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ADVANCED COPYRIGHT ISSUES ON THE INTERNET

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I.	Introduction	2
II.	Rights Implicated by Transmission and Use of Works on the Internet	4
A.	The Right of Reproduction	4
1.	The Ubiquitous Nature of Copies on the Internet	5
2.	Whether Images of Data Stored in RAM Qualify as Copies	6
3.	The WIPO Treaties Are Unclear With Respect to Interim Copies	9
4.	Whether Volition Is Required for Liability	16
5.	The Reproduction Right Under WIPO Implementing Legislation	25
B.	The Right of Public Performance	29
1.	Isochronous Versus Asynchronous Transmissions	30
2.	The Meaning of "Publicly"	31
C.	The Right of Public Display	31
D.	The Right of Public Distribution	34
1.	The Requirement of a Copy	34
2.	The Requirement of a Public Distribution	36
3.	The Requirement of a Rental or Transfer of Ownership	37
4.	The Right of Distribution Under the WIPO Treaties	37
5.	The Right of Distribution Under WIPO Implementing Legislation	38
E.	The Right of Importation	39
F.	The New Right of Transmission and Access Under the WIPO Treaties	40

1. The Right of Communication to the Public in the WIPO Copyright Treaty	40
2. The Right of Making Available to the Public in the WIPO Performances and Phonograms Treaty	43
3. The Right of Transmission and Access Under WIPO Implementing Legislation	44
G. New Rights and Provisions Under Pending Legislation	46
1. Circumvention of Technological Measures and Rights Management Information	47
2. Fair Use	58
3. Expansion of Library/Archives Exemptions	59
4. Distance Education	59
5. Limitation of Scope of Shrinkwrap and Clickwrap Licenses	60
6. Copying in the Course of Computer Maintenance or Repair	61
III. Application of Copyright Rights to Specific Acts on the Internet	62
A. Browsing	62
B. Caching	64
1. Types of Caching	64
2. The Detriments of Caching	65
3. Application of the Fair Use Doctrine	67
4. Application of the Implied License Doctrine	70
5. Technical Solutions	71
6. Legislative Solutions	72
C. Liability of Online Providers	72
1. Direct Liability	72
2. Contributory Liability	73
3. Vicarious Liability	76
4. Potential Resolutions Outside the Courts	77
5. Pending Legislation to Limit Liability of Online Service Providers	79
D. Linking and Framing	85
1. The <i>Shetland Times</i> Case	88

2. The <i>Total News</i> Case	89
3. The <i>Ticketmaster</i> Case	92
4. The <i>Futuredontics</i> Case	93
E. Derivative Works	94
F. First Sales in Electronic Commerce	97
G. New User Interface Paradigms	99
IV. Conclusion	101

*2 I. Introduction

During the last couple of years, the Internet has become one of the basic foundational infrastructures for the much vaunted and over-hyped “information superhighway.” Now growing at a rate that staggers the imagination,¹ the Internet has moved from a quiet means of communication among academic and scientific *3 research circles into the commercial arena and private homes. The Internet has become a major global data pipeline through which large amounts of intellectual property are moved. As this pipeline is increasingly used in the mainstream of commerce to sell and deliver creative content and information across transnational borders, issues of intellectual property protection for the material available on and through the Internet are rising in importance.

Copyright law will provide one of the most important forms of intellectual property protection on the Internet for at least two reasons. First, much of the material that will move in commerce on the Internet will be works of authorship, such as musical works, multimedia works, audiovisual works, movies, software, database information, and the like, which are within the usual subject matter of copyright. Second, because the very nature of an electronic online medium requires that data be copied as it is transmitted through the various nodes of the network, copyright rights are obviously at issue.

Traditional copyright law was designed to deal primarily with the creation, distribution, and sale of protected works in tangible copies.² In a world of tangible distribution, it is generally easy to know when a “copy” has been made. The nature of the Internet, however, is such that it is often difficult to know precisely whether a copy of a work has been made and, if so, where it resides at any given time within the network. As described further below,³ information is sent through the Internet using a technology known as “packet switching,” in which data is broken up into smaller units, or “packets,” and the packets are sent as discrete units. As these packets pass through the random access memory (RAM) of each interim computer node on the network, are copies of the work being made?

The case of *MAI Systems Corp. v. Peak Computer, Inc.*⁴ held that loading a computer program into the RAM of a computer constituted the making of a copy within the purview of copyright law.⁵ If this holding is widely adopted, a copy may be created under United States law at each stage of transmission of a work through the Internet. The language of two recently adopted treaties discussed extensively in this paper--the WIPO Copyright Treaty⁶ and the WIPO Performances and Phonograms Treaty⁷--leave unclear the crucial question whether the *MAI* approach will be internationalized. In any event, these two treaties would strengthen copyright holders’ rights of “distribution” and would create new rights of “making available to *4 the public” a copyrighted work,⁸ both of which are implicated by transmissions through the Internet nearly as broadly as the right of reproduction.

The ubiquitous nature of copying in the course of physical transmission gives the copyright owner potentially very strong rights with respect to the movement of copyrighted material through the Internet, and has moved copyright to the center of attention as a form of intellectual property on the Internet. If the law categorizes all interim and received transmissions as copies for copyright law purposes, or treats all such transmissions as falling within the right of distribution of the copyright owner, then activities that have been permissible with respect to traditional tangible copies of works, such as browsing and

transfer, may now fall within the control of the copyright holder.

This paper discusses the multitude of areas in which copyright issues will arise in an online context. Although the issues will, for simplicity of reference, be discussed in the context of the Internet, the analysis applies to any form of online usage of copyrighted works. Part II of this paper discusses the various copyright rights that may be implicated by transmissions and use of works on the Internet. Part III then analyzes the application of those rights to various activities on the Internet, such as browsing, caching, operation of an online service or bulletin board, linking to other sites, creation of derivative works, and resale or subsequent transfer of works downloaded from the Internet. Part III also analyzes the application of the fair use doctrine and the implied license doctrine to various Internet activities. At present, there is very little case law addressing most of these issues, so a great deal of uncertainty is likely to exist as these issues are worked out over time through the courts and the various relevant legislative bodies and industry organizations.

II. Rights Implicated by Transmission and Use of Works on the Internet

This Part discusses the various rights of the copyright holder--the right of reproduction, the right of public performance, the right of public display, the right of public distribution, the right of importation, and the new rights of transmission and access--that may be implicated by the transmission and use of works on the Internet.

A. The Right of Reproduction

The single most important copyright right implicated by the transmission and use of works on the Internet is the right of reproduction. As elaborated below, if the law categorizes all interim and received transmissions as copies for copyright law purposes, then a broad range of ordinary activities on the Internet, such as browsing, caching, and access of information, may fall within the copyright holder's monopoly rights.

***5 1. The Ubiquitous Nature of Copies on the Internet**

Under current technology, information is transmitted through the Internet using a technique known broadly as packet switching.⁹ Specifically, data to be transmitted through the network is broken up into smaller units or packets of information, which are in effect labeled as to their proper order.¹⁰ The packets are then sent through the network as discrete units, often through multiple different paths and often at different times.¹¹ As the packets are released and forwarded through the network, each "router" computer makes a temporary (ephemeral) copy of each packet and transmits it to the next router according to the best path available at that instant until it arrives at its destination.¹² If any packet is lost along the way, the originating computer automatically resends it, likely along a different path than the lost packet was originally sent.¹³ The packets, which frequently do not arrive in sequential order, are then "reassembled" at the receiving end into proper order to reconstruct the data that was sent.¹⁴ Thus, only certain subsets (packets) of the data being transmitted are passing through the RAM of a node computer at any given time, although a complete copy of the transmitted data may be created and/or stored at the ultimate destination computer, either in the destination computer's RAM, on its hard disk, or in portions of both.

To illustrate the number of interim copies, in whole or in part, that may be made when transmitting a work through the Internet, consider the example of downloading a picture from a website. During the course of such transmission, no less than *seven* interim copies of the picture may be made: The modem at the receiving and transmitting computers will buffer each byte of data, as will the router, the receiving computer itself (in RAM), the Web browser, the video decompression chip, and the video display board.¹⁵ These copies are in addition to the one that may be stored on the recipient computer's hard disk.¹⁶

***6 2. Whether Images of Data Stored in RAM Qualify as Copies**

Do these interim and final copies of a work (many of which are only partial) being transmitted through the Internet qualify as copies within the meaning of United States copyright law? The Copyright Statute defines copies as 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. The term "copies" includes the material object, other than a phonorecord, in which the work is first fixed.¹⁷

The language of the definition raises two issues concerning whether images¹⁸ of transmitted data in RAM qualify as copies. First, depending upon where the data is in transit through the Internet, only a few packets--or indeed perhaps only a single byte--of the data may reside in a given RAM at a given time. For example, the modem at the receiving and transmitting computers may buffer only one or a few bytes of data at a time. A node computer may receive only a few packets of the total data, the other packets being passed through a different route and therefore a different node computer's RAM. Should the law consider these partial images a copy of the work? Should the outcome turn on whether all or most of the packets of data comprising the work pass through a given RAM, or only a portion? How can interim partial images of data stored in RAM be deemed a copy of a work in the case where there is no point in time at which the entire work is available in a single RAM? No case to date has addressed these specific issues.

The report published by the Working Group on Intellectual Property Rights of President Clinton's Information Infrastructure Task Force (NII White Paper)¹⁹ implicitly suggests that at least interim, partial copies of a work created in RAM in interim node computers during transmission may not themselves constitute a "fixed" copy:

A transmission, in and of itself, is not a fixation. While a transmission may result in a fixation, a work is not fixed by virtue of the transmission alone. Therefore, "live" transmissions via the NII [National Information Infrastructure] will not meet the fixation requirement, and will be unprotected by the Copyright Act, unless the work is being fixed at the same time as it is being transmitted.²⁰

The second general issue raised by the definition of "copies" is whether images of data stored in RAM are sufficiently permanent to be deemed copies for copyright purposes. The definition of "copies" speaks of "material objects," suggesting an enduring, tangible embodying medium for a work. With respect to an image of data stored in RAM, is the RAM itself to be considered the material object? The image of the data in RAM disappears when the computer is turned off. In addition, most *7 RAM is "dynamic" (DRAM), meaning that even while the computer is on, the data must be continually refreshed in order to remain readable. So the data is in every sense fleeting. Is its embodiment in RAM sufficiently permanent to be deemed a copy?

The legislative history of the Copyright Act of 1976 would suggest that data stored in RAM is not a copy. As noted above, a copy is defined as a material object in which a work is fixed. The statute defines a work to be "fixed in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration."²¹ According to the legislative history, "the definition of 'fixation' would exclude from the concept purely evanescent or transient reproductions such as those projected briefly on a screen, shown electronically on a television or other cathode ray tube, or captured momentarily in the 'memory' of a computer."²² This language suggests that images of data temporarily stored in RAM do not constitute copies.²³

Several cases, however, appear to have held to the contrary. The leading case is *MAI Systems Corp. v. Peak Computer, Inc.*,²⁴ which held that loading an operating system into RAM for maintenance purposes by an unlicensed third party maintenance organization created an illegal copy of the program fixed in RAM.²⁵ At least three courts have followed the court in *MAI*,²⁶ and some earlier decisions also support its conclusion.²⁷

The Ninth Circuit's opinion in *MAI* may be somewhat qualified, however. The court in *MAI* realized that the copy of the operating system was stored in RAM for several minutes (rather than only a few seconds), and in addition, the court emphasized that while in RAM, the output of the program was viewed by the user, *8 which confirmed the conclusion that the RAM copy was capable of being perceived with the aid of a machine:

[B]y showing that Peak loads the software into the RAM and is then able to view the system error log and diagnose the problem with the computer, MAI has adequately shown that the representation created in the RAM is "sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration."²⁸

Thus, in view of the court's observations in *MAI* which led to its conclusion, it may be considered an open issue whether the *MAI* holding should apply to images--especially only partial images--of works stored in RAM for more transitory periods, such as in a node computer's RAM during a transmission through the Internet. Indeed, following *MAI*, the Seventh Circuit's decision in the case of *NLFC, Inc. v. Devcom Mid-Am., Inc.*²⁹ indicated that merely proving that the defendant had remotely accessed the plaintiff's software through a terminal emulation program was not sufficient to prove that a copy had been

made.³⁰

Moreover, an earlier Ninth Circuit decision in the case of *Lewis Galoob Toys, Inc. v. Nintendo of America, Inc.*³¹ implied that an image of data stored in RAM may not qualify as a copy. At issue in that case was whether a device that altered certain bytes of data of a video game “on the fly” as such information passed through RAM created an infringing derivative work.³² The court held that it did not because although a derivative work need not be fixed, it must have some “form” or “permanence,” which was lacking in the enhanced displays created by the device.³³ The court stated, however, that even if a derivative work did have to be fixed, the changes in the displayed images wrought on the fly by the accused device did not constitute a fixation because the transitory images it created were not “embodied” in any form.³⁴

One further decision also suggests that the issue is unsettled regarding whether data in RAM constitutes a copy. Although the court in *Advanced Computer Services, Inc. v. MAI Systems Corp.*³⁵ followed the *MAI* decision, the court’s opinion suggests that only copies that exist for several minutes should constitute a copy within the purview of copyright law.³⁶ More recently, however, in *Stenograph L.L.C. v. Bossard Assocs.*,³⁷ the D.C. Circuit held that an infringing copy of a *9 computer program was made when that program was loaded into RAM upon boot up and used for its principal purposes.³⁸

3. The WIPO Treaties Are Unclear With Respect to Interim Copies

Just as the issue of whether transitory images of data stored in RAM constitute copies is unsettled under current United States case law, the language of two copyright treaties recently adopted by the World Intellectual Property Organization (WIPO)³⁹ leave the issue unclear as well.⁴⁰

(a) Introduction to the WIPO Treaties

The WIPO treaties were adopted as a result of the WIPO Diplomatic Conference on Certain Copyright and Neighboring Rights Questions hosted by WIPO in Geneva on December 2-20, 1996. More than 700 delegates from approximately 160 countries attended this Conference, which was aimed at tightening international copyright law to respond to issues arising from worldwide use of the Internet. The Conference was also designed to bring existing legislation on copyrights more in line with the provisions of the Trade Related Intellectual Property (TRIPS) sections of the Uruguay Round trade agreement, which in 1994 set up the World Trade Organization (WTO).⁴¹

Three new treaties were considered, only two of which were adopted,⁴² the WIPO Copyright Treaty⁴³ and the WIPO Performances and Phonograms Treaty.⁴⁴ The WIPO Copyright Treaty strengthens the Berne Convention for the Protection of Literary and Artistic Works (Berne Convention),⁴⁵ established in 1886, which was the first international copyright treaty. The WIPO Performances and Phonograms Treaty strengthens the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations, completed in Rome in *10 1961 (Rome Convention).⁴⁶ The treaties are not self executing under United States law, and implementing legislation will have to be passed by Congress.

The two adopted treaties will effect important substantive changes in international copyright law that have potentially far reaching implications for the Internet, and the relevant provisions of these treaties will be discussed throughout this paper. The legislative history to the treaties took the form of several “Agreed Statements.”⁴⁷ Under the Vienna Convention, an Agreed Statement is evidence of the scope and meaning of the treaty language.⁴⁸ Relevant portions of the Agreed Statements will also be discussed in this paper.

Each of the signatories to the WIPO treaties will be required to adopt implementing legislation to conform to the requirements of the treaties. The scope of legislation required in any particular country will depend upon the substantive extent of that country’s existing copyright law, as well the country’s own views concerning whether its existing laws already conform to the requirements of the treaties. As discussed in detail below, WIPO implementation legislation pending in the United States takes a largely minimalist view of the changes to United States copyright law required to conform to the WIPO treaties. It is curious that all the implementing legislation introduced in Congress to date implicitly takes the position that U.S. law already contains most of the rights required under the WIPO treaties, in view of the fact that, as analyzed below, much of the language describing mandatory copyright rights in the WIPO treaties appears to go beyond the correlative rights in current United States law or to set up new rights entirely. The possibility that other countries may adopt legislation implementing the WIPO treaty rights in their seemingly broader form raises the prospect of varying scopes of rights in

different countries, a situation that the WIPO treaties were intended to avoid in the first place.⁴⁹

In contrast to the pending United States implementing legislation, the Commission of the European Communities draft Proposal for a European Parliament and Council Directive on the Harmonization of Certain Aspects of Copyright and Related Rights in the Information Society (EC Directive)⁵⁰ to update and harmonize member state copyright laws seems to take a more expansive view, although individual member states will be free to interpret the extent to which their own copyright laws already conform to the dictates of the EC Directive in adopting legislation in response to it. The WIPO implementation legislation pending in the *11 United States and the EC Directive will be discussed at length throughout this paper as they relate to the various issues treated herein.

(b) The WIPO Copyright Treaty

Article 7 of an earlier draft of the WIPO Copyright Treaty would apparently have adopted the approach of *MAI* to the question of whether RAM copies fall within the reproduction right of the copyright holder.⁵¹ The proposed Article 7(1) provided: “The exclusive right accorded to authors of literary and artistic works in Article 9(1) of the Berne Convention of authorizing the reproduction of their works shall include, in any manner or form, includes [sic] direct and indirect reproduction of their works, whether permanent or temporary, in any manner or form [sic].”⁵²

The reference to “temporary” reproductions would have seemed to cover copies in RAM. The reference to “indirect” reproductions, particularly when coupled with the inclusion of “temporary” reproductions, might have been broad enough to cover interim, partial reproductions in RAM in the course of transmission of a work through the Internet, as well as complete copies of a work made in RAM and/or on a hard disk at the receiving computer.

*12 In addition, proposed Article 7(2) of the treaty seemed to recognize the possibility that the language of Article 7(1) might be read to cover interim, partial reproductions during transmission, for it would have allowed signatory members (referred to as “Contracting Parties” in the treaty) to limit the right of reproduction in those instances:

Subject to the conditions under, and without prejudice to the scope of applicability of, Article 9(2) of the Berne Convention, it shall be a matter for legislation in Contracting Parties to limit the right of reproduction in cases where a temporary reproduction has the sole purpose of making the work perceptible or where the [sic] a temporary reproduction is of a transient or incidental nature, provided that such reproduction takes place in the course of use of the work that is authorized by the author or permitted by law in accordance with the Berne Convention and this Treaty.⁵³

The proposed Article 7, and the subject of interim transmission copies in general, generated a lot of controversy at the Conference.⁵⁴ Telecommunications companies and Internet providers particularly objected to Article 7 because they feared that protection for temporary copying would impose liability for the interim copying that inherently occurs in computer networks.⁵⁵ On the other hand, content providers, such as the software, publishing, and sound recording industries, opposed any open-ended approach that would permit all temporary copying.⁵⁶

*13 To resolve the controversy, the proposed Article 7 was ultimately deleted entirely from the adopted version of the treaty.⁵⁷ The Agreed Statement pertaining to the right of reproduction (formerly Article 7) provides:

The reproduction right, as set out in Article 9 of the Berne Convention, and the exceptions permitted thereunder,⁵⁸ fully apply in the digital environment, in particular to the use of works in digital form. It is understood that the storage of a protected work in digital form in an electronic medium constitutes a reproduction within the meaning of Article 9 of the Berne Convention.⁵⁹

Assistant Secretary of Commerce and Commissioner of Patents and Trademarks Bruce Lehman, who headed the U.S. delegation to the Conference, stated at the end of the Conference that the Agreed Statement was intended to make clear that the reproduction right includes the right to make digital copies, but also that certain copying, e.g., for temporary digital storage, will be permitted.⁶⁰ Commissioner Lehman further expressed the view that the treaty language is broad enough to permit domestic legislation that would remove any liability on the part of network providers where the copying is simply the result of their functioning as a conduit for network services.⁶¹ However, the Agreed Statement itself does nothing more than reference Article 9 of the Berne Convention, which of course was adopted long before digital copies were an issue under

copyright law, and makes no explicit reference to “temporary digital storage.”⁶² In addition, the phrase “storage of a protected work in digital form in an electronic medium” could potentially include temporary digital storage in a node computer during transmission. It is therefore difficult to agree with Commissioner Lehman that the Agreed Statement makes anything “clear.”

Rather, the Agreed Statement seems to leave virtually open ended the question of whether temporary images in RAM will be treated as falling within the copyright owner’s right of reproduction. The uncertainty surrounding the scope of the reproduction right in a digital environment that has divided U.S. courts therefore appears destined to replicate itself in the international arena. The uncertainty is heightened by the fact that Article 9 of the Berne Convention allows signatories to adopt certain exceptions to the reproduction right,⁶³ raising the prospect of inconsistent exceptions being adopted from country to country. As a result, whether interim copies made during the course of transmission constitute infringement may turn on the countries through which the transmission path passes, which is arbitrary *14 under the current transmission technology of the Internet. The issue has ignited debate in the United States in connection with the proposed legislation, discussed below, that is being considered by Congress to implement the treaty.

(c) The WIPO Performances and Phonograms Treaty

Curiously, despite the focus on and ultimate removal of the proposed Article 7 of the WIPO Copyright Treaty, Article 7 as adopted in the WIPO Performances and Phonograms Treaty appears to come closer to adopting the approach of *MAI*. Article 7 gives performers the exclusive right of “authorizing the *direct or indirect* reproduction of their performances fixed in phonograms.”⁶⁴ As originally proposed, Article 7 contained language even closer to the *MAI* logic, for it expressed the reproduction right of performers as one of “authorizing the direct or indirect reproduction, *whether permanent or temporary*, of their musical performances fixed in phonograms”⁶⁵ The use of the phrase “permanent or temporary” would more strongly have suggested that temporary interim reproductions of performances would be within the performer’s right of reproduction.

In addition, Article 7(2) in an earlier draft was also deleted, which made reference to transient copies:

Subject to the provisions of [sic] conditions under, and without prejudice to the scope of applicability of, Article 13(2), it shall be a matter for legislation in Contracting Parties to limit the right of reproduction in cases where a temporary reproduction has the sole purpose of making the fixed performance perceptible or where the [sic] a temporary reproduction is of a transient or incidental nature, provided that such reproduction takes place in the course of use of the fixed performance that is authorized by the performer or permitted by law in accordance with this Treaty.⁶⁶

The Agreed Statement that was issued with respect to the right of reproduction in the WIPO Performances and Phonograms Treaty is very similar to the Agreed Statement on the same subject that was issued with the WIPO Copyright Treaty. The Agreed Statement issued with the WIPO Performances and Phonograms Treaty provides:

The reproduction right, as set out in Articles 7 and 11, and the exceptions permitted thereunder through Article 16, fully apply in the digital environment, in particular to the use of performances and phonograms in digital form. It is understood that the storage of a protected performance or phonogram in digital form in an electronic medium constitutes a reproduction within the meaning of these Articles.⁶⁷

Thus, the Agreed Statement for the WIPO Performances and Phonograms Treaty contains the same ambiguities noted above with respect to the Agreed Statement for the WIPO Copyright Treaty.

Similar to Article 7, Article 11 gives producers of phonograms the “exclusive right of authorizing the direct or indirect reproduction of their phonograms, in any *15 manner or form.”⁶⁸ As in the case of Article 7, an earlier proposed version of Article 11 contained the phrase “whether permanent or temporary,” but this phrase was deleted in the final adopted version.⁶⁹

Both Articles 7 and 11 define the rights recited therein in terms of “phonograms.” “Phonogram” is defined in Article 2(b) as any “fixation” of the sounds of a performance or of other sounds ... other than ... incorporated in a cinematographic or other audiovisual work.⁷⁰

“Fixation” is defined broadly in Article 2(c) as “the embodiment of sounds, or the representations thereof, from which they

can be perceived, reproduced or communicated through a device.”⁷¹ Storage in RAM would seem to satisfy this definition of fixation. Thus, any unauthorized transmission of a performance, or of the sounds embodied in a phonogram fixing such performance, to RAM memory would potentially violate the rights of both the owner of the performance and of the phonogram.⁷²

*16 Thus, the WIPO Performances and Phonograms Treaty replicates the same uncertainty as the WIPO Copyright Treaty with respect to the issue of whether transient copies of performances and phonograms will fall within the copyright owner’s right of reproduction.⁷³ Indeed, the definition of the right of reproduction in Article 7 and Article 11 to include “direct or indirect” reproductions, together with the broad definition of “fixation” in Article 2(c), arguably adopt an approach that is closer to the *MAI* decision than the WIPO Copyright Treaty.

4. Whether Volition Is Required for Liability

Even assuming the rationale of the *MAI* case and the provisions of the WIPO Treaties are applied to deem all reproductions during transmission of a work through the Internet to be copies within the copyright owner’s rights, a difficult issue arises as to who should be responsible for the making of such copies. Multiple actors potentially may be connected with a particular copy or copies of a work on the Internet, such as a work posted to a bulletin board service (BBS)—the original poster of the work, the BBS operator, the Online Service Provider (OSP) through which the BBS is offered, a user downloading a copy of the work from the BBS, and perhaps the operators of node computers through which a copy of the work may pass during the course of such downloading. Which one or more of these actors should be deemed to have made the copy or copies?

The most difficult aspect of the issue of which actors should be liable for copies made in the course of the downloading, viewing, or other transmission of a work through the Internet stems from the fact that many such copies will typically be made *automatically*. For example, copies of the work (in whole or in part) will automatically be made in the RAM (and possibly in temporary hard disk storage) of each interim node computer within the transmission path of the work through the *17 Internet. And the modems on the initiating and receiving ends of the transmission will buffer the data to be transmitted. Internet search engine services may use “spiders” to “crawl” through the Internet and make copies in RAM of materials on websites in the course of creating an index of that material.

Should a volitional act be required on the part of a third party to be liable for a copy made during transmission? If so, is a *direct* volitional act to cause the copy to be made required (as in the case of the original poster or the ultimate recipient of the copy), or is it sufficient if there was a volitional act in setting up the automatic process that ultimately causes the copy to be made (as in the case of the BBS operator, the OSP, or the search engine service)? In view of the fact that copyright law has traditionally imposed a standard of strict liability for infringement,⁷⁴ one could argue that a direct volitional act may not be required.

In addition to copies made automatically on the Internet, many infringing copies may be made *innocently*. For example, one may innocently receive an e-mail message that infringes the copyright rights of another and print that message out. Or one may innocently encounter (and copy into the RAM of one’s computer or print out) infringing material in the course of browsing.

Several cases have addressed the issue of direct liability on the part of OSPs, BBS operators, and others for infringement of the reproduction right by users of the service, and in particular how much of a volitional act is required for direct infringement liability.

(a) The *Netcom* Case

The well known case of *Religious Technology Center v. Netcom On-Line Communication Services*⁷⁵ refused to impose direct infringement liability on an OSP for copies made through its service, at least where the OSP had no knowledge of such infringements.⁷⁶ In that case, the plaintiffs sought to hold liable the OSP (Netcom) and the operator of a BBS which gained its Internet access through the OSP for postings of the plaintiffs’ copyrighted works on the bulletin board.⁷⁷ The works in question were posted by an individual named Erlich⁷⁸ to the BBS’s computer for use through Usenet.⁷⁹ The BBS’s computer automatically briefly *18 stored them.⁸⁰ The OSP then automatically copied the posted works onto its computer and onto other computers on the Usenet.⁸¹ In accordance with usual Usenet procedures, Usenet servers maintained the posted works for

a short period of time--eleven days on Netcom's computer and three days on the BBS's computer.⁸² The OSP neither created nor controlled the content of the information available to its subscribers, nor did it take any action after being told by the plaintiffs that Erlich had posted infringing messages through its system.⁸³

The court cast the issue of direct liability as "whether possessors of computers are liable for incidental copies automatically made on their computers using their software as part of a process initiated by a third party."⁸⁴ The court distinguished *MAI*, noting that

unlike *MAI*, the mere fact that Netcom's system incidentally makes temporary copies of plaintiffs' works does not mean Netcom has caused the copying. The court believes that Netcom's act of designing or implementing a system that automatically and uniformly creates temporary copies of all data sent through it is not unlike that of the owner of a copying machine who lets the public make copies with it.⁸⁵

The court held that, absent any volitional act on the part of the OSP or the BBS operator other than the initial setting up of the system, the plaintiffs' theory of liability, carried to its natural extreme, would lead to unreasonable liability: "Although copyright is a strict liability statute, there should still be some element of volition or causation which is lacking where a defendant's system is merely used to create a copy by a third party."⁸⁶

Accordingly, the court refused to hold the OSP liable for direct infringement.⁸⁷ The court also refused to hold the BBS operator liable for direct infringement.⁸⁸ "[T]his court holds that the storage on a defendant's system of infringing copies and retransmission to other servers is not a direct infringement by the BBS operator of the exclusive right to *reproduce* the work where such copies are uploaded by an infringing user."⁸⁹ The court further held that the warning of the presence of infringing material the plaintiffs had given did not alter the outcome with respect to direct infringement liability: "[w]hether a defendant makes a direct copy that *19 constitutes infringement cannot depend on whether it received a warning to delete the message. This distinction may be relevant to contributory infringement, however, where knowledge is an element."⁹⁰

(b) The *MAPHIA* Case

Another well known case, *Sega Enterprises Ltd. v. MAPHIA*,⁹¹ adopted the reasoning of the *Netcom* case and refused to hold a BBS and its system operator directly liable for the uploading and downloading of unauthorized copies of Sega's video games by others, even though the defendants participated in encouraging the unauthorized copying,⁹² which was not true in *Netcom*.⁹³ (As discussed below, the court did, however, find contributory liability.) The evidence established that the system operator knew that the infringing activity was going on through the bulletin board, and indeed that he had specifically solicited the uploading of the games for downloading by users of the bulletin board.⁹⁴ The system operator also sold video game copiers, known as "Super Magic Drives," through the MAPHIA BBS, which enabled subscribers to the BBS to play games which had been downloaded from the BBS.⁹⁵

In granting a motion by Sega seeking summary judgment and a permanent injunction,⁹⁶ the court refused to impose direct liability for copyright infringement on the BBS and its system operator, Chad Sherman.⁹⁷ The court cited the *Netcom* case for the proposition that, although copyright is a strict liability statute, there should be some element of volition or causation which is lacking where a defendant's system is merely used to create a copy by a third party.⁹⁸ The court further stated:

While Sherman's actions in this case are more participatory than those of the defendants in *Netcom*, the Court finds *Netcom* persuasive. Sega has not shown that Sherman himself uploaded or downloaded the files, or directly caused such uploading or downloading to occur. The most Sega has shown is that Sherman operated his BBS, that he knew *20 infringing activity was occurring, and that he solicited others to upload games. However, whether Sherman knew his BBS users were infringing on Sega's copyright, or encouraged them to do so, has no bearing on whether Sherman directly caused the copying to occur. Furthermore, Sherman's actions as a BBS operator and copier seller are more appropriately analyzed under contributory or vicarious liability theories. Therefore, because Sega has not shown that Sherman directly caused the copying, Sherman cannot be liable for direct infringement.⁹⁹

(c) The *Sabella* Case

Similarly, in *Sega Enterprises Ltd. v. Sabella*,¹⁰⁰ the court refused to hold a BBS operator liable for direct infringement of the reproduction right where there was no evidence that the operator did any unauthorized copying herself.¹⁰¹ The defendant, Sabella, was the system operator of a BBS called *The Sewer Line*, which contained a directory called *Genesis*, into which were uploaded and downloaded infringing copies of Sega's video games by subscribers to the BBS.¹⁰² The defendant also sold copiers that enabled users to play Sega games directly from floppy disks without the need for a Sega game cartridge, and allowed purchasers of her copiers to download files from her BBS without charge for a certain time period.¹⁰³

Although the court agreed that the defendant's activities were more participatory than those of the defendant in *Netcom*, the court nevertheless found the *Netcom* court's logic persuasive.

*21 Sega has not shown that Sabella herself uploaded or downloaded the files, or directly caused such uploading or downloading to occur. The most Sega has shown is that Sabella should have known such activity was occurring, that she sold copiers that played games such as those on her BBS, and that she gave her copier customers downloading privileges on her BBS.¹⁰⁴

Citing *Netcom*, the court concluded that "whether Sabella knew her BBS users were infringing on Sega's copyright or encouraged them to do so, has no bearing on whether Sabella directly caused the copying to occur."¹⁰⁵

The court did rule, however, that Sabella was liable for contributory infringement.¹⁰⁶ The court cited the Ninth Circuit's holding in *Fonovisa, Inc. v. Cherry Auction, Inc.* that "providing the site and facilities for known infringing activity is sufficient to establish contributory liability."¹⁰⁷ The court noted that

Sabella provided the BBS as a central depository site for the unauthorized copies of games, and allowed subsequent distribution of the games by user downloads. She provided the facilities for copying the games by providing, monitoring, and operating the BBS software, hardware, and phone lines necessary for the users to upload and download games.¹⁰⁸ Accordingly, she was liable for contributory infringement under the *Fonovisa* standard.¹⁰⁹

The court went further, however, holding that even under an alternative and higher standard of "substantial participation," Sabella was liable.¹¹⁰ "Sabella did more than provide the site and facilities for the known infringing conduct. She provided a road map on the BBS for easy identification of Sega games available for downloading."¹¹¹ The court also rejected Sabella's fair use defense,¹¹² issued a permanent injunction against Sabella,¹¹³ and awarded Sega statutory damages of \$5,000 per infringed work.¹¹⁴

*22 In contrast to the preceding cases, several cases have held that where a defendant BBS operator has a more direct participation in the acts of infringement of its subscribers or users, there can be direct infringement liability for those acts.

(d) The *Frena* Case

Playboy Enterprises, Inc. v. Frena,¹¹⁵ decided before *Netcom*, *MAPHIA*, and *Sabella*, goes further than those cases and establishes some support for liability for the acts of subscribers without a direct volitional act on the part of the operator. In *Frena*, the court held the operator of a BBS, Frena, responsible for infringement of the rights of *distribution* and *display* (although curiously not the right of *reproduction*) with respect to the plaintiff's copyrighted photographs, which were distributed and displayed through the bulletin board by subscribers, despite evidence that the operator never himself uploaded any of the photographs onto the bulletin board and removed the photographs as soon as he was made aware of them.¹¹⁶ "There is no dispute that Defendant Frena supplied a product containing unauthorized copies of a copyrighted work. It does not matter that Defendant Frena claims he did not make the copies [himself]."¹¹⁷ Although the case did not generate a finding of liability with respect to the right of reproduction, the court's logic with respect to finding infringement of the rights of distribution and display would seem to apply to the reproduction right as well.

