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MEMORANDUM FOR: HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES
FROM: RONALD H. BROWN *Ronald H. Brown*
SUBJECT: INFORMATION INFRASTRUCTURE TASK FORCE MEETING

You are invited to attend the fourth Information Infrastructure Task Force (IITF) meeting Tuesday, July 26, 1994 from 1 p.m. to 3 p.m., in the Indian Treaty Room (Room 474) at the Old Executive Office Building. Our meeting agenda includes a discussion of creating an Administration "Global Information Infrastructure" (GII) Initiative, a report on the National Information Infrastructure (NII) FY 1996 budget development process, a status on a second series of vision papers for critical NII applications, discussion of Departments' roles in celebrating the first anniversary of the Administration's NII Initiative, and a presentation from Polly Baca, Special Assistant to the President and Director of the U.S. Office of Consumer Affairs, on NII consumer issues. I hope you can join us for what I am sure will be a productive and informative meeting.

An item which requires your immediate attention is attached: "Intellectual Property and the NII" draft report of the IITF's Intellectual Property Rights Working Group. Please ensure that your staff reviews this critical draft report and provides comments to Mary Ann Robinson of the Office of Management and Budget, Room 3235, New Executive Office Building, Washington, D.C. 20503 at 202/395-3785, or fax, 202/395-7285 by June 14. Please keep this document confidential, as the report will not be released as a draft for public comment until June 20, 1994 when it will be presented to the NII Advisory Council. The draft report will be discussed at the Information Policy Committee meeting Wednesday, June 15, from 2 p.m. to 3 p.m., Room 248, Old Executive Office Building. Meeting comments will be incorporated into the draft report. If you or your staff wish to comment and plan to attend this meeting, please contact Mary Ann Robinson.

At our last meeting, several Committee reports were discussed and approved for public comment: (1) the Information Policy Committee's Government Information Locator Service (GILS) report, which identifies public information resources throughout the Federal Government; (2) the Information Policy Committee's "Principles for Providing and Using Personal Information" report, which proposes revisions to the 1973 "Code of Fair Information Practices;" and (3) the Committee on Applications and Technology's "Putting the Information Infrastructure to Work" report, which describes, in detail, the vision for seven NII application arenas (manufacturing, health care, education, electronic commerce, environmental monitoring, libraries, and government services). In addition, Vice President Gore gave a brief presentation by video conference stressing the importance of the IITF's role in promoting both NII and the GII initiatives, and encouraging each agency to allocate resources and develop detailed implementation plans to promote better use of the NII.

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I encourage all Departments and Agencies to participate in compiling the Administration NII Accomplishments Report, which will be released as part of the NII's first anniversary celebration in September. We have received only partial participation, and to ensure the success of this report, we need full cooperation of all Departments and Agencies. A draft report will be distributed to the Vice President and other IITF members at the July 26 meeting. I strongly urge your Department or Agency to make a special effort to submit relevant accomplishments to Yvette Barrett (202/482-0979 (fax) or ybarrett@ntia.doc.gov (e-mail)) by July 15, 1994.

As you know, the U.S. Advisory Council on the National Information Infrastructure has established three Mega-Projects: (1) Vision and Goals for the NII; (2) Access to the NII; and (3) Privacy, Security and Intellectual Property. The Council is seeking Federal employees for detail assignment to assist in compiling and evaluating the data available in these areas and in drafting preliminary reports and analyses. It would serve the Administration well to assist the Council in its efforts and increase the expertise and knowledge of our staffs in these areas. Please give this opportunity your serious attention and focus on possible benefits to the Government as well as career enhancement opportunity for your staff. Interested applicants should provide a resume detailing their applicable expertise and interests to Sarah Maloney at NTIA, 14th and Constitution Avenue, NW, Room 4892, Washington, D.C. 20230, 202/482-1835 (office) or smaloney@ntia.goc.gov (e-mail).

Due to limited seating availability, we are requesting that no more than two representatives of your Department or Agency attend the meeting. To reserve a seat, please fax your name, Social Security Number and date of birth (for White House clearance) to Yvette Barrett of the National Telecommunications and Information Administration (NTIA) at 202/482-0979 (fax) by close of business on Tuesday, July 19, 1994. If you have any questions, Ms. Barrett can also be reached at 202/482-1835 (office) or ybarrett@ntia.doc.gov (e-mail).

Thank you for your participation. I look forward to seeing you on July 26.

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**INTELLECTUAL PROPERTY
AND THE
NATIONAL INFORMATION INFRASTRUCTURE**

**A PRELIMINARY DRAFT
OF
THE REPORT OF THE WORKING GROUP
ON INTELLECTUAL PROPERTY RIGHTS**

GREEN PAPER

JUNE 20, 1994

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INTRODUCTION

On February 22, 1993, President Clinton announced his plan to create a White House Information Infrastructure Task Force (IITF) to work with Congress and the private sector to develop comprehensive telecommunications and information policies aimed at articulating and implementing the Administration's vision for the National Information Infrastructure (NII). The IITF is chaired by Secretary of Commerce Ronald Brown and is comprised of three committees -- the Applications Committee, the Telecommunications Policy Committee, and the Information Policy Committee -- and a Security Issues Forum. The Working Group on Intellectual Property Rights, which is chaired by Assistant Secretary of Commerce and Commissioner of Patents and Trademarks Bruce A. Lehman, was established within the Information Policy Committee to examine the intellectual property implications of the NII.

This Report presents the result of the Working Group's examination to date. While it addresses each of the major areas of intellectual property law, it focuses primarily on copyright law and its application and effectiveness in the context of the NII.¹

To prepare this Report, the Working Group drew on the expertise of its members from the Executive Branch and observers from the Legislative Branch. In addition, the Working Group received and considered views of the public.

¹ The "National Information Infrastructure," as it is discussed in this Preliminary Report, is intended to encompass the digital, interactive services now available, such as the Internet, as well as those contemplated for the future. To make our analysis more concrete, however, we have, in many instances, evaluated the intellectual property implications of activity on the Internet, the superstructure whose protocols and rules effectively create (or permit the creation of) a "network of networks." This reflects neither an endorsement of the Internet nor a derogation of any other existing or proposed network or service that may be available via the NII, but, rather, an acknowledgment that a currently functioning structure lends itself more readily to legal analysis than a hypothetical construct.

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The Working Group held a public hearing on November 18, 1993, at which 30 witnesses testified. The Working Group also solicited written comments and received some 70 statements during a public comment period which closed on December 10, 1993. Through this process, the Working Group heard from representatives of a wide variety of interested parties, including the computer software, motion picture, music, broadcasting, publishing and other information industries, as well as various electronic industries. Views of the academic, research, library and legal communities were also heard, as well as those of individual copyright owners and users.

The special intellectual property concerns and issues raised by the development and use of the NII are the subject of this Report; it does not attempt to address all existing intellectual property issues.² Because of the legal nature of the subject, this Report uses certain words and phrases that may be unfamiliar to some readers or that do not have their ordinary meaning when used in the context of intellectual property law. The Working Group has attempted to identify these terms of art and provide their legal definitions.

The Working Group is issuing this Preliminary Report to solicit public comment on the Report and, particularly, its preliminary findings and recommendations. Written comments should be submitted on or before August 22, 1994, to:

The Commissioner of Patents and Trademarks
U.S. Patent and Trademark Office
Box 4
Washington, D.C. 20231

Attention: Terri A. Southwick
Attorney-Advisor

Alternatively, comments may be submitted electronically to the following Internet address: nii-ip@uspto.gov.

² For instance, the current debate over whether or to what extent certain aspects of computer programs are or should be protected under copyright law is not covered by this Report. Likewise, certain patent issues, such as pre-grant publication and reexamination, are not addressed.

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Comments submitted will be available for public inspection at the U.S. Patent and Trademark Office, 2121 Crystal Drive, Suite 902, Arlington, VA, between the hours of 9 a.m. and 4 p.m.

Reply comments may be submitted electronically or in writing no later than September 19, 1994.

This Preliminary Report is also available on the IITF Bulletin Board. The Bulletin Board can be accessed through the Internet by pointing the Gopher Client to iitf.doc.gov or by telnet to iitf.doc.gov (log in as gopher). The Bulletin Board is also accessible at 202-501-1920 using a personal computer and a telephone modem. The Report may be found under "Speeches, Testimony and Documents" and is listed as "Intellectual Property Working Group Draft Report."

Public hearings will be held on this Report, and will be announced in the press, on the IITF Bulletin Board and in the Federal Register.

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BACKGROUND

Intellectual property is a subtle and esoteric area of the law that evolves in response to technological change.³ Copyright law, in particular, responds to technological challenges for authors and copyright owners -- from Gutenberg's moveable type printing to digital audio recorders, and everything in between -- photocopyers, radio, television, videocassette recorders, cable television and satellites. The use of computer technology -- such as digitization -- and communications technology -- such as fiber optic cable -- has had an enormous impact on the creation, reproduction and dissemination of copyrighted works. The development of the National Infrastructure will merge computer and communications technology into an integrated information technology, and generate both unprecedented challenges and important opportunities for the copyright marketplace.

A national information infrastructure already exists. Telephones, televisions, radios, computers and fax machines are used every day to receive, store, process, perform, display and transmit data, text, voice, sound and images in homes and businesses throughout the country. Fiber optics, wires, cables, switches, routers, microwave networks, satellites and other communications technologies connect telephones to telephones, computers to computers, and fax machines to fax machines. The NII of tomorrow will be much more than these separate communications networks; it will integrate them into an advanced high-speed, interactive, broadband, digital communications system. Computers, telephones, televisions, radios, fax machines, and more will be linked by the NII and will be able to communicate and interact with other computers,

³ Supreme Court Justice Story found that copyright and patent cases come "nearer than any other class of cases belonging to forensic discussions, to what may be called the metaphysics of the law where the distinctions are, or at least may be, very subtle [sic] and refined, and, sometimes, almost evanescent." See Folsom v. Marsh, 9 F. Cas. 342, 344 (C.C.D. Mass. 1841) (No. 4,901).

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telephones, televisions, radios, fax machines and more -- all in digital format.⁴

The NII has great potential to increase access to information and entertainment resources that will be delivered quickly and economically anywhere in the country in the blink of an eye. For instance, hundreds of channels of "television" programming, thousands of musical recordings, and literally millions of "magazines" and "books" can be made available to homes and businesses across the United States and, eventually, the world.⁵ It can improve the nation's educational and health care systems. It can enhance the ability of U.S. firms to compete and succeed in the global economy, generating more jobs for Americans. New job opportunities can be created in the processing, organizing, packaging and dissemination of the information and entertainment products flowing through the NII.

Yet, the potential of the NII will not be realized if the information and entertainment products protectible by intellectual property laws are not protected effectively when disseminated via the NII. Owners of intellectual property rights will not be willing to put their interests at risk by allowing access to their works via the NII if appropriate systems -- both in the U.S. and internationally -- are not in place to permit them to set and enforce the terms and conditions under which their works are made available in the NII environment. Likewise, the public will not use the services available on the NII and generate the market necessary for its success unless access to a wide variety of works is provided under equitable and reasonable terms and conditions, and the integrity of those works is assured. All the computers, telephones, fax machines, scanners,

4 These devices will be linked not only to each other (computer to computer, for example) but will also be cross-linked (computer to television).

5 The United States and other countries are working toward the development of a Global Information Infrastructure (GII) that "will allow us to share information, to connect, and to communicate as a global community." And as that information moves through international channels, "[p]rotecting intellectual property is absolutely essential." See Remarks Prepared for Delivery by Vice President Al Gore at the International Telecommunications Union in Buenos Aires, Argentina (March 21, 1994).

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cameras, keyboards, televisions, monitors, printers, switches, routers, wires, cables, networks and satellites in the world will not create a successful NII. What will drive the NII is the content moving through it.

The development of the NII is obviously neither the first nor the last technological challenge to copyright owners' ability to prevent unauthorized uses of their works.⁶ For instance, the advent of the photocopying machine caused great apprehension among copyright owners of printed works.⁷ But time, cost and quality were on the copyright owner's side. It was, and still is, more efficient and cheaper to buy an extra copy of most books than to photocopy them – and the quality of a book from the original publisher is typically higher than that of a photocopy. The introduction of audio tape recorders also posed problems for copyright owners. But again, the physical attributes of the work made reproductions cheaper, but also lower in quality – until, of course, the introduction of digital audio recorders, which reproduce sound recordings both cheaply and with no degradation of sound quality. Congress responded to this threat to sound recordings with enactment of the Audio Home Recording Act of 1992, which combined legal and technological safeguards.⁸

6 See Sony Corp. v. Universal City Studios, Inc., 464 U.S. 417, 430-31 nn. 11-12 (1984) (hereinafter "Sony") (significance of changes in technology and their effect on copyright law).

7 The Commission on New Technological Uses of Copyrighted Works (hereinafter "CONTU") reported about the issues raised by photocopiers and computers back in 1978, using language that is applicable again today:

The ownership and control of information and the means of disseminating it are emerging as national and international policy issues. Concerns about the impact on individual freedom posed by the control of the flow of information are at the forefront of public debate. The adequacy of the legal structure to cope with the pace and rate of technological change frequently has been called into question.

Final Report of the National Commission on New Technological Uses of Copyrighted Works (hereinafter "CONTU Final Report") at 3 (citations omitted).

8 See 17 U.S.C. § 1001 et seq. (Supp. V 1993). The Audio Home Recording Act requires a serial copy management system in all digital audio recording devices and digital audio interface devices imported, manufactured or

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Advances in digital technology and the rapid development of electronic networks and other communications technologies raise the stakes considerably. Any two-dimensional work can readily be "digitized" – translated into digital code (a series of zeros and ones). The work can then be stored and used in that digital format. This dramatically increases: the ease and speed with which a work can be reproduced; the quality of the copies (both the first and the hundredth "generation"); the ability to manipulate and change the work; and the speed with which copies (authorized and unauthorized) can be "delivered" to the public. Works also can be combined easily with other works into a single medium, such as a CD-ROM, which is causing a blurring of the lines that typically divide types of works.

