverse engineering for the purpose of achieving interoperability.

Section 1202 of the DCMA also prohibits the unauthorized removal or alteration of copyright management information. It also prohibits the knowing distribution of any work containing false copyright management information or containing copyright management information that has been altered or removed without permission. Where the defendant knows or has reasonable grounds to know that such distribution will induce, enable, facilitate or conceal an infringement of any right under the Copyright Act. “Copyright management information” includes not only information about the author/performer/copyright owner (including information contained in a copyright notice), but also information about the terms and conditions governing any use of the work in question. These prohibitions do not apply to the authorized actions of law enforcement, intelligence, and other governmental activities

The DMCA establishes both civil and criminal liability for violating the Anti-Circumvention and Rights Management integrity provisions of the Act, including statutory damages of up to \$2,500 per act of circumvention, device, product, component, offer or performance of service, and up to \$25,000 per rights integrity violation. (17 U.S.C. §1203)

One of the most well known cases which dealt with the scope of protection available under the DMCA for technological protection measures is *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294 ( S.D.N.Y. 2000), aff'd sub.com, *Universal City Studios Inc. v. Corley*, 273 F.3d 429 (2d Cir. 2001). In this case the court dealt with the liability of Shawn Reimerdes, better known as Emmanuel Goldstein, who ran a website that published decryption technology for DVD's. Most works placed on DVD's are currently protected by a copy protection technology called CSS which is designed to prevent the unauthorized copying of motion pictures in DVD format. Decryption technology, called DeCSS,. circumvents the CSS-protected motion pictures on DVD's and allows end users to reproduce the motion pictures contained on such copy-protected discs. Reimerdes made this DeCSS available on the Internet through his website and by linking his website to the same information contained on other websites. Reimerdes was sued by eight major United States motion picture studios. Ultimately, the courts enjoined the defendant from both publishing the decryption information as well as linking its site to others that posted the DeCSS code.

## **Temporary Copies**

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US copyright law has recognized that any temporary copy of a copyrighted work created in a computer environment qualifies as a reproduction for which permission is required from the copyright owner.

In its seminal decision, *MAI Systems Corp. v. Peak Computer, Inc.*, 991 F.2d 511 (9<sup>th</sup> Cir. 1993), the Ninth Circuit Court of Appeals held that a temporary copy created by booting a program into the Random Access memory of a computer qualified as a "copy" for which permission to reproduce the work was required by the copyright owner, even though the copy was not permanently "fixed." The court held that no permanent fixation was required since the definition of "copies" under the 1976 Act (as amended) is "material objects, other than phonorecords, in which a work is fixed by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device," Since a person can load the software in question and then view the program, such reproduction was sufficiently permanent or stable to qualify as an unauthorized reproduction under the Act.

In. *Religious Technology Center v. Netcom On-Line Communications Services, Inc.*, 907 F. Supp. 1361 (N.D. Cal. 1995), the court addressed what constitutes infringing reproductions in the context of the storage of digital information. Relying on the *MAI* case, the court held that "there is no question that after *MAI* that 'copies' were created, as [the user's] act of sending a message.... caused reproductions of the plaintiff's works." Ultimately, the court

held that the display of recognizable copies through a computer was sufficiently permanent to constitute a copy under the Copyright Act.