The reach of *Frena* may be limited, however, because the BBS was apparently one devoted to photographs, much of it of adult subject matter, and subscribers routinely uploaded and downloaded images therefrom.¹¹⁸ Thus, the court may have viewed Frena as a more direct participant in the infringement, having set up a bulletin board that was devoted to the kind of activity that would foreseeably lead to infringement. The undisputed evidence of the presence on the bulletin board of the plaintiff's photographs, some of which had been edited to remove the plaintiff's trademarks and to add Frena's

advertisements,¹¹⁹ was apparently evidence of sufficient involvement for the court to find direct infringement of the public distribution right.¹²⁰ Similarly, Frena's selection of the infringing content for inclusion in the bulletin board was apparently sufficient involvement to constitute direct infringement of the public display right.¹²¹

*23 In addition, as discussed in detail below, legislation pending in Congress that addresses the issue of OSP liability implicitly rejects the logic of the *Frena* case, at least to the extent that it suggested that passive, automatic acts engaged in through a technological process initiated by another through the facilities of an OSP could constitute direct infringement on the part of the OSP.

(e) The *Webbworld* Case

In a case factually similar to *Frena*, a company operating a website was held directly liable for the posting of copyrighted material on its site which could be downloaded by subscribers.¹²² In *Playboy Enterprises, Inc. v. Webbworld, Inc.*, the defendant Webbworld, Inc. operated a website called Neptics, which made adult images available to subscribers who paid \$11.95 per month.¹²³ Over a period of several months, images became available through the Neptics website which were originally created by or for the plaintiff Playboy Enterprises, Inc.¹²⁴

The court rejected the defendant's argument that it could not be held directly liable for infringement under the logic of the *Netcom* case.¹²⁵ The court distinguished the *Netcom* case on the ground that Netcom did not create or control the content of the information available to its subscribers, but rather merely provided access to the Internet.¹²⁶ In contrast, the court noted that Neptics was receiving payment selling the images it stored on its computers, and therefore was acting as more than merely an information conduit.¹²⁷

The defendant also argued that it could not be held liable for direct infringement because it had no control over the persons who posted the infringing images to the adult newsgroups from which Neptics obtained its material.¹²⁸ The court rejected this argument:

While this may be true, Neptics surely has control over the images it chooses to sell on the Neptics' website. Even the absence of the ability to exercise such control, however, is no defense to liability. If a business cannot be operated within the bounds of the Copyright Act, then perhaps the question of its legitimate existence needs to be addressed.¹²⁹

***24 (f) The *Sanfilippo* Case**

In *Playboy Enterprises, Inc. v. Sanfilippo*,¹³⁰ the court found the defendant operator of a website, through which 7475 of the plaintiff's copyrighted images were available, directly liable for infringement.¹³¹ The defendant admitted copying sixteen files containing a great many of the images from a third party source onto his hard drive and CD-ROM.¹³² He also admitted that eleven other files containing such images were uploaded to his hard drive by a third party.¹³³ The court found that because the defendant had authorized the third party to upload such files to his site, the defendant was directly liable for such uploading as a violation of the exclusive right under Section 106 of the Copyright Statute to "authorize" others to reproduce a copyrighted work.¹³⁴ The court also found that the defendant had willfully infringed 1699 of the copyrighted images.¹³⁵

One of the most interesting aspects of the *Sanfilippo* case is the amount of damages the court awarded. The plaintiff sought statutory damages and argued that a statutory damages award should be made for each individual image that was infringed.¹³⁶ The defendant argued that, in awarding damages, the court should consider the fact that the copied images were taken from compilations and, therefore, an award should be made only with respect to each particular magazine's copyright from which the images were taken.¹³⁷ The court rejected this argument and allowed a statutory damage award for each image on the grounds that each image had an independent economic value on its own,¹³⁸ each image represented "a singular and copyrightable effort concerning a particular model, photographer, and location,"¹³⁹ and the defendant marketed each one of the images separately.¹⁴⁰ The court awarded statutory damages of \$500 per image, for a total damage award of \$3,737,500.¹⁴¹ To the author's knowledge, this is the largest statutory damages award ever made in a copyright case and indeed one of the largest copyright damage awards of any kind.

*25 In sum, under a majority of the cases decided to date, it appears that a direct volitional act of some kind is required for

liability for direct copyright infringement. The *MAPHIA* and *Sabella* cases suggest that it is insufficient for direct liability for an actor such as a BBS operator to have provided only encouragement of the acts (such as initial uploading of unauthorized copies) that lead to infringement. Rather, for direct liability, the defendant must have engaged in the very acts of infringement themselves.

However, the *Frena*, *Webbworld*, and *Sanfilippo* cases (as well as the *Hardenburgh* and *Webbworld* cases discussed below with respect to the public display and distribution rights) suggest that where an actor such as a BBS operator or website operator has some form of direct involvement in the anticipated acts that lead to infringement or in the infringing acts themselves (such as resale of the infringing material), there may be a finding of sufficient volitional activity to impose direct liability. Thus, to establish direct liability for infringement, one must look at whether the defendant participated in the very acts of infringement themselves.

5. The Reproduction Right Under WIPO Implementing Legislation

(a) United States Legislation

As of August 1998, four bills were pending in Congress to implement the WIPO treaties, only one of which attempts to clarify the issue of whether interim copies made during the course of transmission infringe the reproduction right.

(1) House Bill 2281 and Senate Bill 2037

Two nearly identical bills were introduced in July 1997 with the support of the Clinton administration. In the House, Rep. Howard Coble introduced House Bill 2281, the "WIPO Copyright and Performances and Phonograms Treaty Implementation Act of 1997."¹⁴² A subcommittee hearing on the bill took place on September 17, 1997,¹⁴³ and the bill was approved for full committee action by the subcommittee on February 26, 1998.¹⁴⁴ As discussed below, House Bill 2281 was later combined with another title embodying a compromise agreement between OSPs and copyright owners with respect to the issue of liability on the part of OSPs, together with some miscellaneous provisions relating to ephemeral recordings, distance education, and exemptions for libraries and archives. The combined bill, which is still denominated House Bill 2281, was passed by the House in August 1998.¹⁴⁵

A counterpart bill in the Senate, Senate Bill 1121, was introduced by Sen. Orrin Hatch on July 31, 1997.¹⁴⁶ Senate Bill 1121 contained the same substantive *26 provisions implementing the WIPO treaties as House Bill 2281. As discussed below, Senate Bill 1121 has now similarly been combined with another title embodying the industry compromise with respect to the issue of liability on the part of OSPs. The combined bill, which is now denominated Senate Bill 2037, was passed by the Senate in May 1998.¹⁴⁷ As of this writing, Senate Bill 2037 and House Bill 2281 were in conference committee to resolve the differences between them.¹⁴⁸

House Bill 2281 and Senate Bill 2037 take a minimalist approach to implementing the requirements of the WIPO treaties. It has been the view of the Clinton administration that most of the enhanced copyright protections set forth in the treaties are already available under United States law, so that no major changes to U.S. law are believed to be required to implement the treaties.

Specifically, House Bill 2281 and Senate Bill 2037 address *only* the requirements of Articles 11 and 12 of the WIPO Copyright Treaty, and of Articles 18 and 19 of the WIPO Performances and Phonograms Treaty, to provide adequate legal protection and effective legal remedies against (i) the circumvention of effective technological measures that are used by rights holders to restrict unauthorized acts with respect to their protected works, and (ii) the removal or alteration of any electronic rights management information (information which identifies the work, the author of the work, the owner of any right in the work, or information about the terms and conditions of use of the work), or the distribution or communication to the public of copies of works with knowledge that the electronic rights management information has been removed or altered. The specific provisions of these bills are discussed in further detail below. These bills contain nothing addressing the reproduction right or how that right relates to the digital environment.

(2) Senate Bill 1146

An alternative bill to implement the WIPO treaties, Senate Bill 1146, entitled the “Digital Copyright Clarification and Technology Education Act of 1997,” was introduced on September 3, 1997 by Sen. John Ashcroft.¹⁴⁹ A committee hearing on the bill was held on September 4, 1997.¹⁵⁰ Like House Bill 2281 and Senate Bill 2037, Senate Bill 1146 also contains language to implement prohibitions against the circumvention of technologies designed to prevent unauthorized access to copyrighted works and to provide electronic rights management information about a work, although it adopts a different approach to doing so than House Bill 2281 and Senate Bill 2037, as discussed further below.

Senate Bill 1146, however, also contains a much broader package of copyright-related measures. With respect to the reproduction right, Senate Bill 1146 would clarify that ephemeral copies of a work in digital form that are incidental to the operation of a device in the ordinary course of lawful use of the work do not infringe *27 the reproduction right. Specifically, Senate Bill 1146 would add a new Subsection (b) to Section 117 of the Copyright Statute to read:

(b) Notwithstanding the provisions of section 106, it is not an infringement to make a copy of a work in a digital format if such copying--

- (1) is incidental to the operation of a device in the course of the use of a work otherwise lawful under this title; and
- (2) does not conflict with the normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author.¹⁵¹

New Section 117(b)(1) is similar to the right granted in the existing Section 117 of the Copyright Statute with respect to computer programs, which permits the making of copies of the program “as an essential step in the utilization of the computer program in conjunction with a machine.”¹⁵² New Section 117(b)(1) extends this right to the otherwise lawful use of other types of works in a digital format, to the extent that copying is necessary for such use. It would seem to cover activities such as the loading of a musical work into memory in conjunction with playing the work, the incidental copies of a movie or other work ordered on demand that are made in memory in the course of the downloading and viewing of the movie, and the various interim copies of a work that are made in node computers in the routine course of an authorized transmission of the work through the Internet.

The limiting language contained in new Section 117(b)(2) is drawn directly from the WIPO treaties themselves. Specifically, Article 10 of the WIPO Copyright Treaty permits treaty signatories to provide for limitations of, or exceptions to, the rights granted under the treaty in “certain special cases that do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the author.”¹⁵³ The scope of reach of this language is obviously not self-evident, and the boundaries of this exception to the reproduction right are therefore not entirely clear. However, the exception should apply to at least the most common instances in which incidental copies must be made in the course of an authorized use of a digital work, including in the course of an authorized transmission of that work through a network.

(3) House Bill 3048

The most recent bill to be introduced into Congress to implement the WIPO copyright treaties is House Bill 3048, entitled the “Digital Era Copyright Enhancement Act,” which was introduced on November 13, 1997 by Rep. Rick Boucher.¹⁵⁴ Like Senate Bill 1146, House Bill 3048 contains a broad package of changes to current U.S. copyright law, as will be discussed further below. With respect to the reproduction right, House Bill 3048 contains an identical amendment to Section 117 as Senate Bill 1146 to permit the making of incidental copies of a *28 work in digital form in conjunction with the operation of a device in the ordinary course of lawful use of the work.¹⁵⁵

(b) The EC Directive

The EC Directive contains strong statements of copyright owners’ rights to control the reproduction, distribution, and presentation of their works online. The EC Directive requires legislative action by EC member states with respect to four rights, the reproduction right,¹⁵⁶ the communication to the public right,¹⁵⁷ the distribution right,¹⁵⁸ and protection against the circumvention or abuse of electronic management and protection systems.¹⁵⁹

With respect to the reproduction right, the EC Directive adopts essentially the same broad language of proposed Article 7(1) of the WIPO Copyright Treaty that provoked so much controversy and was ultimately deleted from the WIPO Copyright Treaty. Specifically, Article 2 of the EC Directive provides that member states must “provide for the exclusive right to authorize or prohibit direct or indirect, temporary or permanent reproduction by any means and in any form,” of copyrighted works.¹⁶⁰ The extension of the reproduction right to “direct or indirect” and “temporary or permanent” reproductions would seem to cover even ephemeral copies of a work made during the course of transmission or use of a copyrighted work in an online context. Indeed, the official commentary to Article 2 notes that the definition of the reproduction right covers “all relevant acts of reproduction, whether online or offline, in material or immaterial form.”¹⁶¹ The commentary also appears to adopt the approach of the *MAI* case in recognizing copies of a work in RAM as falling within the reproduction right: “The result of a reproduction may be a tangible permanent copy, like a book, but it may just as well be a non-visible temporary copy of the work in the working memory of a computer.”¹⁶²

To provide counterbalance, however, Article 5(1) of the EC Directive provides an automatic exemption from the reproduction right for “[t]emporary acts of reproduction … which are an integral part of a technological process for the sole purpose of enabling use to be made of a work or other subject matter, and having no independent economic significance.”¹⁶³ This provision is very similar to the new *29 clause (b) that would be added to Section 117 of the U.S. Copyright Statute under Senate Bill 1146 and House Bill 3048. Thus, the EC Directive adopts an approach that affords the reproduction right a very broad inherent scope, but provides an explicit and automatic exemption for copies that are made incidental to the use¹⁶⁴ of a work through a technological process, such as transmission through a network or loading into memory for viewing or playing of the work.

B. The Right of Public Performance

Section 106(4) of the Copyright Statute grants the owner of copyright in a work the exclusive right to perform the work publicly.¹⁶⁵ The right applies to literary, musical, dramatic, and choreographic works, pantomimes, motion pictures and other audiovisual works.¹⁶⁶ It does not apply to pictorial, graphic, sculptural, and architectural works.¹⁶⁷ It also does not apply to sound recordings, other than with respect to public performances by digital transmission,¹⁶⁸ although a public performance of a sound recording may infringe the right of public performance of the underlying musical work that is recorded in the sound recording.¹⁶⁹

Section 101 provides that to perform a work “publicly” means:

- (1) to perform … it at a place open to the public or at any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered; or
- (2) to transmit or otherwise communicate a performance … of the work to a place specified by clause (1) or to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.¹⁷⁰

Because this definition encompasses transmissions of works, it clearly implicates online activity. However, to fall within the public performance right, there must be a transmission of a *performance* of the work, not merely of the work itself. Thus, for example, transmission of the digitally encoded sounds of a musical work to the hard disk of a recipient computer may infringe the right of distribution of *30 the work (as well as the reproduction right), but not the public performance right, because the work is not being *performed*¹⁷¹ at the recipient’s end.

1. Isochronous Versus Asynchronous Transmissions

One of the most hotly debated issues concerning the scope of the public performance right in online contexts is whether, to fall within the copyright owner’s right of public performance, the “performance” must be accomplished by a transmitted signal that is capable of immediate conversion to a performance moment-by-moment in time (referred to as an “isochronous transmission”), or whether it is sufficient that the transmitted signal is sent either faster or slower (overall or moment-by-moment) than the embodied performance (referred to as an “asynchronous transmission”).¹⁷²

The definition of performing a work publicly in Section 101 of the Copyright Statute was drafted at a time when “transmissions” were generally isochronous transmissions, as in broadcasting. If this definition is read to require an isochronous transmission--and to date all of the types of transmissions that courts have held to be public performances have been isochronous transmissions¹⁷³--then many acts of downloading of works on the Internet (being asynchronous transmissions), even if followed by in-home playback, may not fall within the public performance right. The issue is far from settled, however, and performing rights societies have argued to the contrary.¹⁷⁴ The issue is particularly significant for musical works because different organizations are often responsible for licensing and collecting royalties for public distribution and public performance of musical works.

Even if an isochronous transmission is required for a public performance, the distinction between isochronous and asynchronous transmissions becomes highly blurred on the Internet. Because the Internet is based on packet switching technology, all transmissions through the Internet are in some sense asynchronous. Moreover, through use of buffering in memory or storage of information on magnetic or optical storage, either at the transmitting or the receiving end or both, of all or parts of transmitted data, even an asynchronous transmission can effect a smooth, moment-by-moment performance at the receiving end.

One can argue that the determinative factor of whether a public performance has been accomplished should be judged from the perspective of what the recipient perceives, not the transmission technology used (whether isochronous or asynchronous), especially if the transmitting party controls when and what the recipient sees. For example, the Senate Report accompanying the Digital *31 Performance Right in Sound Recordings Act of 1995 suggests that burst transmissions for prompt playback may constitute public performances:

[I]f a transmission system was designed to allow transmission recipients to hear sound recordings substantially at the time of transmission, but the sound recording was transmitted in a high-speed burst of data and stored in a computer memory for prompt playback (such storage being technically the making of a phonorecord), and the transmission recipient could not retain the phonorecord for playback on subsequent occasions (or for any other purpose), delivering the phonorecord to the transmission recipient would be incidental to the transmission.¹⁷⁵

2. The Meaning of “Publicly”

Section 106(4) grants the exclusive right to perform a work publicly.¹⁷⁶ Section 101 defines performing a work “publicly” to include performance by transmission to an audience that may receive the transmission at different times, at different places, or both.¹⁷⁷ Thus, the mere fact that recipients may download performances of a work at dispersed times on demand through the Internet does not diminish the “public” nature of such performances. For example, in *On Command Video Corp. v. Columbia Pictures Industries, Inc.*,¹⁷⁸ the court held that the public performance right was implicated by a system of video cassette players wired to hotel rooms which was capable of transmitting guest-selected movies to the occupants of one room at a time.¹⁷⁹

In sum, the breadth of definition of public performances makes a variety of online transmissions of “on demand” information potentially within the public performance right. How contemporaneously the playback of that information must be with the transmission in order for there to be deemed a “performance” under current United States law remains to be seen. The WIPO treaties could render many of these issues largely academic in view of the fact that the current public performance right could become subsumed in the potentially broader right of “communication to the public” or “making available to the public” contained in the WIPO treaties discussed below. However, as discussed further below, all four currently pending bills to implement the WIPO treaties take a minimalist approach and do not adopt separate rights of communication to the public or making available to the public. Accordingly, the noted uncertainties with respect to the right of public performance are likely to await further clarification through judicial development.

C. The Right of Public Display

Section 106(5) of the Copyright Statute grants the owner of copyright in a literary, musical, dramatic, and choreographic work, a pantomime, and a pictorial, graphic or sculptural work, including the individual images of a motion picture or *32 other audiovisual work,¹⁸⁰ the exclusive right to display the work publicly.¹⁸¹ Section 101 defines the meaning of “to display a

work publicly” in virtually identical terms as the definition of “to perform a work publicly.”¹⁸² Thus, a public display can be accomplished by a transmission of a display of the work to members of the public capable of receiving the display in the same place or separate places and at the same time or at different times.

For example, in *Playboy Enterprises, Inc. v. Frena*,¹⁸³ the court held that the making of photographs available on a BBS was a public display, even though the display was limited to subscribers, and subscribers viewed the photographs only upon downloading the photographs from the BBS on demand.¹⁸⁴ Thus, making material available through the Internet even to only a small and select audience may still constitute a public display. The point at which a selected audience becomes so small that a display to such audience can no longer be considered a public display is unclear. The *Playboy* court seemed to define an audience as public if it contains “a substantial number of persons outside of a normal circle of family and its social acquaintances.”¹⁸⁵

Similarly, in *Marobie-FL, Inc. v. National Association of Fire Equipment Distributors*,¹⁸⁶ the administrator of the Web page of the defendant, National Association of Fire Equipment Distributors (NAFED), placed certain files on NAFED’s Web page containing three volumes of copyrighted clip art of the plaintiff.¹⁸⁷ The court ruled that the placement of the files containing the clip art on the Web page constituted a direct violation of both the plaintiff’s distribution right and public display right.¹⁸⁸ The court concluded that the mere making available of the files for downloading was sufficient for liability, because “once the files were uploaded [onto the Web server], they were available for downloading by Internet users and ... the [[[OSP]]] server transmitted the files to some Internet users when requested.”¹⁸⁹ The court, citing the *Netcom* case, refused to hold the OSP supplying Internet service to NAFED directly or vicariously liable, although the court noted that the OSP might be liable for contributory infringement, depending upon whether the OSP knew that any material on NAFED’s Web page was copyrighted, when it *33 learned of that fact, and the degree to which the OSP monitored, controlled, or had the ability to monitor or control the contents of NAFED’s Web page.¹⁹⁰

And in *Playboy Enterprises, Inc. v. Hardenburgh*,¹⁹¹ the defendants operated a BBS which made available graphic image files to subscribers for a fee, many of which contained adult material.¹⁹² To increase its stockpile of available information, and thereby its attractiveness to new customers, defendants provided an incentive to encourage subscribers to upload information onto the BBS.¹⁹³ Subscribers were given “credit” for each megabyte of electronic data that they uploaded onto the system, which entitled them to download defined amounts of data from the system in return.¹⁹⁴ Information uploaded onto the BBS went directly to an “upload file” where an employee of the BBS briefly checked the new files to ascertain whether they were “acceptable,” meaning not pornographic and not blatantly protected by copyright.¹⁹⁵ Many of the plaintiff’s copyrighted photographs appeared on the BBS and the plaintiff brought suit for infringement.¹⁹⁶

With respect to the issue of direct liability for the infringing postings of its subscribers, the court agreed with the *Netcom* decision’s requirement of some direct volitional act or participation in the infringement.¹⁹⁷ However, the court found that the facts of the case, unlike those of *Frena*, *MAPHIA*, and *Netcom*, were sufficient to establish direct liability for infringement of both the public display and distribution rights.¹⁹⁸ The court based its conclusion on two crucial facts: (1) Defendants’ policy of encouraging subscribers to upload files, including adult photographs, onto the system, and (2) Defendants’ policy of using a screening procedure in which [its] employees viewed all files in the upload file and moved them into the generally available files for subscribers.

These two facts transform Defendants from passive providers of a space in which infringing activities happened to occur to active participants in the process of copyright infringement.¹⁹⁹

Finally, in *Playboy Enterprises, Inc. v. Webbworld, Inc.*,²⁰⁰ the court held the defendants directly liable for infringing public displays of copyrighted images for making such images available through a website for downloading by subscribers.²⁰¹

*34 The WIPO Copyright Treaty does not contain a right of public display per se. However, the right of public display is arguably subsumed under the right of communication to the public in the WIPO Copyright Treaty.

D. The Right of Public Distribution

Section 106(3) of the Copyright Statute grants the copyright owner the exclusive right “to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending.”²⁰² Thus, to

implicate the right of public distribution, three conditions must obtain: (a) a copy must be distributed; (b) the distribution must be to the public; and (c) the distribution must be by sale, rental, lease, lending or “other transfer of ownership.”²⁰³

1. The Requirement of a Copy

Whether transmissions of a work on the Internet implicate the public distribution right turns in the first instance on whether there has been a distribution of a copy of the work. The broadcasting and cable industries have traditionally treated broadcasts and cable transmissions as *not* constituting distributions of copies of a work. With respect to Internet transmissions, however, if a complete copy of a work ends up on the recipient’s computer, it may be easy to conclude that a copy has been distributed. Indeed, to remove any doubt from this issue, the NII White Paper proposed to include “transmission” within the copyright owner’s right of distribution,²⁰⁴ where transmission is defined essentially as the creation of an electronic copy in a recipient system.²⁰⁵

It is less clear whether other types of transmissions constitute distributions of copies. For example, what about an artistic work that is transmitted and simultaneously performed live at the recipient’s end? Although the public performance right may be implicated, has there been a distribution of a copy that would implicate the right of distribution? Should it matter whether significant portions of the work are buffered in memory at the recipient’s computer? Many of these distinctions could be rendered moot by the potentially broader right of communication to the public contained in the WIPO treaties discussed below, were that right to be expressly contained in implementing legislation in the United States (the currently pending bills do not contain such a right).

*35 Even if a copy is deemed to have been distributed in the course of an Internet transmission of an infringing work, difficult questions will arise as to who should be treated as having made the distribution--the original poster of the unauthorized work, the OSP or BBS through which the work passes, the recipient, or some combination of the foregoing? Thus, the same issue of volition arises with respect to the distribution right as was discussed above in connection with the reproduction right.

Several decisions have addressed the question of whether the mere posting of a work on a BBS or other Internet site from which it can be downloaded by members of the public constitutes a public distribution of the work. In *Religious Technology Center v. Netcom On-Line Communication Services*,²⁰⁶ the court refused to hold either an OSP or a BBS operator liable for violation of the public distribution right based on the posting by an individual of infringing materials on the BBS.²⁰⁷ With respect to the BBS, the court stated, “[o]nly the subscriber should be liable for causing the distribution of plaintiffs’ work, as the contributing actions of the BBS provider are automatic and indiscriminate.”²⁰⁸ With respect to the OSP, the court noted, “[i]t would be especially inappropriate to hold liable a service that acts more like a conduit, in other words, one that does not itself keep an archive of files for more than a short duration.”²⁰⁹

However, in *Playboy Enterprises, Inc. v. Frena*,²¹⁰ the court, with very little analysis of the issue, held a BBS operator liable for infringement of the public distribution right for the making of photographs available through the BBS that were downloaded by subscribers, even though the defendant claimed he did not make copies of the photographs himself.²¹¹ But because the BBS was apparently one devoted to photographs, much of it of adult subject matter, and subscribers routinely uploaded and downloaded images therefrom,²¹² the court seemed to have viewed the defendant as a direct participant in the distributions to the public that took place through the BBS.

Similarly, in *Playboy Enterprises, Inc. v. Chuckleberry Publishing Inc.*,²¹³ the court ruled that uploading copyrighted pictorial images onto a computer in Italy which could be accessed by users in the United States constituted a public distribution in the United States.²¹⁴ In contrast to the *Netcom* case, the court noted that the defendant did more than simply provide access to the Internet.²¹⁵ Instead, *36 the defendant provided services and supplied the content for those services, which gave users the option to either view or download the images.²¹⁶ The court concluded that the defendant, by actively soliciting United States customers to the services, had distributed its product within the United States.²¹⁷

And in *Playboy Enterprises, Inc. v. Webbworld, Inc.*,²¹⁸ the court held the defendants directly liable for infringing the distribution right by making copyrighted images available through a website for downloading by subscribers.²¹⁹ The court found that, in contrast to the *Netcom* case, the defendants took “affirmative steps to cause the copies to be made.”²²⁰

Finally, as previously noted, the court in *Marobie-FL, Inc. v. National Association of Fire Equipment Distributors*²²¹ ruled

that the placement of three files containing copyrighted clip art on the Web page of the defendant constituted a direct violation of the plaintiff's distribution right because the files were available for downloading by Internet users and were transmitted to Internet users upon request.²²²

2. The Requirement of a Public Distribution

Unlike the case of the public performance and public display rights, the Copyright Statute does not define what constitutes a public distribution. However, one might expect courts to afford a similarly broad interpretation of public with respect to the right of public distribution. Some distributions will clearly be public, such as the posting of material on a Usenet newsgroup, and some will clearly not, such as sending e-mail to a single individual. Many other Internet distributions will fall in between. However, one might expect courts to treat distribution to members of the public by Internet access at different times and places as nevertheless public, by analogy to the public performance and public display rights.

As previously discussed with respect to the public display right, the court in *Playboy Enterprises, Inc. v. Hardenburgh*²²³ held the defendant operators of a BBS directly liable for infringement of the public distribution right by virtue of making available photographs--many of which were copyrighted by the plaintiff Playboy Enterprises--to subscribers of the BBS for a fee.²²⁴ The court's basis for finding liability was derived principally from the fact that the defendants had a policy of encouraging subscribers to contribute files, including adult photographs, to an *37 "upload file" on the BBS, and from the fact that the defendants had a practice of using a screening procedure in which its employees screened all files in the upload file to remove pornographic material and moved such material into the generally available files for subscribers.²²⁵ These facts led the court to conclude that the defendants were active participants in the process of copyright infringement.²²⁶

With respect to the requirement that the distributions be "to the public" in order to infringe the distribution right, the court ruled that "[d]efendants disseminated unlawful copies of [the plaintiff's] photographs to the public by adopting a policy in which [the defendants'] employees moved those copies to the generally available files instead of discarding them."²²⁷ The court also concluded that the defendants were liable for contributory infringement by virtue of their encouraging subscribers to upload information to the BBS with at least constructive knowledge that infringing activity was likely to be occurring on their BBS.²²⁸

3. The Requirement of a Rental or Transfer of Ownership

The public distribution right requires that there have been either a rental or a transfer of ownership of a copy.²²⁹ If material is distributed free, as much of it is on the Internet, there is no sale, rental, or lease, and it is therefore unclear whether a sale or a "transfer of ownership" has taken place. With respect to distributions in which the recipient receives a complete copy of the work on the recipient's computer, perhaps a transfer of ownership should be deemed to have taken place, since the recipient has control over the received copy.

It is unclear precisely what a "rental" means on the Internet. For example, is a download of an on-demand movie a rental? In a sense, the user pays a rental fee to watch the movie only once. However, the downloaded bits of information comprising the movie are never "returned" to the owner, as in the case of the usual rental of a copy of a work. These unanswered questions lend uncertainty to the scope of the distribution right on the Internet.

4. The Right of Distribution Under the WIPO Treaties

Article 6 of the WIPO Copyright Treaty provides that "[a]uthors of literary and artistic works shall enjoy the exclusive right of authorizing the making available to the public of the original and copies of their works through sale or other transfer of ownership."²³⁰ This right seems potentially broader than the public distribution right under current U.S. law because it includes the mere "making available" of copies of works to the public, whereas U.S. law currently reaches only the actual distribution of copies.

*38 It is unclear whether this "making available" right reaches the mere posting of copies on the Internet. The Agreed Statement for Article 6 provides, "[a]s used in these Articles, the expressions 'copies' and 'original and copies,' being subject to the right of distribution and the right of rental under the said Articles, refer exclusively to fixed copies that can be put into circulation as tangible objects."²³¹ One interpretation of the Agreed Statement is that a copy posted on the Internet, being

electronic in format, is not capable of being “put into circulation as tangible objects.”

On the other hand, one might argue that at least complete copies downloaded to permanent storage at recipient computers should be treated as the equivalent of circulation of copies “as tangible objects.” If, for example, copies of a book were sold on floppy disks rather than on paper, such floppy disks might well be treated as the placement of copies into circulation as tangible objects. Yet a network download can result in a copy on a floppy disk (or a hard disk) at the recipient’s computer. One could therefore argue that the transmission of electronic copies to “physical” storage media at the receiving end should be treated as within the distribution right of the WIPO treaty.

In any event, this making available right might more easily reach BBS operators and OSPs through which works are made available on the Internet. It is unclear whether a requirement of volition will be read into Article 6 for liability, as some U.S. courts have required for liability under the current rights of public distribution, display, and performance. Moreover, because the WIPO Copyright Treaty does not define the public, the same ambiguities will arise as under current U.S. law concerning what type of availability will be sufficient to be public, particularly with respect to the making available of works to limited audiences.

Articles 8 and 12 of the WIPO Performances and Phonograms Treaty²³² contain rights of distribution very similar to that of Article 6 of the WIPO Copyright Treaty, so the same ambiguities noted above will arise.

5. The Right of Distribution Under WIPO Implementing Legislation

(a) United States Legislation

None of the currently pending WIPO treaty implementation legislation contains any provisions that would modify the right of distribution as it exists under *39 current United States law. Thus, the pending bills implicitly deem the current right of public distribution to be equivalent to the Article 6 right.

(b) The EC Directive

Article 4(1) of the EC Directive requires member states to “provide authors, in respect of the original of their works or of copies thereof, with the exclusive right to any form of distribution to the public by sale or otherwise.”²³³ Use of the phrase “any form of distribution” suggests that a broad right is intended, although, as in the United States, the right applies only with respect to the distribution of “copies.”²³⁴ Consistent with the Agreed Statement of the WIPO Copyright Treaty, the comments to Article 4(1) of the EC Directive recite that “the expressions ‘copies’ and ‘originals and copies,’ being subject to the distribution right, refer exclusively to fixed copies that can be put into circulation as tangible objects.”²³⁵

Thus, although use of the phrase “any form of distribution” might suggest that all online transmissions of copyrighted works would fall within the distribution right of the EC Directive, the comments limit the distribution right “to fixed copies that can be put into circulation as tangible objects.” Whether the latter requirement excludes some or all online transmissions of works is subject to the uncertainties previously discussed in connection with the distribution right under the WIPO Copyright Treaty itself in Part II.D.4 above.

E. The Right of Importation

Section 602(a) of the Copyright Statute provides that “[i]mportation into the United States … of copies or phonorecords of a work that have been acquired outside the United States is an infringement of the exclusive right to distribute copies.”²³⁶ One purpose of Section 602(a) was to allow a copyright owner to prevent distribution into the United States of copies of works that, if made in the United States, would have been infringing, but were made abroad outside the reach of United States copyright law.²³⁷

Section 602(a) was obviously drafted with a model of physical copies in mind. “Importation” is not defined in the Copyright Statute, but the requirement that copies of a work be “acquired outside the United States” might suggest that “importation” means the movement of physical copies into the United States.²³⁸ It is unclear how this right will be applied to Internet

transmissions into the United States, with respect to which no physical copies in a traditional sense are moved across national borders. Because the NII White Paper takes the position that the stream of data sent *40 during a transmission does not constitute a copy of a copyrighted work, the NII White Paper concludes that the Section 602(a) importation right does not apply to network transmissions into the United States,²³⁹ and recommends that Section 602 be amended to include importation by transmission of copies, as well as by carriage or shipment of them.²⁴⁰

However, because physical copies often end up on a computer in the United States as a result of network transmissions into the United States, it is possible that the importation right will be construed analogously to the distribution right with respect to transmissions, especially since the importation right is defined in Section 602(a) in terms of the distribution right. Thus, if a transmission is deemed to be within the distribution right, then it is possible that the importation right will be construed to apply when transmissions of copies are made into the United States from abroad.

In any event, the new right of communication to the public afforded under the WIPO treaties, discussed in the next Part, could help plug any hole that may exist in the traditional importation right, at least with respect to transmissions into the United States that qualify as “communications to the public,” if such right is adopted in implementing legislation. (As noted in the next Part, however, none of the pending WIPO implementation bills contain an explicit right of communication to the public).

F. The New Right of Transmission and Access Under the WIPO Treaties

The recently adopted WIPO treaties each afford a broad new right of transmission and access to a copyrighted work. The right is denominated a “right of communication to the public” in the WIPO Copyright Treaty,²⁴¹ and is denominated a “right of making available to the public” in the WIPO Performances and Phonograms Treaty.²⁴² Despite the difference in denomination, the rights appear to be very similar.

1. The Right of Communication to the Public in the WIPO Copyright Treaty

Article 8 of the WIPO Copyright Treaty provides a new right of “communication to the public.” Without prejudice to the provisions of Articles 11(1)(ii), 11bis(1)(i) and (ii), 11ter(1)(ii), 14(1)(ii) and 14bis(1) of the Berne Convention, authors of literary and artistic works shall enjoy the exclusive right of authorizing any communication to the public of their works, by wire or wireless means, including the making available to the public of their works in *41 such a way that members of the public may access these works from a place and at a time individually chosen by them.²⁴³

This new right of communication to the public is broader than the existing rights of communication to the public in the Berne Convention, which are confined to performances, broadcasts, and recitations of works.²⁴⁴ Specifically, Article 11(1)(ii) of the Berne Convention provides that authors of dramatic, dramaticomusical, and musical works shall enjoy the exclusive right of authorizing “any communication to the public of the performance of their works.”²⁴⁵ Article 11bis(1)(ii) provides that authors of literary and artistic works shall enjoy the exclusive right of authorizing “any communication to the public by wire or by rebroadcasting of the broadcast of the work, when this communication is made by an organization other than the original one.”²⁴⁶ Finally, Article 11ter(1)(ii) provides that authors of literary works shall enjoy the exclusive right of authorizing “any communication to the public of the recitation of their works.”²⁴⁷

The new right of communication to the public in the WIPO Copyright Treaty appears to be broader than the existing rights of reproduction, display, performance, distribution, and importation under current United States law in the following ways:

- *No Requirement of a Copy:* The right does not require the making or distribution of copies of a work. It therefore removes the potential limitations on the rights of reproduction and distribution under United States law stemming from the requirement of a copy.