The establishment of high-speed, high-capacity electronic information systems makes it possible for one individual, with a few key strokes, to deliver perfect copies of digitized works to scores of other individuals – or to upload a copy to a bulletin board or other service where thousands of individuals can download it or print unlimited "hard" copies on paper or disks. The emergence of an integrated information technology is dramatically changing, and will continue to change, how people and businesses deal in information and entertainment products and services, and how works are created, owned, distributed, reproduced, displayed, performed, licensed, managed, presented, organized, sold, accessed, used, and stored. This leads, understandably, to a persistent call for change in the law.

distributed in the United States. Such a system allows unlimited first generation digital copying of sound recordings, but prevents the making of digital copies from copies. The Act prohibits the importation, manufacture or distribution of any device, or the offering or performance of any service, the primary purpose of which is to circumvent any program or circuit which implements a serial copy management system. The Act also establishes a royalty system through which importers and manufacturers of digital audio recording devices and digital audio recording media make royalty payments on each device or medium they distribute. Such payments are collected by the Copyright Office and distributed annually to record companies, performers, music publishers and songwriters.

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Thomas Jefferson stated:

I am not an advocate for frequent changes in laws and constitutions. But laws and institutions must go hand and hand with the progress of the human mind. As that becomes more developed, more enlightened, as new discoveries are made, new truths discovered and manners and opinions change, with the change of circumstances, institutions must advance also to keep pace with the times. We might as well require a man to wear still the coat which fitted him when a boy⁹

Our task is to determine whether the coat still fits in this new information age.

Our intellectual property regime must (1) recognize the legitimate rights and commercial expectations of persons and entities whose works are used in the NII environment, whether at their instance or without their permission, and (2) ensure that users have access to the broadest feasible variety of works on terms and conditions that, in the language of the Constitution, "promote the progress of science and the useful arts."¹⁰

For more than two centuries copyright law, with periodic amendment, has provided protection for an increasing variety of works of authorship. The most recent complete revision of the law -- The Copyright Act of 1976 -- was enacted in response to "significant changes in technology [that had] affected the operation of the copyright law."¹¹ The legislative history of the 1976 Act noted that

9 See Inscription at the Jefferson Memorial. As Secretary of State, Thomas Jefferson was the first head of the U.S. Patent Office.

10 Congress' authority to grant certain intellectual property rights is derived from Article I, Section 8, Clause 8 of the U.S. Constitution: "The Congress shall have Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

11 See H.R. Rep. No. 1476, 94th Cong., 2d Sess. 47 (1976), reprinted in 1976 U.S.C.C.A.N. 5659 (hereinafter "House Report") ("During the past half century a wide range of new techniques for capturing and communicating printed

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those changes had "generated new industries and new methods for the reproduction and dissemination of copyrighted works, and the business relations between authors and users have evolved new patterns."¹²

We are once again faced with significant changes in technology. However, because the crafters of the 1976 Act sought to articulate rights in language that was, to the greatest extent possible, technologically neutral, we believe that the copyright regime need not be overhauled to meet these new challenges. With no more than minor clarification and adjustment, we believe the Copyright Act, like the Patent Act, will provide the necessary protection of rights -- and limitations on those rights -- to promote the progress of science and the useful arts on the NII. We believe, however, that there must be a combined effort in three disciplines -- the law, technology and education -- to successfully resolve the intellectual property issues raised by the development and use of the NII.

matter, visual images, and recorded sounds have come into use, and the increasing use of information storage and retrieval devices, communications satellites, and laser technology promises even greater changes in the near future.").

12 See House Report at 47, reprinted in 1976 U.S.C.C.A.N. 5660.

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I. THE LAW

A. COPYRIGHT

1. SUBJECT MATTER AND SCOPE OF PROTECTION

a. ELIGIBILITY FOR PROTECTION

The subject matter eligible for protection under the Copyright Act¹³ is set forth in Section 102(a):

Copyright protection subsists . . . 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.¹⁴

¹³ The Copyright Act of 1976, as amended, is codified at 17 U.S.C. § 101 *et seq.* (1988 & Supp. V 1993). Hereinafter, the Act is cited as "17 U.S.C. § ____." The Copyright Act preempts any grant of equivalents rights for works of authorship within the specified subject matter. Section 301 provides:

On and after January 1, 1978, all legal or equitable rights that are equivalent to any of the exclusive rights within the general scope of copyright as specified by section 106 in works of authorship that are fixed in a tangible medium of expression and come within the subject matter of copyright as specified by sections 102 and 103, whether created before or after that date and whether published or unpublished, are governed exclusively by this title. Thereafter, no person is entitled to any such right or equivalent right in any such work under the common law or statutes of any State.

17 U.S.C. § 301(a) (1988).

¹⁴ 17 U.S.C. § 102(a) (1988 & Supp. V 1993). The Copyright Act specifically excludes from protectible subject matter any "idea, procedure, process, system, method of operation, concept, principle or discovery" even if it meets the criteria for protection. *See* 17 U.S.C. § 102(b) (1988).

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From this provision, the courts have derived three basic requirements for copyright protection – originality, creativity and fixation.

The requirements of originality and creativity are derived from the statutory qualification that copyright protection extends only to "original works of authorship."¹⁵ To be original, a work merely must be one of independent creation – i.e., not copied from another. There is no requirement that the work be novel (as in patent law), unique or ingenious. While there must also be a modicum of creativity in the work, the level of creativity required is exceedingly low; "even a slight amount will suffice."¹⁶

The final requirement for copyright protection is fixation in a tangible medium of expression. Protection attaches automatically to an eligible work of authorship the moment the work is sufficiently fixed.¹⁷ Congress provided considerable room for technological advances in the area of fixation by noting that the medium may be "now known or later developed."¹⁸

The Copyright Act divides the possible media for fixation into "copies" and "phonorecords":

"Copies" are 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,

15 See 17 U.S.C. § 102(a) (1988 & Supp. V 1993). The statutory qualification is derived from Congress' limited Constitutional authority to grant copyright protection to "authors" for their "writings." See U.S. CONST., art. I, § 8, cl. 8.

16 Feist Publications, Inc. v. Rural Tele. Serv. Co., 499 U.S. 340, 345 (1991) ("vast majority of works make the grade quite easily, as they possess some creative spark").

17 Formal requirements for obtaining or enjoying copyright protection – such as registration or a copyright notice – have been abolished.

18 See 17 U.S.C. § 102(a) (1988 & Supp. V 1993).

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reproduced, or otherwise communicated, either directly or with the aid of a machine or device.¹⁹

"Phonorecords" are material objects in which sounds, other than those accompanying a motion picture or other audiovisual work, are fixed by any method now known or later developed, and from which the sounds can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.²⁰

According to the House Report accompanying the Copyright Act of 1976, Congress intended the terms "copies" and "phonorecords" to "comprise all of the material objects in which copyrightable works are capable of being fixed."²¹

The form of the fixation and the manner, method or medium used are virtually unlimited. A work may be fixed in "words, numbers, notes, sounds, pictures, or any other graphic or symbolic indicia"; may be embodied in a physical object in "written, printed, photographic, sculptural, punched, magnetic, or any other stable form"; and may be capable of perception either "directly or by means of any machine or device 'now known or later developed.'"²²

All works created for placement on the NII or transmission through it will be "fixed" in a manner that requires their protection by copyright. In a digital format, a work is fixed in a series of zeros and ones, which fits within the House Report's list of permissible manners of fixation.²³ Virtually all works also will be fixed in acceptable material objects. For instance, floppy disks, compact discs (CDs), CD-ROMs, optical disks, CD-Is, digital tape, and other digital

19 17 U.S.C. § 101 (1988) (definition of "copies").

20 17 U.S.C. § 101 (1988) (definition of "phonorecords").

21 House Report at 53, reprinted in 1976 U.S.C.C.A.N. 5666-67.

22 House Report at 52, reprinted in 1976 U.S.C.C.A.N. 5665-66.

23 See id.

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storage devices are all stable forms in which works may be fixed and from which works may be perceived, reproduced or communicated by means of a machine or device.²⁴

The question of whether interactive works are sufficiently fixed (given the user's ability to constantly alter the sequence of the "action") has been resolved by the courts in the context of video games and should not present a new issue with respect to the NII. Such works are generally considered sufficiently fixed.²⁵ The sufficiency of the fixation of works transmitted via the NII, however, where no copy or phonorecord has been made prior to the transmission, is not so clear.

A transmission is not a fixation. While a transmission may result in a fixation, a work is not fixed by virtue of the transmission alone. Therefore, works transmitted "live" via the NII 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.²⁶ The Copyright Act provides that a work "consisting of sounds, images, or both, that are being transmitted" meets the fixation requirement "if a fixation of the work is being made simultaneously with its transmission."²⁷ To obtain protection for a work under this "simultaneous fixation" provision, the simultaneous

24 See, e.g., Stern Elecs., Inc. v. Kaufman, 669 F.2d 852, 855 (2d Cir. 1982) (putting work in "memory devices" of a computer "satisf[ies] the statutory requirement of a 'copy' in which the work is 'fixed'").

25 See, e.g., Atari Games Corp. v. Oman, 888 F.2d 878 (D.C. Cir. 1989).

26 Unfixed broadcasts are not within the subject matter of Federal copyright law. Therefore, protection of such works is not preempted and may be provided in state statutory or common law. See 17 U.S.C. § 301 (1988 & Supp. V 1993).

27 See 17 U.S.C. § 101 (1988) (definition of "fixed"); see also Baltimore Orioles, Inc. v. Major League Baseball Players Assoc., 805 F.2d 663, 668 (7th Cir. 1986) (telecasts that are videotaped at the same time that they are broadcast are fixed in tangible form), cert. denied, 480 U.S. 941 (1987). It is understood that the "fixation" must be made or authorized by the author.

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fixation of the transmitted work must itself qualify as a sufficient fixation.

A simultaneous fixation (or any other fixation) meets the requirements if its embodiment in a copy or phonorecord is "sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration."²⁸ Works are not sufficiently fixed if they are "purely evanescent or transient" in nature, "such as those projected briefly on a screen, shown electronically on a television or cathode ray tube, or captured momentarily in the 'memory' of a computer."²⁹ Electronic network transmissions from one computer to another, such as e-mail, may only reside on each computer in RAM (random access memory), but that has been found to be sufficient fixation.³⁰

b. PUBLISHED AND UNPUBLISHED WORKS

Although prior to 1978, Federal copyright protection generally was available only for published works, such protection is now available for published as well as unpublished works.³¹ The

28 17 U.S.C. § 101 (1988) (definition of "fixed").

29 House Report at 53, reprinted in 1976 U.S.C.C.A.N. 5666-67.

30 See Advanced Computer Services of Michigan Inc. v. MAI Systems Corp., 845 F. Supp. 356, 363 (E.D. Va. 1994) (conclusion that program stored only in RAM is sufficiently fixed is confirmed, not refuted, by argument that it "disappears from RAM the instant the computer is turned off"; if power remains on (and work remain in RAM) for only seconds or fractions of a second, "the resulting RAM representation of the program arguably would be too ephemeral to be considered 'fixed'"). There may be too much of a delay between transmission and "fixation" (if any) on the receiving computer's screen or RAM to qualify as a "simultaneous" fixation.

31 See 17 U.S.C. § 104 (1988 & Supp. V 1993). Prior to 1978, certain unpublished works, particularly dramatic works and musical compositions, could obtain copyright protection through registration with the Copyright Office. Since 1978, all otherwise eligible unpublished works are protected. See 17 U.S.C. § 104(a) (1988 & Supp. V 1993).

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Copyright Act provides a definition of "publication" to draw a line between published and unpublished works.

"Publication" is the distribution of copies or phonorecords of a work to the public by sale or other transfer of ownership, or by rental, lease, or lending. The offering to distribute copies or phonorecords to a group of persons for purposes of further distribution, public performance, or public display constitutes publication. A public performance or display of a work does not of itself constitute publication.³²

The definition was intended to make clear that "any form of dissemination in which a material object does not change hands — performances or displays on television, for example — is not a publication no matter how many people are exposed to the work."³³ Therefore, unless otherwise published, a work only displayed or performed via the NII would not be considered "published" under the Copyright Act, no matter how many people have access to it. The House Report also states, however, that the definition was intended to clarify that the offering of copies or phonorecords to a group of, for instance, wholesalers, broadcasters or motion picture theater operators constitutes publication if the purpose of the offering is "further distribution, public performance, or display."³⁴ Therefore, if sufficient numbers of actual copies of the work are offered to bulletin board system ("BBS")³⁵ operators or others for upload onto systems on the NII, publication may occur.

32 17 U.S.C. § 101 (1988) (definition of "publication").

33 See House Report at 138, reprinted in 1976 U.S.C.C.A.N. 5754. See also discussion of transmissions and the "distribution" of copies infra pp. 37-41.

34 See House Report at 138.

35 A bulletin board system is a computer system to which subscribers have telecommunications access for many purposes, including sending and receiving electronic mail, and obtaining and delivering files (which may consist of software, text, graphic images, or anything else that may be placed in a digital format). A BBS may be (1) commercial, as in the examples of CompuServe, Prodigy, and the like, (2) institutional, as in the case of a university BBS, or (3) individually owned and operated.

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The classification of a work as either published or unpublished has significant repercussions under the Copyright Act. For example:

- works that are published in the United States are subject to mandatory deposit in the Library of Congress;³⁶
- unpublished works are eligible for protection without regard to the nationality or domicile of the author;³⁷
- published works must bear a copyright notice if published before March 1, 1989;³⁸
- certain limitations on the exclusive rights of a copyright owner are applicable only to published works;³⁹

36 17 U.S.C. § 407 (1988). "[T]he owner of copyright or of the exclusive right of publication in a work published in the United States shall deposit, within three months after the date of publication – (1) two complete copies of the best edition; or (2) if the work is a sound recording, two complete phonorecords of the best edition, together with any printed or other visually perceptible material published with such phonorecords." 17 U.S.C. § 407(a) (1988). The deposit requirements are not conditions of copyright protection, but failure to deposit copies of a published work may subject the copyright owner to significant fines. See 17 U.S.C. § 407(a), (d) (1988).