- *Right of Transmission:* It affords the exclusive right to control any “communication to the public” of a work “by wire or wireless means.” Although “communication” is not defined in the WIPO Copyright Treaty, the reference to a communication “by wire or wireless means” seems clearly applicable to electronic transmissions of works (a right of transmission). This conclusion is bolstered by the fact that Article 2(g) of the WIPO Performances and Phonograms Treaty does contain a definition of “communication to the public,” which is defined in terms of “transmission to the public by any medium,

otherwise than by broadcasting.”²⁴⁸ This transmission right will potentially site the infringement at the place of transmission, in addition to the point of receipt of a transmitted work (under the reproduction right).

***42 • Right of Authorization:** It also affords the exclusive right of “authorizing” any communication to the public. No actual communications to the public are apparently necessary to infringe the right.

• *Right of Access:* The right of authorizing communications to the public explicitly includes “making available to the public” a work “in such a way that members of the public may access” the work “from a place and at a time individually chosen by them” (a right of access).²⁴⁹ This access right would seem to allow the copyright holder to remove an infringing posting of a work prior to any downloading of that work. This right may also expand potential liability beyond just posters or recipients of infringing material on the Internet to include OSPs and BBS operators, who could be said to make a work available to the public in such a way that members of the public may access it.

The Agreed Statement for Article 8, however, appears aimed at limiting the breadth of the net of potential liability that Article 8 might establish. The Agreed Statement provides:

It is understood that the mere provision of physical facilities for enabling or making a communication does not in itself amount to communication within the meaning of this Treaty or the Berne Convention. It is further understood that nothing in Article 8 precludes a Contracting Party from applying Article 11bis(2).²⁵⁰

It is unclear who the “mere” provider of “physical facilities” was meant to reference--only the provider of telecommunications lines (such as phone companies) through which a work is transmitted, or other service providers such as OSPs or BBS operators.

The right of transmission and access under Article 8 of the WIPO Copyright Treaty is similar to (and potentially broader than) the amendment to U.S. copyright law proposed in the NII White Paper “to expressly recognize that copies or phonorecords of works can be distributed to the public by transmission, and that such transmissions fall within the exclusive distribution right of the copyright owner.”²⁵¹ The NII White Paper’s proposal would expand the distribution right, as opposed to creating a wholly new right, as the WIPO Copyright Treaty does. The amendment proposed by the NII White Paper proved to be very controversial, and implementing legislation introduced in Congress in 1996 ultimately did not win passage in that Congress.

***43 2. The Right of Making Available to the Public in the WIPO Performances and Phonograms Treaty**

Articles 10 and 14 of the WIPO Performances and Phonograms Treaty grant analogous rights for performers and producers of phonograms to the right of “communication to the public” contained in Article 8 of the WIPO Copyright Treaty. The WIPO Performances and Phonograms Treaty, however, casts these rights as ones of “making available to the public.”²⁵² Specifically, Article 10 of the WIPO Performances and Phonograms Treaty provides, “[p]erformers shall enjoy the exclusive right of authorizing the making available to the public of their performances fixed in phonograms, by wire or wireless means, in such a way that members of the public may access them from a place and at a time individually chosen by them.”²⁵³

Thus, Article 10 provides an exclusive right with respect to analog and digital on-demand transmission of fixed performances.²⁵⁴

Similarly, Article 14 provides, “[p]roducers of phonograms shall enjoy the exclusive right of authorizing the making available to the public of their phonograms, by wire or wireless means, in such a way that members of the public may access them from a place and at a time individually chosen by them.”²⁵⁵ No Agreed Statements pertaining to Articles 10 and 14 were issued.

Article 2(b) of the WIPO Performances and Phonograms Treaty defines a “phonogram” to mean “the fixation of the sounds of a performance or of other sounds, or of a representation of sounds, other than in the form of a fixation incorporated in a cinematographic or other audiovisual work.”²⁵⁶ Article 2(c) defines fixation broadly as “the embodiment of sounds, or of the

representations thereof, from which they can be perceived, reproduced or communicated through a device.”²⁵⁷ Under this definition, storage of sounds on a computer would constitute a fixation, and the fixed copy of such sounds would therefore constitute a phonogram. Accordingly, the making available to the public of sounds stored on a computer would seem to fall within the access rights of Articles 10 and 14.

Because there were no Agreed Statements generated in conjunction with Articles 10 and 14 of the WIPO Performances and Phonograms Treaty, there is no *44 Agreed Statement similar to that accompanying Article 8 in the WIPO Copyright Treaty for limiting liability for the mere provision of physical facilities for enabling or making transmissions. Accordingly, one will have to await the implementing legislation in the various countries to know how broadly the rights set up in Articles 10 and 14 of the WIPO Performances and Phonograms Treaty will be codified into copyright laws throughout the world.

3. The Right of Transmission and Access Under WIPO Implementing Legislation

(a) United States Legislation

None of the currently pending WIPO treaty implementation legislation contains any express implementation of a right of “communication to the public” or of “making available to the public.” In view of this, the uncertainties discussed previously concerning whether the mere transmission or access of a copyrighted work through an online medium falls within existing United States rights of reproduction, distribution, public display, or public performance remain under the current implementing legislation.

With respect to the Article 10 right of making available to the public of fixed performances, the recently enacted Digital Performance Rights in Sound Recordings Act grants these rights for digital transmissions, although not for analog transmissions.²⁵⁸ However, because the WIPO Performances and Phonograms Treaty grants these rights with respect to both digital and analog transmissions, as well as with respect to spoken or other sounds in addition to musical works, it would seem that the United States might have to amend its copyright laws to comply with the requirements of Article 10.²⁵⁹

Although currently pending WIPO treaty implementation legislation does not contain any express rights of transmission or access, recent case law suggests that courts may interpret existing copyright rights to afford the equivalent of a right of transmission and access. For example, in the recent case of *Marobie-FL, Inc. v. National Association of Fire Equipment Distributors*,²⁶⁰ discussed previously, the court concluded that the mere making available of the files for downloading was sufficient for liability, because “once the files were uploaded [onto the Web server], they were available for downloading by Internet users and … the [OSP] server transmitted the files to some Internet users when requested.”²⁶¹ From this statement, it appears that the court construed the distribution and public display rights to cover both the making available of the clip art to the public on the Web page (a right of access), as well as subsequent downloads by users (a right of transmission).

***45 (b) The EC Directive**

The EC Directive explicitly adopts both the right of communication to the public of copyrighted works and the right of making available to the public of fixed performances, by wire or wireless means, in language that parallels that of the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty. Specifically, Article 3(1) of the EC Directive provides the following with respect to copyrighted works:

Member States shall provide authors with the exclusive right to authorize or prohibit any communication to the public of originals and copies of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access them from a place and at a time individually chosen by them.²⁶²

The comments to Article 3 define “communication to the public” to cover “any means or process other than the distribution of physical copies. This includes communication by wire or by wireless means,”²⁶³ which clearly encompasses a right of *transmission*. Indeed, the comments explicitly note, “[o]ne of the main objectives of the provision is to make it clear that this right covers interactive ‘on-demand’ acts of transmissions.”²⁶⁴ The comments also make clear that Article 3(1) affords a right to control online *access* to a work, apart from actual transmissions of the work:

As was stressed during the WIPO Diplomatic Conference, the critical act is the “making available of the work to the public,”

thus the offering a work on a publicly accessible site, which precedes the stage of its actual “on-demand transmission.” It is not relevant whether any person actually has retrieved it or not. The “public” consists of individual “members of the public.”²⁶⁵

Similarly, Article 3(2) of the EC Directive affords a right of making available to the public of fixed performances by wire or wireless means:

Member States shall provide for the exclusive right to authorize or prohibit the making available to the public, by wire or wireless means, in such a way that members of the public may access them from a place and at a time individually chosen by them:

(a) for performers, of fixations of their performances,

(b) for phonogram producers, of their phonograms,

(c) for the producers of the first fixation of films, of the original and copies of their films, and

(d) for broadcasting organizations, of fixations of their broadcasts, whether these broadcasts are transmitted by wire or over the air, including by cable or satellite.²⁶⁶

The right of Article 3(2) of the EC Directive is actually broader than the right required under Article 10 of the WIPO Performances and Phonograms Treaty. Under Article 10 of the WIPO Performances and Phonograms Treaty, the right of *46 making available to the public applies only to performances fixed in phonograms,²⁶⁷ which Article 2 of that treaty defines to mean “the fixation of the sounds of a performance or of other sounds … other than in the form of a fixation incorporated in a cinematographic or other audiovisual work.”²⁶⁸ The Article 3(2) right of the EC Directive goes further, covering fixed performances of audiovisual material as well. The comments to Article 3(2) of the EC Directive justify this extension of the right on the ground that audiovisual productions or multimedia products are as likely to be available online as are sound recordings.²⁶⁹

In sum, the EC Directive explicitly grants a right of transmission and access to copyrighted works and fixed performances, whereas the currently pending United States implementing legislation does not. It remains to be seen how broadly these rights mandated under the EC Directive will be adopted in implementing legislation in EC member countries. However, this disparity between the express rights afforded under United States law and the EC Directive raises considerable potential uncertainty. First, at a minimum, use of different language to denominate the various rights among countries may breed confusion. Second, differences of scope of the rights of transmission and access are likely to arise between the United States and the EC by virtue of the fact that these rights are spelled out as separate rights in the EC, whereas, if they exist at all, they are subsumed under a collection of various other rights in the United States. Adding further to the potential confusion is the possibility that some EC member countries may adopt these rights expressly, as mandated by the EC Directive, whereas other countries may, like the United States, deem them to be subsumed in other rights already afforded under that country’s laws.

Because online transmissions through the Internet are inherently global, these disparities raise the possibility that rights of varying scope will apply to an online transmission as it travels through computers in various countries on the way to its ultimate destination. Similarly, legal rights of varying scope may apply depending upon in which country a work is actually first accessed. Given the ubiquitous nature of caching on the Internet, the site of the access may be arbitrary from a technical point of view, but significant from a legal point of view. Such a situation would not afford the international uniformity that the WIPO treaties seek to establish.

G. New Rights and Provisions Under Pending Legislation

The EC Directive and several pending bills in the United States would establish a number of new rights and provisions related to various areas of copyright law. These rights and provisions are discussed in this section.

***47 1. Circumvention of Technological Measures and Rights Management Information**

Both the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty require signatories to establish certain obligations with respect to circumvention of technological measures to protect copyrighted works and the preservation and use of certain “rights management information.”

With respect to the circumvention of technological measures, Article 11 of the WIPO Copyright Treaty and Article 18 of the WIPO Performances and Phonograms Treaty require treaty signatories to “provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures” that are used by authors, performers, and producers of phonograms to restrict acts with respect to their copyrighted works that are not authorized by the rights holders or permitted by law.²⁷⁰

With respect to the preservation and use of rights management information, Article 12 of the WIPO Copyright Treaty and Article 19 of the WIPO Performances and Phonograms Treaty require treaty signatories to provide adequate and effective legal remedies against any person performing any of the following acts knowing (or, with respect to civil remedies, having reasonable grounds to know) “that it will induce, enable, facilitate or conceal an infringement of any right covered by this Treaty or the Berne Convention,” (i) removing or altering any electronic rights management information without authority,²⁷¹ or (ii) distributing, importing for distribution, broadcasting, or communicating to the public, without authority, copies of works knowing that electronic rights management information has been removed or altered without authority.²⁷² The WIPO Copyright Treaty defines “rights management information” as information which identifies the work, the author of the work, the owner of any right in the work, or information about the terms and conditions of use of the work, and any numbers or codes that represent such information, when any of these items of information is attached to a copy of a work or appears in connection with the communication of a work to the public.²⁷³ The WIPO Performances and Phonograms Treaty provides a similar definition in the context of performers, producers, and performances.²⁷⁴

***48** The following sections summarize the implementation of these rights in pending United States legislation and the EC Directive.

(a) United States Legislation

The pending United States implementing legislation takes one of two approaches to the circumvention of technological measures and rights management information. The first approach, adopted by House Bill 2281 and Senate Bill 2037, would outlaw both *conduct* and *devices* directed toward or used for circumventing technological copyright protection mechanisms. The second approach, adopted by Senate Bill 1146 and House Bill 3048, would outlaw *only conduct* involving the removal or deactivation of technological protection measures. Although Bruce Lehman conceded that the WIPO treaties do not mandate adoption of a device-based approach, he and other supporters of this approach have argued that a conduct-only approach would be difficult to enforce and that meaningful legislation must control the devices used for circumvention.²⁷⁵

(1) House Bill 2281 and Senate Bill 2037

House Bill 2281 and Senate Bill 2037 would each add several new provisions to the Copyright Act. Both bills designate such new provisions to be contained in a new Chapter 12 to the Copyright Act. Instances in which the two bills differ substantively will be specifically pointed out.

(i) Circumvention of Technological Protection Measures

New Section 1201(a)(1) would outlaw conduct to circumvent copyright protection mechanisms: “No person shall circumvent a technological protection measure that effectively controls access to a work protected under this title.”²⁷⁶ Note that this provision does not expressly require either knowledge or intent and is therefore potentially very broad in its reach. New Section 1201(a)(3) defines “circumvent a technological protection” as “to descramble a scrambled work, to decrypt an encrypted work, or otherwise to avoid, bypass, remove, deactivate, or impair a technological protection measure, without the authority of the copyright owner.”²⁷⁷ That section further provides that a technological protection measure “effectively controls access to a work” if “the measure, in the ordinary course of its operation, requires the application of information, or a

process or a treatment, with the authority of the copyright owner, to gain access to the work.”²⁷⁸

New Section 1201(a)(1) as added by House Bill 2281, but not by Senate Bill 2037, provides that the prohibition on circumventing a technological protection *49 measure shall not take effect until the end of a two-year period beginning on the date of enactment of the bill.²⁷⁹ New Section 1201(a)(1) as added by House Bill 2281 further requires the Secretary of Commerce, in consultation with the Assistant Secretary of Commerce for Communications and Information, the Commissioner of Patents and Trademarks, and the Register of Copyrights, to conduct a rulemaking on the record during such initial two-year period, and during each succeeding three-year period, to determine whether nonprofit libraries, archives, or educational institutes, or persons who have gained initial lawful access to a copyrighted work are, or are likely to be, adversely affected by the prohibition on circumventing technological protection measures.²⁸⁰ The Secretary must publish a list of particular classes of copyrighted works for which the rulemaking determines that lawful uses have been, or are likely to be, adversely affected.²⁸¹ The prohibitions of new Section 1201(a) shall not apply to nonprofit libraries, archives, or educational institutions, or to persons who have gained initial lawful access to a copyrighted work, with respect to such class of works for the ensuing three-year period.²⁸²

The noted differences in new Section 1201(a)(1) as added by House Bill 2281 and Senate Bill 2037 will have to be resolved in the joint conference committee.

Both House Bill 2281 and Senate Bill 2037 would, however, outlaw *devices* directed to circumvention of technological copyright protection measures. Specifically, new Sections 1201(a)(2) and 1201(b)(1) as added by both bills prohibit the manufacturing, importing, offering to the public, or trafficking of any technology, product, service, device, component, or part thereof that is primarily designed or produced for the purpose of circumventing a technological protection measure that effectively “controls access to” a copyrighted work or “protects a right of a copyright owner,” has only limited commercially significant purpose or use other than to circumvent such technological protection measure, or is marketed for use in circumventing such technological protection measure.²⁸³ New Section 1201(b)(2) provides that a technological measure “effectively protects a right of a copyright owner” if the measure “in the ordinary course of its operation, prevents, restricts, or otherwise limits the exercise of a right of a copyright owner.”²⁸⁴

It is curious to note that, although new Sections 1201(a)(2) and 1201(b)(1) prohibit devices designed to circumvent both technological protection measures that control access to a copyrighted work and that protect a right of a copyright owner, new Section 1201(a)(1) prohibits only conduct that is directed to the former, but not *50 the latter. The statement of Rep. Coble accompanying the original introduction of House Bill 2281 does not explain why this distinction was drawn.²⁸⁵

Section 1201(c)(3) of both bills states that nothing in the bills “shall require that the design of, or design and selection of parts and components for, a consumer electronics, telecommunications, or computing product provide for a response to any particular technological” protection measure.²⁸⁶

(ii) Integrity of Copyright Management Information

Both House Bill 2281 and Senate Bill 2037 contain provisions directed to maintaining the integrity of “copyright management information” (CMI), which new Section 1202(c) as added by the bills defines to include the following items of information (among others) “conveyed” in connection with copies of a work or the performance or display of a work, including in digital form,

- the title and other information identifying the work, including the information set forth on a copyright notice,²⁸⁷
- the name and other identifying information about the author or the copyright owner of the work,²⁸⁸
- terms and conditions for use of the work,²⁸⁹
- identifying numbers or symbols referring to such information or links to such information²⁹⁰ and
- any other information that the Register of Copyrights may prescribe by regulation.²⁹¹

The statement of Rep. Coble accompanying the original introduction of House Bill 2281 notes that the term “conveyed” is “used in its broadest sense and is not meant to require any type of transfer, physical or otherwise, of the information. It merely requires that the information be accessible in conjunction with, or appear with, the work being accessed.”²⁹² Under this definition, CMI could include *51 information that is contained in a link whose address is conveyed with the copyrighted work. Such information could well be a shrinkwrap license, as such license would convey the “terms and conditions for use of the work,” which is one of the express components of the definition of CMI.

Rep. Coble’s statement further notes that the definition of CMI “does not encompass[,] nor is it intended to encompass, tracking or usage information relating to the identity of users of the works.”²⁹³ This exclusion was presumably set up to exempt from violation the deletion of user information to preserve privacy. Indeed, this exclusion was made express in Section 1202(c) of House Bill 2281 (which has no counterpart in Senate Bill 2037) that exempts from the definition of CMI “any personally identifying information about a user of a work or of a copy, phonorecord, performance, or display of a work.”²⁹⁴

New Section 1202(a) prohibits any person from knowingly providing CMI that is false or distributing or importing for public distribution CMI that is false, with the intent to induce, enable, facilitate, or conceal infringement.²⁹⁵ New Section 1202(b) prohibits any person from intentionally removing or altering any CMI, distributing or importing for distribution CMI knowing that it has been altered or removed, or distributing, importing for distribution, or publicly performing works in which CMI has been removed or altered.²⁹⁶

New Section 1203 provides civil remedies for any person injured by a violation of new Section 1201 or 1202, including temporary and permanent injunctions (although new Section 1203(b)(1) as added by House Bill 2281 contains a provision prohibiting injunctions that constitute prior restraints on free speech or the press protected under the First Amendment),²⁹⁷ impounding, actual damages and any additional profits of the violator, statutory damages (in the amount of not less than \$200 or more than \$2,500 for each violation of new Section 1201, and not less than \$2,500 or more than \$25,000 for each violation of Section 1202), costs and attorneys fees, and an order for the remedial modification or the destruction of any device or product involved in the violation.²⁹⁸ Damages may be trebled by the court for repeated violations within a three year period.²⁹⁹ Conversely, damages may be reduced or remitted entirely if the violator proves that it was not aware and had no reason to believe that its acts constituted a violation.³⁰⁰

*52 New Section 1204 provides for criminal penalties for the willful violation of new Section 1201 or 1202 for purposes of commercial advantage or private financial gain.³⁰¹ Penalties include fines up to \$1,000,000 and imprisonment for up to 10 years for repeated offenses.³⁰²

New Section 1201(c) provides that nothing in that section “shall affect rights, remedies, limitations, or defenses to copyright infringement, including fair use, under this title.”³⁰³ Notwithstanding this provision, groups such as the Digital Future Coalition (DFC) have criticized the approach of House Bill 2281 and Senate Bill 2037. In a position paper dated August 1997,³⁰⁴ the DFC argued that new Section 1201 as added by Senate Bill 2037 would effectively negate fair use rights, because it imposes liability for “circumvention” even when the purpose of the activity is permitted by the copyright act (such as reverse engineering or other activities that otherwise constitute fair use). The DFC also argued that new Section 1201 would outlaw legitimate devices with substantial noninfringing uses, effectively overruling the Supreme Court’s decision in *Sony Corp. of Am. v. Universal City Studios, Inc.*³⁰⁵

The DFC argued that the savings clause of new Section 1201(d) as added by House Bill 2281 and of new Section 1201(c) as added by Senate Bill 2037 is inadequate because while section 1201 will not as a formal matter restrict existing limitations and exceptions to copyright, it will as a practical matter preclude the exercise of these limitations and exceptions by preventing the manufacture and use of the technologies necessary for their existence. Nor would the savings clause protect individuals who gain ‘access’ to works in violation of 1201(a)(1), even if they do so for entirely lawful purposes.³⁰⁶

Similarly, the DFC criticized new Section 1202 as too draconian, in that it would impose civil penalties even in cases where no specific intent to infringe or promote infringement can be shown. “In other words, even someone who alters digital identifiers casually could be liable for a minimum of \$2,500 in damages plus costs and attorney’s fees.”³⁰⁷

Another position paper filed on behalf of the Information Technology Industry Council raised concern that new Section 1201

will impose liability too broadly in view of the broad definition of “circumvention”:

Thus, if a device does not respond to a technological protection measure that is intended to control copying, which in some cases may be a simple 1 or 0 in header information *53 included with the digital content, the device may be construed as avoiding, bypassing, deactivating or impairing that measure.... Companies that make devices that do not respond to copy flags-- because they don't know about the flags or because of technological difficulties associated with complying--could be liable under Section 1201 even though they had no intent to circumvent.³⁰⁸

The paper also raises concerns about broadening the standard for liability for third party use of devices that infringe the copyright owner's rights from that of the *Sony* case, which imposes liability only for sale of devices having no substantial noninfringing uses,³⁰⁹ to the prohibition under the bill of devices that are “primarily designed or produced” for circumvention, or have “only limited commercially significant purpose” other than circumvention, or are marketed for use in circumvention.³¹⁰

(iii) Other Provisions of House Bill 2281

House Bill 2281 contains the following provisions that do not have counterparts in Senate Bill 2037:

- *Free Speech Rights*: A provision in new Section 1201(c)(4), providing that nothing in new Section 1201 “shall enlarge or diminish any rights of free speech or the press for activities using consumer electronics, telecommunications, or computing products.”³¹¹

- *Reverse Engineering for Interoperability*: A provision in new Section 1201(f), providing that a person who has lawfully obtained the right to use a copy of a computer program may circumvent a technological measure that effectively controls access to a particular portion of that program for the sole purpose of identifying and analyzing those elements of the program that are necessary to achieve interoperability of an independently created computer program with other programs, and that have not previously been readily available to the person engaging in the circumvention, to the extent any such acts of identification and analysis do not constitute infringement under this title.³¹²

- *Encryption Research*: A provision in new Section 1201(g), providing that it is not a violation of the regulations prohibiting circumventing a technological measure if such circumvention is done as an act of good faith “encryption research.”³¹³ “Encryption research” is defined as “activities necessary to identify and analyze flaws and vulnerabilities of encryption technologies applied to copyrighted works, if these activities are conducted to advance the state of knowledge in the field of encryption technology or to *54 assist in the development of encryption products.”³¹⁴ “Encryption technology” is defined as “the scrambling and descrambling of information using mathematical formulas or algorithms.”³¹⁵ New Sections 1201(g)(2)(C) and (D) require, however, that the person “have made a good faith effort to obtain authorization before the circumvention”³¹⁶ and that such acts not otherwise constitute a copyright infringement, respectfully.³¹⁷ New Section 1201(g)(5) calls for a report to Congress on encryption technologies not later than one year after enactment of the bill.³¹⁸

- *Protection of Minors*: Provisions in new Section 1201(h), providing that (i) a court, in applying the prohibitions of new Section 1201(a)(2)(A) against the manufacture or trafficking in a component or part designed to circumvent technological protection measures,³¹⁹ may consider the necessity of such component or part for its intended and actual incorporation into a product whose sole purpose is to prevent the access of minors to material on the Internet,³²⁰ and (ii) a parent may circumvent a technological protection measure controlling access to a test or an evaluation of that parent's minor child's abilities by a nonprofit educational institution if the parent attempted in good faith to obtain authorization before the circumvention and the circumvention is necessary to obtain a copy of the test or evaluation.³²¹

- *Protection of Personally Identifying Information*: A provision in new Section 1201(i), providing that it is not a violation of the regulations prohibiting circumventing a technological protection measure if such measure, or the work it protects, collects or disseminates personally identifying information about the natural person who seeks to gain access to the work protected, without providing conspicuous notice of such collection or dissemination to such person and the capability to prevent or restrict the same, and the circumvention is carried out solely to prevent such collection or dissemination.³²²

- *Industry-Led Development of Technological Protection Measures*: A provision in Section 104 calling for the “expeditious”

development of technological protection measures through voluntary industry-led processes,³²³ as well as three annual reports to Congress (commencing one *55 year after enactment of the bill) on the development of such measures and the fair use impact on access to copyrighted works.³²⁴

- *Evaluation of Impact of Copyright Law on Electronic Commerce:* Section 105 calls for a Commerce Department study and report to Congress within two years of enactment with respect to the impact of the bill and “the development of electronic commerce and associated technology” on the operation of existing copyright law, and with respect to “the relationship between existing and emergent technology” and existing copyright law.³²⁵

- *Under Secretary of Commerce for Intellectual Property Policy:* A provision in Section 401, establishing a new position of Under Secretary of Commerce for Intellectual Property Policy, whose duties would be to:

- (1) Promote exports of goods and services of the United States industries that rely on intellectual property.

- (2) Advise the President, through the Secretary of Commerce, on national and certain international issues relating to intellectual property policy, including issues in the areas of patents, trademarks, and copyrights.

- (3) Advise Federal departments and agencies on matters of intellectual property protection in other countries.

- (4) Provide guidance, as appropriate, with respect to proposals by agencies to assist foreign governments and international intergovernmental organizations on matters of intellectual property protection.

- (5) Conduct programs and studies related to the effectiveness of intellectual property protection throughout the world.

- (6) Advise the Secretary of Commerce on programs and studies relating to intellectual property policy that are conducted, or authorized to be conducted, cooperatively with foreign patent and trademark offices and international intergovernmental organizations.

- (7) In coordination with the Department of State, conduct programs and studies cooperatively with foreign intellectual property offices and international intergovernmental organizations.³²⁶

These differences between House Bill 2281 and Senate Bill 2037 will have to be resolved in the joint conference committee.

(2) House Bill 3048 and Senate Bill 1146

House Bill 3048 and Senate Bill 1146 contain identical provisions respecting the circumvention of technological copyright protection measures. Each bill prohibits certain defined circumvention *conduct*, rather than *devices*. Specifically, new Section 1201 as added by House Bill 3048 and Senate Bill 1146 provides that no person, for the purpose of facilitating or engaging in an act of infringement, shall engage in conduct so as knowingly to remove, deactivate or otherwise circumvent the application or *56 operation of any effective technological measure used by a copyright owner to preclude or limit reproduction of a work or a portion thereof.³²⁷

Thus, the bills do not ban circumvention undertaken for reasons other than facilitating or engaging in infringement, such as fair uses. In addition, new Section 1201 expressly states that “conduct” does *not* include manufacturing, importing or distributing a device or a computer program.³²⁸

Although new Section 1201(a) refers only to technological measures used to preclude or limit *reproduction* of a copyrighted work, and does not refer to *access* to a copyrighted work (as is included in House Bill 2281 and Senate Bill 2037), the definition of “effective technological measure” in new Section 1201(c) includes two references to access. Specifically, “effective technological measure” is defined as information included with or an attribute applied to a transmission or a copy of a work in a digital format which “encrypts or scrambles the work or a portion thereof in the absence of access information

supplied by the copyright owner; or includes attributes regarding access to or recording of the work that cannot be removed without degrading the work or a portion thereof.”³²⁹ This is a much more specific and narrower definition of effective technological measure than that contained in House Bill 2281 and Senate Bill 2037.

Unlike new Section 1201, new Section 1202 as added by Senate Bill 1146 and House Bill 3048 is largely identical to new Section 1202 as added by Senate Bill 2037 with respect to removal, alteration, or falsification of CMI. The most important difference is that new Section 1202 as added by Senate Bill 1146 and House Bill 3048 contains language making clear that the conduct governed by that section does not include the manufacturing, importing, or distributing of a device (curiously, there is no reference to a computer program, as there is in the exclusion from new Section 1201).

The civil remedies afforded under Senate Bill 1146 and House Bill 3048 are the same as those of House Bill 2281 and Senate Bill 2037, except that the range of statutory damages are slightly different, and Senate Bill 1146 and House Bill 3048 provide for a doubling of damages, rather than a trebling, for repeated violations.³³⁰ Senate Bill 1146 and House Bill 3048 contain no provision for criminal penalties similar to new Section 1204 as added by House Bill 2281 and Senate Bill 2037.

During consideration of House Bill 2281 by the House Judiciary Committee in late March 1998, Rep. Boucher offered the conduct-oriented proposal of House Bill 3048 in the nature of a substitute to House Bill 2281, but the effort failed, as did a *57 series of other amendments proposed by Rep. Boucher.³³¹ Among those were proposals to exempt from liability circumvention activities to facilitate reverse engineering or to enable repair and maintenance of circumvention devices, or to allow access to public domain or uncopyrightable works.³³²

(b) The EC Directive

The EC Directive adopts the approach of House Bill 2281 and Senate Bill 2037 in that it would outlaw both conduct and the manufacture or distribution of devices that could be used to defeat technological copyright protections. Specifically, Article 6 of the EC Directive provides that

Member States shall provide adequate legal protection against any activities, including the manufacture or distribution of devices or the performance of services ... which the person concerned carries out in the knowledge, or with reasonable grounds to know, that they will enable or facilitate without authority the circumvention of any effective technological measures designed to protect any copyright or any rights related to copyright.³³³

Article 6 defines “technical measures” to mean “any device, product or component incorporated into a process, device or product designed to prevent or inhibit the infringement of any copyright or any rights related to copyright.”³³⁴

Like House Bill 2281 and Senate Bill 2037, the EC Directive does not require that the circumvention of the technical measures be done for the purpose of facilitating or engaging in an act of infringement. However, the commentary to Article 6 elaborates on the requirement of knowledge by the party liable for the circumvention in a way that suggests a standard of liability that may be somewhat akin to that of the *Sony* case in the United States:

[The requirement of knowledge] excludes from protection those activities which are carried out without the knowledge that they will enable circumvention of technological protection devices. It furthermore covers only those activities and services which have only a limited commercially significant purpose or use other than to circumvent. This solution would ensure that general-purpose electronic equipment and services are not outlawed merely because they may also be used in breaking copy protection or similar measures.³³⁵

It remains to be seen how broadly this provision will be implemented by member states.

Article 7(1) of the EC Directive deals with CMI, which the EC Directive denominates “electronic rights-management information.” Specifically, Article 7 requires member states to prohibit any person from removing or altering any *58 electronic rights-management information, or from distributing, importing for distribution, broadcasting, communicating, or making available to the public copies of works from which electronic rights-management information has been removed or altered, “if such person knows, or has reasonable grounds to know, that by so doing he is ... enabling or facilitating an infringement.”³³⁶

Article 7(2) defines “rights management-information” broadly to mean “any information provided by rightholders which identifies the work[,] … the author or any other rightholder, … and any numbers or codes that represent such information” when any of such information is associated with a copy of the work or appears in connection with the communication to the public of the work.³³⁷

The commentary to Article 7 limits its scope to be potentially narrower than that of the pending United States implementing legislation. Specifically, the commentary states that Article 7 “aims only at the protection of electronic rights-management information, and does not cover all kinds of information that could be attached to the protected material.”³³⁸ By contrast, the definition of CMI under the pending United States legislation is broad enough to cover more than just electronic information.

2. Fair Use

(a) United States Legislation

Both House Bill 3048 and Senate Bill 1146 contain identical provisions with respect to application of the fair use doctrine in a digital environment. These bills would amend Section 107 of the Copyright Statute (the fair use exemption) in two ways. First, they would add an amendment providing that the fair use doctrine applies to uses of a copyrighted work “by analog or digital transmission.”³³⁹ Second, they would add a new sentence to Section 107 providing that, in making a determination concerning fair use, a court should give no independent weight to the means by which the work has been performed, displayed or distributed under the authority of the copyright owner, or the application of an effective technological measure to protect the work.³⁴⁰ The import of this provision appears to be (i) to clarify that digital uses of a copyrighted work may be a fair use notwithstanding that the copyright owner has authorized use of the work only in other media or modes and (ii) that the fair use exemption may apply even if an effective technological measure must be circumvented to use the work (as in the case of reverse engineering).