37 17 U.S.C. § 104(a) (1988 & Supp. V 1993); see also 17 U.S.C. § 104(b) (1988 & Supp. V 1993) (national origin requirements for published works).

38 17 U.S.C. § 405 (1988). For such works, failure to include a copyright notice risks total loss of copyright protection. See id. Works published after March 1, 1989 (the effective date of the Berne Implementation Act) may (but are not required to) bear a copyright notice identifying the year of publication and the name of the copyright owner. See 17 U.S.C. § 401 (1988).

39 See generally 17 U.S.C. §§ 107 - 120 (1988 & Supp. V 1993). See, e.g., 17 U.S.C. § 118 (1988 & Supp. V 1993) (compulsory license is available for the use of certain published works in connection with noncommercial broadcasting). Whether a work is considered published or unpublished is also relevant in a fair use analysis. See discussion of fair use infra note 143 and accompanying text.

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- deposit requirements for registration with the Copyright Office differ depending on whether a work is published or unpublished;⁴⁰ and
- the duration of protection for works made for hire may be determined by the date of publication.⁴¹

c. WORKS NOT PROTECTED

Certain works of authorship are expressly excluded from protection under the Copyright Act regardless of their originality, creativity and fixation. Copyright protection, for example, does not extend to any "idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied" in such work.⁴² Thus, although a magazine article on how to tune a car engine is protected by copyright, that protection extends only to the expression of the ideas, facts and procedures in the article, not the ideas, facts and procedures themselves, no matter how creative or original they are. Anyone may "use" the ideas, facts and procedures in the article to tune an engine – or to write another article on the same subject. What may not be taken is the expression used by the original author to describe or explain those ideas, facts and procedures.⁴³

40 See 17 U.S.C. § 408(b) (1988) ("the material deposited for registration shall include -- (1) in the case of an unpublished work, one complete copy or phonorecord; (2) in the case of a published work, two complete copies or phonorecords of the best edition; (3) in the case of a work first published outside the United States, one complete copy or phonorecord as so published; (4) in the case of a contribution to a collective work, one complete copy or phonorecord of the best edition of the collective work").

41 See 17 U.S.C. § 302(c) (1988).

42 17 U.S.C. § 102(b) (1988).

43 This is usually referred to as the "idea/expression dichotomy." The ideas are not protected; the expression is. The line between idea and expression is not easy to draw. The distinction is not that one is fixed and the other is not -- they are both fixed in the copyrighted work of authorship. At some point, the

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Copyright protection is not extended under the Copyright Act to works of the U.S. Government.⁴⁴ A work of the U.S. Government may, therefore, be reproduced and distributed without infringement liability under U.S. copyright laws.⁴⁵ Titles, names, short phrases, and slogans⁴⁶ also do not enjoy copyright protection under the Copyright Act.⁴⁷

idea becomes detailed enough to constitute expression. Judge Learned Hand explained:

Upon any work . . . a great number of patterns of increasing generality will fit equally well, as more and more of the incident is left out. The last may perhaps be no more than the most general statement of what the [work] is about, and at times might consist only of its title; but there is a point in this series of abstractions where they are no longer protected, since otherwise the [author] could prevent the use of his "ideas," to which, apart from their expression, his property is never extended.

Nichols v. Universal Pictures Corp., 45 F.2d 119, 121 (2d Cir. 1930).

44 17 U.S.C. § 105 (1988). While Section 105 leaves works created by the U.S. Government unprotected under U.S. copyright laws, Congress did not intend for the section to have any effect on the protection of U.S. government works abroad. See House Report at 59, reprinted in 1976 U.S.C.C.A.N. 5672. Further, while works created by the U.S. Government are not protected by the Copyright Act, copyright interests transferred to the U.S. Government by assignment, bequest or otherwise may be held and enforced by it. See 17 U.S.C. § 105 (1988).

45 A work of the U.S. Government is a work "prepared by an officer or employee of the United States Government as part of that person's official duties." 17 U.S.C. § 101 (definition of "work of the United States Government"). Although the wording of this definition is not identical to that of a "work made for hire," the concepts "are intended to be construed in the same way." House Report at 58, reprinted in 1976 U.S.C.C.A.N. 5672. See discussion of works made for hire infra notes 82-84 and accompanying text.

46 See, e.g., Takeall v. Pepsico Inc., 29 U.S.P.Q.2d 1913 (4th Cir. 1993) (unpublished) (holding phrase "You got the right one, uh-huh" is not copyrightable and, thus, was not infringed by commercial using phrase "You got the right one baby, uh-huh"). While short phrases are not copyrightable standing alone, they may be protected as part of a larger, copyrighted work. See e.g. Dawn Assoc. v. Links, 203 U.S.P.Q. 831 (N.D. Ill. 1978) (holding phrase

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d. CATEGORIES OF PROTECTIBLE WORKS

The Copyright Act enumerates eight broad categories of protectible subject matter:

- (1) literary works;
- (2) musical works, including any accompanying words;
- (3) dramatic works, including any accompanying music;
- (4) pantomimes and choreographic works;
- (5) pictorial, graphic and sculptural works;
- (6) motion pictures and other audiovisual works;
- (7) sound recordings; and
- (8) architectural works.⁴⁸

LITERARY WORKS

Although many categories of works will be available via the NII, the majority of works currently available on computer networks, such as the Internet, are literary works.

"Literary works," are works, other than audiovisual works, expressed in words, numbers, or other verbal or numerical symbols or indicia, regardless of the nature of the material objects, such as books, periodicals,

"When there is no room in hell . . . the dead will walk the earth" to be an integral part of a copyrighted advertisement, and defendant's unauthorized use of it was therefore infringing); Grand Upright Music Ltd. v. Warner Bros. Records, Inc., 780 F. Supp. 182, 183-85 (S.D.N.Y. 1991) (finding lyric "alone again" to be protected as part of a copyrighted work and infringed by defendant rap artist's "sampling").

47 Other material ineligible for copyright protection includes the utilitarian elements of industrial designs; familiar symbols or designs; simple geometrical shapes; mere variations of typographic ornamentation, lettering or coloring; common works considered public property, such as standard calendars, height and weight charts, and tape measures and rulers.

48 17 U.S.C. § 102(a) (1988 & Supp. V 1993).

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manuscripts, phonorecords, films, tapes, disks, or cards, in which they are embodied.⁴⁹

Literary works include works such as computer programs,⁵⁰ articles, novels, directories, computer databases, essays, catalogs, poetry, dictionaries, encyclopedias, and other reference materials.⁵¹

MUSICAL WORKS

A musical work consists of the musical notes and lyrics (if any) in a musical composition.⁵² A musical work may be embodied in any form, such as a piece of sheet music, or a phonorecord, such as a compact disc.⁵³ Musical works may be "dramatic," *i.e.*, written as a part of a musical or other dramatic work, or "nondramatic," *i.e.*, an individual, free-standing composition.

49 17 U.S.C. § 101 (1988) (definition of "literary works").

50 Following the recommendation of CONTU, Congress amended the Copyright Act in 1980 to explicitly recognize that computer programs were protected as literary works. See Act of December 12, 1980, Pub. L. 96-517, 1980 U.S.C.C.A.N. (94 Stat.) 3015. "Computer programs" are defined as a "set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result." See 17 U.S.C. § 101 (1988 & Supp. V 1993).

51 See House Report at 54, reprinted in 1976 U.S.C.C.A.N. 5667.

52 Congress did not define the term "musical work" in the statute based on the assumption that the term had a "fairly settled" meaning. See House Report at 53, reprinted in 1976 U.S.C.C.A.N. 5666-67.

53 A phonorecord generally embodies two works -- a musical work or, in the case of spoken word recordings, a literary work, and a sound recording. Musical works available through services on the NII may also be the subject of Musical Instrument Digital Interface ("MIDI") recordings. A MIDI is a data stream between a musical unit in a computer and a music-producing instrument. The data stream instructs the instrument, such as a synthesizer, on what notes to play.

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DRAMATIC WORKS

Generally, a dramatic work is one in which a series of events is presented to the audience by characters through dialogue and action as the events happen, such as in a play.⁵⁴

PANTOMIMES AND CHOREOGRAPHIC WORKS

This category was first added to the list of protectible subject matter in 1976.⁵⁵ While these works can be fixed in a series of drawings or notations, they are usually fixed on film or videotape.

PICTORIAL, GRAPHIC AND SCULPTURAL WORKS

Pictorial and graphic works will be a major component of the works traveling through the NII. Works in this category include:

[T]wo-dimensional and three-dimensional works of fine, graphic, and applied art, photographs, prints and art reproductions, maps, globes, charts, diagrams, models, and technical drawings, including architectural plans.⁵⁶

MOTION PICTURES AND OTHER AUDIOVISUAL WORKS

The Copyright Act provides definitions of "audiovisual works," as well as the subcategory of "motion pictures."

"Audiovisual works" are works that consist of a series of related images which are intrinsically intended to be

54 See H. Abrams, The Law of Copyright § 204[C][3][b][iv] (1993). The term "dramatic works" is not defined in the Act. See House Report at 53, reprinted in 1976 U.S.C.C.A.N. 5666-67.

55 Congress also declined to define the terms "pantomimes" and "choreographic works," again relying on "fairly settled meanings." See House Report at 53, reprinted in 1976 U.S.C.C.A.N. 5666-67.

56 17 U.S.C. § 101 (1988) (definition of "pictorial, graphic, and sculptural works").

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shown by the use of machines, or devices such as projectors, viewers, or electronic equipment, together with accompanying sounds, if any, regardless of the nature of the material objects, such as films or tapes, in which the works are embodied.⁵⁷

"Motion pictures" are audiovisual works consisting of a series of related images which, when shown in succession, impart an impression of motion, together with accompanying sounds, if any.⁵⁸

The House Report notes that the key to the subcategory "motion pictures" is the conveyance of the impression of motion, and that such an impression is not required to qualify as an audiovisual work.⁵⁹

ARCHITECTURAL WORKS

An "architectural work" is "the design of a building, as embodied in any tangible medium of expression, including a building, architectural plans, or drawings."⁶⁰ It includes the overall form, as well as the "arrangement and composite of spaces and elements" in the design of the building.⁶¹

57 17 U.S.C. § 101 (1988) (definition of "audiovisual works").

58 17 U.S.C. § 101 (1988) (definition of "motion pictures").

59 See House Report at 56, reprinted in 1976 U.S.C.C.A.N. 5669.

60 17 U.S.C. § 101 (Supp. V 1993) (definition of "architectural work"). The category of architectural works was added in 1990 by the Architectural Works Copyright Protection Act, Public Law 101-650, 1990 U.S.C.C.A.N. (104 Stat.) 5089, 5133.

61 Id.

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"MULTIMEDIA" WORKS

Increasingly, works falling into different categories are fixed in a single tangible medium of expression.⁶² This will certainly be true as development of the NII progresses and the ability to create and disseminate interactive so-called "multimedia" or "mixed media" products increases.

A prefatory note may be warranted because of the manner in which these terms are used in the context of copyright law. The terms "multimedia" and "mixed media" are, in fact, misnomers. In these works, it is the types or categories of works included that are "multiple" or "mixed" – not the medium. The very premise of a so-called "multimedia" work is that it combines several different elements or types of works (e.g., text (literary work), sound (sound recording), still images (pictorial works), and moving images (audiovisual work) into a single medium (e.g., a CD-ROM) – not multiple or mixed media.⁶³ However, in recognition of the prevalent use of the term, this Report will refer to this type of work as a "multimedia" work.

Multimedia works are not treated as a separate category under the Copyright Act; nor are they explicitly included in any of the eight enumerated categories. While most current multimedia works would be considered compilations,⁶⁴ that classification does not resolve the issue of subject matter categorization for multimedia works.⁶⁵

62 The embodiment of two or more different types of works in one medium is not a new concept. For instance, a book may contain both a literary work and pictorial works. A compact disc may contain a musical work, a sound recording and a computer program.

63 A true "multimedia" work would be one in which several material objects, such as a book, a videocassette and an audiocassette, are bundled into one product.

64 See discussion of compilations infra pp. 26-27.

65 While expressly protected under the Copyright Act, the category of "compilations" is not a particularly useful subject matter category. Works in any of the eight enumerated categories of protectible subject matter outlined

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Despite the fact that the Copyright Act enumerates eight categories of works, works that do not fit into any of the categories may, nevertheless, be protected. The list of protectible works in Section 102 is intended to be illustrative rather than exclusive. The House Report explains that the categories of works "do not necessarily exhaust the scope of 'original works of authorship' that the [Act] is intended to protect."⁶⁶ However, absent the addition of a new category, a work that does not fit into one of the enumerated categories is, in a sense, in copyright no-man's land.⁶⁷

Categorization of works generally, and specifically, proper categorization, holds a great deal of significance under the Copyright Act. For instance, two of the exclusive rights granted in Section 106 apply only to certain categories of works.⁶⁸ In addition, many of the

above may take the form of a compilation; and a compilation may fit into one or more of the subject matter categories.

66 House Report at 53, reprinted in 1976 U.S.C.C.A.N. 5666. Indeed, Congress amended the Copyright Act in 1990 to add "architectural works" as a category of protectible works. See supra note 60.

67 It should be noted that the Copyright Office classifies works into four broad categories for purposes of registration: nondramatic literary works, works of performing arts, works of visual arts, and sound recordings. See 37 C.F.R. § 202.3(b)(i)-(iv). The Copyright Office notes that in cases "where a work contains elements of authorship in which copyright is claimed which fall into two or more classes, the application should be submitted in the class most appropriate to the type of authorship that predominates in the work as a whole." See 37 C.F.R. § 202.3(b)(2). However, the Copyright Act makes clear that the Copyright Office classification of works for purposes of registration "has no significance with respect to the subject matter of copyright or the exclusive rights provided." See 17 U.S.C. § 408(c)(1) (1988); see also House Report at 153, reprinted in 1976 U.S.C.C.A.N. 5769 ("It is important that the statutory provisions setting forth the subject matter of copyright be kept entirely separate from any classification of copyrightable works for practical administrative purposes.").

68 See 17 U.S.C. § 106(4),(5) (1988). The public performance right is limited to literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works. The public display right is limited to literary, musical, dramatic, and choreographic works, pantomimes,

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limitations on rights in Sections 108 through 120 are not applicable to all types of works.⁶⁹ Therefore, categorization of multimedia works may be an important issue.

Generally, multimedia works include two or more of the following preexisting elements: text (literary works), computer programs (literary works), music (sound recordings), still images (pictorial and graphic works) and moving images (audiovisual works). The definition of "literary works" begins with "works, other than audiovisual works,"⁷⁰ Therefore, a reasonable interpretation is that text and computer programs that would otherwise be categorized as literary works may be considered part of an audiovisual work if included in a work of that type. Such is also the case with sound recordings. A music video is not categorized as both a sound recording and an audiovisual work; it is categorized as an audiovisual work.⁷¹ Thus, in the case of literary works and sound

and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work. Id.

69 See, e.g., 17 U.S.C. § 108(h) (1988) (limitation not applicable to musical works, pictorial, graphic or sculptural works, or motion pictures or other audiovisual works other than audiovisual works dealing with news); 17 U.S.C. § 109(b) (Supp. V 1993) (certain limitations not applicable to sound recordings or computer programs); 17 U.S.C. § 110(4) (1988) (limitation applicable only to nondramatic literary or musical works); 17 U.S.C. § 110(8) (1988) (limitation applicable only to nondramatic literary works); 17 U.S.C. § 110(9) (1988) (limitation applicable only to dramatic literary works); 17 U.S.C. § 112(a) (1988) (limitation not applicable to motion pictures or other audiovisual works); 17 U.S.C. § 113 (1988 & Supp. V 1993) (limitation applicable only to pictorial, graphic, or sculptural works); 17 U.S.C. § 114 (1988) (limitation applicable only to sound recordings); 17 U.S.C. § 115 (1988) (limitation applicable only to nondramatic musical works); and 17 U.S.C. § 120 (Supp. V 1993) (limitation applicable only to architectural works).

70 See 17 U.S.C. § 101 (1988) (definition of "literary works") (emphasis added).

71 The definition of "sound recordings" explicitly excludes from the category of sound recordings musical, spoken or other sounds "accompanying a motion picture or other audiovisual work" See 17 U.S.C. § 101 (1988) (definition of "sound recordings"). The definition of "audiovisual works" also

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recordings, the categorization of "audiovisual work" appears to "trump" the others. Audiovisual works also include still images – at least related ones.⁷² Therefore, generally, multimedia works would likely be audiovisual works.

The somewhat strained analysis needed to find a category for multimedia works and the increasing "cross-breeding" of types of works demonstrate that categorization may no longer be useful. Its necessity is also questionable, except, perhaps, in the case of sound recordings, which are not granted the full panoply of rights.⁷³ Consideration may be given in the future to eliminating categorization under the Copyright Act.

COMPILATIONS AND DERIVATIVE WORKS

A "compilation" is "a work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship."⁷⁴ Directories, magazines and anthologies are types of compilations. A "derivative work" is a work "based upon" one or more existing works.⁷⁵ A derivative work is created when one or more existing works is "recast, transformed, or adapted" into a new work, such as when a

expressly includes any "accompanying sounds." See 17 U.S.C. § 101 (1988) (definition of "audiovisual works").

72 Audiovisual works are "works that consist of a series of related images which are intrinsically intended to be shown by the use of machines, or devices such as projectors, viewers, or electronic equipment" 17 U.S.C. § 101 (1988) (definition of "audiovisual works").

73 See discussion *infra* note 120 and accompanying text.

74 17 U.S.C. § 101 (1988) (definition of "compilation"). A "collective work," which is one kind of "compilation," is "a work, such as a periodical issue, anthology, or encyclopedia, in which a number of contributions, constituting separate and independent works in themselves, are assembled into a collective whole." 17 U.S.C. § 101 (1988) (definition of "collective work").

75 17 U.S.C. § 101 (1988) (definition of "derivative work").

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novel is used as the basis of a movie or when a drawing is made into a sculpture.⁷⁶ Translations, musical arrangements and abridgments are types of derivative works.

The Copyright Act makes clear that the subject matter of copyright specified in Section 102 (literary works, musical works, sound recordings, etc.) includes compilations and derivative works.⁷⁷ The copyright in a compilation or derivative work, however, extends only to the contribution of the author of the derivative work or compilation (the compiler), and does not affect the copyright protection granted the preexisting material.⁷⁸ The copyright protection for an individual musical work, for instance, is not reduced or enlarged, shortened or extended if the work is included in a compilation, such as a medley of songs. Copyright in a compilation or derivative work does not imply any exclusive right in the preexisting material employed in the compilation or derivative work.⁷⁹

2. COPYRIGHT OWNERSHIP

Copyright ownership in a work initially vests in the author of the work.⁸⁰ If the work is a "joint work" with two or more authors, those authors are co-owners of the copyright in the work.⁸¹

76 See id.

77 See 17 U.S.C. § 103(a) (1988).

78 17 U.S.C. § 103(b) (1988).

79 Id.

80 17 U.S.C. § 201(a) (1988).

81 Id. A "joint work" is a work "prepared by two or more authors with the intention that their contributions be merged into inseparable or interdependent parts of a unitary whole." 17 U.S.C. § 101 (1988) (definition of "joint work").

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Under certain circumstances, the copyright in a work is not granted to the actual preparer of the work. In the case of "works made for hire," the employer of the preparer, or the person for whom the work was prepared, is considered the "author" for purposes of the Copyright Act.⁸² There are two types of works made for hire – those prepared by an employee and those prepared by an independent contractor under special order or commission. The copyright in a work prepared by an employee within the scope of employment vests in the employer, and the employer is the author.⁸³ The copyright in a work specially ordered or commissioned vests in the person for whom the work was prepared if the work falls into one of nine specified categories and if the parties expressly agree in writing that the work will be considered a work made for hire.⁸⁴

82 See 17 U.S.C. § 201(b) (1988). This legal conclusion may only be altered by the parties in a written instrument signed by them expressly agreeing otherwise. *Id.*

83 The Copyright Act does not define "employee." In 1989, the Supreme Court held that an employment relationship determination for copyright purposes should be made by reference to the "general common law of agency." See Community for Creative Non-Violence v. Reid, 490 U.S. 730, 740-41 (1989). The central question in an agency law inquiry is whether the hiring party has the "right to control the matter and means by which the product is accomplished." *Id.* at 751. The factors to be considered include the skill required, the source of the instrumentalities and tools used in creating the work, where the work was created, the duration of the relationship between the parties, whether the hiring party has the right to assign additional projects to the hired party, the method of payment, the extent of the hired party's discretion over when and how long to work, the hired party's role in hiring and paying assistants, whether the hiring party is in business and whether the work is part of the regular business of the hiring party, the provision of employee benefits, and the tax treatment of the hired party. *Id.* at 751-52. The Court did not specify any factors that should be weighed more heavily than others, but made clear that an "employee" under the Copyright Act is not limited to a formal, salaried employee.

84 To qualify as a work made for hire under the second prong, the work must be specially ordered or commissioned for use as (1) a contribution to a collective work; (2) part of an audiovisual work; (3) a translation; (4) a supplementary work; (5) a compilation; (6) an instructional text; (7) a test; (8) answer material for a test; or (9) an atlas. 17 U.S.C. § 101 (1988) (definition of "work made for hire").

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Copyright ownership, or ownership of any of the exclusive rights (or subdivision thereof), may be transferred to one or more persons, but the transfer must be made in writing and signed by the owner of the right(s).⁸⁵

Copyright ownership entitles the copyright owner to:

- (1) exercise the exclusive rights granted under Section 106;
 - (2) authorize others to exercise any of those exclusive rights;
- and
- (3) prevent others from exercising any of those exclusive rights (or receive damages for the unauthorized exercise of the rights).

An important distinction to understand is the difference between ownership of a copyright in a work and ownership of a copy of a work. Ownership of a material object in which a copyrighted work is fixed (e.g., a book, CD or videocassette) carries with it no interest in the copyright.⁸⁶

Ownership of a copyright, or any of the exclusive rights under a copyright, is distinct from ownership of any material object in which the work is embodied. Transfer of ownership of any material object, including the copy or phonorecord in which the work is first fixed, does not of itself convey any rights in the copyrighted work embodied in the object; nor, in the absence of an agreement, does transfer of ownership of a copyright or

85 17 U.S.C. § 204(a) (1988). An exclusive license is considered a transfer of copyright, and therefore must be in writing. Although an exclusive license may be limited in time or place or scope, it nevertheless extends the benefits of copyright ownership with respect to the rights granted to the licensee for the duration of the license. The rights of a copyright owner may also be licensed on a nonexclusive basis to one or more licensees. The Copyright Act does not require nonexclusive licenses to be in writing.

86 See 17 U.S.C. § 202 (1988).

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of any exclusive rights under a copyright convey property rights in any material object.⁸⁷

Ownership, possession or any other attachment to or relationship with a copy of a copyrighted work (including obtaining access to it through a computer network or other service) does not entitle one to exercise any of the exclusive rights of the copyright owner (e.g., to reproduce it or distribute it).

a. TRANSFER OF OWNERSHIP

A copyright in a work is divisible; the exclusive rights of a copyright owner may be transferred in whole or in part.⁸⁸ A transfer of copyright ownership may occur through an assignment, exclusive license, mortgage, "or any other conveyance, alienation, or hypothecation" of a copyright or any of the exclusive rights.⁸⁹ A transfer of copyright ownership may be limited in time or in place, but it must be an exclusive transfer of whatever right or rights are involved (i.e., nonexclusive licenses are not considered transfers of ownership).⁹⁰ Any of the exclusive rights in the work⁹¹ may be

87 Id.

88 See 17 U.S.C. § 201(d)(1) (1988) ("The ownership of a copyright may be transferred in whole or in part by any means of conveyance or by operation of law, and may be bequeathed by will or pass as personal property by the applicable laws of intestate succession.").

89 17 U.S.C. § 101 (1988) (definition of "transfer of copyright ownership"). With the exception of transfers by operation of law, all transfers of copyright ownership must be in writing. 17 U.S.C. § 204(a) (1988) ("A transfer of copyright ownership, other than by operation of law, is not valid unless an instrument of conveyance, or a note or memorandum of the transfer, is in writing and signed by the owner of the rights conveyed or such owner's duly authorized agent.").

90 See 17 U.S.C. § 204(a) (1988).

91 See discussion of the exclusive rights of a copyright owner *infra* pp. 33-43.

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separately transferred and owned, and the owner of a particular right is considered the "copyright owner" with respect to that right.⁹²

In the case of any copyrighted work other than a "work made for hire," all transfers of copyright ownership (as well as all nonexclusive licenses) executed by the author of the work may be terminated after 35 years.⁹³ This right to terminate, intended to protect authors, cannot be waived by contract or other agreement.⁹⁴ However, termination is not automatic; an author must assert his or her termination rights and comply with certain statutory requirements to regain copyright ownership.⁹⁵

b. LICENSING

The exclusive rights of a copyright owner may be licensed on an exclusive basis (i.e., copyright ownership in one or more rights is transferred by the copyright owner) or on a nonexclusive basis (i.e., the copyright owner retains ownership of the copyright and may grant similar licenses to others). A nonexclusive licensee is not a copyright owner and therefore does not have standing to sue for any infringement by others.⁹⁶ Unlike exclusive licenses, nonexclusive

92 See 17 U.S.C. § 201(d)(2) (1988); 17 U.S.C. § 101 (1988) (definition of "copyright owner").

93 See 17 U.S.C. § 203(a) (1988). See also 17 U.S.C. § 304(c) (1988 & Supp. V 1993).

94 17 U.S.C. § 203(a)(5) (1988) ("Termination of the grant may be effected notwithstanding any agreement to the contrary, including an agreement to make a will or to make any future grant.").

95 See 17 U.S.C. § 203(a) (1988).

96 See 17 U.S.C. § 501(b) (1988) ("The legal or beneficial owner of an exclusive right under a copyright is entitled . . . to institute an action for any infringement of that particular right committed while he or she is the owner of it."). In certain circumstances, television broadcast stations and others are treated as legal or beneficial owners and may bring actions for infringement by cable systems and satellite carriers. See 17 U.S.C. § 501(c), (d), (e) (1988).

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licenses need not be in writing.⁹⁷ Licensing issues are, and will continue to be, significant in the context of the development of the NII.

Services on the NII will provide the opportunity for new uses for copyrighted works. If rights with respect to these new uses are not expressly granted or retained in license agreements, conflicts will arise between copyright owners and licensees. For instance, public display on a bulletin board system may not have been contemplated in licenses granting the public display right that were executed in the 1970s. Failure to contemplate possible future developments, of course, is not a new problem, and is one based primarily in contract, rather than copyright law. Whenever new technologies have produced new uses for works, courts have been called upon to decide whether the new use is covered by the old license.⁹⁸

A variety of licensing methods will continue to be possible as the NII develops. For instance, rights in copyrighted works offered via the NII may be licensed off-line or on-line. They may be licensed directly (through individual transactions between the rightsholder and the licensee) or through other licensing arrangements, such as voluntary collective licensing. Licensing of rights may be on a per-use, per-work or other basis.

97 However, like exclusive licenses, nonexclusive licenses are subject to termination after 35 years. See 17 U.S.C. §§ 203(a) (1988), 304(c) (1988 & Supp. V 1993).