***59 (b) The EC Directive**

Article 5(3) of the EC Directive permits member states to adopt limitations to the rights of reproduction and of communication or making available to the public for the following fair use purposes: for illustration for teaching or scientific research for non-commercial purposes; for the benefit of visually- or hearing-impaired persons for non-commercial purposes; use of excerpts in connection with the reporting of current events; quotations for purposes such as criticism or review of a work that has been lawfully made available to the public; and for public security or proper performance of an administrative or judicial procedure.³⁴¹ Article 5(4) provides that in all cases, the limitations “shall only be applied to certain specific cases and shall not be interpreted in such a way as to allow their application to be used in a manner which unreasonably prejudices the rightholders’ legitimate interests or conflicts with the normal exploitation of their works or other subject matter.”³⁴²

3. Expansion of Library/Archives Exemptions

All four pending bills contain similar provisions that would expand the scope of the exemption in Section 108 of the Copyright Statute for libraries and archives. Under the amendment, libraries and archives would be authorized to make three copies of works for preservation purposes, rather than one.³⁴³ The amendment would also delete the requirement that the copies be made “in facsimile form.”³⁴⁴ According to Rep. Boucher, this phrase had been read to preclude the use of digital technologies to preserve works.³⁴⁵

4. Distance Education

Both House Bill 3048 and Senate Bill 1146 contain identical provisions that would expand the exemptions in Section 110(2) of the Copyright Statute for certain performances or displays of copyrighted works for instructional activities performed by government or nonprofit educational institutions.³⁴⁶ The bills would extend this exemption to distributions of a work, in addition to performances and displays, to cover the distribution of a work over a computer network.³⁴⁷ The bills would also expand the exemption from nondramatic literary or musical works to all works, and *60 extend the exemption to apply to

students officially enrolled in the course, not only courses held in a classroom.³⁴⁸

House Bill 2281 and Senate Bill 2037 take a lesser approach. Each bill contains identical provisions requiring that, within six months after enactment, the Assistant Secretary of Commerce for Communications and Information submit to Congress recommendations on how to promote distance education through digital technologies, including interactive digital networks, while maintaining an appropriate balance between the rights of copyright owners and the needs of users of copyrighted works.³⁴⁹ The bills list a number of factors that should be considered in making such recommendations.³⁵⁰

5. Limitation of Scope of Shrinkwrap and Clickwrap Licenses

House Bill 3048 contains an interesting and potentially controversial provision that would extend the scope of the preemption provisions of the Copyright Statute to limit certain provisions common to shrinkwrap and clickwrap license agreements. Specifically, House Bill 3048 would add the following provision at the end of Section 301(a) of the Copyright Statute:

When a work is distributed to the public subject to non-negotiable license terms, such terms shall not be enforceable under the common law or statutes of any state to the extent that they--

- (1) limit the reproduction, adaptation, distribution, performance, or display, by means of transmission or otherwise, of material that is uncopyrightable under section 102(b) or otherwise; or
- (2) abrogate or restrict the limitations on exclusive rights specified in sections 107 through 114 and sections 117 and 118 of this title.³⁵¹

Clause (1) was apparently intended to establish an affirmative principle that subject matter which is not protected by copyright under Section 102(b) of the Copyright Statute (which includes “any idea, procedure, process, system, method of operation, concept, principle, or discovery”)³⁵² cannot be the subject of contractual prohibitions on reproduction, adaptation, distribution, performance or display in a license having non-negotiable terms (such as a shrinkwrap or clickwrap agreement). Although this provision is founded on a philosophical notion that subject matter which the copyright law deems free for the public to use should not be withdrawn from use, at least by virtue of a non-negotiable license, it may have unintended consequences with respect to confidentiality clauses that protect trade secret material.

Specifically, many shrinkwrap or clickwrap agreements contain confidentiality clauses that prohibit the disclosure, use, and reproduction of trade secret subject *61 matter embodied in software that will typically fall within the enumerated subject matter of Section 102(b) of the Copyright Statute. Clause (1) could be read to preempt these confidentiality clauses. The authors of House Bill 3048 apparently see a more pernicious effect from confidentiality clauses simply because they are contained in a non-negotiable license, although it is not clear why.

Clause (2) would preempt clauses in a shrinkwrap or clickwrap agreement that have the effect of restricting the limitations on copyright rights enumerated in Sections 107 through 114, 117, and 118 of the Copyright Statute. This provision would affect many shrinkwrap and clickwrap agreements in at least two ways. First, because many courts have ruled that disassembly of computer programs to extract ideas from them is a fair use under certain circumstances,³⁵³ the clauses which flatly prohibit disassembly or reverse engineering of software that are common in shrinkwrap and clickwrap agreements might be preempted. Second, clauses which prohibit transfer of a copy of a computer program by the licensee to a third party (a right that would otherwise be available if the first sale doctrine of Section 109 of the Copyright Statute is deemed applicable by treating a shrinkwrap license transaction as a sale) might be preempted.

6. Copying in the Course of Computer Maintenance or Repair

Title III of House Bill 2281 and Senate Bill 2037 would each add a new subsection to Section 117 of the Copyright Statute, providing that it is not an infringement for an owner or lessee of a machine to make or authorize the making of a copy of a computer program upon activation of a machine that lawfully contains an authorized copy of the program for purposes only of maintenance or repair of that machine, provided the copy is used in no other manner and is destroyed immediately after the

maintenance or repair is completed, and, with respect to any computer program or portion thereof that is not necessary for that machine to be activated, such is not accessed or used other than to make the new copy by virtue of the activation of the machine.³⁵⁴

This amendment to the Copyright Statute was deemed necessary by its sponsors in view of judicial decisions such as *MAI Systems Corp. v. Peak Computer, Inc.*³⁵⁵ and *Triad Systems Corp. v. Southeastern Express Co.*,³⁵⁶ holding that copying parts of a computer program to memory in the course of turning on and running the machine constitutes a “reproduction” under Section 106 of the Copyright Statute. Under these decisions, a service technician who is not the owner or licensee of the system software commits copyright infringement by even booting up the machine for maintenance or repair.

*62 III. Application of Copyright Rights to Specific Acts on the Internet

As is apparent from Part II, copyright owners hold a potentially very broad panoply of rights that may be applicable to acts on the Internet. These rights may well be expanded by the recently adopted WIPO treaties. Part III of this paper analyzes the potential application of such rights to various actions on the Internet, such as browsing, caching, linking, operating an Internet service or bulletin board, creating derivative works, and reselling or subsequent transferring of works downloaded from the Internet, as well as how various traditional defenses--such as fair use and the implied license doctrine--may be interpreted with respect to Internet activities.

A. Browsing

Browsing is probably the single most common activity of users on the Internet today. It provides a graphic illustration of the difficulty and uncertainty of applying traditional copyright rights, in which tangible objects are the paradigm for transfer of information, to the Internet medium, in which electronic transmissions are the paradigm for transfer of information. The difficulty arises principally from the fact that, unlike in the case of traditional media, reading or use of a copyrighted work on the Internet generally requires making a copy of the work (at least under the logic of the *MAI* case and under the WIPO Copyright Treaty), and may require a distribution, transmission, and access of the work as well. Thus, although “reading” and “using” are not within a copyright holder’s exclusive rights, copying, distribution, and transmission and access (under the WIPO treaties) are. To the extent the latter acts are necessarily incidental to browsing a work on the Internet, such browsing may technically infringe multiple rights of the copyright holder.

In addition, browsing may implicate the right of public display and/or public performance. For example, the NII White Paper takes the position that browsing through copies of works on the Internet is a public display of at least a portion of the browsed work.³⁵⁷ In addition, at least isochronous downloading of performances of copyrighted works in the course of browsing by members of the public, such as from a commercial online service like America Online (AOL), may constitute infringements of the public performance right.³⁵⁸ As noted in Part II above, the fact that potential recipients of transmitted displays and performances are geographically and/or temporally dispersed does not prevent a transmission to a single recipient in any given instance from creating a public display or performance.

In a great many instances, a copyright holder will have placed material on the Internet with the intent and desire that it be browsed. Browsing of such material will no doubt be deemed to be either within the scope of an implied license from the copyright holder or a fair use. For example, the court in *63 *Religious Technology Center v. Netcom On-Line Communication Services*³⁵⁹ noted in dicta that much of digital browsing is probably a fair use or an innocent infringement: Absent a commercial or profit-depriving use, digital browsing is probably a fair use; there could hardly be a market for licensing the temporary copying of digital works onto computer screens to allow browsing. Unless such a use is commercial, such as where someone reads a copyrighted work on-line and therefore decides not to purchase a copy from the copyright owner, fair use is likely. Until reading a work online becomes as easy and convenient as reading a paperback, copyright owners do not have much to fear from digital browsing and there will not likely be much market effect.

Additionally, unless a user has reason to know, such as from the title of a message, that the message contains copyrighted materials, the browser will be protected by the innocent infringer doctrine, which allows the court to award no damages in appropriate circumstances. In any event, users should hardly worry about a finding of direct infringement; it seems highly unlikely from a practical matter that a copyright owner could prove such infringement or would want to sue such an individual.³⁶⁰

Although the *Netcom* court is no doubt correct in its observations under U.S. copyright law, nevertheless browsing raises important copyright problems that cannot be dismissed simply on the notion that doctrines such as fair use, implied license, or innocent infringement will remove the problems entirely. First, Internet activities are inherently global, and countries outside the U.S. may not apply defensive doctrines such as fair use and implied license as broadly as U.S. courts. At best, the rules may differ from country to country, which will breed uncertainty and the possibility of inconsistent results in different countries.

Second, as elaborated below in the discussion on caching, copyright owners may begin placing notices on their works governing the uses to which they may be put. Such notices may restrict use of the work in ways that are unclear or undesirable, and the applicability of the fair use or implied license doctrines may become more uncertain in the face of such notices.

Third, the fact that browsing, an activity akin to reading in traditional media, potentially constitutes literal infringement of so many copyright rights represents a significant shift in the balance between the rights of purchasers and users on the one hand, and the interests of copyright owners on the other. As one commentator recently stated:

The conflict here of perspective, policy, and technology may be a defining issue in cyberspace. ... [T]he idea that reading a digital text entails a potential copyright violation shifts policy. That shift, even if desirable, should occur because of an express policy choice rather than because new technology technically triggers concepts originally designed for a world of photocopy machines, recorders, and the like.³⁶¹

Such policy shift, and the details of it, may not be expressly defined in U.S. copyright law (and perhaps in the copyright laws of other countries as well) until legislation implementing the WIPO treaties is considered.

***64 B. Caching**

Caching is another activity that is, under current technology, virtually ubiquitous on the Internet. Caching (sometimes known as “mirroring,” usually when it involves storage of an entire site or other complete set of material from a source) means storing copies of material from an original source site (such as a Web page) for later use when the same material is requested again, thereby obviating the need to go back to the original source for the material. The purpose of caching is to speed up repeated access to data and to reduce network congestion resulting from repeated downloads of data. The cached material is generally stored at a site that is geographically closer to the user, or on a more powerful computer, or one that has a less congested data path to the ultimate user. The cached information is usually stored only temporarily, although the times may vary from a few seconds to a few days, weeks, or more.

1. Types of Caching

Caching may be of the following types:

- *Local Caching*: Caching generally occurs locally at the end user’s computer, either in RAM, on the hard disk, or some combination of both. Most browsers, for example, store recently visited Web pages in RAM or on the hard disk. When the user hits the “Back” key, for example, the browser will usually retrieve the previous page from the cache, rather than downloading the page again from the original site. This retrieval from cache is much faster and avoids burdening the network with an additional download.
- *Proxy Caching*: Proxy caching occurs at the server level, rather than at the end user’s computer level. Specifically, a copy of material from an original source is stored on a server other than the original server. For example, an OSP such as AOL may store Web pages that have been previously requested by AOL users on its own server for a certain period of time. When another user subsequently requests a page previously stored, AOL may download the page from its own server, rather than fetching the page from the original source server.

The need for caching on the Internet stems basically from current transmission bandwidth limitations, which have resulted from at least two causes. First, usage of the Internet has grown in the last couple of years at a rate far disproportional to the ability to build the infrastructure necessary to support the increased usage.³⁶² Second, much of the infrastructure in place now was not designed for an onlinecentric model of usage. Thus, many individual users have computers with modems of low speed by today's standards-- adequate for facsimile transmissions and the *65 like, but inadequate for high bandwidth transmissions of graphically rich information. And most of the current Internet traffic must move to the end user ultimately through ordinary, analog telephone lines, which were not designed for high speed transmission of voluminous digital data.

Caching presents difficult copyright issues on a number of fronts. Because caching involves the making of copies, it presents an obvious problem of potential infringement of the right of reproduction. In addition, because copies of copyrighted works may be further distributed and displayed or performed from the cache server to members of the public, proxy caching may give rise to infringement of the rights of public distribution, public display, public performance, and digital performance. Under the recently adopted WIPO treaties, caching may also infringe the new rights of transmission and access. Because the situs of infringements of these rights under the WIPO treaties is most likely the server, caching may give rise to infringements at every proxy server. Large OSPs may have proxy servers at many sites around the globe.

2. The Detriments of Caching

From a legal perspective, because caching has obvious technical benefits in getting information from the Internet to a user faster, one might assume that a copyright owner who has placed information on the Internet and desires such information to reach end users as expeditiously as possible would have no incentive to assert its copyright rights against caching. In legal terms, one might be tempted to conclude that caching will fall within the fair use or implied license doctrines. However, the legal analysis is complex because caching carries with it a number of potential detriments to the owner of the copyrighted material.³⁶³

- *Loss of Version Control:* Caching interferes with the ability of a website operator to control what version of information is delivered to the end user.³⁶⁴ For example, a website may have been substantially improved, yet an old version of material from the site may reside on the proxy server of the end user's OSP. Many end users may therefore not see the improved version the website owner desired to present to the public. In a more serious vein, suppose a website owner is notified that its site contains infringing or defamatory material. To avoid liability, the website owner may remove such material promptly, yet it may continue to be distributed through old cached versions, giving rise to potential ongoing liability.

- *Out of Date Information:* Many websites may contain time sensitive information, such as stock quotes or sports scores. If information is obtained from a cache rather than the original site, and the cache has not been refreshed recently, the user may obtain out of date information or *66 information that is no longer accurate. The problem is heightened by the fact that most caching is "invisible" to the user. In many instances the user will simply not know whether the information being presented is cached information, how recently the cache was refreshed, or whether the information contained in the cached version is now out of date as compared to information at the original site. A user may therefore unknowingly rely on inaccurate information to his or her detriment.

- *Interference with Timed Information:* Closely related to the problem of out of date information is the problem of interference with timed information. For example, a website owner may have contracted with an advertiser to display an advertising banner during a certain window of time, say 7:00 to 8:00 p.m. If a page from the site is downloaded into a cache at 7:30 p.m. and is not refreshed for several hours, users will see the ad for far more than the one hour the advertiser paid for, and may not see at all the ad that the next advertiser paid to have displayed from 8:00 p.m. to 9:00 p.m.³⁶⁵

- *Inaccurate Page Impression and Other Information:* Many websites keep track of the number of "page impressions" at the site--i.e., the number of times a page is displayed from the site to users. Page impressions are often used as a measure for advertising charges--the more page impressions a site generates among users, the more the site can charge for advertisements placed on the site. Accesses to cached versions of a Web page may not be counted as page impressions at the original site,³⁶⁶ and the original website owner may not know how often a given page was viewed from the cache.³⁶⁷ Reduced page impression counts cost the website owner advertising revenues. In addition, many sites maintain "server logs" which record activities of users of the site, from which valuable information may be gleaned. Accesses to cached information will generate entries into the logs of the proxy server, not the original site.

- *Loss of Limits on Access:* Caching may also result in the loss of control over access to information at a site. For example, suppose a website owner desires to limit access to material on a site to a single user at a particular institution through use of a password. Such user could enter the password, download the information to a proxy server, and then other, unauthorized users might be able to gain access to it through the cached information on the proxy server.³⁶⁸

***67 3. Application of the Fair Use Doctrine**

Because of the potential detriments of caching, application of the fair use and implied license doctrines to caching is uncertain. We turn first to the application of the four statutory fair use factors under Section 107 of the Copyright Statute. The fair use question will be analyzed from the perspective of an OSP performing proxy caching, as OSPs or similar entities seem the most likely targets for claims of infringement by copyright owners based on caching.³⁶⁹ Only one case to date, *Religious Technology Center v. Netcom On-Line Communication Services*,³⁷⁰ has addressed the applicability of the fair use doctrine to an OSP in a factual setting akin to caching. In that case, the plaintiff sought to hold Netcom, an OSP, liable for allegedly infringing material that was “mirrored” on its server as part of providing Usenet news group services to its subscribers.³⁷¹ The holding of that case with respect to the various fair use factors is analyzed below.

(a) Purpose and Character of the Use

The first statutory fair use factor looks to “the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes.”³⁷² Proxy caching is generally done in the context of providing commercial services to end users, and is therefore likely to be for a commercial purpose. However, the *Netcom* court noted that Netcom’s use of copyrighted material as part of its Usenet services, “though commercial, also benefits the public in allowing for the functioning of the Internet and the dissemination of other creative works, a goal of the Copyright Act.”³⁷³ The court noted that the commercial nature of Netcom’s activity should therefore not be dispositive, concluding that “[b]ecause Netcom’s use of copyrighted materials served a completely different function than that of the plaintiffs, this factor weighs in Netcom’s favor.”³⁷⁴

In many instances, however, it may be unclear whether an OSP’s particular form of caching serves a “completely different function” than that of the copyright owner’s use of its material. For example, material may be cached from a source website and accessed by users from the proxy server in exactly the same way that it would have been accessed from the original server. The copyright holder might use this fact to distinguish the *Netcom* court’s holding with respect to the first statutory fair use factor.

***68 (b) Nature of the Copyrighted Work**

The second statutory fair use factor looks to “the nature of the copyrighted work.”³⁷⁵ Fair use rights are generally construed more broadly with respect to factual or published works than with respect to fictional or unpublished works. Although all material available on the Internet is published, such material varies tremendously as to its substantive nature. Thus, whether a particular cached work is factual, fictional, or in between will vary from case to case, and the application of the second statutory factor to any particular instance of caching cannot necessarily be predicted in advance.

In the *Netcom* case, the court held that the precise nature of the works at issue was not important to the fair use determination “because Netcom’s use of the works was merely to facilitate their posting to the Usenet, which is an entirely different purpose than plaintiffs’ use.”³⁷⁶ As noted with respect to the first statutory fair use factor, however, the same may often not be true in particular instances of caching. Accordingly, it is difficult to say how the second statutory factor may be applied to caching in the future.

(c) Amount and Substantiality of the Portion Used

The third statutory fair use factor looks to “the amount and substantiality of the portion used in relation to the copyrighted work as a whole.”³⁷⁷ Caching routinely involves the making of copies of entire Web pages, which may in turn contain entire

copyrighted works,³⁷⁸ so in many instances all or a substantial portion of a copyrighted work will be copied in the course of caching. Generally, no more of a work may be copied than is necessary for the particular use.³⁷⁹ Although copying an entire work will ordinarily militate against a finding of fair use,³⁸⁰ one could argue that caching inherently requires copying all or a substantial portion of the cached material in order to derive the benefits of the caching, and this factor should therefore not be dispositive of fair use.

For example, the *Netcom* court noted that “the mere fact that all of a work is copied is not determinative of the fair use question, where such total copying is essential given the purpose of the copying.”³⁸¹ Because *Netcom* had copied no more of the plaintiff’s works than necessary to function as a Usenet server, the court *69 concluded that the third statutory factor should not defeat an otherwise valid defense.³⁸²

OSPs that engage in copying of whole works may be able to rely on this logic by arguing that such copying is essential given the nature and purpose of caching. Such an argument may, however, be vulnerable to attack, depending upon the way in which the caching is performed. Caching by an OSP of only that material that has been requested by users in some previously defined time period may be said to be “essential” because such material has at least a demonstrated basis for expecting that it will be accessed again. But what about extensive “mirroring,” where an OSP copies, for example, entire websites from geographically remote sites to more local servers? Such caching is not based on actual demand usage. Should this matter? Could the OSP argue that such caching is “essential” to avoid potential network bottlenecks from the remote site to its users’ computers?

How far can this logic be pushed? For example, should the law permit caching by “Offline Browsers,” which browse the Internet automatically, visit sites preidentified by the user as being of interest, collect all the pages from those sites, and download copies onto the user’s hard disk for browsing off-line?³⁸³

No case to date has specifically addressed these issues, and they must therefore be considered unresolved for the moment.

(d) Effect of Use on the Potential Market

The fourth statutory fair use factor looks to “the effect of the use upon the potential market for or value of the copyrighted work.”³⁸⁴ This factor is generally considered the most important of the four factors.³⁸⁵ In analyzing this factor, a court may look to “whether unrestricted and widespread conduct of the sort engaged in by the defendant … would result in a substantially adverse impact on the potential market” for the original.³⁸⁶ Because caching is inherently widespread on the Internet, a court may well look beyond the individual actions of a particular caching entity and assess the potential aggregate impact of caching on a copyright owner.

The application of this factor is very difficult to predict in advance, without knowing the particular factual circumstances of the caching that is being challenged. There are no doubt many instances of caching that do not harm the potential market for a copyright owner’s work, especially with respect to caching of material from non-commercial websites that make material available for free. However, even in *70 the case of non-commercial sites, one or more of the detriments of caching noted in subsection 2 above may be applicable, and the copyright owner might use such detriments as the basis for an argument of harm to the potential market for the copyrighted material. For example, a website owner might put promotional material up on its site that is updated frequently. If caching caused the latest updated material not to be available, the owner might argue that the “market” for its website material had been harmed.

With respect to commercial sites, one can more readily imagine instances in which caching could cause harm to the market for copyrighted works. For example, if caching reduces the number of page impressions generated by a home page containing copyrighted material on which advertising is sold, the owner could argue that its advertising revenues for banners placed in conjunction with such copyrighted material (which, in this instance, is arguably the very market for such material) will be harmed.

In the *Netcom* case, the court held that potential harm under the fourth fair use factor precluded a ruling that the OSP’s posting of the plaintiffs’ copyrighted material in its Usenet service was a fair use.³⁸⁷ The plaintiffs had argued that the Internet’s extremely widespread distribution of its copyrighted religious materials multiplied the potential effects of market substitution for its materials by groups using such materials to charge for Scientology-like religious training.³⁸⁸

In sum, it seems that the application of the fourth fair use factor will be highly fact specific, and there may be instances in which a copyright holder could establish sufficient harm to its potential markets from caching as to preclude a finding of fair use. It therefore seems unwise to make a blanket assumption that the fair use doctrine will automatically protect all forms of caching.³⁸⁹

4. Application of the Implied License Doctrine

The potential harm to copyright owners from caching noted with respect to the fair use doctrine introduces similar uncertainty with respect to whether the implied license doctrine may apply to caching in various instances. Courts often tend to construe implied licenses narrowly.³⁹⁰ A court might therefore be hesitant to construe any implied license from a copyright owner based on its posting of material *71 for browsing on the Web to cover uses (such as caching) that cause palpable harm to the owner.

A second problem with the implied license doctrine is that it might be defeated by a copyright owner posting an explicit statement of permitted uses of its material. A website owner might, for example, post a notice that its material cannot be cached, or can be cached only if refreshed at defined time intervals. Although such notice would be readable by individual users who browse the site, it would not be “readable” by automatic caching software. Thus, the notice might be sufficient for legal purposes to defeat an implied license argument, yet a caching entity would have no way to avoid liability from automatic caching by making use of such notice. The technical solutions discussed in the next subsection may ultimately resolve much of the issue. Until then, however, reliance on the implied license doctrine carries substantial legal uncertainty.

5. Technical Solutions

The caching problem may ultimately be solved by various technical solutions that allow the copyright holder to specify or control caching through technological means. For example, it is possible to create “dynamic pages” on websites that are displayed to a user only after the user initiates a server-resident program called a “CGI script.”³⁹¹ CGI scripts rely on the Common Gateway Interface (CGI), which is a standard for interfacing external applications with information servers. Use of the CGI protocol allows user requests to trigger execution of a server-resident program, with whatever dynamic information the program creates as output being returned to the user initiating the request. CGI scripts can tailor response information to particular users or classes of users. Using this mechanism, each subsequent request to the file server for the same destination information specified by the Uniform Resource Locator (URL) can return different information. The use of CGI programs is largely incompatible with file caching.³⁹²

In addition, the Internet Engineering Task Force (IETF) is considering a revision to the basic Hypertext Transfer Protocol (HTTP), the most commonly used protocol on the Web today to request information from sites, which would include a mechanism for specifying caching preferences. The revised protocol would allow the attachment of explicit directives to both requests and responses for information. A content provider posting information to a server could mark the information “Public” (full permission to cache), “Private” (no caching by a proxy cache, only a local user cache), or “No Cache” (no caching anywhere permitted). The server may also specify an expiration date to indicate that the information becomes stale after a certain date. Using this protocol, a user would be able to indicate to a server that the user wanted only information that has been in the cache for less than a specified amount of time, or only information that is still “fresh” (meaning that the expiration time set by the origin server has not passed). When a request arrives for information *72 that has become stale, the cache would check with the server and may receive a new expiration time.³⁹³

Ultimately, technical solutions similar to these may enable express instructions from a copyright owner to be posted concerning the scope of permitted caching. Whether and when such solutions may come into widespread use, and whether “fair use” forms of caching will still be needed even with the use of such mechanisms, remains to be seen. In the meantime, caching presents an important area of legal uncertainty on the Internet.

6. Legislative Solutions

As discussed in detail in the next section, pending legislation would create a safe harbor for caching by OSPs under defined circumstances, which in part anticipate, and condition the safe harbor upon, compliance with the technical solutions described in the previous subsection that may develop and become industry standards. The safe harbor implicitly recognizes,

and seems designed to minimize, the potential detriments of caching discussed above.

C. Liability of Online Providers

Much of the Internet copyright debate in recent years has centered around the issue of copyright liability of OSPs, BBS operators, system operators, and other service providers for infringing activities taking place through their facilities. Indeed, to date, almost all of the reported Internet copyright decisions have centered around the issue of liability of OSPs and BBS operators. Copyright owners have sought to hold OSPs and BBS operators liable on theories of direct liability, contributory liability, and vicarious liability. This section discusses each of these three theories in turn and the cases raising those theories that have been decided to date involving the Internet. This section also discusses pending United States legislation that would limit the liability of OSPs for the infringing acts of third parties committed through their online services.

1. Direct Liability

As discussed in detail in Part II.A.4 above, a majority of the cases decided to date seem to require that there be some kind of a direct volitional act in order to establish direct infringement liability on the part of an OSP or BBS for infringing postings and unauthorized uses by users. For example, the *Netcom* court refused to hold an OSP directly liable for automatic pass through of allegedly infringing messages posted to Usenet by a subscriber.³⁹⁴ The subsequent *MAPHIA*³⁹⁵ case and the *Sabella*³⁹⁶ case extended the logic of *Netcom*, refusing to hold liable as a direct *73 infringer the operator of a BBS for the uploading and downloading by subscribers of unauthorized copies of Sega's videogames through the BBS, even though the operator encouraged the initial uploading, because the operator had not participated in the very acts of uploading or downloading themselves.³⁹⁷

The logic of the Ninth Circuit's decision in *Subafilms, Ltd. v. MGM-Pathe Communications Co.*³⁹⁸ also suggests there should not be direct liability for persons who merely place material on a network for subsequent unauthorized copying, display, performance, or the like. *Subafilms* held that no independent "right of authorization" was created by the Copyright Statute's reference in Section 106 of the exclusive right "to do or to authorize" the acts enumerated therein.³⁹⁹ Rather, the reference to "authorize" was meant only to establish potential liability for contributory infringement on the part of a person who causes an infringement by authorizing it.⁴⁰⁰ Under the reasoning of the *Subafilms* decision, even if loading material onto a server encourages (or authorizes) copying through downloading, that authorization does not suffice for direct liability.⁴⁰¹

However, as discussed in greater detail in Part II.A.4 above, the *Frena* and *Webbworld* cases seem to go further in their willingness to impose direct liability on a BBS operator, at least where an actor such as a BBS operator or website operator has some form of direct involvement in the anticipated acts that lead to infringement or in the infringing acts themselves (such as resale of the infringing material). Such acts of direct involvement in the infringement process may be sufficient for a finding of enough volitional activity to impose direct liability. As noted below, however, pending legislation limiting the liability of OSPs might negate or limit the holdings of these cases.

2. Contributory Liability

A party may be liable for contributory infringement where "with knowledge of the infringing activity, [it] induces, causes or materially contributes to the infringing activity of another."⁴⁰² "The standard of knowledge is objective: to know or have reason to know that the subject matter is copyrighted and that the particular uses were violating copyright law."⁴⁰³ To show liability for contributory infringement, *74 there must be a direct infringement⁴⁰⁴ of which the contributory infringer has knowledge and encourages or facilitates.

The requirement of knowledge may eliminate contributory liability on the part of an OSP or BBS operator with respect to many instances of infringement in which the OSP or BBS is merely a passive information conduit and has no knowledge of the infringement. However, given knowledge (or reason to know), a system provider cannot simply continue to provide the facility that enables infringement. For example, in *Religious Technology Center v. Netcom On-Line Communication Services*,⁴⁰⁵ the court held that the OSP Netcom could be contributorily liable for infringing postings by an individual named Erlich of copyrighted religious materials to Usenet through the provider after the service was given notice of the infringing material.⁴⁰⁶ "If plaintiffs can prove the knowledge element, Netcom will be liable for contributory infringement since its failure to simply cancel Erlich's infringing message and thereby stop an infringing copy from being distributed worldwide

constitutes substantial participation in Erlich's public distribution of the message.⁴⁰⁷ The court found that the copyright notices in the posted works were sufficient to give Netcom notice that the works were copyrighted.⁴⁰⁸

However, the court was careful to note that where an operator is unable to verify a claim of infringement, there may be no contributory liability.

Where a BBS operator cannot reasonably verify a claim of infringement, either because of a possible fair use defense, the lack of copyright notices on the copies, or the copyright holder's failure to provide the necessary documentation to show that there is a likely infringement, the operator's lack of knowledge will be found reasonable and there will be no liability for contributory infringement for allowing the continued distribution of the works on its system.⁴⁰⁹

Nevertheless, the court clearly imposed a duty on the operator to actively attempt to verify a claim of infringement and to take appropriate action in response.

Thus, it is fair, assuming Netcom is able to take simple measures to prevent further damage to plaintiffs' copyrighted works, to hold Netcom liable for contributory infringement where Netcom has knowledge of Erlich's infringing postings yet continues to aid in the accomplishment of Erlich's purpose of publicly distributing the postings.⁴¹⁰

In addition to the *Netcom* case, the court in the subsequent *MAPHIA*⁴¹¹ case (also out of the Northern District of California) held a BBS and its system operator liable for contributory infringement for both the uploading and the subsequent downloading of copies of Sega's video games by users where the system operator *75 had knowledge that the infringing activity was going on through the bulletin board and had specifically solicited the uploading of the games for downloading by users of the bulletin board.⁴¹² The court cited the Ninth Circuit's decision in *Fonovisa, Inc. v. Cherry Auction, Inc.*⁴¹³ for the proposition that providing the site and facilities for known infringing activity is sufficient to establish contributory liability.⁴¹⁴ In this case, Sherman provided the BBS as a central depository site for the unauthorized copies of games, and allowed subsequent distribution of the games by user downloads. He provided the facilities for copying the games by providing, monitoring, and operating the BBS software, hardware, and phone lines necessary for the users to upload and download games.⁴¹⁵

This suggests that mere operation of a BBS, at least if the operator knows that infringing activity is taking place, is sufficient for contributory liability.

However, the court went on to find that Sherman would have been liable as a contributory infringer even under a higher standard requiring more direct participation in the infringement that the court believed the *Netcom* decision established.

However, even under an alternative and higher standard of "substantial participation," Sherman is liable. Under this standard, Sherman is only liable if he knew of the users' infringing actions, and yet substantially participated by inducing, causing or materially contributing to the users' infringing conduct. (citation omitted) In this case, Sherman did more than provide the site and facilities for the known infringing conduct. He actively solicited users to upload unauthorized games, and provided a road map on his BBS for easy identification of Sega games available for downloading. Additionally, through the same *MAPHIA* BBS medium, he offered copiers for sale to facilitate playing the downloaded games.⁴¹⁶

In sum, it appears that an OSP, BBS operator, or other operator of an online service can be liable for contributory infringement where the operator has knowledge of the infringing activity. How much the operator must contribute to the infringing activity after gaining such knowledge beyond the mere provision of the facilities used to accomplish the infringement is unclear. The Ninth Circuit's *Fonovisa* decision might be read to require little more than continuing to provide such facilities after knowledge that infringing activity is taking place. The *MAPHIA* court interpreted the *Netcom* decision to require more, although one should note that the *Netcom* case was decided before *Fonovisa*. Because no case has yet reached the Ninth Circuit involving an issue of contributory liability on the part of an OSP, BBS operator, or other service provider, the issue of what standard governs such liability in the Ninth Circuit remains somewhat unclear. However, the cases seem to require a service provider at least to actively attempt to verify a claim of infringement after receiving notice of the same and to take appropriate action in response.

*76 As discussed in previous sections, several other decisions have imposed contributory liability on the part of a BBS where the BBS operator actively encouraged the acts leading to the infringements. See the discussions of *Sabella* and *Hardenburg*

above.

As discussed below, pending legislation would define certain safe harbors against liability for OSPs who act as merely passive conduits for infringing information and without knowledge of the infringement.

3. Vicarious Liability

A party may be vicariously liable for the infringing acts of another if it (1) has the right and ability to control the infringer's acts and (2) receives a direct financial benefit from the infringement.⁴¹⁷ Unlike contributory infringement, knowledge is not an element of vicarious liability.⁴¹⁸

The *Netcom* case is the principal decision to date to consider the vicarious liability of an online provider. In that case, the court refused to impose liability on Netcom under a theory of vicarious liability.⁴¹⁹ The court found that there was a genuine issue of material fact as to whether Netcom had the right and ability to control the activities of its subscribers in view of the fact that Netcom's expert testified that with an easy software modification Netcom could identify postings containing particular words or from particular individuals, and Netcom had acted to suspend subscribers' accounts on over one thousand occasions.⁴²⁰

However, the court held that the second prong of the test was not satisfied, because there was no evidence that Netcom received a direct financial benefit from the infringing postings, or that such postings enhanced the value of Netcom's services to subscribers or attracted new subscribers.⁴²¹

In refusing to impose vicarious liability because it found Netcom received no direct financial benefit from the infringing postings, the court in *Netcom* relied⁴²² on the district court's decision in *Fonovisa, Inc. v. Cherry Auction, Inc.*,⁴²³ which found *77 no direct financial benefit despite an argument that lessees at a swap meet included many vendors selling counterfeit goods and that clientele sought "bargain basement" prices.⁴²⁴ It should be noted that the Ninth Circuit subsequently reversed *Fonovisa*, and appears to have adopted a less demanding standard for financial benefit for purposes of vicarious liability, which may undermine the strength of the *Netcom* decision as precedent. The Ninth Circuit held that adequate financial benefit was alleged by virtue of the fact that the operator of the swap meet received financial benefits through admission fees, parking fees, and sales at concession stands.⁴²⁵ A copyright holder seeking to hold an OSP or BBS operator vicariously liable might argue under *Fonovisa* that the subscription fees paid by the infringers should be sufficient financial benefit, just as were the admission fees, parking fees, and concession stand sales in *Fonovisa*.

The Ninth Circuit's holding in *Fonovisa* suggests a standard that does not require direct financial benefit from the infringing activity itself, but rather that the infringing activity contributes to an overall commercial design and benefit for the operator.⁴²⁶ Further judicial development will be required to see how broadly the courts may apply the doctrine of vicarious liability to service providers.