98 See, e.g., Harper Bros. v. Klaw, 232 F. 609 (S.D.N.Y. 1916) (license to dramatize "Ben Hur" in a play did not include right to produce a movie, but licensor enjoined from producing movie because licensee's right to produce a play would be harmed by licensor's production of a movie); L.C. Page & Co. v. Fox Film Corp., 83 F.2d 196 (2d Cir. 1936) (grant of exclusive "moving picture" rights embraced technical improvements in movies that might be developed during the term of the license, thus license held to cover "talkies"); Bartsch v. Metro-Goldwyn-Mayer, Inc., 391 F.2d 150 (2d Cir.), cert. denied, 393 U.S. 826 (1968) (1930 license of film rights in a play, when television was a known technology but its full impact not yet realized, included television rights; as experienced businessman, licensor had reason to know of new technology's potential and had burden of negotiating exception).

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The licensing of rights for the creation of multimedia works -- whose creators may wish to include dozens of preexisting works (or portions thereof) -- can be difficult. Because registration and copyright notices are not required for copyrighted works, identification of copyright owners alone can be complicated. The relative newness of the multimedia industry results in an uncertainty on the part of copyright owners and multimedia creators with regard to appropriate terms and conditions for such uses.

3. TERM OF PROTECTION

Generally, a copyrighted work is protected for the length of the author's life plus another 50 years.⁹⁹ In the case of joint works, copyright protection is granted for the length of the life of the last surviving joint author plus another 50 years.¹⁰⁰ Works made for hire, as well as anonymous and pseudonymous works, are protected for a term of either 75 years from the year of first publication or 100 years from the year of creation, whichever is shorter.¹⁰¹ When the term of protection for a copyrighted work expires, the work is said to "fall into the public domain."

4. EXCLUSIVE RIGHTS

The Copyright Act grants to the copyright owner of a work a bundle of exclusive rights:

- (1) to reproduce the copyrighted work in copies or phonorecords;

⁹⁹ See 17 U.S.C. § 302(a) (1988). The terms of protection for works created before January 1, 1978 (the effective date of the 1976 revisions to the Copyright Act) are set forth in Sections 303 and 304 of the Act. See 17 U.S.C. §§ 303, 304 (1988 & Supp. V 1993).

¹⁰⁰ 17 U.S.C. § 302(b) (1988).

¹⁰¹ 17 U.S.C. § 302(c) (1988). The term for anonymous or pseudonymous works differs if the identity of one or more of the authors is revealed before the end of the term of protection. See *id.*

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- (2) to prepare derivative works based upon the copyrighted work;
- (3) 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;
- (4) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly; and
- (5) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work, to display the copyrighted work publicly.¹⁰²

These rights, in most instances, have been well elaborated by Congress and the courts. For the most part, the provisions of the current copyright law can serve the needs of creators, owners, distributors and users of copyrighted works in the NII environment. In certain instances, small changes in the law may be necessary to optimize the intellectual property component of the NII.

a. THE RIGHT TO REPRODUCE THE WORK

This fundamental right -- to reproduce copyrighted works in copies and phonorecords¹⁰³ -- appears likely to be implicated in myriad NII transactions. Indeed, because of the nature of computer-to-computer communications, it appears to be a right that will be implicated in most NII transactions. For example, when a computer

102 17 U.S.C. § 106 (1988 & Supp. V 1993). Section 106(A) grants additional rights for certain works of visual art in single copies or limited editions. The development of the NII does not raise unique issues with respect to those rights. See 17 U.S.C. § 106(A) (Supp. V 1993).

103 See definitions of "copies" and "phonorecords" *supra* pp. 11-12.

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user simply "browses" a document resident on another computer, the image on the user's screen exists -- under contemporary technology -- only by virtue of the copy that has been reproduced in the user's computer memory. It has long been clear under U.S. law that, as discussed above, the placement of a work into a computer's memory amounts to a reproduction of that work (because the work may be, in the law's terms, "perceived, reproduced, or . . . communicated . . . with the aid of a machine or device").

In each of the instances set out immediately below, one or more copies¹⁰⁴ is made, and, necessarily, in the absence of a proof of fair use or other relevant defense,¹⁰⁵ unauthorized activities of these types will be infringing.¹⁰⁶

- When a work is placed into a computer, whether on a disk, diskette, ROM, or other storage device or in RAM for more than a very brief period, a reproduction has occurred and a copy has been made.

104 This Report uses the term "copy" or "copies" to refer to copies and phonorecords except in those instances where the distinction is relevant.

105 One of the important aspects of defining a transaction as a "reproduction" rather than something else is that the potentially relevant exceptions to the reproduction right are substantially fewer in number than those that apply to certain other rights, particularly "distribution" and "public performance." A detailed discussion of fair use and other statutory exemptions appears in later sections of this Report.

106 In some instances, the locus of the infringement and/or the identification of the infringing party or parties may require analysis not required with respect to "traditional" infringements, but this would not appear to be a sufficient reason to reject the application of "reproduction" analysis (coupled, where appropriate, with creative examination of locus/party issues, and, perhaps, clarification of the "contributory infringement" doctrine. Contributory liability for copyright infringement may be imposed on persons not themselves performing the proscribed acts, but either deriving direct benefits from them or providing equipment or materials that may only be used in furtherance of an infringement. See discussion of contributory infringement and vicarious liability infra pp. 72-80.

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- When a printed work is "scanned" into a digital file, a reproduction has occurred and a copy – the digital file itself – has been made.
- When other works – including photographs, motion pictures, or sound recordings – are digitized, copies have been made.
- Whenever a digitized file is "uploaded" from a user's computer to a bulletin board system or other server, a reproduction has occurred and a copy has been made.
- Whenever a digitized file is "downloaded" from a BBS or other server, a reproduction has occurred and a copy has been made.
- When a file is transferred from one computer network user to another, reproductions occur and multiple copies have been made.¹⁰⁷
- Under current technology, when a user's computer is being used as a "dumb" terminal to "look at" a file resident on another computer (such as a BBS or Internet host), a reproduction occurs and a copy of the portion viewed is made in the user's computer. (Without such copying into the RAM or buffer of the user's computer, no screen display would be possible). As long as the amount viewed is more than de minimis, it is an infringement unless authorized or specifically exempt.

b. THE RIGHT TO PREPARE DERIVATIVE WORKS

The copyright law grants copyright owners the right to control the abridgment, adaptation, translation, revision and other "transformations" of their works.¹⁰⁸ A user who modifies -- by

¹⁰⁷ For example, if a PTO employee transfers a file (such as a hearing announcement) to another person with an Internet account, copies will typically, at a minimum, be made (a) in the PTO's Internet server, (b) in the recipient's Internet server, and (c) in the recipient's microcomputer.

¹⁰⁸ See 17 U.S.C. § 106(2) (1988). "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

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annotating, editing, translating or otherwise significantly changing – the contents of a downloaded file has created a derivative work. (Although the law does not provide an exemption for the purely private creation of derivative works for personal use, such acts are largely undetectable by the law unless and until the derivative work is reproduced, distributed, publicly performed or publicly displayed).

c. THE RIGHT TO DISTRIBUTE COPIES

Before addressing issues raised by the distribution right in the context of the NII, it is necessary to understand its application and shortcomings with respect to conventional modes of exploitation and infringement.

The right to distribute copies of works is substantially circumscribed by the "first sale" doctrine set out in Section 109(a):

Notwithstanding the provisions of section 106(3), 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.¹⁰⁹

This doctrine limits copyright owners' rights by making only the initial distribution of a particular copy of a copyrighted work subject to their control.

The first sale doctrine's importance in the NII context should not be underestimated: if a transaction by which a user obtains a "copy" of a work is characterized as a "distribution," then, under the current law, the user may be entitled to make a like distribution

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. § 101 (1988) (definition of "derivative work").

109 17 U.S.C. § 109(a) (1988).

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without the copyright owner's permission (and without liability for infringement).¹¹⁰ This may demonstrate the unintended consequence of characterizing many electronic disseminations as "distributions." Indeed, the system encompassed by Sections 106(3) and 109(a) appears to "fit" only "conventional" transactions in which possessory interests in tangible copies are conveyed in the first instance, for example, from publisher to wholesaler (exclusive distribution right applies) and thereafter from wholesaler to retailer (first sale doctrine denies publisher any control), from retailer to user (first sale doctrine denies publisher any control), and from user to user (first sale doctrine denies publisher any control). Electronic disseminations, by contrast, typically involve the proliferation of copies, with the "publisher" retaining its copy and the user acquiring a new one. This suggests that, under the current law, the reproduction right, rather than the distribution right, may be both more logically applicable and more legally appropriate (by virtue of its more limited exceptions).¹¹¹

110 "Conventional" analysis would entitle the user to dispose of his copy by conventional means, such as giving it or selling it to a third party, so that the user had no copy at the end of the transaction. If, however, one characterizes as a "distribution" the transaction that begins with a digitized copy in a host's computer, and concludes with a digitized copy in the host's computer and a digitized copy in the user's computer, then the user would appear privileged to serve as a host for another user under the umbrella of the first sale doctrine.

111 Furthermore, with respect to international distributions, Section 602 of the law makes unauthorized importations a violation of the distribution right. However, it also contains three exceptions to the right and courts are divided as to whether the first sale doctrine limits the ability of copyright owners to enforce the importation right as it does the domestic distribution right. See 17 U.S.C. § 602(a) (1988) (subsection does not apply to "(1) importation of copies or phonorecords under the authority or for the use of the Government of the United States or of any State or political subdivision of a State, but not including copies or phonorecords for use in schools, or copies of any audiovisual work imported for purposes other than archival use; (2) importation, for the private use of the importer and not for distribution, by any person with respect to no more than one copy or phonorecord of any one work at any one time, or by any person arriving from outside the United States with respect to copies or phonorecords forming part of such person's personal baggage; or (3) importation by or for an organization operated for scholarly, educational, or religious purposes and not for private gain, with respect to no

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One court decision has construed the unauthorized downloading of digitized photographic images by BBS subscribers as "implicating" the distribution right.¹¹² The court's discussion in Playboy Enterprises Inc. v. Frena¹¹³ reflects some uncertainty over the meaning and scope of the various rights provided in Section 106:

Public distribution of a copyrighted work is a right reserved to the copyright owner, and usurpation of that right constitutes infringement [Playboy Enterprise's] right under 17 U.S.C. §106 to distribute copies to the public has been implicated by Defendant Frena [a Bulletin Board Service operator]. Section 106(3) grants the copyright owner "the exclusive right to sell, give away, rent or lend any material embodiment of his work." 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 it did not make the copies itself.¹¹⁴

The court appears to have glossed over the reproduction right, apparently because of its uncertainty whether the operator of the bulletin board system could be held to have reproduced a work that was (a) uploaded by one subscriber and (b) downloaded by another. (As discussed below, the BBS operator publicly displayed the works

more than one copy of an audiovisual work solely for its archival purposes, and no more than five copies or phonorecords of any other work for its library lending or archival purposes, unless the importation of such copies or phonorecords is part of an activity consisting of systematic reproduction or distribution, engaged in by such organization in violation of the provisions of section 108(g)(2)"); compare BMG Music v. Perez, 952 F.2d 318 (9th Cir. 1991) (first sale doctrine does not apply to importation rights under Section 602) with Sebastian Int'l. Inc. v. Consumer Contacts (PTY) Ltd., 847 F.2d 1093 (3d Cir. 1988) (contra).

112 The court elsewhere in its opinion uses "implicate" to mean "infringe."

113 839 F. Supp. 1552 (M.D. Fla. 1993).

114 Id. at 1556.

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by the same conduct, and was found liable by the court for infringing the display right.)

Whether the litigants in Playboy put the issue properly in dispute or not, the right to distribute copies of a work has traditionally covered the right to convey a possessory interest in a tangible copy of the work. Indeed, the first sale doctrine implements the common law's abhorrence of restraints on alienation of property by providing that the distribution right does not generally prevent owners of lawfully made copies from alienating them in a manner of their own choosing.¹¹⁵ It is clear that a Frena subscriber, at the end of a transaction, possessed a copy of a Playboy photograph, but it is rather less clear whether, under the current law, Frena "distributed" that photograph or the subscriber "reproduced" it (and, if the latter, whether current law clearly would have made Frena contributorily liable for the unauthorized reproduction.)¹¹⁶

In a similar case, Sega Enterprise Ltd. v. MAPHIA,¹¹⁷ a court, on a motion for a preliminary injunction, made findings of fact regarding the use of a bulletin board to "make and distribute" copies of copyrighted video games, the "unauthorized copying and distribution" of the games on the bulletin board, and the profits made by the defendant from the "distribution" of the games on the

115 Owners of copyrights in computer programs and sound recordings have the right to control post-first-sale rentals of copies of their works; owners of copyrights in works fixed in other media do not. See 17 U.S.C. § 109 (1988 & Supp. V 1993). This inconsistency may be important in the NII context, particularly with respect to "multimedia works" that are not expressly or self-evidently in any particular category of copyrighted work (and whose treatment under various exemptions and special provisions may be unclear). See discussion of multimedia works supra pp. 22-26.

116 See discussion of contributory infringement and vicarious liability infra pp. 72-80.

117 No. C 93-4262 CW, 1994 U.S. Dist. LEXIS 5266 (N.D. Cal. Mar. 28, 1994).

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bulletin board.¹¹⁸ The court's conclusions of law, however, did not specify infringement of the distribution right.¹¹⁹

d. THE RIGHT TO PERFORM THE WORK PUBLICLY

The public performance right is available to all types of "performable" works – literary, musical, dramatic, and choreographic works, pantomimes, motion pictures, and other audiovisual works – with the exception of sound recordings.¹²⁰ While some have urged that many NII transactions be characterized as "performances," it is important to understand:

- the definition of "perform" in the copyright law,¹²¹
- that only "public" performances are covered by the copyright law,¹²² and

118 Id. at *8-9.

119 The court stated that Sega had established that "unauthorized copies" of its games are "made" when they are uploaded to the bulletin board and when they are downloaded. Id. at *17.

120 See 17 U.S.C. § 106(4) (1988).

121 "To '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." 17 U.S.C. § 101 (1988) (definition of "perform").

122 To perform or display a work "publicly" means –
(1) to perform or display 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 or display 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.

17 U.S.C. § 101 (1988) (definition of "publicly").

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- the limitations set out in the statute that render the performance right ineffective in a variety of circumstances (mostly of a nonprofit nature).¹²³

A distinction must be made – as the law does – between transmissions of copies of works, transmissions of performances of works, and performances of works in the NII context. When a copy of a work is transmitted over wires or satellite signals in digital form so that it may be captured in a user's computer, without being "rendered" or "shown," it has rather clearly not been performed. Thus, for example, a file comprising the digitized version of a motion picture might be transferred via the Internet with the reproduction and distribution right being implicated. When, however, the motion picture is literally "rendered" – by showing its images in sequence – so that users with the requisite hardware and software might watch it with or without copying the performance, then a "performance" has occurred.

The "public" nature of a performance – which brings it within the scope of copyright – is sufficiently broadly defined to apply to multiple individual viewers who may watch a work being performed in a variety of locations at several different times. Courts have repeatedly imposed performance liability upon entities that, for example, develop novel modes of delivering motion picture performances to customers (and novel legal arguments as to why their performances are not "public.")¹²⁴

¹²³ See 17 U.S.C. § 110 (1988).

¹²⁴ See, e.g., Columbia Pictures Indus. v. Redd Horne, Inc., 749 F.2d 154 (3d Cir. 1984) (video store operator liable for public performance violation where he rented tapes to customers and provided semi-private screening rooms where the tapes could be viewed); Columbia Pictures Indus. v. Aveco, Inc., 800 F.2d 59 (3d Cir. 1986) (same result where customers also rented rooms for viewing); and On Command Video Corp. v. Columbia Pictures Indus., 777 F. Supp. 787 (N.D. Cal. 1991) (infringement found where hotel guests in rooms selected tapes to be played on remote control console in hotel basement with signal then sent to rooms).

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e. THE RIGHT TO DISPLAY THE WORK PUBLICLY

The right to display a work publicly is extremely significant in the context of the NII. The analyses that attend the determination of whether a particular transmission might amount to a "distribution" or a "performance" are rarely necessary. To display a work means to "show a copy of it, either directly or by means of a . . . television image, or any other device or process" ¹²⁵ The definition of "display" clearly encompasses the behavior of, for instance, the defendant in the Playboy case. ¹²⁶ Thus, when any NII user visually "browses" through copies of works in any medium (but not through a list of titles or other "menus" that are not copies of the works) ¹²⁷ a public display occurs. A display is "public" on the same terms as a "performance"; therefore, virtually all NII uses would appear to fall within the law's current comprehension of "public display."

4. LIMITATIONS ON THE EXCLUSIVE RIGHTS

The exclusive rights of copyright owners are not without exception. The Copyright Act specifies certain violations of copyright owners' exclusive rights that the copyright owner cannot prevent. ¹²⁸

¹²⁵ 17 U.S.C. § 101 (1988 & Supp. V 1993) (definition of "display").

¹²⁶ See discussion of Playboy case supra pp. 39-40.

¹²⁷ Of course, to the extent that such lists or menus are protectible under the Copyright Act, the authors of such lists would have the exclusive right to publicly display them.

¹²⁸ Although sometimes referred to as "rights" of the users of copyrighted works, "fair use" and other exemptions from copyright infringement are actually limitations on the rights of the copyright owners. Users are not granted any affirmative "rights" under the Copyright Act; rather, copyright owners' rights are limited by the provision of certain exemptions from user liability. It has been argued, however, that the Copyright Act would be unconstitutional if such limitations did not exist, as they alleviate First Amendment and other concerns.

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a. FAIR USE

The most significant, and perhaps murky, of the limitations on a copyright owner's exclusive rights is the doctrine of fair use.¹²⁹

Fair use is an affirmative defense¹³⁰ to any action for copyright infringement. It is potentially available with respect to all unauthorized uses of works in all media. If it is proven, then the use may continue without any obligation on the user's part to seek the permission of the copyright owner, pay royalties, or the like. The doctrine of fair use is rooted in some 200 years of judicial decisions and is, in general, most likely to be found when a user incorporates some of a pre-existing work into a new work of authorship.¹³¹ It is thus widely accepted, for example, that quotation from a book or play by a reviewer, or the capturing of copyrighted music in a television news broadcast is fair use. As one moves away from such favored uses into the area of uses that are – for practical purposes – competitive with one another, the ease of analysis shrinks (as the number of litigated cases grows).

Before examining the doctrine developed by the courts, it is useful to examine the statutory language concerning fair use. Section 107 of the Copyright Act provides:

Notwithstanding the provisions of sections 106 and 106A, the fair use of a copyrighted work, including such use by

129 See 17 U.S.C. § 107 (1988 & Supp. V 1993). The judicially created doctrine, although now codified in the Copyright Act, has been described as "so flexible as virtually to defy definition." See Time Inc. v. Bernard Geis Assoc., 293 F. Supp. 130, 144 (S.D.N.Y. 1968).

130 As an affirmative defense, the burdens of persuasion and coming forward with evidence both must be carried by defendants in order to avoid liability, i.e., a copyright owner need not prove an accused use not fair, but a defendant must prove its fairness.

131 In the recent case of Campbell v. Acuff-Rose Music, Inc., 114 S. Ct. 1164 (1994), the Supreme Court expressly accepted the proposition that such "transformative" uses are more favored in fair use analyses than uses that amount to little more than verbatim copying.

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

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- (4) the effect of the use upon the potential market for or value of the copyrighted work.

The fact that a work is unpublished shall not itself bar a finding of fair use if such finding is made upon consideration of all the above factors.¹³²

The language may usefully be divided into two parts: the introduction, which is largely tautological: "fair use . . . is not an infringement of copyright," and the analysis required by the second sentence. The recitation of assorted uses in the middle of the first sentence has been held neither to create a presumption that such uses are fair¹³³ nor to prevent fair use analysis from being applied to other -- "unlisted" -- uses.

132 17 U.S.C. § 107 (1988 & Supp. V 1993).

133 Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 561 (1985).

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The core of Section 107 is the second sentence, in which Congress elaborates a test little different from that articulated by Justice Story more than a century ago.¹³⁴ It is clear that courts must evaluate all four factors in determining whether a particular use is fair, but may also take into account unenumerated "extra" factors, when appropriate.

THE PURPOSE AND CHARACTER OF THE USE

Although, as discussed below, the fourth factor has repeatedly been held to be the most important, the first factor often plays a major role in determining the result when a defendant asserts a fair use defense.

The first factor contrasts "commercial" uses with "nonprofit educational" uses. There is, of course, a continuum between these two opposites, with most uses not falling neatly into either the favored or disfavored pigeonhole. The weight of the factor may be inferred from the Supreme Court's very limited fair use jurisprudence: In the four fair use cases that it has decided, one noncommercial noneducational use was held fair,¹³⁵ two commercial

134 Justice Story stated that courts should "look to the nature and the objects of the selections made, the quantity and value of the material used, and the degree in which the use may prejudice the sale, or diminish the profits, or supersede the objects, of the original work." Folsom v. Marsh, 9 F. Cas. 342, 348 (C.C.D. Mass. 1841)(No. 4,901).

135 See Sony, *supra* note 6, at 456 (videotaping by individuals at home of off-the-air television broadcast programming for purpose of "time-shifting" -- as distinguished from "librarying" -- held fair use).

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uses were held unfair,¹³⁶ and one commercial use was held potentially fair.¹³⁷

In the Sony case, the Court announced a "presumption" that helps explain courts' near universal rejection of fair use claims in commercial contexts. It declared that all commercial uses were to be presumed unfair, thus placing a substantial burden on defendants asserting that a particular commercial use is fair. The Campbell case made clear that the Sony presumption was of greatest applicability in the context of verbatim copying, thus giving greater leeway to commercial but transformative uses.

Indeed, "mere reproductions" have fared very badly in court under the Copyright Act, even in actual and ostensible educational contexts. Courts have denied fair use, for example, to:

- a teacher's reproduction, in text materials, of the copyrighted material of another teacher,¹³⁸
- a school system's practice of taping educational broadcasts for later use in classrooms,¹³⁹ and

136 See Stewart v. Abend, 495 U.S. 207, 216 (1990) (theatrical and television distribution of motion picture over objection of owner of renewal term in underlying short story held infringing); Harper & Row, *supra* note 117, at 569 ("Nation" magazine's scoop of "Time" magazine's first serial rights in President Ford's memoirs held infringing, notwithstanding newsworthiness of the account of the Nixon pardon set out therein).

137 See Campbell, *supra* note 131, at 1177-79 (parodic lyrics of popular song not *per se* unfair by virtue of commercial purpose of parody; case remanded for further factual determination).

138 Marcus v. Rowley, 695 F.2d 1171 (9th Cir. 1983).

139 Encyclopaedia Britannica Educational Corp. v. Crooks, 558 F. Supp. 1247 (W.D.N.Y. 1983).

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- off-campus copy shops' manufacture – to teachers' specifications – and distribution of photocopies of anthologies containing portions of textbooks and periodicals.¹⁴⁰

Taken together, these cases indicate that, for the most part, educational fair use is limited to the type of copying expressly authorized in the "classroom guidelines," a part of the legislative history incorporating provisions to which copyright owners and educators agreed.¹⁴¹

THE NATURE OF THE COPYRIGHTED WORK

This factor tends to play a smaller role than the first in fair use litigation. Courts have held that it weighs in the copyright owner's favor when works of fiction¹⁴² and unpublished works¹⁴³ are copied,

140 Basic Books, Inc. v. Kinko's Graphics Corp., 758 F. Supp. 1522 (S.D.N.Y. 1991).

141 See House Report at 68-74, reprinted in 1976 U.S.C.C.A.N. 5681-88. The guidelines generally permit the copying, for classroom purposes, of short extracts of works, provided that the copying is spontaneously done or requested by the instructor (and the copies are neither used nor re-made repeatedly over time).

142 See Twin Peaks Prods., Inc. v. Publications Int'l. Ltd., 996 F.2d 1366, 1376 (2d Cir. 1993).

143 See New Era Publications Int'l. ApS v. Henry Holt & Co., 684 F. Supp. 808 (S.D.N.Y. 1988), cert. denied, 493 U.S. 1094 (1990). The 1992 amendment to Section 107, clarifying that the "fact that a work is unpublished shall not itself bar a finding of fair use if such finding is based upon consideration of all the above factors," was intended, however, to "overrule the overly restrictive language of Salinger [Salinger v. Random House, 811 F.2d 90 (2d Cir.), cert. denied, 484 U.S. 890 (1987)] and New Era with respect to the use of unpublished materials . . ." See S. Rep. No. 102-141, 102d Cong., 1st Sess., at 5. According to some members of Congress, those two cases "threatened to establish a virtual per se rule against the fair use of any published materials, such as letters or diaries." See 138 Cong. Rec. S17,358 (daily ed. Oct. 7, 1992) (Statement by Senators Simon, Leahy, Kennedy, Grassley, Metzenbaum, and Kohl).

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and in defendant's favor when factual works¹⁴⁴ and published works¹⁴⁵ are copied.

THE AMOUNT AND SUBSTANTIALITY OF THE PORTION USED

This is probably the least important factor, given that the taking of even a small amount of a work can lead to a finding of infringement, if it is considered the "heart" of the work.¹⁴⁶ Indeed, the most cited copyright treatise devotes only some four sentences to its discussion:

The third factor listed in § 107 is "the amount and substantiality of the portion used in relation to the copyrighted work as a whole." This raises an issue discussed in a preceding section [concerning the quantum of copying that constitutes infringement], and may be regarded as relating to the question of substantial similarity rather than whether the use is "fair." This includes a determination of not just quantitative, but also qualitative substantiality. In any event, whatever the use, generally it may not constitute a fair use if the entire work is reproduced.¹⁴⁷

THE EFFECT OF THE USE

Courts have repeatedly identified this as the most important of the four factors.¹⁴⁸ It is important to recall that it weighs against a defendant not only when a current market exists for a particular use,

144 See National Rifle Ass'n v. Handgun Control Fed'n, 15 F.3d 559, 562 (6th Cir. 1994).

145 See New Era Publications Int'l. ApS v. Carol Publishing Group, 904 F.2d 152, 157 (2d Cir. 1990).

146 See Harper & Row, *supra* note 133, at 569 (taking of some 300 words held infringing).

147 3 Melville B. & David Nimmer, Nimmer on Copyright § 13.05[A] (1993) (hereinafter Nimmer on Copyright).

148 See Stewart v. Abend, *supra* note 136, at 238.

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but also when a potential market could be exploited by the copyright owner. Harm in either market will, in most instances, render a use unfair.¹⁴⁹

The Supreme Court's decisions demonstrate the significant weight given this factor:

- In Sony, the absence of any market for home taping licenses, combined with the testimony of some copyright owners that they were indifferent to home copying, led the Court to conclude that there was no cognizable harm.¹⁵⁰
- In Harper & Row, the Court accepted the argument that the "scooping" of "Time" magazine's right to make the first serial publication of President Ford's memoirs, which caused cancellation of the magazine's contract with Harper & Row, caused harm to the copyright owner.¹⁵¹
- In Stewart, performances of the movie palpably harmed the economic interests of the owner of the copyright in the underlying short story.¹⁵²
- In Campbell, the Court – because the parody was "transformative" – rejected the court of appeals' determination that the commercial purpose of the parody required its creator to overcome Sony's presumption of market harm.¹⁵³

¹⁴⁹ See Salinger v. Random House, Inc., 811 F.2d 90, 99 (2d Cir.), cert. denied, 484 U.S. 890 (1987) (protecting potential market for author's letters notwithstanding his profound disinclination ever to publish them).