In one decision handed down after both the *Netcom* and *Fonovisa* decisions, *Marobie-FL, Inc. v. National Association of Fire Equipment Distributors*,⁴²⁷ the court, citing the *Netcom* case, refused to hold vicariously liable an OSP supplying Internet service to a website that contained infringing material because the infringements that occurred through the website did not directly financially benefit the OSP.⁴²⁸ The website owner paid the OSP a flat quarterly subscription fee that did not change based upon how many people visited the website or what was accessed on such site.⁴²⁹

As discussed below, pending legislation would define certain safe harbors against liability for OSPs who act as merely passive conduits for infringing information and without direct financial benefit from the infringement.

4. Potential Resolutions Outside the Courts

In addition to the reported decisions discussed above, the issue of online provider liability continues to generate litigation. For example, several complaints were filed on October 2 and October 8, 1996 by the 1200-member Software Publishers Association (SPA) against a Web home page author and several OSPs as part of an "anti-piracy" campaign on the part of the SPA. The complaints asserted that the defendants were contributorily liable for copyright infringement because they provided the means for third parties to make infringing copies of copyrighted *78 software owned by SPA members. One of the

October 8 complaints, *Adobe Systems Inc. v. Tripod Inc.*,⁴³⁰ alleged that an OSP was liable for contributory infringement for illegally distributing “cracker tools”⁴³¹ and for providing links to Internet sites where unauthorized copies of the plaintiffs’ software could be found.⁴³² Similar suits were filed on the same date by the SPA against three other OSPs.⁴³³ The October 2 complaint alleged that Jeffrey B. Workman used his home page to distribute cracker tools and serial numbers for the plaintiffs’ software.⁴³⁴

In connection with the filing of the complaints, the SPA also launched a program to convince OSPs to adhere to a voluntary written “Code of Conduct,” which would require OSPs to monitor websites posted by their subscribers, in order to prevent any illegal exchange of copyrighted software programs, links to other sites that may contain information about stolen programs or discussions about copying techniques.⁴³⁵ The complaints, as well as the Code of Conduct, generated division among different industry segments, and many OSPs vowed to fight the efforts of the SPA. A coalition of OSPs, coordinated by public interest groups such as Voters Telecommunications Watch, Electronic Frontiers Florida, Electronic Frontiers Austin, Electronic Frontiers Georgia, and the Texas Internet Service Providers Association, was formed to produce its own proposal for handling the issue of piracy and the obligations of online providers.⁴³⁶

Shortly after the complaints were filed, the SPA backed down from its litigation, illustrating that means other than litigation may ultimately provide better paths to resolution of the issues of piracy through online services.⁴³⁷ Within approximately two weeks, the SPA settled two of the lawsuits against the OSPs in return for agreement by the OSPs to strengthen efforts to warn customers about copyright laws and to remove software or other content discovered to be posted illegally. One OSP, for example, agreed to remove software in which registration codes have been “cracked” and tools that are used only for cracking software. The suit against a third OSP had been dropped earlier without similar commitments. The SPA did not require as a condition for dropping any of the suits that the OSPs *79 acquiesce to the SPA’s “Code of Conduct,” which would have required active policing of customers’ websites. The SPA continued to maintain, however, that it was still keeping legal remedies as an option against both users and OSPs.⁴³⁸

Earlier, in August 1996, the Church of Scientology reached a settlement with Netcom to settle their longstanding litigation.⁴³⁹ As part of the settlement, Netcom announced new guidelines titled “Intellectual Property Rights on the Internet,” which Netcom now distributes to all its subscribers and which purport to set forth terms and conditions binding on all computers whose host name or address includes “netcom.com.” Under these guidelines, Netcom assumed the role of arbiter of allegations of copyright infringement based on materials posted through its service. Upon receipt of a complaint of infringement, Netcom will immediately remove questionable materials from its service pending an investigation. The guidelines do not, however, detail how Netcom will ultimately evaluate claims of infringement.⁴⁴⁰

As detailed in the next subsection, many years of difficult negotiations between content providers and OSPs have finally led to a compromise agreement with respect to the scope of liability of OSPs for infringements committed through their networks or services. The compromise agreement has been embodied in at least two pieces of legislation pending in Congress.

5. Pending Legislation to Limit Liability of Online Service Providers

From late 1995 through May 1996, OSPs, telecommunications carriers and other distributors of online information, content providers, and software companies negotiated intensively to reach a consensus on proposed legislation that would provide various statutory safe harbors with respect to the liability of online providers.⁴⁴¹ The parties were unable to reach agreement on legislation in the 103rd Congress. The debate among the various industry segments was ignited again in connection with the WIPO copyright treaties in Geneva in December 1996.

(a) History of the Various Legislative Efforts

A number of bills were then introduced in Congress that would limit the liability of OSPs. The first to be introduced was House Bill 2180 by Rep. Coble on July 17, 1997.⁴⁴² This bill would have exempted OSPs from direct or vicarious copyright liability solely based on the transmission or providing of access to online material, and eliminate any damage remedy for contributory liability, limiting plaintiffs to injunctive relief.⁴⁴³ The criteria for exemption were that the OSP: (a) not initially place the material online; (b) not generate, select, or alter the content of *80 the material; (c) not determine the recipients of the material; (d) not receive a financial benefit directly attributable to a particular act of infringement; (e) not sponsor, endorse, or advertise the material; and (f) either not know or be aware by notice or other information indicating that the

material is infringing, or be prohibited by law from accessing the material.⁴⁴⁴

The second bill to be introduced was Senate Bill 1146, which, in addition to the WIPO treaty implementation provisions discussed above, also contained provisions limiting liability of OSPs. Senate Bill 1146 adopted a different approach to OSP liability than House Bill 2180. It contained three major provisions. First, it provided blanket exemptions from direct, vicarious or contributory liability for OSPs based on the mere provision of defined electronic communications network services or facilities, or on the transmission of private electronic communications, including voice messaging or electronic mail services or real-time communication formats, including chat rooms, streamed data, or other virtually simultaneous transmissions.⁴⁴⁵ Second, it provided exemptions from direct, vicarious or contributory liability for the provision of the following information location tools: a site-linking aid or directly, including a hyperlink or index; a navigational aid, including a search engine or browser; and the tools for the creation of a site-linking aid.⁴⁴⁶ Third, it provided immunity from direct, vicarious or contributory liability to OSPs for stored third party content, unless upon receiving notice of infringing material that complied with certain defined standards, the OSP failed expeditiously to remove, disable, or block access to the material to the extent technologically feasible and economically reasonable for the lesser of a period of ten days or receipt of a court order concerning the material.

Hearings were held in September 1997 on both House Bill 2180 and Senate Bill 1146. These hearings revealed lingering conflict between service providers and copyright owners on liability issues. Rep. Goodlatte led continuing negotiations between the content providers and OSPs. To further a compromise, on February 12, 1998, he and Rep. Coble introduced House Bill 3209,⁴⁴⁷ entitled the “On-Line Copyright Infringement Liability Limitation Act,” as a substitute for House Bill 2180.

On April 1, 1998, the House Judiciary Committee approved the substance of House Bill 3209, but folded it into the pending WIPO implementation legislation, House Bill 2281.⁴⁴⁸ The combined bills are now denominated House Bill 2281. Subsequently, based on continuing negotiations, an agreement was finally reached between service providers and copyright owners with respect to the proper scope of liability for online infringements of copyright. House Bill 2281 was then amended to include this compromise agreement.⁴⁴⁹

***81** Meanwhile, similar actions were taking place in the Senate. The provisions of Senate Bill 1121, implementing the WIPO treaty, were combined with a new title embodying the compromise agreement between service providers and copyright owners with respect to liability.⁴⁵⁰ The combined Senate bill, entitled the “Digital Millennium Copyright Act of 1998,” is now denominated Senate Bill 2037.⁴⁵¹ Senate Bill 2037 was unanimously approved by the Senate Judiciary Committee in April 1998 and adopted by the full Senate in May 1998.⁴⁵² However, the Senate subsequently vitiating its action on September 17, 1998,⁴⁵³ indefinitely postponed action on Senate Bill S. 2037, and then passed H.R. 2281 in its stead.⁴⁵⁴

Both House Bill 2281 and Senate Bill 2037 contain the same substantive provisions with respect to OSP liability.

(b) The OSP Liability Provisions of Senate Bill 2037 and House Bill 2281

The liability provisions are contained in Title II of both Senate Bill 2037 and House Bill 2281. Title II seeks to clearly define the conditions under which an OSP’s liability for infringements that occur on the OSP’s systems or networks will be limited. Specifically, Title II defines four safe harbors which would be codified in a new Section 512 of Title 17. If the OSP falls within these safe harbors, the OSP will be exempt from monetary damages and will be subject only to carefully prescribed injunctive remedies.⁴⁵⁵

(1) Safe Harbors

The four safe harbors are described below. Under new Section 512(j), the first safe harbor applies only to “an entity offering the transmission, routing or providing of connections for digital online communications, between or among points specified by a user, of material of the user’s choosing, without modification to the content of the material as sent or received.”⁴⁵⁶ The other three safe harbors apply more broadly to “a provider of on-line services or network access, or the operator of facilities therefor.”⁴⁵⁷ The latter definition would seem to cover a broad array of OSPs, BBS operators, system operators, and the like.

***82 (i) Acting as a Mere Conduit for Infringing Information**

The first safe harbor is essentially a codification of the *Netcom* case and a rejection of the *Frena* case, at least to the extent that the *Frena* case suggested that passive, automatic acts engaged in through a technological process initiated by another through the facilities of an OSP could constitute direct infringement on the part of the OSP.

Specifically, under new Section 512(a), an OSP is not liable for monetary relief, and is subject only to limited injunctive relief, for transmitting infringing material through a system or network operated by the OSP, or for intermediate and transient storage of such material in the course of transmission, if

- it was initiated by or at the direction of a person other than the OSP,⁴⁵⁸
- it is carried out through an automatic technical process without selection of such material by the OSP,⁴⁵⁹
- the OSP does not select the recipients of such material except as an automatic response to the request of another,⁴⁶⁰
- no copy of such material made by the OSP is maintained on the system or network in a manner ordinarily accessible to anyone other than anticipated recipients for a period no longer than is reasonably necessary for the communication,⁴⁶¹ and
- the material is transmitted without modification to its content.⁴⁶²

(ii) Caching

New Section 512(b) provides that an OSP is not liable for monetary relief, and is subject only to limited injunctive relief, for caching of material placed on a system or network operated by the OSP by an originator of the material.⁴⁶³ Such caching must occur through an automatic technical process upon the original transmission of such material to a requester, in order to make the material available to subsequent requesters.⁴⁶⁴ Thus, new Section 512(b) appears not to cover “advance” caching, in *83 which material is copied into a cache for *anticipated* requests for it, rather than upon the first actual request for it.

In addition, the safe harbor requires that the OSP comply with all rules of the originator for refreshing, reloading or other updating of the cached material in accordance with an industry standard data communications protocol (provided such rules are not used by the originator to unreasonably impair intermediate storage), and that the OSP not interfere with any technology associated with the cached material that returns information to the originator that would have been obtained in the absence of transmission through caching (provided such technology does not interfere with the performance of the network, is consistent with accepted industry standard communications protocols and does not extract other information).⁴⁶⁵ The safe harbor also requires that, if the originator has conditioned access to the information, such as upon payment of a fee or provisions of a password, the OSP must permit access to the cached information only upon the same conditions.⁴⁶⁶ Finally, the OSP must respond expeditiously to remove or disable access to any cached information that it receives notice has been removed or disabled from the originating site from which the information was cached.⁴⁶⁷

(iii) Innocent Storage of Infringing Information

New Section 512(c) provides that an OSP is not liable for monetary relief, and is subject only to limited injunctive relief, for storage of infringing material on its system or network where it does not have actual knowledge that the material is infringing, or, in the absence of actual knowledge, is not aware of facts or circumstances from which infringing activity is apparent,⁴⁶⁸ does not receive a financial benefit directly attributable to any infringing activity for which it has the right and ability to control,⁴⁶⁹ and if properly notified of the infringing activity,⁴⁷⁰ responds expeditiously to remove or disable access to the infringing material.⁴⁷¹

To take advantage of this safe harbor, the OSP must designate an agent to receive notifications of claimed infringements and make available the contact *84 information for such agent through its service and through the U.S. Copyright Office.⁴⁷²

(iv) Referral or Linking to Infringing Material

New Section 512(d) provides that an OSP is not liable for monetary relief, and is subject only to limited injunctive relief, for

referring or linking users to an online location containing infringing material or activity by using information location tools (including a directory, index, reference, pointer, or hypertext link), provided the OSP does not have actual knowledge that the material is infringing, or, in the absence of actual knowledge, is not aware of facts or circumstances from which infringing activity is apparent;⁴⁷³ does not receive a financial benefit directly attributable to any infringing activity for which it has the right and ability to control;⁴⁷⁴ and, if properly notified of the infringing activity,⁴⁷⁵ responds expeditiously to remove or disable access to the infringing material.⁴⁷⁶

(2) General Requirements for Limitations of Liability

In addition to meeting the requirements of one of the specific safe harbors, to be eligible for the limitations of liability, under new Section 512(h) the OSP must adopt, reasonably implement, and inform subscribers of a policy for the termination of subscribers who are repeat infringers.⁴⁷⁷ Furthermore, the OSP must not interfere with standard technical measures used by copyright owners to identify or protect copyrighted works that “have been developed pursuant to a broad consensus of copyright owners and service providers in an open, fair, voluntary, multi-industry standards process,” “are available to any person on reasonable and nondiscriminatory terms,” and do not impose substantial costs or burdens on OSPs or their systems.⁴⁷⁸

(3) Other Provisions

New Section 512(f) provides that an OSP shall not be liable for the good faith disabling of access to or removal of material or activity claimed to be, or appearing from the facts and circumstances to be, infringing.⁴⁷⁹ New Section 512(g) sets up a *85 procedure through which a copyright owner may obtain an order through a United States district court directing the OSP to release the identity of an alleged direct infringer acting through the OSP’s system or network.⁴⁸⁰ Under new Section 512(k), failure of an OSP to fit into one of the safe harbors does not affect the OSP’s claim that its conduct is nonetheless noninfringing, or any other defense.⁴⁸¹ Finally, new Section 512(l) clarifies that the safe harbors are not conditioned upon a requirement that the OSP monitor its system for infringements or access, remove, or disable access to material where such conduct is prohibited by law.⁴⁸²

(4) Injunctions

Under new Section 512(i), if an OSP is subject to injunctive relief, courts are limited to injunctions that restrain the OSP from providing access to infringing material at particular online sites on its service⁴⁸³ that restrain it from providing services to a subscriber engaging in infringing activity by terminating the subscriber,⁴⁸⁴ or that are otherwise necessary to prevent or restrain infringement of specified copyrighted material at a particular online location, provided that such remedies are the least burdensome to the OSP among forms of relief comparably effective for that purpose.⁴⁸⁵

D. Linking and Framing

The practice of “linking” is another activity that is ubiquitous on the World Wide Web. A “link” is an embedded electronic address that “points” to another Web location. Links may be of at least two different types. The first type, which will be referred to as an “out link,” merely provides a vehicle by which a person browsing a Web page can go to another site by clicking on the link. The out link stores the electronic address of the destination site, and clicking on the link sends that address to the browser, which in turn moves the user to the new destination site.

A second type of link, which will be referred to as an “in-line link,” is a pointer to a document, image, audio clip or the like somewhere on the Web contained in another’s Web page which, in effect, pulls in the image, text or audio clip from the other Web page into the current document for display. In other words, a user looking at *A*’s Web page will see on that page image, text, or an audio clip that *86 actually was “pulled in” from site owner *B*’s Web page.⁴⁸⁶ When material from an in-line link is displayed within the “frame” or window border of a page of the linking website, this type of linking is often referred to as “framing.”⁴⁸⁷ The linking site is sometimes referred to as a “para-site,” with obvious pejorative connotations.

Both out links and in-line links raise a number of potential copyright issues. An out link that points to a site containing infringing material may, for example, cause further infringing reproductions, public performances, public distributions,

public displays, digital performances of sound recordings, and/or importations to occur when the user reaches that site and the infringing material is downloaded, imported and/or performed or displayed to the linking user. Even if material on the destination site is not infringing of its own right, the reproductions, distributions, and displays that occur as a result of the out link may not be authorized, since the out link may have been established (as is generally the case) without the explicit permission of the owner of material on the destination site. Under the WIPO treaties, the result of clicking on the out link may be to generate an unauthorized access and transmission of the destination material. Or the out link itself may be considered to be an unauthorized “making available to the public” of the material on the destination site--the owner of the destination site may wish to retain complete control of how and when information on its site is presented to the public.

It is unclear whether an out link might also be considered the creation of an unauthorized derivative work. Viewed in one way, an out link could be considered nothing more than a reference to another work, much like a citation in a law review article, that should not be considered a derivative work. One could argue that the material on the linked site is neither altered by the link nor “incorporated” into the linking site, but is seen in its original form when the user arrives there as a result of the link.

Viewed a different way, one could treat a site as a virtual collective work comprised of all material available to be viewed by the user in the course of browsing through the site. Links cause an “incorporation”—at least in a virtual sense--of the linked material into this collective work, thereby in some sense creating a derivative work. If the linked site material enhances the value of the linking site, the linked site owner might argue that the linking site is “based upon” the linked site and therefore constitutes a derivative work.⁴⁸⁸

*87 The fair use or implied license doctrine may apply to many out links, because it is no doubt the case that many site owners will want their material disseminated as widely as possible, and references in to the site through links from other sites will be considered desirable. However, in some instances the linked site owner may argue that out links cause harm, and such harm should defeat a fair use or implied license defense. For example, nonconsensual links may result in burdensome amounts of traffic on the linked site from users the linked site is not targeting. The owner of the linked site could argue that such unwanted traffic prevents the owner from distributing copyrighted material on its site to its desired audience, thereby harming the potential market for its material. Alternatively, if the linking site is undesirable for some reason in the eyes of the linked site, the linked site might allege the linking diminishes the commercial value of its copyrighted material at the linked site. This might be the case, for example, if a site distributing pornographic material were to link to a religious site distributing religious material.⁴⁸⁹

In addition to the issues of direct infringement discussed above, if a linked site contains infringing material, the link may give rise to contributory infringement on the part of the linking site, particularly if the linking site is promoting the copying, transmission, public display or public performance of material at the linked site. As noted in the previous section, the SPA recently instituted a complaint against an OSP for contributory infringement based in part on the provision of links to Internet sites where unauthorized copies of the plaintiffs’ software could be found. Linking to a site containing infringing material may also give rise to vicarious liability if the linking site derives financial benefit from the link.

As discussed in the previous Part, pending legislation would provide a safe harbor to OSPs who set up out links to infringing material without knowledge of the infringement.

In-line links may provide an even more direct basis for legal liability than out links. An in-link link causes a reproduction of the linked material to be “pulled in” to the linking site, and therefore may cause an infringement of the right of reproduction, display, or performance, or may constitute the creation of an unauthorized derivative work, just as if material had been clipped from a printed source and placed in one’s own material. An in-line link may also cause an infringing access or transmission of copyrighted material under the WIPO treaties.

*88 Although beyond the scope of this paper, both out links and in-line links may raise issues of trademark infringement as well as copyright infringement. The trademarks of the linked site are often used as an icon on which the user may click to reach the linked site, and the trademark owner may argue that such use constitutes an infringement. In addition, both out links and in-line links may give rise to allegations of false implications of sponsorship or endorsement of the linking site by the company affiliated with the linked site or material, or of confusion as to source of the linked material.

To date, there have been a number of cases challenging linking on copyright grounds.

1. The *Shetland Times* Case

A recent case out of Scotland illustrates one type of harm that a linked site owner perceived to result from links to its site. In *Shetland Times Ltd. v. Wills*,⁴⁹⁰ the plaintiff, Shetland Times (Times), maintained a website containing copies of articles that appeared in the printed version of its newspaper.⁴⁹¹ Users visiting the site were initially presented with a “front page” containing headlines.⁴⁹² Clicking on a headline linked the user to the full text of the article.⁴⁹³ The Times planned to sell advertising space on the front page.⁴⁹⁴

The defendant, The Shetland News (News), also maintained a website.⁴⁹⁵ News took verbatim the headlines from Times’ site and placed them on News’ Web page to allow users at News’ site to link directly to the full text of Times’ articles, without having to first view Times’ front page.⁴⁹⁶ This bypassing of Times’ front page obviously caused harm to Times’ ability to sell advertising on the front page, since those readers of Times’ articles who arrived at the articles through links from News’ site would never see the ads.⁴⁹⁷ Times sued News in the Scotland Court of Sessions, alleging that News’ copying of Times’ headlines constituted copyright infringement.⁴⁹⁸

The court issued an “interim interdict” (a temporary order) pending a full hearing, ruling that the headlines could be considered copyrightable literary works.⁴⁹⁹ The court rejected the defendant’s argument that the headlines were not *89 the product of sufficient skill or effort, finding that because many of the headlines consisted of eight or so words that imparted information, copying of the headlines might at least in some instances constitute copyright infringement.⁵⁰⁰

The parties subsequently settled their dispute by agreeing that News would be permitted to link to stories on Times’ website by means of headlines only in the following manner. Each link to any individual story would be acknowledged by the legend *A Shetland Times Story* appearing underneath each headline and of the same or similar size as the headline, adjacent to any such headline or headlines there would appear a button showing legibly the Times masthead logo and the legend and the button would each be hypertext links to the Times online headline page.⁵⁰¹

Under United States law, in most instances headlines will probably not be individually copyrightable under the “words and short phrases” doctrine,⁵⁰² which holds that individual words and short phrases such as titles are not copyrightable, although a collection of headlines might be copyrightable as a compilation. Thus, News’ verbatim copying of a collection of Times’ headlines from a single Times newspaper as a basis for News’ links to the Times website might also constitute an infringement under United States copyright law. If Times’ suit had been brought in the United States, News would no doubt argue that its use of the headlines was a fair use as part of news reporting.⁵⁰³ Times would no doubt argue in response that the commercial harm to its advertising revenues from its headlines on its own front page should defeat News’ fair use argument. Although it is unclear how such a case would be decided under United States fair use law, the case is a good illustration of the copyright issues that may arise out of the act of linking.

2. The *Total News* Case

In February 1997, a number of news service providers--The Washington Post, Cable News Network, Times Mirror, Dow Jones, and Reuters New Media--commenced a suit against Total News, Inc. (Total News) and other defendants who were either providing website design and programming services to Total News or were principals of Total News.⁵⁰⁴ The case was the first in North America to challenge framing as a copyright infringement.⁵⁰⁵

*90 The Total News website was a para-site, designed to make news sources from all over the world available at a single site.⁵⁰⁶ The Total News home page frame consisted of the totalnews.com URL at the top, a column of rectangular icons with the trademarked names of several of the plaintiffs running down the left margin, and advertising sold by the defendants at the bottom.⁵⁰⁷ At the right center portion of the screen was a news window.⁵⁰⁸ When the user first logged onto the Total News website, this window was occupied by a “compass” style array of hyperlinks to several of the plaintiffs’ websites.⁵⁰⁹ Clicking on the links would cause material from the plaintiffs’ websites to be displayed in the news window, but still within the Total News “frame.”⁵¹⁰ Thus, for example, if a user clicked on the “Washington Post” link, the news window within the Total News frame would fill with an electronic version of *The Washington Post* newspaper linked in from *The Washington Post*’s own website.⁵¹¹ However, the totalnews.com URL would remain in place at the top of the frame and advertising sold by Total News would remain in place at the bottom of the frame.⁵¹²

Because the news window of the Total News frame was smaller than full screen in size,⁵¹³ the effect of the framing by the

defendants was to display only a portion of the original screens of material from the linked sites at any given time, and the user was forced to scroll the news window horizontally or vertically to see all of the original material from the linked sites.⁵¹⁴ Thus, advertisements contained on the original pages of the linked sites were reduced in size, and in some cases were totally obscured by the Total News frame.⁵¹⁵ At the same time, the user was continuously exposed to the advertising contained within the Total News frame:

Absent the “framing” by Defendants described above, someone wishing to view the content of Plaintiffs’ sites would, upon accessing those sites, see only Plaintiffs’ material as Plaintiffs intend for it to be seen. Use of Defendants’ website thus results in continuous, prolonged exposure to the logo, URL and advertising of totalnews.com. Defendants have promoted totalnews.com to advertisers and the public based entirely on Defendants’ ability to republish the content of Plaintiffs’ sites within the totalnews frames, including frames containing advertising.⁵¹⁶

The plaintiffs alleged that Total News infringed the copyrights in various materials from the plaintiffs’ websites by “republishing” such material through the *91 Total News site.⁵¹⁷ The complaint did not state which specific rights of the copyright holders were infringed, referring instead merely to the plaintiff’s “exclusive rights under 17 U.S.C. Section 106.”⁵¹⁸ The plaintiffs also alleged claims for misappropriation of news,⁵¹⁹ federal⁵²⁰ and state⁵²¹ trademark dilution, federal⁵²² and state⁵²³ trademark infringement, unfair competition,⁵²⁴ and tortious interference with contractual relations with their advertisers.⁵²⁵

At least one of the plaintiffs, CNN, attempted to counteract the deleterious effects of the framing by employing special code in its Web page that checked to see if the content was being viewed from within a frame, and, if so, caused the unauthorized composite page to be replaced with the CNN page on the entire screen.⁵²⁶ This technical solution had several problems, however. It took up to a minute or more to take effect, and a pop-up window inviting users to return to the Total News site was still able to appear superimposed on the CNN website.⁵²⁷

In June 1997, the parties settled the case pursuant to a stipulated order of settlement and dismissal.⁵²⁸ Under the settlement, Total News agreed to stop framing the plaintiffs’ websites.⁵²⁹ However, the settlement permitted Total News to maintain out links from the Total News website to any of the plaintiffs’ websites, provided that the links were only via hyperlinks consisting of the names of the linked sites in plain text;⁵³⁰ Total News made no use, as hyperlinks or otherwise, of any of the plaintiffs’ proprietary logos or other distinctive graphics, video, or audio material;⁵³¹ and the links were not likely to imply affiliation with, or endorsement or sponsorship by, any plaintiff or to otherwise cause confusion, dilution of the plaintiff’s marks, or other violations of state or federal law.⁵³²

***92 3. The *Ticketmaster* Case**

In April 1997, Ticketmaster Corporation brought an action in federal district court against Microsoft Corporation⁵³³ based on links from Microsoft’s “Seattle Sidewalk” website to Ticketmaster’s website.⁵³⁴ In February 1998, Ticketmaster filed a Second Amended Complaint,⁵³⁵ which asserts claims for copyright⁵³⁶ and trademark infringement⁵³⁷, as well as for unfair competition based on various common law and state law theories.⁵³⁸

Ticketmaster maintains a website (www.ticketmaster.com) through which it sells and markets tickets to various entertainment events.⁵³⁹ The “Seattle Sidewalk” site, one of a number of city guides maintained by Microsoft on The Microsoft Network, offers a guide to entertainment and restaurants available in the Seattle area.⁵⁴⁰ Microsoft placed links on the Seattle Sidewalk to the Ticketmaster site so that users of the Seattle Sidewalk could purchase tickets to events of interest online through Ticketmaster.⁵⁴¹ Negotiations between Microsoft and Ticketmaster for an agreement allowing Microsoft to profit from linkage to and association with Ticketmaster’s website failed, and Microsoft established the links—which in several instances bypassed the home page of the Ticketmaster site--without permission from Ticketmaster.⁵⁴²

With respect to its trademark claims, Ticketmaster asserted that the unauthorized links wrongfully appropriated, misused, and diluted Ticketmaster’s name and trademarks.⁵⁴³ In particular, Ticketmaster noted in its complaint that it had a business relationship with MasterCard by which Ticketmaster had agreed to give MasterCard prominence over any other credit cards in any advertising.⁵⁴⁴ Ticketmaster objected to Microsoft’s use of Ticketmaster’s name in connection with MasterCard without giving MasterCard prominence.⁵⁴⁵ Ticketmaster also asserted that its name and trademark had been buried by Microsoft in metatag code at Microsoft’s site in order to attract to Microsoft’s Sidewalk websites Internet search engines and

Internet users who are seeking information about tickets sold by and *93 available through Ticketmaster.⁵⁴⁶ Ticketmaster alleged that this use of its name and trademark in metatags improperly feathered Microsoft's own nest at Ticketmaster's expense.⁵⁴⁷

Ticketmaster also asserted claims of copyright infringement, based on the allegations that (i) in creating links to the Ticketmaster site, Microsoft repeatedly viewed and thus copied onto its own computers the copyrighted contents of Ticketmaster's website, and (ii) in the operation of the links, Microsoft was reproducing, publicly distributing and displaying without permission Ticketmaster's copyrighted website material.⁵⁴⁸

In Microsoft's answer to Ticketmaster's complaint,⁵⁴⁹ Microsoft alleged that Ticketmaster could not complain about Microsoft's link to Ticketmaster's home page because Ticketmaster knew when it set up its website that owners of other Web pages would create such links.⁵⁵⁰ Microsoft noted that when an event requires tickets, Microsoft routinely provides information about how to obtain them, including prices, telephone numbers, and, where appropriate, hypertext links to relevant Web pages.⁵⁵¹ Microsoft alleged that such information is freely available to the public and is not proprietary to Ticketmaster.⁵⁵² Microsoft asserted numerous defenses, including (i) that Ticketmaster, when it chose to set up Web pages, assumed the risk that others would use its name and URLs,⁵⁵³ (ii) that Ticketmaster is estopped from complaining about Microsoft's link because Ticketmaster encourages users to seek out its website and refer others to the site,⁵⁵⁴ and (iii) that Microsoft's presentation of information about Ticketmaster on its Seattle Sidewalk site is commercial speech protected by the First Amendment.⁵⁵⁵

Although Microsoft removed some or all of its links to the Ticketmaster site after the complaint was filed, the lawsuit remains unresolved.

4. The *Futuredentics* Case

In September 1997, Futuredentics, Inc., owner of a website relating to its dental referral service, filed a complaint against a defendant that was framing material from Futuredentics' website in the defendant's website.⁵⁵⁶ The frame *94 displaying Futuredentics' website material included the defendant's logo, information on the defendant, and links to the defendant's other web pages.⁵⁵⁷ Futuredentics claimed that such framing constituted the creation of an infringing derivative work.⁵⁵⁸ The defendant moved to dismiss the complaint for failure to state a claim, arguing that its frame should be viewed as merely a "lens" which enabled Internet users to view the information that Futuredentics itself placed on the Internet.⁵⁵⁹ The court denied the defendant's motion, ruling that existing authority did not resolve the legal issue, and Futuredentics' complaint therefore sufficiently alleged a copyright infringement claim.⁵⁶⁰ Interestingly, however, the court had previously denied Futuredentics' motion for a preliminary injunction, ruling that Futuredentics had failed to establish a probability of success.⁵⁶¹

E. Derivative Works

In-line links have already been discussed as one type of activity on the Internet that may constitute the unauthorized creation of derivative works. The derivative works right is potentially broader than the reproduction right because the definition of derivative works does not require that they be fixed,⁵⁶² and at least one court has so held.⁵⁶³ Thus, those who alter a copyrighted work in RAM may face liability under the derivative works right, regardless of whether the *MAI* case is good law.

Consider, for example, an add-in feature to a browser program that enables the browser to strip the advertising banners out of a Web page before displaying that page to the user. Because the stripping produces a modified Web page, does it constitute the creation of an unauthorized derivative work in RAM? One could argue that the act of stripping the advertising banners in the course of real-time display of the Web page is analogous to fast forwarding past commercials when watching a videotape or to using an electronic device to alter the play parameters of a video game to enhance one's personal enjoyment of the game, and that such alteration for private use and enjoyment should not be considered creation of a derivative work or, alternatively, should be a fair use.⁵⁶⁴ One could also argue that stripping the advertising banners is such a trivial change that it does not create a *95 modification "which, as whole, represent[s] an original work of authorship,"⁵⁶⁵ and therefore does not create a derivative work at all.⁵⁶⁶

On the other hand, one could argue that a Web page with the advertising banners stripped is not a trivial change, because not

only does the page have a significantly different appearance and content, but indeed there might be a wholly separate demand for versions of the Web page without advertising. The copyright owner could argue that such “advertising-free” versions of its Web page should therefore be deemed derivative works over which the owner should have control and the exclusive right to exploit.⁵⁶⁷ One can imagine, for example, in a commercial subscription service on the Internet that the copyright owner might charge more for a subscription that displays all material without advertising. Thus, the particular factual context in which advertising is stripped out by a browser program could determine whether or not such stripping will be ruled to infringe the derivative works right.

A host of other Internet activities that have not yet been tested in court raise potential issues under the derivative works right.

- *Crawlers Creating Indexes:* A number of services offer full text search indexes for material on the Internet, such as Web pages and material posted to Usenet bulletin boards, LISTSERV mailing lists and Chat Groups. These services utilize automatic software often referred to as “crawlers” or “spiders” that search the Internet to locate material, temporarily copy such material, and create a full-text index of the material. Is the resulting index an unauthorized derivative work? One could argue that it is a derivative work because it constitutes an “abridgment” or “condensation” of the material or “other form in which a work may be recast, transformed, or adapted.”⁵⁶⁸ On the other hand, one could argue that the indexing is merely a functional recording of facts about a work of authorship—the words contained in the work and their location within the work—and is therefore not based upon any of the expression of that work in a derivative works sense. In any event, it seems likely that in a great many instances, the copyright owner is *96 unlikely to object to the creation of such indexes, as they enable others to locate the original work.

- *Commercial Compilations of Free Information:* Even if indexing of Internet material is considered a good activity that should not be prohibited under the derivative works doctrine, how far should the systematic gathering of materials from the Internet be allowed to extend? Some businesses have now sprung up that gather materials from the Internet and resell compilations of such material for a fee (which is usually low). For example, compilations of Usenet postings on a particular topic may be sold on CD-ROM for \$19.95. Such compilations are often sold for the convenience of the purchaser, who can then avoid having to go to the original site to retrieve such material. Charges for the connect time in retrieving such information online will often exceed the low cost charged for the compilation. In traditional media, were one to gather a collection, say, of articles from newspapers on a particular topic and market them commercially as a compilation, there would likely be an infringing derivative work created. Should compilations of “free” information from the Internet which are gathered and resold commercially be treated differently? Certainly those who post material to the Usenet, for example, do so with the intention that such material be freely available for reading. Should authors who post such information for the free use by others be allowed to stop any subsequent commercial use of such materials?

- *Archiving:* In a related vein, at least one service known as the Internet Archive, located at www.archive.org, has now begun using automated “robots” to create large archives of verbatim copies of websites for future reference.⁵⁶⁹ This site, which appears to be systematically making and storing copies of a huge range of what it refers to as “public materials,” justifies its archive as providing a great research tool for future historians of the Internet, yet also notes that the archive will provide a treasure-trove for marketers and entrepreneurs. To the extent such compilations are made to facilitate historical research, should they be deemed within the fair use exception to the derivative works right? Should the fact that they may also be used for marketing and other commercial activities remove them from fair use?