¹⁵⁰ See Sony *supra* note 6, at 443-47.

¹⁵¹ See Harper & Row *supra* note 133, at 562.

¹⁵² See Stewart *supra* note 136, at 238.

¹⁵³ See Campbell *supra* note 131, at 1173.

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It is reasonable to expect that courts would approach claims of fair use in the context of the NII just as they do in "traditional" environments. Commercial uses that involve no "transformation" by users will likely always be infringing, while nonprofit educational transformative uses will likely often be fair. Between these extremes, courts will have to engage in the same type of fact-intensive analysis that typifies fair use litigation and frustrates those who seek "bright lines" clearly separating the lawful from the infringing.¹⁵⁴

Two copyright cases decided to date concerning the unauthorized "uploading" and "downloading" of copyrighted materials held that such uses were not fair uses.¹⁵⁵ In the Playboy case, the court characterized the issue as whether "unrestricted and widespread conduct of the sort engaged in by the defendant bulletin board system operator (whether in fact engaged in by the defendant or others) would result in a substantially adverse impact on the potential market for or value of [Playboy's photographs],"¹⁵⁶ and determined that it would. This, in turn, led it to conclude that there was market harm, and, thus, infringement.

In the other case, Sega Enterprise Ltd. v. MAPHIA,¹⁵⁷ the court found that Sega established a prima facie case of direct and contributory infringement in the operation of the defendant's bulletin board system -- to which Sega's copyrighted video game programs were uploaded and downloaded.¹⁵⁸ In issuing a

¹⁵⁴ The inability of our common law system always to provide guidance covering every possible permutation of behavior is not necessarily a weakness. By permitting courts to reach decisions on a case-by-case basis, our system permits both necessary gap-filling and jurisprudential evolution without having to return to Congress for additional elaboration on a frequent basis.

¹⁵⁵ See supra notes 112-16 and accompanying text (discussing Playboy decision).

¹⁵⁶ Playboy, 839 F. Supp. at 1558.

¹⁵⁷ Supra note 117.

¹⁵⁸ Id. at *16-17.

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preliminary injunction, the court found that each of the four factors applied in this case weighed against a finding of fair use, but found that the fourth factor, in particular, weighed "heavily" against such a finding:

Based on Defendant's own statement that 45,000 bulletin boards like MAPHIA operate in this country, it is obvious that should the unauthorized copying of Sega's video games by Defendants and others become widespread, there would be a substantial and immeasurable adverse effect on the market for Sega's copyrighted video game programs.¹⁵⁹

Cases already decided in other contexts will give valuable guidance to courts confronted with NII-related cases. Just as courts have distinguished between home use of a VCR to make time-shifting tapes of materials broadcast over the air (fair use) and school systems' attempts to use VCRs to download broadcast instructional materials for the creation of an educational film library (not fair use), so too will users of copyrighted works available via the NII be subjected to like scrutiny. Educational uses that serve the same ends and are constrained in the same manner as the copying permitted under the Classroom Guidelines may be fair, while attempts to supplant the market for books, films, software and other materials by proliferating them without permission via the NII will likely be infringing.

Finally, it may be that technological means of tracking transactions and licensing will lead to reduced application and scope of fair use. Thus, one sees in American Geophysical Union v. Texaco Inc.,¹⁶⁰ a court establishing liability for the unauthorized photocopying of journal articles based in part on the court's perception that obtaining a license for the right to make photocopies via the Copyright Clearance Center was not unreasonably burdensome.

¹⁵⁹ *Id.* at *22.

¹⁶⁰ 802 F. Supp. 1 (S.D.N.Y. 1992).

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b. FIRST SALE DOCTRINE

A fundamental tenet of copyright law, and another limitation on the exclusive rights, is the "first sale doctrine," which prevents an owner of copyright in a work from controlling subsequent transfers of copies of that work. Once the copyright owner has transferred ownership of a particular copy (material object) embodying the work, the copyright owner's exclusive right to distribute copies of the work is "extinguished" with respect to that copy.¹⁶¹

Section 109(a) of the Copyright Act provides:

Notwithstanding the provisions of section 106(3) [which grants copyright owners the exclusive right to distribute copies or phonorecords of a work], 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.¹⁶²

This limitation on the copyright owner's distribution right allows wholesalers who buy books to distribute those copies to retailers and retailers to sell them to consumers and consumers to give them to friends and friends to sell them in garage sales and so on and so on -- all without the permission of (or payment to) the copyright owner of the work.¹⁶³ It does not allow the transmission of a work (through a computer network, for instance), because a transmission would necessarily also involve a reproduction of the

¹⁶¹ See T.B. Harms Co. v. Jem Records, Inc., 655 F. Supp. 1575, 1582 (D.N.J. 1987); Columbia Pictures Indus., Inc. v. Aveco, Inc., 612 F. Supp. 315, 319-20 (M.D. Pa. 1985), aff'd, 800 F.2d 59 (3d Cir. 1986).

¹⁶² 17 U.S.C. § 109(a) (1988).

¹⁶³ The reproduction right is not affected by the first sale doctrine; the owner of a particular copy of a copyrighted work may distribute it freely, but may not reproduce it.

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work (which would not be exempt under Section 109). Moreover, a transmission does not constitute a distribution of a copy under the current law.¹⁶⁴

The first sale doctrine allows the owner of a particular copy of a work to "dispose" of possession of that copy in any way – for example, by selling it, leasing it, loaning it or giving it away. However, there is an exception to this exemption with regard to two types of works – sound recordings and computer programs. The owner of a particular copy of a computer program or a particular phonorecord of a sound recording may not rent, lease or lend that copy or phonorecord for the purpose of direct or indirect commercial advantage.¹⁶⁵ These exceptions were enacted because of the ease with which reproductions of those works can be made at a lower cost than the original with minimum degradation in quality.¹⁶⁶ The rationale for these exceptions may apply to other types of works as more types of works become available in digital format, and the "nexus" of rental of those works and reproduction "may directly and adversely affect the ability of copyright holders to exercise their reproduction and distribution rights under the Copyright Act."¹⁶⁷

164 See discussion of the distribution right supra pp. 37-41.

165 See 17 U.S.C. § 109(b)(1)(A) (Supp. V 1993). The prohibition with respect to record rental does not apply to nonprofit libraries or nonprofit educational institutions for nonprofit purposes. *Id.* Nonprofit libraries may also lend a computer program for nonprofit purposes if each copy has a copyright warning affixed to the package. 17 U.S.C. § 109(b)(2)(A) (Supp. V 1993). The prohibition with respect to computer program rental does not apply to a computer program "which is embodied in a machine or product and which cannot be copied during the ordinary operation or use of the machine or product" or "a computer program embodied in or used in conjunction with a limited purpose computer that is designed for playing video games and may be designed for other purposes." 17 U.S.C. § 109(b)(1)(B) (Supp. V 1993).

166 Kenneth R. Corsello, Note, The Computer Software Rental Amendments Act of 1990: Another Bend in the First Sale Doctrine, 41 Cath. U. L. Rev. 177, 192 (1991).

167 See H.R. Rep. No. 98-987, 98th Cong., 2d Sess. 2 (1984), reprinted in 1984 U.S.C.C.A.N. 2898, 2899 (justifying the Record Rental Amendment of 1984).

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A copyright owner's exclusive right to publicly display copies of a work is also limited by Section 109:

Notwithstanding the provisions of section 106(5) [which grants copyright owners the exclusive right to display publicly copies of a work], the owner of a particular copy lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to display that copy publicly, either directly or by the projection of no more than one image at a time, to viewers present at the place where the copy is located.¹⁶⁸

Thus, an art gallery that purchases a painting may publicly display it without liability. The owner of a particular copy of an electronic audiovisual game intended for use in coin-operated equipment may publicly perform or display that game in that equipment.¹⁶⁹

This exemption from liability would not apply to the public display of a copy of a work on a bulletin board system or other computer or communications network, as more than one image would likely be displayed at a time (to different viewers) and viewers would not be "present at the place where the copy is located."

C. LIBRARY EXEMPTIONS

¹⁶⁸ 17 U.S.C. § 109(c) (1988).

¹⁶⁹ Section 109(e) reversed the decision in Red Baron-Franklin Park, Inc. v. Taito Corp., 883 F.2d 275 (4th Cir. 1989), cert. denied, 110 S.Ct. 869 (1990), which held that video games could not be operated in an arcade without the permission of the copyright owner because such operation entailed violation of the copyright owner's exclusive rights to perform and display the work publicly. Section 109(e), however, does not allow the public display or performance of any other work of authorship embodied in the audiovisual game if the copyright owner of the game is not also the copyright owner of the other work. See 17 U.S.C. § 109(e) (Supp. V 1993).

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The Copyright Act provides that in certain circumstances and under certain conditions it is not an infringement of copyright for a library or archives, or any of its employees acting within the scope of their employment,¹⁷⁰ to reproduce or distribute one copy or phonorecord of a work.¹⁷¹

The conditions of the library exemption are that (1) the reproduction or distribution is made without any purpose of direct or indirect commercial advantage; (2) the collections of the library are open to the public or available not only to researchers affiliated with the library, but also to other persons doing research in a specialized field; and (3) the reproduction or distribution of the work includes a notice of copyright.¹⁷²

The circumstances under which a library may reproduce or distribute a copyrighted work without infringement liability include:

ARCHIVAL COPIES

A library may reproduce and distribute a copy or phonorecord of an unpublished work reproduced in facsimile form if the sole purpose is preservation and security, and if the copy or phonorecord reproduced is currently in the collection of the library.¹⁷³ The House Report notes that "the right would extend to any type of work, including photographs, motion pictures and sound recordings." However, the copy or phonorecord made must be in "facsimile form." A library may "make photocopies of manuscripts by microfilm or electrostatic process, but [may] not reproduce the work in 'machine-

170 Hereinafter, the term "library" will be used to refer to a library or archives, or any of its employees acting within the scope of their employment.

171 See 17 U.S.C. § 108(a) (1988). Section 108 limitations are additional exemptions provided specifically for libraries. Libraries, of course, may also take advantage of the fair use or any other exemptions of the Copyright Act. See 17 U.S.C. § 108(f)(4) (1988).

172 See 17 U.S.C. § 108(a) (1988).

173 See 17 U.S.C. § 108(b) (1988).

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readable' language for storage in an information system."¹⁷⁴ Thus, this exemption does not appear to allow for preservation in electronic or digital form, which, arguably, would not constitute "facsimile form."

REPLACEMENT COPIES

A library may reproduce a published work duplicated in facsimile form solely for the purpose of replacing a copy or phonorecord that is damaged, deteriorated, lost or stolen, if the library has, after reasonable efforts, determined that an unused replacement cannot be obtained at a fair price.¹⁷⁵ Again, the copy or phonorecord made must be in "facsimile form." The exemption does not allow for replacement of a published work by reproduction in digital form.

ARTICLES AND SHORT EXCERPTS FOR USERS

A library may make and distribute a copy of one article or other contribution to a copyrighted collection or periodical issue, or a copy or phonorecord of a small part of any other copyrighted work at the request of a user, subject to two conditions.¹⁷⁶

OUT-OF-PRINT WORKS FOR SCHOLARLY PURPOSES

A library may make and distribute a copy or phonorecord of an entire work if it has determined that a copy or phonorecord of the

¹⁷⁴ House Report at 75, reprinted in 1976 U.S.C.C.A.N. 5689.

¹⁷⁵ 17 U.S.C. § 108(c) (1988); see House Report at 75, reprinted in 1976 U.S.C.C.A.N. 5689.

¹⁷⁶ 17 U.S.C. § 108(d) (1988). First, the copy or phonorecord must become the property of the user, and the library or archives must have no notice that the copy or phonorecord will be used for any purpose other than private study, scholarship, or research. Second, the library or archives must prominently display a warning of copyright at the place where orders are accepted and on its order form. *Id.*

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copyrighted work cannot be obtained at a fair price, subject to two conditions.¹⁷⁷

NEWS PROGRAMS

A library may reproduce and distribute by lending a limited number of copies of an audiovisual news program.¹⁷⁸

INTERLIBRARY LOANS

The Copyright Act allows a library to make single copies of copyrighted works and to enter into interlibrary lending arrangements, but prohibits copying "in such aggregate quantities as to substitute for a subscription to or purchase of [a copyrighted] work."¹⁷⁹ CONTU developed guidelines to interpret the quoted phrase, which were later included in the Conference Report on the Copyright Act of 1976.¹⁸⁰ The guidelines provide that a library may "borrow" not more than five copies per year of articles from the most recent five years of any journal title.¹⁸¹

The exemptions granted under Section 108 extend only to isolated and unrelated reproduction of a single copy or phonorecord of the same material on separate occasions,¹⁸² and do not apply to

177 17 U.S.C. § 108(e) (1988). First, the copy or phonorecord must become the property of the user, and the library or archives must have no notice that the copy or phonorecord will be used for any purpose other than private study, scholarship, or research. Second, the library or archives must prominently display a warning of copyright at the place where orders are accepted and on its order form. *Id.*

178 *See* 17 U.S.C. § 108(f)(3) (1988).

179 17 U.S.C. § 108(g)(2) (1988).

180 H.R. Conf. Rep. No. 1733, 94th Cong., 2d Sess. 72-73 (1976), reprinted in 1976 U.S.C.C.A.N. 5810, 5813-14 (hereinafter "Conference Report").

181 *Id.* at 72, reprinted in 1976 U.S.C.C.A.N. 5813.

182 *See* 17 U.S.C. § 108(g) (1988).