- *Offline Browsers:* In the last several months, a number of new software packages known as “Offline Browsers” have come on the market, such as “OM-Express” by Open Market, Inc., “Web Buddy” by DATAVIZ, *97 and “WebClip” by PaperClip Software, Inc. These products browse the Internet automatically, visiting sites predefined as of interest by the user, and collect all the pages from those sites into copies on the user’s hard disk. Often the browsing and compiling is done over night to enable the user to browse the material the next day, but at hard disk speed (hundreds of times faster than actually browsing the Web).⁵⁷⁰ Thus, a compilation of material from various sites of particular interest to the user is created. If the resulting compilation is used purely for personal purposes, its creation and use may fall within the fair use doctrine. However, if the compilation were, for example, systematically forwarded on to others of similar interest for a fee, or used in other commercial ways, the issue becomes murkier.

- *Voice Browser:* Yet another form of browser is beginning to emerge, which might be referred to as a “voice browser.” This type of browser accesses text material from a source, translates the words of the text into audible form, and reads the material to the user. Such browser could be useful, for example, for retrieving e-mail messages or for use by blind persons. It is unclear whether this mere change of medium from textual to aural form constitutes the unauthorized creation of a derivative work. Transportation of a two dimensional drawing of a copyrighted cartoon character, for example, into a three dimensional

sculpture such as a doll, would clearly constitute the creation of a derivative work. Should correlative changes of media on the Internet similarly be treated as the creation of a derivative work?⁵⁷¹

F. First Sales in Electronic Commerce

The “first sale doctrine” of copyright law is codified in Section 109 of the Copyright Statute. That section provides, “Notwithstanding the provisions of Section 106(3) [the exclusive distribution right], the owner of a particular copy or phonorecord lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord.”⁵⁷² The applicability of the first sale doctrine to “sales” through online commerce is uncertain.

Section 109 pertains to the sale or disposal of “the possession of [a] copy or phonorecord.” The statute was, of course, originally drafted with tangible copies in mind. An immediate issue concerns whether an initial “sale” accomplished by an online *transmission*, rather than the physical distribution of a material object, constitutes a sale of a copy that would trigger the application of the doctrine at all. *98 At least one commentator has argued that it does not,⁵⁷³ and the NII White Paper notes that the issue is uncertain.⁵⁷⁴ However, it seems plausible to analogize a transmission in which a complete authorized copy of a work ends up in permanent storage at the recipient’s site (i.e., other than a transitory copy in RAM) as the distribution of a copy for purposes of the first sale doctrine, at least where it was intended that the recipient “own” the received copy.⁵⁷⁵ Such a transaction seems highly analogous to a traditional sale of a copy, except for the distribution vehicle.

One could readily argue that in such instances the first sale doctrine should apply by analogy to permit a purchaser to further transmit his or her copy to a third party, so long as the purchaser deletes his or her original copy from storage, because in that instance, as in the case of traditional distributions of physical copies, no more total copies end up in circulation than were originally sold by or under authority of the copyright owner. As one commentator has noted:

[The first sale doctrine’s] balance was gauged over the years Neither the copyright owner nor the copy owner receives all that it might desire. The balance could be recut today for cyberspace, but no clear reasons exist to do so. Absent that, this balance governs treatment of digital works, whether on the Internet or a diskette. Applying it is relatively simple. A purchaser who acquires a digital product that is not subject to a license has a right to retransfer the copy, make copies essential to use the work, and otherwise act as owner of the copy. If the “copy” is transferred, the transferor must relinquish all copies it possesses. Otherwise, it would in effect be making multiple copies inconsistent with the balance between copy and copyright owners.⁵⁷⁶

Although this argument makes sense in many instances, such as where a buyer has purchased a copy of a book that is delivered electronically, in other instances the policy choices with respect to whether the first sale doctrine should be applied by analogy seem less clear. One such example comprises works that are made available for on-demand usage, such as movies. The copyright owner clearly intends to make such works available only for one time use by the recipient, and any further retransmission or distribution of the work to third parties would cut into the owner’s on-demand market for the work. Yet depending upon the transmission technology used, a copy of the work may be made in whole or in part at the recipient’s end. Indeed, under the *MAI* case, even the data stored in RAM at the recipient’s computer would constitute a copy. It seems less clear that such copy should trigger the first sale doctrine and permit the recipient to further distribute that copy, even if the recipient does not retain a copy.

As currently codified in Section 109, the first sale doctrine is drafted as an exception to the *distribution* right of the copyright holder. However, as discussed earlier, the new rights of transmission and access under the WIPO treaties are seemingly broader than the current distribution right under United States law. An issue therefore arises as to whether the first sale doctrine should prevail over these *99 new rights of transmission and access, in addition to the right of distribution. Both WIPO treaties contain provisions stating that nothing in them shall affect the freedom of Contracting Parties to determine the conditions, if any, under which the exhaustion of rights afforded by the treaties will apply after the first sale or other transfer of ownership of the original or a copy of a work with the authorization of the owner.⁵⁷⁷ The WIPO treaties thus seem to contemplate that the interplay between the doctrine of first sale and the new rights of transmission and access will ultimately be resolved through implementing legislation.

The implementing legislation in the United States may therefore afford Congress the opportunity to resolve the ambiguities in the scope of the first sale doctrine as applied to the Internet. Indeed, House Bill 3048 would add the following new Subsection (f) to Section 109 of the Copyright Statute with respect to applicability of the first sale doctrine to works in digital format:

The authorization for use set forth in [109(a)] applies where the owner of a particular copy or phonorecord in a digital format lawfully made under this title, or any person authorized by such owner, performs, displays or distributes the work by means of transmission to a single recipient, if that person erases or destroys his or her copy or phonorecord at substantially the same time. The reproduction of the work, to the extent necessary for such performance, display, distribution, is not an infringement.⁵⁷⁸

This provision seems drafted to apply to the paradigm situation, discussed above, in which the original sale of a work via transmission in digital format results in a complete copy of the work residing in permanent storage at the purchaser's site. So long as the original purchaser erases his or her copy at substantially the same time, new Subsection (f) permits the purchaser to transmit that copy to a third party without liability (including any reproductions, displays or performances that are attendant thereto).

The applicability of this provision to the case of on-demand transmissions for simultaneous viewing or other usage by the original purchaser (such as movies or online games) is not clear. In those instances, as discussed above, it is unclear whether the purchaser should be treated as the "owner of a particular copy or phonorecord in a digital format" by virtue of the initial on-demand download of the work in order to trigger application of the new Subsection (f).

G. New User Interface Paradigms

Over the last several years, a considerable amount of litigation in the software industry has involved the so-called "look and feel" cases, which have tested the extent to which a program's "look" (its screen displays, visible portions of the user interface and other visual and aural elements of output produced by the program) and its "feel" (its dynamic, operational flow, its keystrokes and other means for invoking functions, its file formats, menu structure and other technical interfaces, and its general recognizable "style" of operation that it presents to the user) can be *100 protected by copyright.⁵⁷⁹ Copyright owners have sought to protect various user interface paradigms, such as the "total concept and feel" of Apple Computer's "Macintosh" operating system,⁵⁸⁰ as well as various specific details of user interfaces such as menu commands.⁵⁸¹

The Internet is spawning a number of interesting new user interface paradigms for the search and delivery of information and the conduct of electronic commerce. For example, a technology known as the Virtual Reality Modeling Language (VRML) has enabled game companies and businesses to create three-dimensional Internet worlds. Many of these worlds, designed to work with standard Web browsers, enable users to walk through synthetic environments, or even view real panoramas. Prototypes include self guided tours of great museums and a virtual walk on the Great Wall of China. User interfaces appearing on the Internet are also making increasing use of "avatars," digital representations of people. Elaborate virtual worlds will permit Internet users to shop, explore, conduct business and interact with friends in photo-realistic three-dimensional settings.⁵⁸²

For example, a company called Black Sun Interactive has created a three-dimensional environment for Lycos, Inc., which markets one of the popular Internet search engines. The environment permits people, represented by avatars, to search the Internet by wandering through three-dimensional rooms, each associated with a category of information, such as travel or food. The effect created is that of wandering through a library. In September 1996, the Atlanta Braves began offering a virtual world called 3-D Chopchat, consisting of a virtual representation of the Atlanta-Fulton County Stadium, where Internet users can gather.⁵⁸³

These creative efforts will spawn a host of compelling copyright issues as their creators attempt to protect their "look and feel." Although much of the creative expression contained in these three dimensional worlds will no doubt be protectable by copyright, the most difficult issues will center around the various levels of abstraction at which such works should be protected. For example, suppose a search engine company creates a user interface based on a paradigm in which lifelike figures move around an information space modeled after a three-dimensional chess board and respond to commands. Should the paradigm itself be protected by copyright? The information space model? Or only the expressive details of what the user

sees? With respect to avatars, one can image avatars that look and behave like a real person, such as President Clinton. Should such an avatar be considered “original” enough to be copyrightable? To what extent can the “personality” and *101 character traits of an avatar not modeled solely after a single real person be protected by copyright? Should one person’s copyright on a virtual walk over the Great Wall of China prevent others from creating a virtual walk over the Great Wall of China? If not, how many of the stopping points or vistas along such walk must be different to avoid infringement?

In some sense, these issues are no different than those that arise in traditional media such as movies and plays, which raise similar issues of what levels of abstraction should be protected. But the interactive element that will be present in the three-dimensional worlds of the Internet can be expected to add a level of complexity to the analysis that does not exist in traditional media. The interactive nature of the Internet user interface paradigms will both expand the range of creative dimensions that will be embodied therein and introduce functional limitations that the courts have not heretofore had to wrestle with. How the traditional limiting doctrines of idea/expression, functionality, merger, scenes a faire, and fair use will be applied to these new paradigms remains to be seen, and will undoubtedly occupy the courts for years to come.

IV. Conclusion

Copyright law will undoubtedly provide one of the most important forms of intellectual property protection on the Internet. Considerable challenges will be presented, however, in adapting traditional copyright law, which was designed to deal with the creation, distribution and sale of protected works in tangible copies, to the electronic transmissions of the online world in which copies are not tangible in the traditional sense, and it is often difficult to know precisely where a copy resides at any given time within the network.

The most difficult aspect of adapting copyright law to the online world stems from the fact that virtually every activity on the Internet--such as browsing, caching, linking, downloading, accessing information, and operation of an online service--involves the making of copies, at least if the law treats electronic images of data stored in RAM as copies for purposes of copyright law. In short, copying is both ubiquitous and inherent in the very nature of the medium. If the law were to treat all forms of copying as infringements of the copyright holder’s rights, then the copyright holder would have very strong control over Internet use of the copyrighted work. Which forms of copying the law should deem to be within the control of the copyright owner and which should not presents a very difficult challenge.

The cumulative effect of the copyright holder’s rights being implicated by every use of a work on the Internet may be to give the copyright owner the equivalent of exclusive rights of “transmission and access” of information. Indeed, the recently proposed WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty each make such rights express. However, the currently pending implementing legislation in the United States does not set up separate rights of transmission and access, although the draft EC Directive would recognize such rights explicitly. Thus, the implementing legislative regimes adopted by various signatory countries to the WIPO treaties may result in varying scopes and/or *102 denominations of rights, which runs contrary to the goal of the WIPO treaties to harmonize copyright law in the digital environment throughout the world.

The ubiquitous nature of copying on the Internet raises other difficult issues. For example, the practice of dividing copyright rights (such as the reproduction right, the public performance right, and the distribution right) among separate rights holders, as is common in the movie and music industries, will raise difficult issues of overlapping rights when a work is exploited through the Internet, because the exercise of all such rights will involve the making of copies. Licensees may therefore need to seek permission from multiple rights holders that may not have been necessary in traditional media.⁵⁸⁴

Moreover, the traditional divisions of the bundle of copyright rights may no longer make sense on the Internet. For example, it is common for different entities to hold the right to reproduce copies of a movie, to distribute copies of the movie, and to grant licenses for public performance of the movie. Under that division of rights, who has the right to make the movie available on the Internet for on-demand viewing by users, since on-demand viewings will involve the making of copies of the movie, the distribution of copies, and the public performance of the movie? Or should it be the holder of the new right of transmission and access under the WIPO treaties?⁵⁸⁵ Because of the overlapping nature of copyright rights when applied to the Internet, new definitions and divisions of those rights will probably be necessary for online usage of copyrighted works. Corresponding new economic and royalty models and industry practices will also have to evolve. In the meantime, many existing licenses will be unclear as to which entity has rights to control online usage of a work, and one can expect to see much litigation over the interpretation of existing licenses.⁵⁸⁶

The global nature of the Internet may give rise to multiple territorial liability. If every intermediate copy made during a transmission is considered infringing, there is the possibility that a single transmission could give rise to potential liability in several countries, even countries in which the sender did not intend or contemplate that its actions would result in the creation of a copy.⁵⁸⁷ Moreover, differing standards could apply--the same intermediate copy created in the course of transmission through the Internet could be considered infringing when passing through one country, and not when passing through another. In addition, the *103 violation of the rights of transmission and access under the WIPO treaties might occur in yet another country. Although the WIPO treaties may afford a vehicle for greater transnational uniformity of copyright law, there is no guarantee that implementing legislation in the various signatory countries will be consistently adopted, consistently interpreted, or consistently applied.

In sum, copyright owners may have potentially unprecedented rights over use of their copyrighted material on the Internet. One can expect that the fair use and implied license doctrines (and their international equivalents) will take center stage in resolving the balance between copyright owners' and users' rights on the Internet. How broadly these doctrines will be applied, and whether they will be consistently applied in various countries, remains to be seen. Copyright lawyers can expect to be busy.

Footnotes

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¹ A domain survey conducted in July 1997 to discover every host on the Internet revealed that there were 19,540,000 "advertised" connected computers (hosts) in 214 countries and territories, representing a current annual host growth rate of 52%. The largest single domain was ".com", with 4.5 million hosts, constituting 23% of all hosts. See Tony Rutkowski, Internet Survey Reaches 19.5 Million; Internet Host Level Growth Trend Now Appears Linear (Aug. 26, 1997) (unpublished manuscript, on file with author; graphic presentation of most current data from the survey is available at A.M. Rutkowski, *Internet Trends* (last modified Aug. 28, 1998) <ftp:// ftp.genmagic.com/pub/internet/trends/index.htm>). A poll conducted in 1996 by Louis Harris & Associates showed that an estimated 35 million adults in the United States had used the Internet by September 1996. The number of online households is expected to increase to 66.6 million by the year 2000 from 23.4 million in 1997, according to the market research firm Jupiter Communications. See *Random Notes*, CYBERSPACE LAW., Jan. 1997, at 12, 12.

² For example, under United States law, copyright protection subsists only in "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, either directly or with the aid of a machine or device." 17 U.S.C. § 102(a) (1994).

³ See *infra* Part II.A.1.

⁴ 991 F.2d 511, 26 U.S.P.Q.2d (BNA) 1458 (9th Cir. 1993).

⁵ *Id.* at 519, 26 U.S.P.Q.2d at 1464.

⁶ World Intellectual Property Organization Copyright Treaty, Apr. 12, 1997, S. TREATY DOC. NO. 105-17 (1997) [hereinafter WIPO Copyright Treaty].

⁷ World Intellectual Property Organization Performances and Phonograms Treaty, Apr. 12, 1997, S. TREATY DOC. NO. 105-17 (1997) [hereinafter WIPO Performances and Phonograms Treaty].

⁸ WIPO Copyright Treaty, *supra* note 6, art. 6, at 7; WIPO Performances and Phonograms Treaty, *supra* note 7, at 28.

9 American Civil Liberties Union v. Reno, 929 F. Supp. 824, 832 (E.D. Pa. 1996), *aff'd*, 521 U.S. 844 (1997); *see also* GEDIMINAS P. KURPIS (CHAIR), THE NEW IEEE STANDARD DICTIONARY OF ELECTRICAL AND ELECTRONICS TERMS (5th ed. 1993) (definitions of "packet switching" and "packet").

10 *See Reno*, 929 F. Supp. at 832.

11 *Id.*

12 *See id.*

13 *See id.*

14 *Id.*

15 Mark A. Lemley, *Dealing with Overlapping Copyrights on the Internet*, 22 U. DAYTON L. REV. 547, 555 (1997).

16 Even if a complete copy of the picture is not intentionally stored on the recipient computer's hard disk, many computers enhance performance of their memory by swapping certain data loaded in RAM onto the hard disk to free up RAM for other data, and retrieving the swapped data from the hard disk when it is needed again. Some of this swapped data may be left on the hard disk when the computer is turned off, even though the copy in RAM has been destroyed.

17 17 U.S.C.A. § 101 (1996 & Supp. 1998) (definition of "copies").

18 The word "image" is being used here to refer to an image of data stored in RAM to avoid use of the word "copy," which is a legal term of art. Whether an image of data in RAM should be deemed a "copy" for copyright law purposes is the question at issue.

19 INFORMATION INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS (1995) [hereinafter NII WHITE PAPER].

20 *Id.* at 27.

21 17 U.S.C.A. § 101 (definition of "fixed").

22 H.R. REP. NO. 94-1476, at 53 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5666.

23 *But see* RAYMOND T. NIMMER, INFORMATION LAW ¶ 4.02[2], at 4-6 (1996) [hereinafter R. NIMMER, INFORMATION LAW] ("This language refers to subject matter protection and not whether particular acts create an infringing copy. The exclusion of transient works refers to the work itself, not the copy. It presumes that there was no copy of the work other than the transient display or memory.")

24 991 F.2d 511, 26 U.S.P.Q.2d (BNA) 1458 (9th Cir. 1993).

25 *Id.* at 518-19, 26 U.S.P.Q.2d at 1463-64.

²⁶ See *Triad Sys. Corp. v. Southeastern Express Co.*, 64 F.3d 1330, 1333-35, 36 U.S.P.Q.2d (BNA) 1028, 1030, 1032 (9th Cir. 1995); *Marobie-FL, Inc. v. National Ass'n of Fire Equip. Distrib.*, 983 F. Supp. 1167, 1177-78, 45 U.S.P.Q.2d (BNA) 1236, 1243-44 (N.D. Ill. 1997); *Advanced Computer Servs., Inc. v. MAI Sys. Corp.*, 845 F. Supp. 356, 363-64, 30 U.S.P.Q.2d (BNA) 1443, 1449 (E.D. Va. 1994); *see also* 2 MELVILLE B. NIMMER & DAVID NIMMER, *NIMMER ON COPYRIGHT* § 8.08[A][1], at 8-114 (1998) [hereinafter M. NIMMER & D. NIMMER, *NIMMER ON COPYRIGHT*] (suggesting that RAM copies are fixed).

²⁷ See *Vault Corp. v. Quaid Software Ltd.*, 847 F.2d 255, 260, 7 U.S.P.Q.2d (BNA) 1281, 1286 (5th Cir. 1988) (“[T]he act of loading a program from a medium of storage into a computer’s memory creates a copy of the program.”); *Apple Computer, Inc. v. Formula Int’l, Inc.*, 594 F. Supp. 617, 622, 224 U.S.P.Q. (BNA) 560, 563 (C.D. Cal. 1984) (noting that copying a program into RAM creates a fixation, albeit a temporary one); *Tel erate Sys., Inc. v. Caro*, 689 F. Supp. 221, 228, 8 U.S.P.Q.2d (BNA) 1740, 1745 (S.D.N.Y. 1988) (holding that the receipt of data in a local computer constituted an infringing copy).

²⁸ *MAI*, 991 F.2d at 518, 26 U.S.P.Q.2d at 1463.

²⁹ 45 F.3d 231, 33 U.S.P.Q.2d (BNA) 1629 (7th Cir. 1995).

³⁰ *Id.* at 236, 33 U.S.P.Q.2d at 1632.

³¹ 964 F.2d 965, 22 U.S.P.Q.2d (BNA) 1857 (9th Cir. 1992).

³² *Id.* at 967-69, 22 U.S.P.Q.2d at 1858-60.

³³ *Id.* at 968, 22 U.S.P.Q.2d at 1859.

³⁴ *Id.*

³⁵ 845 F. Supp. 356, 30 U.S.P.Q.2d (BNA) 1443 (E.D. Va. 1994).

³⁶ *Id.* at 363, 30 U.S.P.Q.2d at 1449.

³⁷ 144 F.3d 96, 46 U.S.P.Q.2d (BNA) 1936 (D.C. Cir. 1998).

³⁸ *Id.* at 100, 46 U.S.P.Q.2d at 1939.

³⁹ WIPO Copyright Treaty, *supra* note 6; WIPO Performances and Phonograms Treaty, *supra* note 7. WIPO is a United Nations organization that handles questions of copyrights, patents, and trademarks.

⁴⁰ The treaties enter into force three months after thirty instruments of ratification or accession by member States have been deposited with the Director General of WIPO. WIPO Copyright Treaty, *supra* note 6, art. 20, at 15; WIPO Performances and Phonograms Treaty, *supra* note 7, art. 29, at 40.

⁴¹ Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, Legal Instruments--Results of the Uruguay Round vol. 31; 33 I.L.M. 81 (1994).

⁴² The proposed WIPO Treaty on Intellectual Property in Respect of Databases generated huge controversy and was not adopted at

the Conference. *WIPO Delegates Agree on Two Treaties*, 2 BNA'S ELECTRONIC INFO. POL'Y & L. REP. 22, 22 (1997).

⁴³ WIPO Copyright Treaty, *supra* note 6.

⁴⁴ WIPO Performances and Phonograms Treaty, *supra* note 7.

⁴⁵ Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886, 828 U.N.T.S. 221 [hereinafter Berne Convention].

⁴⁶ International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations, Oct. 26, 1961, 496 U.N.T.S. 43 [hereinafter Rome Convention].

⁴⁷ *WIPO Delegates Agree on Two Treaties*, *supra* note 42, at 22.

⁴⁸ *Id.*; Vienna Convention on the Law of Treaties, May 23, 1969, art. 31(2), 1155 U.N.T.S. 331 [hereinafter Vienna Convention].

⁴⁹ WIPO Copyright Treaty, *supra* note 6, Preamble, at 4; WIPO Performances and Phonograms Treaty, *supra* note 7, Preamble, at 22.

⁵⁰ Proposal for a European Parliament and Council Directive on the Harmonization of Certain Aspects of Copyright and Related Rights in the Information Society, 1998 O.J. (C 108) 6 [hereinafter EC Directive]. The EC Directive was first circulated for comments among European legal experts. It was then officially published at the end of 1997 for a more public debate of its provisions.

⁵¹ *WIPO Delegates Agree on Two Treaties*, *supra* note 42, at 22. The WIPO Copyright Treaty contains a number of important provisions relevant to the Internet that are not discussed elsewhere in this paper. Article 2 codifies the idea/expression dichotomy of copyright law: "Copyright protection extends to expressions and not to ideas, procedures, methods of operation or mathematical concepts as such." WIPO Copyright Treaty, *supra* note 6, art. 2, at 5. Article 4 expressly extends copyright protection to computer programs in all forms as literary works: "Computer programs are protected as literary works within the meaning of Article 2 of the Berne Convention. Such protection applies to computer programs, whatever may be the mode or form of their expression." *Id.* art. 4, at 6. Article 5 adopts the approach of the Supreme Court's decision in *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 18 U.S.P.Q.2d (BNA) 1275 (1991), which held that only the selection or arrangement of a compilation of facts, such as a database, and not the facts themselves can be protected under copyright. *Id.* at 344-48, 18 U.S.P.Q.2d at 1277-79. Article 5 provides:

Compilations of data or other material, in any form, which by reason of the selection or arrangement of their contents constitute intellectual creations, are protected as such. This protection does not extend to the data or the material itself and is without prejudice to any copyright subsisting in the data or material contained in the compilation.

WIPO Copyright Treaty, *supra* note 6, art. 5, at 7. The proposed WIPO Treaty on Intellectual Property in Respect of Databases would have extended protection to the information itself in a database where such database was the fruit of substantial labor to compile. Basic Proposal for the Substantive Provisions of the Treaty on Intellectual Property in Respect of Databases to be Considered by the Diplomatic Conference, art. 1(1), WIPO Doc. CRNR/DC/6 (Aug. 30, 1996) <http://www.wipo.org/eng/diplconf/6dc_all.htm> (visited Nov. 21, 1998). Article 7(1) provides that authors of computer programs, cinematographic works, and works embodied in phonograms shall enjoy the exclusive right of authorizing commercial rental to the public of the originals or copies of their works. WIPO Copyright Treaty, *supra* note 6, art. 7(1), at 8. Under Article 7(2), this rental right does not apply "in the case of computer programs where the program itself is not the essential object of the rental" or "in the case of cinematographic works, unless such commercial rental has led to widespread copying of such works materially impairing the exclusive right of reproduction." *Id.* art. 7(2)(I), (ii), at 8. The Agreed Statement for Articles 6 and 7 notes that the expressions "copies" and "original and copies," being subject to the right of rental, "refer exclusively to fixed copies that can be put into circulation as tangible objects." *Id.* art. 6, at 7 n.5, art. 7, at 8 n.6. Article 6 of an earlier draft of the treaty would have required Contracting Parties to abolish non-voluntary broadcasting licenses within five years of ratifying or acceding to the Treaty. Partly Consolidated Text of Treaty No. 1, art. 6(1), WIPO Doc. CRNR/DC/55 (Dec. 12, 1996) <<http://www.wipo.org/eng/diplconf/distrib/55dc.htm>> (visited Nov. 21, 1998). This Article was deleted in the final adopted version.

52 Partly Consolidated Text of Treaty No. 1, *supra* note 51, art. 7(1).

53 *Id.* art. 7(2). Although this provision apparently was designed to ameliorate the potential mischief that might result from deeming all interim copies of a work in the course of transmission to be within the copyright owner's rights, it suffered from a number of potential problems. First, it would have left the issue up to the individual Contracting Parties whether to legislate exemptions. Thus, some Contracting Parties could have legislated such exemptions, while others did not, and the scope of the exemptions could have varied from country to country. As a result, whether interim copies during the course of transmission constitute infringement could have turned on the countries through which the transmission path passes, which is arbitrary under the current transmission technology of the Internet. Second, proposed Article 7(2) stated that the exemptions would apply only to transient or incidental reproductions taking place in the course of an authorized use of a work. Thus, if the transmission *itself* is unauthorized, the exemptions would not have applied, and there could still have been potential liability for the interim reproductions. Yet the operators of the node computers in which the interim copies are made would have no way of knowing whether any particular packet passing through the node is part of an authorized transmission. Article 7(2) therefore was flawed. Article 10(1) of the adopted version affords a more generic vehicle for the adoption of exemptions or exceptions to rights conferred in the Treaty: Contracting Parties may, in their national legislation, provide for limitations of or exceptions to the rights granted to authors of literary and artistic works under this Treaty to an extent consistent with exceptions or limitations provided for in the Berne Convention in certain special cases that do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the author.

WIPO Copyright Treaty, *supra* note 6, art. 10(1), at 9. The requirement that exceptions "not unreasonably prejudice the legitimate interests of the author" provides little guidance as to what boundaries should lie around exceptions that Contracting Parties may wish to adopt in implementing legislation. The Agreed Statement concerning Article 10 does nothing to clarify the uncertainty: It is understood that the provisions of Article 10 permit Contracting Parties to carry forward and appropriately extend into the digital environment limitations and exceptions in their national laws which have been considered acceptable under the Berne Convention. Similarly, these provisions should be understood to permit Contracting Parties to devise new exceptions and limitations that are appropriate in the digital network environment.

WIPO Copyright Treaty, *supra* note 6, art. 10, at 10 n.9.

54 WIPO Delegates Agree on Two Treaties, *supra* note 42, at 22.

55 *Id.*

56 *Id.*

57 *Id.*

58 Article 9(2) of the Berne Convention provides: "It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author." Berne Convention, *supra* note 45, art. 9(2), 828 U.N.T.S. at 239.

59 WIPO Copyright Treaty, *supra* note 6, art. 1(4), at 5 n.1. Article 1(4) provides: "Contracting Parties shall comply with Articles 1 to 21 and the Appendix of the Berne Convention." *Id.* art. 1(4), at 5.

60 WIPO Delegates Agree on Two Treaties, *supra* note 42, at 22.

61 *Id.* at 23.

62 Berne Convention, *supra* note 45, art. 9, 828 U.N.T.S. at 239; WIPO Copyright Treaty, *supra* note 6, art. 1(4), at 5 n.1.

63 Berne Convention, *supra* note 45, art. 9, 828 U.N.T.S. at 239.

64 WIPO Performances and Phonograms Treaty, *supra* note 7, art. 7, at 28 (emphasis added).

65 Partly Consolidated Text of Treaty No. 2, art. 7(1), WIPO Doc. CRNR/DC/58 (Dec. 12, 1996) (emphasis added) <http://www.wipo.org/eng/diplconf/distrib/58dc.htm> (visited Nov. 21, 1998).

66 *Id.* at art. 7(2).

67 WIPO Performances and Phonograms Treaty, *supra* note 7, art. 7, at 28 n.6.

68 *Id.* art. 11, at 30.

69 Partly Consolidated Text of Treaty No. 2, *supra* note 65, art. 14(1) (Article 14 contained the Right of Reproduction, now found in Article 11). Article 11(2) in an earlier draft, i.e. Article 14(2), similar to the proposed and later deleted Article 7(2), was also deleted. Article 11(2), (Article 14(2) in earlier version) would have provided:
Subject to the conditions under, and without prejudice to the scope of applicability of, Article 20(2), it shall be a matter for legislation in Contracting Parties to limit the right of reproduction in cases where a temporary reproduction has the sole purpose of making the phonogram audible or where a temporary reproduction is of a transient or incidental nature, provided that such reproduction takes place in the course of use of the phonogram that is authorized by the producer of the phonogram or permitted by law in accordance with this Treaty.
Id. art. 14(2).

70 WIPO Performances and Phonograms Treaty, *supra* note 7, art. 2(b), at 24.

71 *Id.* art. 2(c), at 24.

72 The WIPO Performances and Phonograms Treaty contains a number of important provisions relevant to the Internet that are not discussed elsewhere in this paper. Article 4 requires each Contracting Party to accord to nationals of other Contracting Parties the treatment it would accord to its own nationals. *Id.* art. 4(1), at 26. Article 5(1) affords moral rights to performers: Independently of a performer's economic rights, and even after the transfer of those rights, the performer shall, as regards his live aural performances or performances fixed in phonograms, have the right to claim to be identified as the performer of his performances, except where omission is dictated by the manner of the use of the performance, and to object to any distortion, mutilation or other modification of his performances that would be prejudicial to his reputation.
Id. art. 5(1), at 26. A proposed Article 25(1), which was deleted in the final version, would have allowed any Contracting Party to declare in a notification deposited with the Director General of WIPO that it will only apply the provisions of Article 5 to musical performances. Partly Consolidated Text of Treaty No. 2, *supra* note 65, art. 25(1). Article 6 grants performers the exclusive right of authorizing "the broadcasting and communication to the public of their unfixed performances except where the performance is already a broadcast performance" and "the fixation of their unfixed performances." WIPO Performances and Phonograms Treaty, *supra* note 7, art. 6, at 27. Articles 9 and 13 grant performers and producers of phonograms, respectively, "the exclusive right of authorizing the commercial rental to the public of the original and copies" of their performances fixed in phonograms and of their phonograms, respectively. *Id.* art. 9(1), at 29, art. 13(1), at 31. Article 15 provides that "[p]erformers and producers of phonograms shall enjoy the right to a single equitable remuneration for the direct or indirect use of phonograms published for commercial purposes for broadcasting or for any communication to the public." *Id.* art. 15(1), at 32. The Agreed Statement for Article 15 provides:
It is understood that Article 15 does not represent a complete resolution of the level of rights of broadcasting and communication to the public that should be enjoyed by performers and phonogram producers in the digital age. Delegations were unable to achieve consensus on differing proposals for aspects of exclusivity to be provided in certain circumstances or for rights to be provided without the possibility of reservations, and have therefore left the issue to future resolution.
Id. art. 15, at 33 n. 12. Under Article 17(1), the term of protection to be granted to performers under the Treaty is at least fifty years from the end of the year in which the performance was fixed in a phonogram. *Id.* art. 17(1), at 34. Under Article 17(2), the term of protection to be granted to producers of phonograms under the Treaty is at least fifty years from the end of the year in which the phonogram was published, or failing such publication within fifty years from fixation of the phonogram, fifty years from the end of

the year in which the fixation was made. *Id.* art. 17(2), at 35.

⁷³ Article 16 affords a generic vehicle for the adoption of exemptions or exceptions to rights conferred in the Treaty. Article 16(1) provides that “Contracting Parties may, in their national legislation, provide for the same kinds of limitations or exceptions with regard to the protection of performers and producers of phonograms as they provide for, in their national legislation, in connection with the protection of copyright in literary and artistic works.” WIPO Performances and Phonograms Treaty, *supra* note 7, art. 16(1), at 33. Article 16(2) provides, however, similar to the WIPO Copyright Treaty, that Contracting Parties shall confine any limitations of or exceptions to rights provided for in this Treaty to certain special cases which do not conflict with a normal exploitation of the performance or phonogram and do not unreasonably prejudice the legitimate interests of the performer or of the producer of the phonogram.

Id. art. 16(2), at 34.

⁷⁴ Religious Tech. Ctr. v. Netcom On-Line Communications Servs., 907 F. Supp. 1361, 1367 & n.10, 37 U.S.P.Q.2d (BNA) 1545, 1548 & n.10 (N.D. Cal. 1995); R. NIMMER, INFORMATION LAW, *supra* note 23, ¶ 4.06, at 4-25, ¶ 4.10, at 4-39. Intent can, however, affect statutory damages to be awarded to the plaintiff. *Netcom*, 907 F. Supp. at 1367, 37 U.S.P.Q.2d at 1548-49.

⁷⁵ 907 F. Supp. 1361, 37 U.S.P.Q.2d (BNA) 1545 (N.D. Cal. 1995).

⁷⁶ *Id.* at 1368-73, 37 U.S.P.Q.2d at 1550-53.

⁷⁷ *Id.* at 1365-66, 37 U.S.P.Q.2d at 1547.

⁷⁸ *Id.* at 1365, 37 U.S.P.Q.2d at 1547. In an earlier order, the court had entered a preliminary injunction against Erlich himself. *Id.* at 1365 n.3, 37 U.S.P.Q.2d at 1547 n.3.

⁷⁹ *Id.* at 1365, 37 U.S.P.Q.2d at 1547. The Usenet is a worldwide community of electronic BBSs that is closely associated with the Internet and with the Internet community. The messages in Usenet are organized into thousands of topical groups, or “Newsgroups”.... As a Usenet user, you read and contribute (“post”) to your local Usenet site. Each Usenet site distributes its users’ postings to other Usenet sites, based on various implicit and explicit configuration settings, and in turn receives postings from other sites.

Id. at 1365 n.4, 37 U.S.P.Q.2d at 1547 n.4 (quoting DANIEL P. DERN, THE INTERNET GUIDE FOR NEW USERS 196-97 (1994)).

⁸⁰ *Netcom*, 907 F. Supp. at 1367, 37 U.S.P.Q.2d at 1549.

⁸¹ *Id.*

⁸² *Id.*

⁸³ *Id.* at 1368, 37 U.S.P.Q.2d at 1549.

⁸⁴ *Id.*, 37 U.S.P.Q.2d at 1550.

⁸⁵ *Id.* at 1368-69, 37 U.S.P.Q.2d at 1550.

⁸⁶ *Id.* at 1370, 37 U.S.P.Q.2d at 1551.

87 *Id.* at 1371, 37 U.S.P.Q.2d at 1552.

88 *Id.* at 1370-71, 37 U.S.P.Q.2d at 1552.

89 *Id.*

90 *Id.* at 1370, 37 U.S.P.Q.2d at 1551.

91 948 F. Supp. 923, 41 U.S.P.Q.2d (BNA) 1705 (N.D. Cal. 1996).

92 *Id.* at 928, 932, 41 U.S.P.Q.2d at 1709, 1712.

93 *Netcom*, 907 F. Supp. at 1367, 37 U.S.P.Q.2d at 1549.

94 *MAPHIA*, 948 F. Supp. at 928, 41 U.S.P.Q.2d at 1709.

95 *Id.* at 929, 41 U.S.P.Q.2d at 1709. The Super Magic Drive consisted of a connector which plugged into the video game console, a receptacle which accepted video game cartridges, a main unit having a RAM to store games, and a floppy disk drive. A MAPHIA BBS user can download video programs through his or her computer onto a floppy disk and make copies with his or her computer or play those game programs through the adaptor drive. To play a downloaded game, the user places the floppy disk into the video game copier. The user can choose the “run program” option and run the video game program from the floppy disk without a video game cartridge. The adaptor drive also allows the user to copy the contents of a game cartridge onto a floppy disk. *Id.*

96 *Id.* at 941, 41 U.S.P.Q.2d at 1720.

97 *Id.* at 932, 41 U.S.P.Q.2d at 1712.

98 *Id.*

99 *Id.* (citations to *Netcom* omitted). An earlier opinion in the case, issued in conjunction with the granting of a preliminary injunction to Sega, although somewhat unclear in its holding, seemed to suggest that the defendants *could* be held liable for direct infringement, at least for the unauthorized copies being uploaded through the bulletin board, although not for the subsequent downloading of copies by users of the bulletin board. *See Sega Enters. Ltd. v. MAPHIA*, 857 F. Supp. 679, 686-87, 30 U.S.P.Q.2d (BNA) 1921, 1926 (N.D. Cal. 1994). The court in the later opinion, however, disavowed this interpretation of its earlier opinion. With respect to its earlier order granting a preliminary injunction, the court stated, “[t]o the extent that order can be read to suggest that Sherman may be liable for direct copyright infringement, it is clarified and superseded by this order.” *Sega Enters. Ltd. v. MAPHIA*, 948 F. Supp. 923, 932 n.5, 41 U.S.P.Q.2d (BNA) 1705, 1712 n.5 (N.D. Cal. 1996). The court also rejected a fair use defense raised by Sherman. With respect to the first fair use factor, the purpose and character of the use, the court found that Sherman’s activities in encouraging the uploading and downloading of Sega’s games was clearly commercial.

Sherman intended to profit directly from the content of the information made available on his BBS because his copier customers could use the game files to play the games rather than purchase Sega game cartridges. This distinguishes Sherman from the Internet provider in *Netcom* who did not gain anything from the content of the information available to subscribers.

Id. at 934, 41 U.S.P.Q.2d at 1713. With respect to the second fair use factor, the nature of the copyrighted work, the court noted that the Sega video games were for entertainment uses and involved fiction and fantasy, so that the second factor weighed against fair use. *Id.* The court found that the third factor, the extent of the work copied, weighed against fair use because BBS users copied virtually entire copyrighted works, and Sherman had not shown any public benefit or explanation for the complete copying. *Id.* at 935, 41 U.S.P.Q.2d at 1714. Finally, the court found that the fourth factor, the effect of the use upon the market, also weighed

against fair use. “Even if the users are only playing the games in their own homes and even if there are currently only a limited number of users that have copiers, unrestricted and widespread conduct of this sort would result in a substantial adverse impact on the market for the Sega games.” *Id.*, 41 U.S.P.Q.2d at 1714-15.

¹⁰⁰ 1997 Copyright L. Dec. (CCH) ¶ 27,648 (N.D. Cal. Dec. 18, 1996).

¹⁰¹ *Id.* at 29,847-48.

¹⁰² *Id.* at 29,844-45.

¹⁰³ *Id.* at 29,845.

¹⁰⁴ *Id.* at 29,847-48.

¹⁰⁵ *Id.* at 29,848.

¹⁰⁶ *Id.* at 29,849.

¹⁰⁷ 76 F.3d 259, 264, 37 U.S.P.Q.2d (BNA) 1590, 1595 (9th Cir. 1996), *quoted in Sega Enters. Ltd. v. Sabella*, 1997 COPYRIGHT L. DEC. (CCH) ¶ 27,648, at 29,849 (N.D. Cal. Dec. 18, 1996).

¹⁰⁸ *Sabella*, 1997 COPYRIGHT L. DEC. ¶ 27,648, at 29,849.

¹⁰⁹ *Id.* Another recent case applied the *Fonovisa* standard to hold the defendant Cyrix Corporation liable for contributory infringement for posting on its Web site some copyrighted applet software of the plaintiff which could be downloaded for use with the defendant’s sound boards. “Cyrix is probably also contributorily liable because it encouraged and provided the resources for known infringing activity, i.e. the copying by others of the applet software that Cyrix made available on its website.” *Creative Labs, Inc. v. Cyrix Corp.*, 42 U.S.P.Q.2d (BNA) 1872, 1875-76 (N.D. Cal. 1997).

¹¹⁰ *Sabella*, 1997 COPYRIGHT L. DEC. ¶ 27,648, at 29,849.

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ *Id.* at 29,854.

¹¹⁴ *Id.*

¹¹⁵ 839 F. Supp. 1552, 29 U.S.P.Q.2d (BNA) 1827 (M.D. Fla. 1993).

¹¹⁶ *Id.* at 1554, 29 U.S.P.Q.2d at 1829. If the *Playboy* case is read broadly, it could expand the potential liability of ISPs and BBS operators in the case of unauthorized postings of photographs. On December 4, 1995, the Copyright Office issued a Notice of

Proposed Rulemaking, Registration of Claims to Copyright, Group Registration of Photographs, 60 Fed. Reg. 62,057. The proposed rule would permit bulk registration of photographs without deposit, which could increase the exposure of online providers by exposing them to statutory damages and attorneys fees for photographic works that are uploaded without authorization or knowledge and are not individually registered. *See* KENT D. STUCKEY, INTERNET AND ONLINE LAW § 6.04[2], at 6-20 n.11 (1996).

¹¹⁷ *Frena*, 839 F. Supp. at 1556, 29 U.S.P.Q.2d at 1831.

¹¹⁸ *Id.* at 1554, 29 U.S.P.Q.2d at 1829.

¹¹⁹ *Id.* at 1556, 1562, 29 U.S.P.Q.2d at 1831, 1836.

¹²⁰ STUCKEY, *supra* note 116, § 6.10[1][b], at 6-63.

¹²¹ *Id.*

¹²² *Playboy Enters., Inc. v. Webbworld, Inc.*, 968 F. Supp. 1171, 1177 (N.D. Tex. 1997).

¹²³ *Id.* at 1173.

¹²⁴ *Id.*

¹²⁵ *Id.* at 1175.

¹²⁶ *Id.*

¹²⁷ *Id.*

¹²⁸ *Id.*

¹²⁹ *Id.* The court also held that the principals of Webbworld could be held vicariously liable for the infringements. *Id.* at 1177. Although the principals had no control over those responsible for originally uploading the infringing images onto the Internet sites from which Webbworld drew its images, the principals had the right and ability to control what occurred on the Neptics Web site. *Id.* The court ruled that the \$11.95 subscription fee gave the principals a sufficient direct financial benefit from the infringing activity to hold them vicariously liable. *Id.* at 1177. The court made its rulings in the context of a motion for summary judgment by the plaintiff. *Id.* at 1172. The court granted summary judgment of infringement with respect to sixty-two copyrighted images, but denied summary judgment with respect to sixteen additional images because of the presence of material issues of fact. *Id.* at 1175. In a subsequent ruling, the court found the defendants directly and vicariously liable with respect to these sixteen additional images based on a similar legal analysis of liability. *See* *Playboy Enters., Inc. v. Webbworld, Inc.*, 991 F. Supp. 543, 554, 45 U.S.P.Q.2d (BNA) 1641, 1648-49 (N.D. Tex. 1997).

¹³⁰ 46 U.S.P.Q.2d (BNA) 1350 (S.D. Cal. 1998).

¹³¹ *Id.* at 1350, 1353.

¹³² *Id.* at 1353.

¹³³ *Id.*

¹³⁴ *Id.*

¹³⁵ *Id.* at 1355.

¹³⁶ *Id.* at 1354-55.

¹³⁷ *Id.* at 1355.

¹³⁸ *Id.*

¹³⁹ *Id.*

¹⁴⁰ *Id.* at 1356.

¹⁴¹ *Id.* The plaintiff requested an astronomical \$285,420,000 in statutory damages (\$20,000/image for 5776 images that were not willfully infringed, and \$100,000/image for 1699 images that were willfully infringed). *Id.* at 1355.

¹⁴² H.R. 2281, 105th Cong. (1997).

¹⁴³ 143 Cong. Rec. D963 (daily ed. Sept. 17, 1997).

¹⁴⁴ 144 Cong. Rec. D135 (daily ed. Feb. 26, 1998).

¹⁴⁵ 144 Cong. Rec. H7103 (daily ed. Aug. 4, 1998).

¹⁴⁶ 143 Cong. Rec. S8532 (daily ed. July 31, 1997).

¹⁴⁷ 144 Cong. Rec. D507 (daily ed. May 14, 1998).

¹⁴⁸ See 144 Cong. Rec. S11887 (daily ed. Oct. 2, 1998).

¹⁴⁹ 143 Cong. Rec. S8728 (daily ed. Sept. 3, 1997).

¹⁵⁰ 143 Cong. Rec. D898 (daily ed. Sept. 4, 1997).

¹⁵¹ S. 1146, 105th Cong. § 205 (1997) (adding § 117(b) to Title 17 of U.S.C.).

¹⁵² 17 U.S.C. § 117 (1994).

¹⁵³ WIPO Copyright Treaty, *supra* note 6, art. 10(2), at 10.

¹⁵⁴ 143 Cong. Rec. H10953 (daily ed. Nov. 13, 1997).

¹⁵⁵ H.R. 3048, 105th Cong. § 6 (1997) (adding § 117(b) to Title 17 of U.S.C.).

¹⁵⁶ EC Directive, *supra* note 50, art. 2, at 10.

¹⁵⁷ *Id.* art. 3, at 10-11.

¹⁵⁸ *Id.* art. 4, at 11.

¹⁵⁹ *Id.* arts. 6-7, at 11-12.

¹⁶⁰ *Id.* art. 2, at 10.

¹⁶¹ Proposal for a European Parliament and Council Directive on the Harmonization of Certain Aspects of Copyright and Related Rights in the Information Society, COM(97)628 final, art. 2, cmt. 2, at 32 [hereinafter EC Directive Comments].

¹⁶² *Id.* art. 2, cmt. 3, at 32.

¹⁶³ EC Directive, *supra* note 50, art. 5(1), at 11. Articles 5(2) and 5(3) also allow member states to elect to provide exceptions from the reproduction right for certain paper copies using photocopying or other similar techniques, audio or audiovisual recordings for personal and noncommercial uses, copies made by public establishments which are not for commercial advantage, teaching, scientific research, use by the visually- or hearing-impaired, reporting current events, criticism, and public security. *Id.* art. 5(2)-(3), at 11. Article 5(4) provides that all exceptions to the reproduction right “shall not be interpreted in such a way as to allow their application to be used in a manner which unreasonably prejudices the rightholders’ legitimate interests or conflicts with the normal exploitation of their works or other subject matter.” *Id.* art. 5(4), at 11.

¹⁶⁴ An earlier version of Article 5(1) provided that the use of the work must be “authorized or otherwise permitted by law.” A copy of an earlier version of the EC Directive and comments may be found at <http://www.bna.com/e-law/docs/ecdraft.html> (last modified Dec. 2, 1997).

¹⁶⁵ 17 U.S.C.A. § 106(4) (1996 & Supp. 1998).

¹⁶⁶ *Id.*

¹⁶⁷ *Id.* at § 106(5).

¹⁶⁸ The Digital Performance Right in Sound Recordings Act of 1995 created a limited public digital performance right in sound

recordings as of February 1, 1996. Pub. L. No. 104-39, 109 Stat. 336 (codified at 17 U.S.C.A. §§ 106, 114, 115 (1996 & Supp. 1998)). Certain transmissions of performances are exempt. The exemptions do not apply, however, to an “interactive” service, which the copyright statute defines as a service “that enables a member of the public to receive, on request, a transmission of a particular sound recording chosen by or on behalf of the recipient.” 17 U.S.C.A. § 114(d)(1), (j)(4).

¹⁶⁹ 17 U.S.C.A. § 106(6).

¹⁷⁰ 17 U.S.C.A. § 101 (1996 & Supp. 1998) (definition of “publicly”).

¹⁷¹ The copyright statute provides that “[t]o ‘perform’ a work means to recite, render, play, dance, or act it, either directly or by means of any device or process or, in the case of a motion picture or other audiovisual work, to show its images in any sequence or to make the sounds accompanying it audible.” *Id.* (definition of “perform”).

¹⁷² STUCKEY, *supra* note 116, § 6.08[4][b], at 6-45.

¹⁷³ *Id.* at 6-46.

¹⁷⁴ *Id.* at 6-47.

¹⁷⁵ S. REP. NO. 104-128, at 39 (1995), *reprinted in* 1995 U.S.C.C.A.N. 356, 386.

¹⁷⁶ 17 U.S.C.A. § 106(4) (1996 & Supp. 1998).

¹⁷⁷ 17 U.S.C.A. § 101 (1996 & Supp. 1998) (definition of “publicly”).

¹⁷⁸ 777 F. Supp. 787, 21 U.S.P.Q.2d (BNA) 1545 (N.D. Cal. 1991).

¹⁷⁹ *Id.* at 789, 21 U.S.P.Q.2d at 1546.

¹⁸⁰ To display a motion picture, one must display individual images “nonsequentially.” STUCKEY, *supra* note 116, § 6.03[5], at 6-16.

¹⁸¹ 17 U.S.C.A. § 106(5). The right of public display does not apply to sound recordings, architectural works, and audiovisual works (except for display of individual images of an audiovisual work). *Id.*

¹⁸² 17 U.S.C.A. § 101 (definition of “publicly”).

¹⁸³ 839 F. Supp. 1552, 29 U.S.P.Q.2d (BNA) 1827 (M.D. Fla. 1993).

¹⁸⁴ *Id.* at 1557, 29 U.S.P.Q.2d at 1831.

¹⁸⁵ *Id.*

186 983 F. Supp. 1167, 45 U.S.P.Q.2d (BNA) 1236 (N.D. Ill. 1997).

187 *Id.* at 1172, 45 U.S.P.Q.2d at 1239-40.

188 *Id.* at 1173, 45 U.S.P.Q.2d at 1240-41.

189 *Id.*, 45 U.S.P.Q.2d at 1241.

190 *Id.* at 1178-79, 45 U.S.P.Q.2d at 1245.

191 982 F. Supp. 503 (N.D. Ohio 1997).

192 *Id.* at 506.

193 *Id.*

194 *Id.*

195 *Id.*

196 *Id.*

197 *Id.* at 512.

198 *Id.* at 513.

199 *Id.*

200 991 F. Supp. 543, 45 U.S.P.Q.2d (BNA) 1641 (N.D. Tex. 1997).

201 *Id.* at 550-53, 45 U.S.P.Q.2d at 1645-47.

202 17 U.S.C.A. § 106(3) (1996 & Supp. 1998).

203 *Id.*

204 The copyright statute currently defines “transmission” or “transmit” solely in reference to performances or displays of a work. *Id.* (definition of “transmit”). The NII White Paper does not, however, argue for removal of the requirement that an offending distribution be one to the “public.” NII WHITE PAPER, *supra* note 19, at 213-15.

205 NII WHITE PAPER, *supra* note 19, at 213. Appendix 1 of the NII White Paper proposes the following definition: “To ‘transmit’ a

reproduction is to distribute it by any device or process whereby a copy or phonorecord of the work is fixed beyond the place from which it was sent.” *Id.* App. 1, at 2.

²⁰⁶ 907 F. Supp. 1361, 37 U.S.P.Q.2d (BNA) 1545 (N.D. Cal. 1995).

²⁰⁷ *Id.* at 1371-72, 37 U.S.P.Q.2d at 1552-53.

²⁰⁸ *Id.* at 1372, 37 U.S.P.Q.2d at 1553.

²⁰⁹ *Id.*

²¹⁰ 839 F. Supp. 1552, 29 U.S.P.Q.2d (BNA) 1827 (M.D. Fla. 1993).

²¹¹ *Id.* at 1555-59, 29 U.S.P.Q.2d at 1830-33.

²¹² *Id.* at 1554, 29 U.S.P.Q.2d at 1829.

²¹³ 939 F. Supp. 1032, 39 U.S.P.Q.2d (BNA) 1746 (S.D.N.Y. 1996).

²¹⁴ *Id.* at 1039, 39 U.S.P.Q.2d at 1751-52.

²¹⁵ *Id.*

²¹⁶ *Id.*, 39 U.S.P.Q.2d at 1752.

²¹⁷ *Id.*

²¹⁸ 991 F. Supp. 543, 45 U.S.P.Q.2d (BNA) 1641 (N.D. Tex. 1997).

²¹⁹ *Id.* at 550-53, 45 U.S.P.Q.2d at 1645-47.

²²⁰ *Id.* at 552, 45 U.S.P.Q.2d at 1647 (quoting Religious Tech. Ctr. v. Netcom On-Line Communications Servs., 907 F. Supp. 1361, 1381, 37 U.S.P.Q.2d (BNA) 1545, 1561 (N.D. Cal. 1995)).

²²¹ 983 F. Supp. 1167, 45 U.S.P.Q.2d (BNA) 1236 (N.D. Ill. 1997).

²²² *Id.* at 1173, 45 U.S.P.Q.2d at 1241.

²²³ 982 F. Supp. 503 (N.D. Ohio 1997).

²²⁴ *Id.* at 509, 513.

²²⁵ *Id.* at 513.

²²⁶ *Id.*

²²⁷ *Id.*

²²⁸ *Id.*

²²⁹ 17 U.S.C.A. § 106 (1996 & Supp. 1998).

²³⁰ WIPO Copyright Treaty, *supra* note 6, art. 6(1), at 7.

²³¹ *Id.* art. 6, at 7 n.5.

²³² Article 8(1) provides: “Performers shall enjoy the exclusive right of authorizing the making available to the public of the original and copies of their performances fixed in phonograms through sale or other transfer of ownership.” WIPO Performances and Phonograms Treaty, *supra* note 7, art. 8(1), at 28. Article 12(1) provides: “Producers of phonograms shall enjoy the exclusive right of authorizing the making available to the public of the original and copies of their phonograms through sale or other transfer of ownership.” *Id.* art. 12(1), at 30. Like the Agreed Statement for the WIPO Copyright Treaty quoted in the text, the Agreed Statement for Articles 8 and 12 of the WIPO Performances and Phonograms Treaty provides: “As used in these Articles, the expressions ‘copies’ and ‘original and copies,’ being subject to the right of distribution and the right of rental under the said Articles, refer exclusively to fixed copies that can be put into circulation as tangible objects.” *Id.* art. 8, at 28 n.7, art. 12, at 30 n.10.

²³³ EC Directive, *supra* note 50, art. 4(1), at 11.

²³⁴ Article 4(2) deals with exhaustion of the distribution right under the first sale doctrine, *id.* art. 4(2), at 11, and will be discussed in Part III.F below.

²³⁵ EC Directive Comments, *supra* note 161, art. 4(1), cmt. 1, at 35.

²³⁶ 17 U.S.C. § 602(a) (1994).

²³⁷ *Parfums Givenchy, Inc. v. Drug Emporium, Inc.*, 38 F.3d 477, 32 U.S.P.Q.2d (BNA) 1512 (9th Cir. 1994).

²³⁸ Lemley, *supra* note 15, at 562.

²³⁹ NII WHITE PAPER, *supra* note 19, at 68.

²⁴⁰ *Id.* at 135.

²⁴¹ WIPO Copyright Treaty, *supra* note 6, art. 8, at 9.

242 WIPO Performances and Phonograms Treaty, *supra* note 7, art. 10, at 29, art. 14, at 31.

243 WIPO Copyright Treaty, *supra* note 6, art. 8, at 9.

244 *See* Berne Convention, *supra* note 45, art. 3(3), 828 U.N.T.S. at 231.

245 *Id.* art. 11(1)(ii), 828 U.N.T.S. at 241.

246 *Id.* art. 11bis(1)(ii), 828 U.N.T.S. at 241, 243.

247 *Id.* art. 11ter(1)(ii), 828 U.N.T.S. at 243.

248 WIPO Performances and Phonograms Treaty, *supra* note 7, art. 2(g), at 25. Article 2(f) of the WIPO Performances and Phonograms Treaty defines “broadcasting” to mean “the transmission by wireless means for public reception of sounds or of images and sounds or of the representations thereof.” *Id.* art. 2(f), at 24. This definition seems to contemplate isochronous transmission.

249 Although “public” is not defined in the WIPO Copyright Treaty, the reference in Article 8 to access by members of the public “from a place and at a time individually chosen by them” is very similar to the definition of display or performance of a work “publicly” in Section 101 of the U.S. Copyright Statute, which applies “whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.” 17 U.S.C.A. § 101 (1996 & Supp. 1998) (definition of “publicly”).

250 WIPO Copyright Treaty, *supra* note 6, art. 8, at 9 n.8.

251 NII WHITE PAPER, *supra* note 19, at 130.

252 WIPO Performances and Phonograms Treaty, *supra* note 7, art. 10, at 29, art. 14, at 31.

253 *Id.* art. 10, at 31.

254 Rebecca F. Martin, *The WIPO Performances and Phonograms Treaty: Will the U.S. Whistle a New Tune?*, J. COPYRIGHT SOC’Y U.S.A., Spring 1997, at 157, 178. Article 8 provides a correlative distribution right with respect to more traditional forms of distribution: “Performers shall enjoy the exclusive right of authorizing the making available to the public of the original and copies of their performances fixed in phonograms through sale or other transfer of ownership.” WIPO Performances and Phonograms Treaty, *supra* note 7, art. 8(1), at 28. The WIPO Performances and Phonograms Treaty also grants to authors in Article 6 the exclusive right of authorizing “the broadcasting and communication to the public of their unfixed performances except where the performance is already a broadcast performance,” as well as “the fixation of their unfixed performances.” *Id.* art. 6, at 27.

255 WIPO Performances and Phonograms Treaty, *supra* note 7, art. 14, at 31.

256 *Id.* art. 2(b), at 24.

257 *Id.* art. 2(c), at 24.

258 17 U.S.C.A. § 106(6) (1996 & Supp. 1998).

259 Martin, *supra* note 254, at 178-79.

260 983 F. Supp. 1167, 45 U.S.P.Q.2d (BNA) 1236 (N.D. Ill. 1997).

261 *Id.* at 1173, 45 U.S.P.Q.2d at 1238.

262 EC Directive, *supra* note 50, art. 3(1), at 10.

263 EC Directive Comments, *supra* note 161, art. 3, cmt. 1, at 32.

264 *Id.* art. 3, cmt. 1, at 33.

265 *Id.*

266 EC Directive, *supra* note 50, art. 3(2), at 10.

267 WIPO Performances and Phonograms Treaty, *supra* note 7, art. 10, at 29.

268 *Id.*, art. 2(b), at 24.

269 EC Directive Comments, *supra* note 161, art. 3, cmt. 3, at 34.

270 WIPO Copyright Treaty, *supra* note 6, art. 11, at 10; WIPO Performances and Phonograms Treaty, *supra* note 7, art. 18, at 35. Shortly after the WIPO treaties were adopted, Assistant Secretary of Commerce and Commissioner of Patents and Trademarks Bruce Lehman, who headed the U.S. delegation at the WIPO Conference, noted that this provision is somewhat broader than the statutory language proposed on the subject in Congress before adoption of the treaties. He noted that implementation of this treaty provision would therefore require new legislation. *WIPO Delegates Agree on Two Treaties*, *supra* note 42, at 22-23.

271 WIPO Copyright Treaty, *supra* note 6, art. 12(1)(i), at 11; WIPO Performances and Phonograms Treaty, *supra* note 7, art. 19(1)(ii), at 35.

272 WIPO Copyright Treaty, *supra* note 6, art. 12(1)(ii), at 11; WIPO Performances and Phonograms Treaty, *supra* note 7, art. 19(1)(ii), at 36.

273 WIPO Copyright Treaty, *supra* note 6, art. 12(2), at 11.

274 WIPO Performances and Phonograms Treaty, *supra* note 7, art. 19(2), at 36.

275 Jeffrey P. Cunard & Jennifer B. Coplan, *WIPO Treaty Implementation: Debate Over OSP Liability*, COMPUTER L.

STRATEGIST, Oct. 1997, at 1, 3.

²⁷⁶ H.R. 2281, 105th Cong. § 103 (1998) (adding § 1201(a)(1)(A) to Title 17 of U.S.C.); S. 2037, 105th Cong. § 103 (1998) (adding § 1201(a)(1) to Title 17 of U.S.C.) (1998).

²⁷⁷ H.R. 2281, § 103 (adding § 1201(a)(3)(A) to Title 17 of U.S.C.); S. 2037, § 103 (adding § 1201(a)(3)(A) to Title 17 of U.S.C.).

²⁷⁸ H.R. 2281, § 103 (adding § 1201(a)(3)(B) to Title 17 of U.S.C.); S. 2037, § 103 (adding § 1201(a)(3)(B) to Title 17 of U.S.C.).

²⁷⁹ H.R. 2281, § 103 (adding § 1201(a)(3)(A) to Title 17 of U.S.C.).

²⁸⁰ *Id.* (adding § 1201(a)(3)(C) to Title 17 of U.S.C.).

²⁸¹ *Id.* (adding § 1201(a)(1)(D) to Title 17 of U.S.C.).

²⁸² *Id.*

²⁸³ H.R. 2281, § 103 (adding § 1201(a)(2), (b)(1) to Title 17 of U.S.C.); S. 2037, § 103 (adding § 1201(a)(2), (b)(1) to Title 17 of U.S.C.).

²⁸⁴ H.R. 2281, § 103 (adding § 1201(b)(2)(B) to Title 17 of U.S.C.); S. 2037, § 103 (adding § 1201(b)(2)(B) to Title 17 of U.S.C.).

²⁸⁵ *Statement of the Honorable Howard Coble on the Introduction of the “WIPO Copyright Treaties Implementation Act”,* 54 PAT. TRADEMARK & COPYRIGHT J. (BNA)) No. 1337, at 276-77 (July 31, 1997) [hereinafter COBLE].

²⁸⁶ H.R. 2281, § 103 (adding § 1201(c)(3) to Title 17 of U.S.C.); S. 2037, § 103 (adding § 1201(c)(3) to Title 17 of U.S.C.).

²⁸⁷ H.R. 2281, § 103 (adding § 1202(c)(1) to Title 17 of U.S.C.); S. 2037, § 103 (adding § 1202(c)(1) to Title 17 of U.S.C.).

²⁸⁸ H.R. 2281, § 103 (adding § 1202(c)(2)-(3) to Title 17 of U.S.C.); S. 2037, § 103 (adding § 1202(c)(2)-(3) to Title 17 of U.S.C.).

²⁸⁹ H.R. 2281, § 103 (adding § 1202(c)(6) to Title 17 of U.S.C.); S. 2037, § 103 (adding § 1202(c)(6) to Title 17 of U.S.C.).

²⁹⁰ H.R. 2281, § 103 (adding § 1202(c)(7) to Title 17 of U.S.C.); S. 2037, § 103 (adding § 1202(c)(7) to Title 17 of U.S.C.).

²⁹¹ H.R. 2281, § 103 (adding § 1202(c)(8) to Title 17 of U.S.C.); S. 2037, § 103 (adding § 1202(c)(8) to Title 17 of U.S.C.).

²⁹² Coble, *supra* note 285, at 277.

²⁹³ *Id.*

294 H.R. 2281, § 103 (adding § 1202(c) to Title 17 of U.S.C.).

295 H.R. 2281, § 103 (adding § 1202(a) to Title 17 of U.S.C.); S. 2037, § 103 (adding § 1202(a) to Title 17 of U.S.C.).

296 H.R. 2281, § 103 (adding § 1202(b) to Title 17 of U.S.C.); S. 2037, § 103 (adding § 1202(b) to Title 17 of U.S.C.).

297 H.R. 2281, § 103 (adding § 1203(b)(1) to Title 17 of U.S.C.).

298 H.R. 2281, § 103 (adding § 1203 to Title 17 of U.S.C.); S. 2037, § 103 (adding § 1203 to Title 17 of U.S.C.).

299 H.R. 2281, § 103 (adding § 1203(c)(4) to Title 17 of U.S.C.); S. 2037, § 103 (adding § 1203(c)(4) to Title 17 of U.S.C.).

300 H.R. 2281, § 103 (adding § 1203(c)(5)(A) to Title 17 of U.S.C.); S. 2037, § 103 (adding § 1203(c)(5)(A) to Title 17 of U.S.C.).

301 H.R. 2281, § 103 (adding § 1204(a) to Title 17 of U.S.C.); S. 2037, § 103 (adding § 1204(a) to Title 17 of U.S.C.).

302 H.R. 2281, § 103 (adding § 1204(a)(2) to Title 17 of U.S.C.); S. 2037, § 103 (adding § 1204(a)(2) to Title 17 of U.S.C.).

303 H.R. 2281, § 103 (adding § 1201(c)(1) to Title 17 of U.S.C.); S. 2037, § 103 (adding § 1201(c)(1) to Title 17 of U.S.C.).

304 *DFC Statement--August 1997* (visited Oct. 27, 1998) <<http://www.ari.net/dfc/issues/wipo/stwip.html>>.

305 464 U.S. 417, 220 U.S.P.Q. (BNA) 665 (1984).

306 *DFC Statement--August 1997*, *supra* note 304.

307 *Id.*

308 *WIPO Copyright Treaties Implementation Act; and Online Copyright Liability Limitation Act: Hearings on H.R. 2281 Before the Subcomm. on Courts and Intellectual Property of the House Comm. on the Judiciary*, 105th Cong. 253 (1997) (prepared statement of Chris Byrne, Director of Intellectual Property, Silicon Graphics, Inc., on behalf of the Information Technology Industry Council) [hereinafter Byrne].

309 Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 442, 220 U.S.P.Q. (BNA) 665, 678 (1984).

310 Byrne, *supra* note 308, at 253.

311 H.R. 2281, 105th Cong. § 103 (1998) (adding § 1201(c)(4) to Title 17 of U.S.C.).

312 *Id.* (adding § 1201(f) to Title 17 of U.S.C.).

³¹³ *Id.* (adding § 1201(g)(2) to Title 17 of U.S.C.).

³¹⁴ *Id.* (adding § 1201(g)(1)(A) to Title 17 of U.S.C.).

³¹⁵ *Id.* (adding § 1201(g)(1)(B) to Title 17 of U.S.C.).

³¹⁶ *Id.* (adding § 1201(g)(2)(C) to Title 17 of U.S.C.).

³¹⁷ *Id.* (adding § 1201(g)(2)(D) to Title 17 of U.S.C.).

³¹⁸ *Id.* (adding § 1201(g)(5) to Title 17 of U.S.C.).

³¹⁹ *Id.* (adding § 1201(a)(2)(A) to Title 17 of U.S.C.).

³²⁰ *Id.* (adding § 1201(h)(1)(B) to Title 17 of U.S.C.).

³²¹ *Id.* (adding § 1201(h)(2)(A)-(B) to Title 17 of U.S.C.).

³²² *Id.* (adding § 1201(i)(1)(A), (B), (D) to Title 17 of U.S.C.).

³²³ *Id.* § 104(a), (c)(1).

³²⁴ *Id.* § 104(d).

³²⁵ *Id.* § 105.

³²⁶ *Id.* § 401(b).

³²⁷ H.R. 3048, 105th Cong. § 8 (adding § 1201(a) to Title 17 of U.S.C.); S. 1146, 105th Cong. § 301 (adding § 1201(a) to Title 17 of U.S.C.).

³²⁸ H.R. 3048, § 8 (adding § 1201(a) to Title 17 of U.S.C.); S. 1146, § 301 (adding § 1201(a) to Title 17 of U.S.C.).

³²⁹ H.R. 3048, § 8 (adding § 1201(c) to Title 17 of U.S.C.); S. 1146, § 301 (adding § 1201(c) to Title 17 of U.S.C.).

³³⁰ H.R. 3048, § 8 (adding § 1203(c)(4) to Title 17 of U.S.C.); S. 1146, § 301 (adding § 1203(c)(4) to Title 17 of U.S.C.).

³³¹ *House Judiciary Approves Copyright Reform for Digital Environment*, 3 BNA'S ELECTRONIC COMM. & L. REP. 452, 453 (1998).

³³² *Id.*

³³³ EC Directive, *supra* note 50, art. 6(1), at 11.

³³⁴ *Id.* art. 6(2), at 12.

³³⁵ EC Directive Comments, *supra* note 161, art. 6, cmt. 2, at 41; *see also id.* art. 6, cmt. 3, at 41 (“[Article 6] prohibits activities aimed at an infringement of a copyright ... this would imply that not any circumvention of technical means of protection should be covered, but only those which constitute an infringement of a right, i.e. which are not authorized by law or by the author.”).

³³⁶ EC Directive, *supra* note 50, art. 7(1), at 12.

³³⁷ *Id.* art. 7(2), at 12.

³³⁸ EC Directive Comments, *supra* note 161, art. 7, cmt. 1, at 42.

³³⁹ H.R. 3048, 105th Cong. § 2(a) (1997); S. 1146, 105th Cong. § 202(a) (1997).

³⁴⁰ H.R. 3048, § 2(b); S. 1146, § 202(b).

³⁴¹ EC Directive, *supra* note 50, art. 5(3), at 11.

³⁴² *Id.* art. 5(4), at 11.

³⁴³ H.R. 2281, 105th Cong. § 413(2)(A), (3)(A) (1998); S. 2037, 105th Cong. § 403(2)(A), (3)(A) (1998); H.R. 3048, § 3(3)(A), (4)(A); S. 1146, § 203(3)(A), (4)(A).

³⁴⁴ H.R. 2281, § 413(2)(B), (3)(B); S. 2037, § 403(2)(B), (3)(B); H.R. 3048, § 3(3)(B), (4)(B); S. 1146, § 203(3)(B), (4)(B).

³⁴⁵ *Latest Copyright Treaty Implementation Bill Limits Scope of Shrink-Wrap Agreements*, 2 BNA’S ELECTRONIC INFO. POL’Y & L. REP. 1231, 1232 (1997).

³⁴⁶ H.R. 3048, § 5(b)(2)(A); S. 1146, § 204(b)(2)(A).

³⁴⁷ H.R. 3048, § 5(b)(2)(A); S. 1146, § 204(b)(2)(A).

³⁴⁸ H.R. 3048, § 5(b)(2)(C)(i); S. 1146, § 204(b)(2)(C)(i).

³⁴⁹ H.R. 2281, § 412(a); S. 2037, § 402(a).

³⁵⁰ H.R. 2281, § 412(b); S. 2037, § 402(b).

351 H.R. 3048, § 7.

352 17 U.S.C. § 102(b) (1994).

353 *See Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1520, 24 U.S.P.Q.2d (BNA) 1561, 1568 (9th Cir. 1993); *Atari Games Corp. v. Nintendo of Am., Inc.*, 975 F.2d 832, 842-44, 24 U.S.P.Q.2d (BNA) 1015, 1023-24 (Fed. Cir. 1992); *DSC Communications Corp. v. DGI Techs. Inc.*, 898 F. Supp. 1183, 37 U.S.P.Q.2d (BNA) 1496, 1500 (N.D. Tex. 1995).

354 H.R. 2281, § 302(3); S. 2037, § 301(3).

355 991 F.2d 511, 519, 26 U.S.P.Q.2d (BNA) 1458, 1464 (9th Cir. 1993).

356 64 F.3d 1330, 1335, 36 U.S.P.Q.2d (BNA) 1028, 1032 (9th Cir. 1995).

357 NII WHITE PAPER, *supra* note 19, at 45.

358 The public digital performance right in a sound recording may also be implicated.

359 907 F. Supp. 1361, 37 U.S.P.Q.2d (BNA) 1545 (N.D. Cal. 1995).

360 *Id.* at 1378 n.25, 37 U.S.P.Q.2d at 1558 n.25.

361 R. NIMMER, INFORMATION LAW, *supra* note 23, ¶ 4.08[1], at 4-30.

362 There is already emerging talk of “Internet2,” or “I2,” a separate network being pioneered by the University Corporation for Advanced Internet Development (Ucaid) for the purpose of achieving greater transmission speeds than currently available on the “regular” Internet. From its thirty-four members at its 1996 inception, the Internet2 organization has grown to more than 100 research universities. Larry Lange, *Technology 1998 Analysis & Forecast: The Internet*, IEEE SPECTRUM, Jan. 1998, at 37, 38-39.

363 In addition to the detriments noted to the copyright owner, caching can give rise to potential liability on the part of the caching entity. For example, if an original site contains defamatory material, the caching entity may be deemed to have “republished” that defamatory information through the caching mechanism.

364 Eric Schlachter, *Caching on the Internet*, CYBERSPACE LAW., Oct. 1996, at 2, 3.

365 *See id.* at 3.

366 *See* David G. Post, Bargaining in the Shadow of the Code: File Caching, Copyright, and Contracts Evolving in Cyberspace 7 (Nov. 2, 1996) (unpublished draft, on file with the author and the *Texas Intellectual Property Law Journal*).

367 “[A]t least one online service markets to Web site owners data about the number of page impressions delivered from its cache.” Schlachter, *supra* note 364, at 3.

368 Post, *supra* note 366 (draft at 8).

369 One commentator argues that even local caching might give rise to suit by a copyright owner: “For example, such a suit might arise in the case of a large company where the cumulative effects of local caching by many Web browsers (perhaps combined with statutory damages and attorneys fees) are significant.” Schlachter, *supra* note 364, at 4.

370 907 F. Supp. 1361, 37 U.S.P.Q.2d (BNA) 1545 (N.D. Cal. 1995).

371 *Id.* at 1365-67, 37 U.S.P.Q.2d at 1547-48.

372 17 U.S.C. § 107(1) (1994).

373 *Netcom*, 907 F. Supp. at 1379, 37 U.S.P.Q.2d at 1559.

374 *Id.*

375 17 U.S.C. § 107(2).

376 *Netcom*, 907 F. Supp. at 1379, 37 U.S.P.Q.2d at 1559.

377 17 U.S.C. § 107(3).

378 Schlachter, *supra* note 364, at 4.

379 See, e.g., *Supermarket of Homes v. San Fernando Valley Board of Realtors*, 786 F.2d 1400, 1409, 230 U.S.P.Q. (BNA) 316, 321 (9th Cir. 1986).

380 *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 449-50, 220 U.S.P.Q. (BNA) 665, 681 (1984).

381 *Netcom*, 907 F. Supp. at 1380, 37 U.S.P.Q.2d at 1560 (citing the Supreme Court’s decision in *Sony*, 464 U.S. at 449-50, 220 U.S.P.Q. at 681, in which the Court held that total copying of copyrighted broadcast programs for the purpose of time-shifted viewing was a fair use).

382 *Id.*

383 See I. Trotter Hardy, *Computer RAM “Copies”: Hit or Myth? Historical Perspectives on Caching As a Microcosm of Current Copyright Concerns*, 22 U. DAYTON L. REV. 423, 447-48 (1997). Several companies are now selling software that allows caching of entire Web sites overnight. See *id.* at 449.

384 17 U.S.C. § 107(4) (1994).

385 See 3 M. NIMMER & D. NIMMER, *NIMMER ON COPYRIGHT*, *supra* note 26, § 13.05[A][4], at 13-188 to -189 (citing Harper & Row Publishers, Inc. v. Nation Enters., 471 U.S. 539, 566, 225 U.S.P.Q. (BNA) 1073, 1083 (1985)).

³⁸⁶ Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 590, 29 U.S.P.Q.2d (BNA) 1961, 1970 (1994) (quoting 3 M. NIMMER & D. NIMMER, NIMMER ON COPYRIGHT, *supra* note 26, § 13.05[A][4], at 13-181) (footnote omitted).

³⁸⁷ See *Netcom*, 907 F. Supp. at 1380, 37 U.S.P.Q.2d at 1561.

³⁸⁸ See *id.*, 37 U.S.P.Q.2d at 1560.

³⁸⁹ Indeed, some ISPs are beginning to request an explicit “license to cache” from owners of Web site material that may be cached by the ISP. See *Schlachter*, *supra* note 364, at 4.

³⁹⁰ See, e.g., *MacLean Assocs. Inc. v. Wm. M. Mercer-Meidinger-Hansen Inc.*, 952 F.2d 769, 779, 21 U.S.P.Q.2d (BNA) 1345, 1353 (3d Cir. 1991) (defendant obtained an implied license to use a computer program prepared by an independent contractor, but only in the furtherance of its business relationship with one particular client for which the contractor had been engaged to support); *Oddo v. Reis*, 743 F.2d 630, 633-34, 222 U.S.P.Q. (BNA) 799, 801 (9th Cir. 1984) (scope of implied license included the right to market an unmodified computer program to third parties, subject to an obligation to account for profits to the developer, but did not include a right to modify); see also *Microstar v. Formgen, Inc.*, 942 F. Supp. 1312, 1317-18 (S.D. Cal. 1996); James E. Meadows, *Practical Aspects of ‘Implied License’*, COMPUTER L. STRATEGIST, May 1993, at 1. See generally Hank Barry & Mira Kothari, *Other People’s Property: There May Be Implied Licenses for Content on Web Pages*, SAN FRANCISCO DAILY J., Aug. 28, 1997, at 5.

³⁹¹ *Schlachter*, *supra* note 364, at 5.

³⁹² Post, *supra* note 366 (draft at 18).

³⁹³ *Id.* (draft at 19).

³⁹⁴ *Religious Tech. Ctr. v. Netcom On-Line Communications Servs.*, 907 F. Supp. 1361, 1372, 37 U.S.P.Q.2d (BNA) 1545, 1553 (N.D. Cal. 1995).

³⁹⁵ *Sega Enters. Ltd. v. MAPHIA*, 948 F. Supp. 923, 41 U.S.P.Q.2d (BNA) 1705 (N.D. Cal. 1996).

³⁹⁶ *Sega Enters. Ltd. v. Sabella*, 1997 COPYRIGHT L. DEC. (CCH) ¶ 27,648, at 29,842 (N.D. Cal. Dec. 18, 1996).

³⁹⁷ *MAPHIA*, 948 F. Supp. at 932, 41 U.S.P.Q.2d at 1712; *Sabella*, COPYRIGHT L. DEC. ¶ 27, 648, at 29,847-48.

³⁹⁸ 24 F.3d 1088, 30 U.S.P.Q.2d (BNA) 1746 (9th Cir. 1994).

³⁹⁹ *Id.* at 1091, 1099, 30 U.S.P.Q.2d at 1749, 1755.

⁴⁰⁰ *Id.* at 1091, 1094, 30 U.S.P.Q.2d at 1749-51.

⁴⁰¹ R. NIMMER, INFORMATION LAW, *supra* note 23, ¶ 4.10, at 4-39.

⁴⁰² See, e.g., *Gershwin Publ’g Corp. v. Columbia Artists Management, Inc.*, 443 F.2d 1159, 1162, 170 U.S.P.Q. (BNA) 182, 184-85 (2d Cir. 1971); *Cable/Home Communications Corp. v. Network Prods., Inc.*, 902 F.2d 829, 845, 15 U.S.P.Q.2d (BNA) 1001, 1012

(11th Cir. 1990).

403 R. NIMMER, INFORMATION LAW, *supra* note 23, ¶ 4.11, at 4-40; *see also* Sega Enters. Ltd. v. MAPHIA, 948 F. Supp. 923, 933, 41 U.S.P.Q.2d (BNA) 1705, 1712-13 (N.D. Cal. 1996) (“The standard for the knowledge requirement is objective, and is satisfied where the defendant knows or has reason to know of the infringing activity.”) (citing Casella v. Morris, 820 F.2d 362, 365, 3 U.S.P.Q.2d (BNA) 1340, 1342 (11th Cir. 1987)).

404 Given the ubiquitous nature of copies on the Internet and the strength of the copyright holder’s other rights discussed in this paper, establishing a direct infringement in a network transmission should not be difficult.

405 907 F. Supp. 1361, 37 U.S.P.Q.2d (BNA) 1545 (N.D. Cal. 1995).

406 *Id.* at 1374, 37 U.S.P.Q.2d at 1555.

407 *Id.*

408 *Id.*, 37 U.S.P.Q.2d at 1554-55.

409 *Id.*, 37 U.S.P.Q.2d at 1555.

410 *Id.* at 1375, 37 U.S.P.Q.2d at 1556.

411 Sega Enters. Ltd. v. MAPHIA, 948 F. Supp. 923, 41 U.S.P.Q.2d (BNA) 1705 (N.D. Cal. 1996).

412 *Id.* at 932-33, 41 U.S.P.Q.2d at 1712-13.

413 76 F.3d 259, 37 U.S.P.Q.2d (BNA) 1590 (9th Cir. 1996).

414 *MAPHIA*, 948 F. Supp. at 933, 41 U.S.P.Q.2d at 1713 (citing *Fonovisa*, 76 F.3d at 264, 37 U.S.P.Q.2d at 1595).

415 *Id.*

416 *Id.* The court further found that because Sega had established contributory liability on the part of Sherman, the court need not address whether Sherman was also liable under the theory of vicarious liability. *Id.*

417 Religious Tech. Ctr. v. Netcom On-Line Communication Servs., 907 F. Supp. 1361, 1375, 37 U.S.P.Q.2d (BNA) 1545, 1556 (N.D. Cal. 1995).

418 *Id.*; R. NIMMER, INFORMATION LAW, *supra* note 23, ¶ 4.11, at 4-40.

419 *Netcom*, 907 F. Supp. at 1377, 37 U.S.P.Q.2d at 1557.

420 *Id.* at 1376, 37 U.S.P.Q.2d at 1556.

421 *Id.* at 1377, 37 U.S.P.Q.2d at 1557-58. The plaintiffs argued that the financial benefit prong was satisfied based on Netcom's advertisements that, compared to competitors like CompuServe and America Online, Netcom provides easy, regulation-free Internet access. Plaintiffs assert that Netcom's policy attracts copyright infringers to its system, resulting in a direct financial benefit. The court is not convinced that such an argument, if true, would constitute a direct financial benefit to Netcom from *Erlich*'s infringing activities.

Id., 37 U.S.P.Q.2d at 1557.

422 *Id.*, 37 U.S.P.Q.2d at 1557.

423 847 F. Supp. 1492, 37 U.S.P.Q.2d (BNA) 1590 (E.D. Cal. 1994), *rev'd*, 76 F.3d 259, 37 U.S.P.Q.2d (BNA) 1590 (9th Cir. 1996).

424 *Fonovisa*, 847 F. Supp. at 1496, 37 U.S.P.Q.2d at 1594.

425 *Fonovisa*, 76 F.3d at 263, 37 U.S.P.Q.2d at 1594.

426 R. NIMMER, INFORMATION LAW, *supra* note 23, ¶ 4.13[2], at 4-49.

427 983 F. Supp. 1167, 45 U.S.P.Q.2d (BNA) 1236 (N.D. Ill. 1997).

428 *Id.* at 1179, 45 U.S.P.Q.2d at 1245.

429 *Id.*

430 No. 96CV30189 (D. Mass. filed Oct. 8, 1996). A copy of the complaint may be found at <http://www.bna.com/e-law/docs/tripod.html> (last updated Nov. 21, 1997).

431 “Cracker tools” are computer programs that allow unscrupulous persons to circumvent such copy-protect devices, and make illegal copies of the computer program.” *Tripod*, No. 96CV30189, at ¶ 18. A “cracker” is a person who breaks the security on a computer system. *Software Companies Claim Contributory Infringement Against ISP, Home Page Owner*, 1 BNA’S ELECTRONIC INFO. POL’Y & L. REP. 674, 674 (1996); *see also* TOM FAHEY, NET.SPEAK THE INTERNET DICTIONARY 45 (Ruffin Prevost ed. 1994).

432 *Tripod*, No. 96CV30189, at ¶ 23.

433 Adobe Sys. Inc. v. Community ConneXion Inc., No. 96-20833 (N.D. Cal. filed Oct. 8, 1996); Adobe Sys. Inc. v. GeoCities, No. 96-7035 TJH (C.D. Cal. filed Oct. 8, 1996); Adobe Sys. Inc. v. Kropf, No. 96-1851 (W.D. Penn. filed Oct. 8, 1996); *see Software Companies Claim Contributory Infringement Against ISP, Home Page Owner, supra* note 431, at 674.

434 Adobe Sys. Inc. v. Workman, No. 1196CU157, at ¶ 32 (N.D. W.Va. filed Oct. 2, 1996). A copy of the complaint may be found at <http://www.bna.com/e-law/docs/workman.html> (last updated Nov. 21, 1997).

435 Elizabeth Wasserman, *Net Software Piracy Alleged*, SAN JOSE MERCURY NEWS, Nov. 7, 1996, at 1C.

436 *ISPs Challenge SPA’s Guidelines For Internet Copyright Protection, Lawsuits*, 2 BNA’S ELECTRONIC INFO. POL’Y & L.

REP. 4, 4-5 (1997).

⁴³⁷ Wasserman, *Net Software Piracy Alleged*, *supra* note 435, at 1C.

⁴³⁸ Elizabeth Wasserman, *Industry Relents on Net Piracy*, SAN JOSE MERCURY NEWS, NOV. 19, 1996, at 1C.

⁴³⁹ See Ian C. Ballon, *Third Party Copyright Liability in Cyberspace: The Netcom Settlement and Policy Statement*, CYBERSPACE LAW., NOV. 1996, at 30-32.

⁴⁴⁰ *Id.*

⁴⁴¹ A summary of the issues and proposed legislative provisions may be found in STUCKEY, *supra* note 116, § 6.10[4], at 6-69 to 6-70.

⁴⁴² 143 CONG. REC. H5485 (daily ed. July 17, 1997).

⁴⁴³ H.R. 2180, 105th Cong. § 2 (1997).

⁴⁴⁴ *Id.*

⁴⁴⁵ S. 1146, 105th Cong. § 102 (1997).

⁴⁴⁶ *Id.*

⁴⁴⁷ 144 CONG. REC. H495 (daily ed. Feb. 12, 1998).

⁴⁴⁸ 144 CONG. REC. D341 (daily ed. March 31, 1998); H.R. 2281, 105th Cong. (1997).

⁴⁴⁹ H.R. REP. NO. 105-551, pt. 2 (1998).

⁴⁵⁰ Sen. Patrick Leahy and Sen. John Ashcroft drafted the compromise agreement for incorporation into pending legislation.

⁴⁵¹ S. 2037, 105th Cong. (1998).

⁴⁵² 144 CONG. REC. S4906 (daily ed. May 14, 1998).

⁴⁵³ 144 CONG. REC. S10536-37 (daily ed. Sept. 17, 1998).

⁴⁵⁴ *Id.*

⁴⁵⁵ H.R. 2281, 105th Cong. § 202(a) (1998) (adding § 512 to Title 17 of U.S.C.); S. 2037, 105th Cong. § 202(a) (1998) (adding § 512

to Title 17 of U.S.C.) (1998).

456 H.R. 2281, § 202(a) (adding § 512(j)(1)(A) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(j)(1)(A) to Title 17 of U.S.C.).

457 H.R. 2281, § 202(a) (adding § 512(j)(1)(B) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(j)(1)(B) to Title 17 of U.S.C.).

458 H.R. 2281, § 202(a) (adding § 512(a)(1) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(a)(1) to Title 17 of U.S.C.).

459 H.R. 2281, § 202(a) (adding § 512(a)(2) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(a)(2) to Title 17 of U.S.C.).

460 H.R. 2281, § 202(a) (adding § 512(a)(3) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(a)(3) to Title 17 of U.S.C.).

461 H.R. 2281, § 202(a) (adding § 512(a)(4) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(a)(4) to Title 17 of U.S.C.).

462 H.R. 2281, § 202(a) (adding § 512(a)(5) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(a)(5) to Title 17 of U.S.C.).

463 H.R. 2281, § 202(a) (adding § 512(b)(1)(A) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(b)(1) to Title 17 of U.S.C.).

464 H.R. 2281, § 202(a) (adding § 512(b)(1)(C) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(b)(3) to Title 17 of U.S.C.).

465 H.R. 2281, § 202(a) (adding § 512(b)(2)(B) - (C) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(b)(5) - (6) to Title 17 of U.S.C.).

466 H.R. 2281, § 202(a) (adding § 512(b)(2)(D) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(b)(7)(B) to Title 17 of U.S.C.).

467 H.R. 2281, § 202(a) (adding § 512(b)(2)(E) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(b)(8) to Title 17 of U.S.C.).

468 H.R. 2281, § 202(a) (adding § 512(c)(1)(A)(i) - (ii) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(c)(1)(A)(i) - (ii) to Title 17 of U.S.C.).

469 H.R. 2281, § 202(a) (adding § 512(c)(1)(B) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(c)(1)(B) to Title 17 of U.S.C.).

470 The requirements for proper notice include identification of the copyrighted work, identification of the infringing material, and a physically or electronically signed statement that, under penalty of perjury, the complaining party has the authority to enforce the rights that are claimed to be infringed. H.R. 2281, § 202(a) (adding § 512(c)(4)(A)(i)-(iii), (vi) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(c)(3)(A)(i)-(iii), (vi) to Title 17 of U.S.C.).

471 H.R. 2281, § 202(a) (adding § 512(c)(1)(C) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(c)(1)(C) to Title 17 of U.S.C.).

472 H.R. 2281, § 202(a) (adding § 512(c)(3) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(c)(2) to Title 17 of U.S.C.).

473 H.R. 2281, § 202(a) (adding § 512(d)(1)(A) - (B) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(d)(1) to Title 17 of

U.S.C.).

474 H.R. 2281, § 202(a) (adding § 512(d)(2) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(d)(2) to Title 17 of U.S.C.).

475 The notice requirements here are the same as for the third safe harbor. *See supra* note 470.

476 H.R. 2281, § 202(a) (adding § 512(d)(3) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(d)(2) to Title 17 of U.S.C.).

477 H.R. 2281, § 202(a) (adding § 512(h)(1)(A) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(h)(1)(A) to Title 17 of U.S.C.).

478 H.R. 2281, § 202(a) (adding § 512(h)(1)(b), (h)(2) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(h)(1)(B), (h)(2) to Title 17 of U.S.C.).

479 H.R. 2281, § 202(a) (adding § 512(f)(1) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(f)(1) to Title 17 of U.S.C.).

480 H.R. 2281, § 202(a) (adding § 512(g) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(g) to Title 17 of U.S.C.).

481 H.R. 2281, § 202(a) (adding § 512(k) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(k) to Title 17 of U.S.C.).

482 H.R. 2281, § 202(a) (adding § 512(l) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(l) to Title 17 of U.S.C.).

483 H.R. 2281, § 202(a) (adding § 512(i)(1)(i) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(i)(1)(i) to Title 17 of U.S.C.).

484 H.R. 2281, § 202(a) (adding § 512(i)(1)(ii) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(i)(1)(ii) to Title 17 of U.S.C.).

485 H.R. 2281, § 202(a) (adding § 512(i)(1)(iii) to Title 17 of U.S.C.); S. 2037, § 202(a) (adding § 512(i)(1)(iii) to Title 17 of U.S.C.).

486 Hardy, *supra* note 383, at 449. For example, [a]n individual at the Massachusetts Institute of Technology for a while kept an in-line link to the *Dilbert* cartoon of the day. The cartoon appears on copyright owner United Media's site, <http://www.unitedmedia.com/comics/dilbert/>, but to browsers of the individual's site, the cartoon appeared to be residing 'there.' United Media sent the individual, Dan Wallach, a 'cease and desist' letter, after which Wallach ceased and desisted the in-line linking. *Id.* at 449 n.82.

487 "Frame" technology is a page presentation capability available in both the Netscape Navigator and the Microsoft Internet Explorer browsers that enables the display of multiple, independently scrollable panels on a single screen. Frames may contain many types of elements, including text, hypertext, graphics, scrollable regions, and other frames.

488 "A 'derivative work' is a work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted. A work consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship, is a 'derivative work.'" 17 U.S.C.A. § 101 (1996 & Supp. 1988) (definition of "derivative work").

489 Linking also raises a number of trademark issues. If the link consists of the linked site's company name, trademark, or logo, there

is a danger of confusing site visitors about the source, affiliation, or sponsorship of either the linking or the linked company's goods or services. The language surrounding a link may also imply an endorsement by the linked company. For example, a list of links to "our many satisfied customers" states an endorsement by those customers of the linking site owner's activities. From the opposite end, a linking site should carefully consider any explicit or implied endorsement it makes of the linked site's goods or services over which it has no control. Linking to a site that contains defamatory material might make the linking entity itself liable as a "re-publisher" of the defamatory material by pointing users to the material. *See* Christine L. Kopitzke, *Think Links: Web-Page Owners Should Consider Legal Consequences of Hypertext Links to Others' Sites*, SAN FRANCISCO DAILY J., Dec. 20, 1996, at 5.

490 *Shetland Times Ltd. v. Willis*, 1997 Sess. Cas. 316 (Sess. 1996).

491 *Id.* at 317.

492 *Id.*

493 *Id.*

494 *Id.*

495 *Id.*

496 *Id.* at 318.

497 *Id.*

498 *Id.*

499 *Id.* at 319-20; *Scottish Judge Enjoins Use of Headlines in World Wide Web Link*, COMPUTER & ONLINE INDUS. LITIG. REP., Jan. 21, 1997, at 23534, 23534-35.

500 *Shetland Times*, 1997 Sess. Cas. at 319.

501 *Publisher's Statement: Internet Dispute Settled* (last modified Nov. 17, 1997) <<http://www.shetland-times.co.uk/st/daily/dispute.htm>>.

502 *See, e.g.*, Apple Computer, Inc. v. Microsoft Corp., 799 F. Supp. 1006, 24 U.S.P.Q.2d (BNA) 1081 (N.D. Cal. 1992).

503 "Notwithstanding the provisions of Sections 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 ... news reporting ... is not an infringement of copyright." 17 U.S.C. § 107 (1994).

504 The Washington Post Co. v. Total News, Inc., No. 97 Civ. 1190 (S.D.N.Y. filed Feb. 20, 1997). A copy of this complaint is available at <<http://www.jmls.edu/cyber/cases/total1.html>> and <<http://www.ljx.com/internet/complain.html>> (both sites visited Oct. 31, 1998).

505 Alan Gahtan, *Inappropriate Use of Frames May Constitute Infringement*, CYBERSPACE LAW., Apr. 1997, at 2, 2.

506 *Total News*, No. 97 Civ. 1190, at ¶ 8.

507 *Id.* at ¶ 31.

508 *Id.*

509 *Id.*

510 *Id.* at ¶ 34.

511 *Id.* at ¶ 33.

512 *Id.*

513 The frame used by Total News to display its directory buttons took up slightly more than 15% of the page width. Gahtan, *supra* note 505, at 3.

514 *Total News*, No. 97 Civ. 1190, at ¶ 30.

515 *Id.* at ¶ 36.

516 *Id.* at ¶ 35.

517 *Id.* at ¶ 8

518 *Id.* at ¶ 72.

519 *Id.* at ¶¶ 38-43.

520 *Id.* at ¶¶ 44-50.

521 *Id.* at ¶¶ 63-64.

522 *Id.* at ¶¶ 51-55.

523 *Id.* at ¶¶ 61-62.

524 *Id.*

525 *Id.* at ¶¶ 74-76.

526 *Id.* at ¶ 37(a).

527 *Id.*

528 Stipulation and Order of Settlement and Dismissal, The Washington Post Co. v. Total News, Inc., No. 97 Civ. 1190 (S.D.N.Y. Jun. 1997). A copy of this order is available at <http://www.bna.com/e-law/cases/totalset.html> (last modified Dec. 2, 1997).

529 *Id.* at ¶ 3.

530 *Id.* at ¶ 4(a).

531 *Id.* at ¶ 4(b).

532 *Id.*

533 Ticketmaster Corp. v. Microsoft Corp., No. 97-3055 DDP (C.D. Cal. filed Apr. 28, 1997). A copy of this complaint is available at <http://www.jmls.edu/cyber/cases/ticket1.html> (visited Nov. 1, 1998).

534 *Id.* at ¶ 14

535 Second Amended Complaint, Ticketmaster Corp. v. Microsoft Corp., No. 97-3055 RAP (C.D. Cal. filed Feb. 12, 1998).

536 *Id.* at ¶¶ 27-28.

537 *Id.* at ¶¶ 31-32.

538 *Id.* at ¶¶ 33-39.

539 *Id.* at ¶ 11.

540 *Id.* at ¶ 15.

541 *Id.* at ¶ 16.

542 *Id.*

543 *Id.* at ¶¶ 17-21.

544 *Id.* at ¶ 22.

545 *Id.*

546 *Id.* at ¶ 17.

547 *Id.* at ¶ 18.

548 *Id.* at ¶ 26.

549 Microsoft's Answer to First Amended Complaint, Affirmative Defenses and Counterclaims, Ticketmaster Corp. v. Microsoft Corp., No. 97-3055 DDP (C.D. Cal. answer filed May 28, 1997). A copy of this answer is available at < <http://www.ljx.com/LJXfiles/ticketmaster/answer.html> > (visited Nov. 1, 1998).

550 *Id.* at ¶¶ 41, 43, 52.

551 *Id.* at ¶¶ 48, 50.

552 *Id.* at ¶ 48.

553 *Id.* at ¶ 52.

554 *Id.* at ¶ 54.

555 *Id.* at ¶ 74.

556 Futuredontics, Inc. v. Applied Anagramatics, Inc., 45 U.S.P.Q.2d (BNA) 2005, 2008 (C.D. Cal. 1998).

557 *Id.* at 2009.

558 *Id.* at 2010.

559 *Id.*

560 *Id.*

561 *Id.* at 2006.

562 17 U.S.C.A. § 101 (1996 & Supp. 1998) (definition of "derivative work"); *see supra* note 488.

563 Lewis Galoob Toys, Inc. v. Nintendo of Am., Inc., 964 F.2d 965, 22 U.S.P.Q.2d (BNA) 1857 (9th Cir. 1992).

⁵⁶⁴ *See id.* at 971, 22 U.S.P.Q.2d at 1861 (holding that alteration of a video game by swapping out certain bytes of information on the fly as such bytes were read into the computer's RAM for execution did not constitute the making of a derivative work and was a fair use).

⁵⁶⁵ 17 U.S.C.A. § 101 (definition of "derivative work").

⁵⁶⁶ *See* R. NIMMER, INFORMATION LAW, *supra* note 23, ¶ 4.15[1], at 4-53 ("A derivative work does not exist if the second party merely makes minor changes. To create a derivative work requires changes that constitute new expression, potentially copyrightable in and of themselves."). One could counter this argument by arguing that the language quoted in text from the definition of "derivative work" was intended only to specify the level of originality that must inhere in the modifications in order for a *separate* copyright to come into existence in the derivative work. *Cf.* 17 U.S.C. § 103(b) (1994) ("The copyright in a compilation or derivative work extends only to the material contributed by the author of such work, as distinguished from the preexisting material employed in the work, and does not imply any exclusive right in the preexisting material."). One could argue that such level of originality is not required in order to *infringe* the derivative works right. *Cf. Lewis Galoob Toys*, 964 F.2d at 968, 22 U.S.P.Q.2d at 1859 ("A derivative work must be fixed to be *protected* under the Act, *See* 17 U.S.C. § 102(a), but not to *infringe*.").

⁵⁶⁷ *Cf. Midway Mfg. Co. v. Arctic Int'l, Inc.*, 704 F.2d 1009, 218 U.S.P.Q. (BNA) 791 (7th Cir. 1983) (a chip that speeded up video games held an infringing derivative work in part because it usurped the market for faster versions of the copyrighted game).

⁵⁶⁸ 17 U.S.C.A. §101 (definition of "derivative work").

⁵⁶⁹ A representative of this archival service has noted that "[w]e do our best to rigorously obey the proposed Standard for Robot Exclusion" and that one may add the following lines to the robots.txt file associated with a site, which will instruct the service's robot not to retrieve any files from the site and to delete any files already retrieved from that site:

User-agent: ia_archiver

Disallow: /

E-mail from burner@archive.org (Mike Burner) to javilk@meg.mall-net.com (Jan. 14, 1997).

⁵⁷⁰ *See* Hardy, *supra* note 383, at 448.

⁵⁷¹ Other Internet activities that involve changes of media will raise similar derivative works issues. For example, does adjusting the brightness, graininess, density, and compression of an image during digital scanning constitute the making of a derivative work?

⁵⁷² 17 U.S.C.A. § 109(a) (1996 & Supp. 1998).

⁵⁷³ STUCKEY, *supra* note 116, § 6.08[3], at 6-41.

⁵⁷⁴ NII WHITE PAPER, *supra* note 19, at 43-44.

⁵⁷⁵ In the case of computer programs, copyright owners often distribute copies of the program subject to a license agreement which states that the copy is being licensed, not sold, to the user as a vehicle to avoid the applicability of the first sale doctrine to the transaction.

⁵⁷⁶ R. NIMMER, INFORMATION LAW, *supra* note 23, ¶ 4.08[2][b], at 4-32 to 4-33.

577 *See* WIPO Copyright Treaty, *supra* note 6, art. 6(2), at 7; WIPO Performances and Phonograms Treaty, *supra* note 7, art. 8(2), at 28, art. 12(2), at 30.

578 H.R. 3048, 105th Cong. § 4 (1997) (adding § 109(f) to Title 17 of U.S.C.).

579 *See generally* David L. Hayes, *A Comprehensive Current Analysis of Software "Look and Feel" Protection*, 1997 INTELLECTUAL PROPERTY UPDATE (J. Wiley & Sons, Inc., 1997).

580 *See* Apple Computer, Inc. v. Microsoft Corp., 759 F. Supp. 1444, 1449, 18 U.S.P.Q.2d (BNA) 1097, 1099 (N.D. Cal. 1991). The well known Macintosh user interface is based upon a desktop metaphor.

581 *See, e.g.*, Lotus Dev. Corp. v. Borland Int'l, 49 F.3d 807, 34 U.S.P.Q.2d (BNA) 1014 (1st Cir.), aff'd by an equally divided court, 516 U.S. 233 (1996).

582 *See* John Markoff, *The Internet, in Three Dimensions; A New Language is Adding Depth to the Flat Computer Screen*, N.Y. TIMES, NOV. 25, 1996, at D1. Companies involved in the use of VRML include Onlive Technologies and Realspace Inc. of Cupertino, California, and Black Sun Interactive, a German company, and Animatek Inc., a Russian company, both with offices in San Francisco.

583 *Id.*

584 *See* Lemley, *supra* note 15, at 568-72.

585 Because the new right of transmission and access in the WIPO treaties will be in addition to the other rights that may be implicated by Internet uses of copyrighted works, these new rights can be expected to increase the problem of overlapping rights. For example, existing licenses will be silent on these new rights, and there will therefore be great uncertainty as to whether the licensor retains such rights, or whether the licensee has a license under such rights and, if so, of what scope.

586 *See* Lemley, *supra* note 15, at 572-74. One commentator has considered several possible ways of dealing with the overlap of exclusive copyright rights that occurs on the Internet (placing the burden of overlap on the user; placing the burden of overlap on the copyright owner; and establishing a new right of transmission over a computer network that would *replace* the other rights to the extent they are applicable to network transmissions). *See id.* at 578-84.

587 In addition, at least one court held that where predicate acts occurred in the U.S. leading to infringements that occurred abroad, damages flowing worldwide from a U.S. infringement could be considered. *Update Art, Inc. v. Modin Publ'g, Ltd.*, 843 F.2d 67, 6 U.S.P.Q.2d (BNA) 1784 (2d Cir. 1988).