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- (1) musical works; (2) pictorial, graphic, or sculptural works; or
- (3) motion pictures or other audiovisual works, except news programs.¹⁸³

Libraries may provide many works in digital format in the future. However, Section 108 does not permit libraries to convert printed works to a digital format without the authority of the copyright owners. Such conversion would constitute "reproduction" of such those works,¹⁸⁴ and would require the authorization of the relevant copyright owners.

d. EDUCATIONAL USE EXEMPTIONS

Section 110(1) exempts from infringement liability the performance or display of a copyrighted work in the course of face-to-face teaching activities by a non-profit educational institution, in a classroom or similar setting.¹⁸⁵

Section 110(2) exempts from liability the transmission of a performance or display of a copyrighted work if (1) the performance or display is a regular part of the systematic instructional activities of the non-profit educational institution; (2) the performance or display is directly related and of material assistance to the teaching content of the transmission; and (3) the transmission is made primarily for reception in classrooms or similar places, or by persons to whom the transmission is directed because of their disabilities.¹⁸⁶

Like the library exemptions, the educational use exemptions are provided in addition to the fair use and other general exemptions, which are also available to educational institutions.

183 17 U.S.C. § 108(h) (1988).

184 See discussion of the scope of the exclusive right to reproduce a work *supra* pp. 34-36.

185 See 17 U.S.C. § 110(1) (1988).

186 See 17 U.S.C. § 110(2) (1988).

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e. OTHER LIMITATIONS

REPRODUCTION OF COMPUTER PROGRAMS

The rights of an owner of a copyright in a computer program are limited such that the owner of a particular copy of a computer program may make a copy or adaptation of the program as an "essential step" in using the computer program in a computer or for archival purposes.¹⁸⁷ This limitation applies only with respect to "owners" of copies of programs, not licensees, borrowers or mere possessors.

CERTAIN PERFORMANCES AND DISPLAYS

Certain performances and displays are exempted from infringement liability under other portions of Section 110 of the Copyright Act, including:

187 Section 117 of the Copyright Act provides:

Notwithstanding the provisions of section 106, it is not an infringement for the owner of a copy of a computer program to make or authorize the making of another copy or adaptation of that computer program provided:

- (1) that such a new copy or adaptation is created as an essential step in the utilization of the computer program in conjunction with a machine and that it is used in no other manner, or
- (2) that such new copy or adaptation is for archival purposes only and that all archival copies are destroyed in the event that continued possession of the computer program should cease to be rightful.

17 U.S.C. § 117 (1988 & Supp. V 1993). Any identical copies made in accordance with Section 117 "may be leased, sold, or otherwise transferred, along with the copy from which such copies were prepared, only as part of the lease, sale, or other transfer of all rights in the program." Adaptations made may be transferred only with the authorization of the owner of the copyright in the original program. *Id.*

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- the performance or display of certain works in the course of religious services;¹⁸⁸
- the performance of certain works by governmental or non-profit agricultural or horticultural organizations;¹⁸⁹
- the performance of certain musical works in retail outlets for the sole purpose of promoting retail sales;¹⁹⁰
- the transmission of performances of certain works to disabled persons;¹⁹¹ and
- the performance of certain works at non-profit veterans' or fraternal organizations for charitable purposes.¹⁹²

The "communication of a transmission embodying a performance or display of a work by the public reception of the transmission on a single receiving apparatus of a kind commonly used in private homes" is also exempted if there is no direct charge to see or hear the transmission and the transmission is not further transmitted to the public.¹⁹³ This exemption allows proprietors to play radios or televisions (i.e., to perform or display copyrighted works in those transmissions) in public establishments, such as restaurants, beauty shops and bars.¹⁹⁴ The applicability of this

188 See 17 U.S.C. § 110(3) (1988).

189 See 17 U.S.C. § 110(6) (1988).

190 See 17 U.S.C. § 110(7) (1988).

191 See 17 U.S.C. § 110(8), (9) (1988).

192 See 17 U.S.C. § 110(10) (1988).

193 See 17 U.S.C. § 110(5) (1988).

194 See, e.g., the decision in Twentieth Century Music Corp. v. Aiken, 422 U.S. 151 (1975), which was essentially codified in Section 110(5) (owner of a small food establishment exempt from infringement liability for the performance of copyrighted works via a radio and four small ceiling speakers). See also Sailor Music v. The Gap Stores, Inc., 516 F. Supp. 923

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exemption is extremely fact-specific and what qualifies as a type of receiving apparatus "commonly used in private homes" will certainly change as home equipment merges (into for example, radio/television/computer units) and becomes more sophisticated.¹⁹⁵

EPHEMERAL RECORDINGS

Section 112 provides that it is not an infringement of copyright for a "transmitting organization" that has the right to transmit to the public a performance or display of a work "to make no more than one copy or phonorecord of a particular transmission program embodying the performance or display" under certain conditions.¹⁹⁶

COMPULSORY LICENSES

Section 111 and Section 119 are compulsory license provisions that allow cable systems and satellite operators to retransmit copyrighted programming without liability if they pay the statutory licensing fee (which is then distributed among the copyright owners

(S.D.N.Y.), aff'd, 668 F.2d 84 (2d Cir. 1981), cert. denied, 456 U.S. 945 (1982); Rodgers v. Eighty Four Lumber Co., 617 F. Supp. 1021 (W.D.Pa. 1985); Springsteen v. Plaza Roller Dome, Inc., 602 F. Supp. 1113 (M.D.N.C. 1985).

¹⁹⁵ See e.g., Cass County Music Co. v. Muedini, 1993 U.S. Dist. LEXIS 4562 (E.D. Wisc. 1993) ("To say that [the defendant] is liable because it has nine speakers and the shops in [another case] had two (or four in Aiken) would be silly," taking note of the multiple speakers in many home systems today).

¹⁹⁶ See 17 U.S.C. § 112(a) (1988). This limitation of the copyright owner's reproduction right is applicable only if:

- (1) the copy or phonorecord is retained and used solely by the transmitting organization that made it, and no further copies or phonorecords are reproduced from it; and
- (2) the copy or phonorecord is used solely for the transmitting organization's own transmissions within its local service area, or for purposes of archival preservation or security; and
- (3) unless preserved exclusively for archival purposes, the copy or phonorecord is destroyed within six months from the date the transmission program was first transmitted to the public. Id.

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of the programming retransmitted).¹⁹⁷ These, as well as other, provisions of the Copyright Act will have to be reviewed as the merger of creative, communications, and computer entities continues. For instance, a compulsory license under Section 111 is only available to a "cable system," which is defined as "a facility . . . that in whole or in part receives signals transmitted or programs broadcast by one or more television broadcast stations" The terms "network station," "independent stations," and "noncommercial educational station" are also defined and used in Section 111.¹⁹⁸

Compulsory licenses are also available for the public performance of nondramatic musical works by means of jukeboxes,¹⁹⁹ for the use of certain works in connection with noncommercial broadcasting,²⁰⁰ and for the reproduction and distribution of nondramatic musical works in the course of making and distributing phonorecords of such works.²⁰¹

5. COPYRIGHT INFRINGEMENT

a. GENERAL

Anyone who, without the authorization of the copyright owner, exercises any of the exclusive rights of a copyright owner is an

197 See 17 U.S.C. §§ 111, 119 (1988 & Supp. V 1993). These provisions are referred to as "compulsory licenses" because under such provisions, copyright owners are compelled to grant the licenses. No license agreements are signed and the terms of such licenses are set forth in the statute; the copyright owner cannot object to the use of the work and must be satisfied with the license fees collected under the statute, which are distributed among all of the affected copyright owners by arbitrators impaneled by the Librarian of Congress.

198 See 17 U.S.C. § 111(f) (1988).

199 See 17 U.S.C. § 116 (Supp. V 1993). (This compulsory license may only be invoked if private negotiations fail to produce a consensual license.)

200 See 17 U.S.C. § 118 (1988 & Supp. V 1993).

201 *Id.*

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infringer of copyright.²⁰² Thus, any activity that falls within the scope of the exclusive rights of the copyright owner is an infringement.²⁰³

Copyright infringement is determined without regard to the intent or the state of mind of the infringer; so-called "innocent" infringement is infringement nonetheless.²⁰⁴ Moreover, although the exclusive rights refer to such rights with respect to "copies" (plural) of the work,²⁰⁵ there is no question that under the Act the making of even a single unauthorized copy may constitute an infringement.²⁰⁶

202 See 17 U.S.C. § 501(a) (Supp. V 1993). Anyone who "trespasses into [the copyright owner's] exclusive domain by using or authorizing the use of the copyrighted work in one of the five ways set forth in the statute" is an infringer of the copyright. *Sony*, *supra* note 6, at 433. Hereinafter, for purposes of this discussion, the lack of authorization by the copyright owner and the absence of a valid defense are presumed.

203 See discussion of the scope of the exclusive rights *supra* at pp. 33-63. For instance, activities such as loading a work into a computer, scanning a printed work into a digital file, uploading or downloading a work between a user's computer and a BBS or other server, and transmitting a work from one computer to another may be infringements (in those cases, of the reproduction right). See, e.g., *MAI Systems Corp. v. Peak Computer, Inc.*, 991 F.2d 511 (9th Cir. 1993) (the turning on of the computer, thereby causing the operating system to be copied into RAM, constituted an infringing reproduction of the copyrighted software); *Advanced Computer Services v. MAI Systems Corp.*, 845 F. Supp. 356 (E.D. Va. 1994) (loading software into computer's random access memory constituted infringing reproduction); see also 2 *Nimmer on Copyright* § 8.08 at 8-103 (1993) ("The input of a work into a computer results in the making of a copy, and hence . . . such unauthorized input infringes the copyright owner's reproduction right.").

204 The innocence or willfulness of the infringing activity may be relevant with regard to the award of statutory damages. See 17 U.S.C. § 504(c) (1988).

205 See 17 U.S.C. § 106 (1988 & Supp. V 1993).

206 See House Report at 61, reprinted in 1976 U.S.C.C.A.N. 5674. Further evidence of the intent of Congress to make even a single act of unauthorized reproduction an infringement is found in specific exemptions created for certain single-copy uses. See, e.g., 17 U.S.C. §§ 108(a), 108(f)(2), 112(a) (1988); see also *Texaco*, *supra* note 160, at 17.

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Courts generally use the term "copying" as shorthand for a violation of any of the exclusive rights (not just the reproduction right). Thus, courts usually require a copyright owner to prove ownership of the copyrighted work and "copying" by the defendant to prevail in an infringement action.²⁰⁷

Since there is seldom direct evidence of copying (witnesses who actually saw the defendant copy the work, for instance), a copyright owner may prove copying through circumstantial evidence that the defendant had access to the original work and that the two works are substantially similar. Other indications of copying, such as the existence of common errors, have also been accepted as evidence of infringement.²⁰⁸

207 Various remedies are available to copyright owners in an infringement action. In a civil case, a copyright owner may seek a preliminary or permanent injunction to prevent or restrain infringement. See 17 U.S.C. § 502 (1988). Courts may also order the impounding of all copies or phonorecords at any time an action is pending. See 17 U.S.C. § 503(a) (1988). As part of a final judgment, the court may order the destruction (or any other "reasonable disposition") of the infringing copies or phonorecords. See 17 U.S.C. § 503(b) (1988). Actual damages may be awarded in the amount of the copyright owner's losses plus any profits of the infringer attributable to the infringement (that are not taken into account in the calculation of the losses). See 17 U.S.C. § 504(b) (1988). Or, at the election of the copyright owner, statutory damages may be awarded in the amount of \$500 to \$20,000 per copyrighted work infringed. See 17 U.S.C. § 504(c)(1) (1988). The court may reduce the statutory damage award (to a minimum of \$200) if it finds the infringement was "innocent" (i.e., the defendant was not aware of and had no reason to believe that its acts constituted an infringement of copyright) or increase the award (to a maximum of \$100,000) if it finds the infringement was committed willfully. See 17 U.S.C. § 504(c)(2) (1988). Criminal sanctions may also be levied against infringers if the infringement was willful and for purposes of commercial advantage or private financial gain. See 17 U.S.C. § 506 (a), (b) (1988).

208 See, e.g., Rockford Map Publishers, Inc. v. Directory Serv. Co., 224 U.S.P.Q. 851 (C.D. Ill. 1984), aff'd, 768 F.2d 145 (7th Cir. 1985), cert. denied, 474 U.S. 1061 (1986); Sub-Contractors Register, Inc. v. McGovern's Contractors & Builders Manual, Inc., 69 F. Supp. 507, 509 (S.D.N.Y. 1946). It is common for publishers of directories and other compilations to deliberately insert mistakes

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The copying of the copyrighted work must be copying of protected expression and not just ideas;²⁰⁹ likewise, the similarity between the two works must be similarity of protected elements (the expression), not unprotected elements (the facts, ideas, etc.). The portion taken must also be more than de minimis.

The similarity between the two works need not be literal (i.e., verbatim phrases, sentences or paragraphs copied); substantial similarity may be found even if none of the words or brush strokes or musical notes are identical.²¹⁰ Various tests have been developed

into the work (such as periodically adding a fictitious name, address and phone number in a telephone directory) to detect and help establish copying. See 2 Howard B. Abrams, The Law of Copyright § 14.02[B][3][c], at 14-19 to 20 (1993).

209 This should be implied in the requirement that there be copying of the copyrighted work. Ideas and facts, of course, are not copyrighted. In the case of compilations, such as databases, if enough facts are copied, the copyrighted expression (the selection, arrangement or coordination of the facts) may be copied and infringement may be found. See CONTU Final Report, supra note 7, at 42 ("The use of one item retrieved from such a work – be it an address, a chemical formula, or a citation to an article – would not . . . conceivably constitute infringement of copyright. The retrieval and reduplication of any substantial portion of a data base, whether or not the individual data are in the public domain, would likely constitute a duplication of the copyrighted element of a data base and would be an infringement.").

210 See Donald v. Zack Meyer's T.V. Sales & Service, 426 F.2d 1027, 1030 (5th Cir. 1970) ("paraphrasing is equivalent to outright copying"), cert. denied, 400 U.S. 992 (1971); Davis v. E.I. DuPont de Nemours & Co., 240 F. Supp. 612, 621 (S.D.N.Y. 1965) ("paraphrasing is tantamount to copying in copyright law"); see generally 3 Nimmer on Copyright § 13.03[A], at 13-28 to 13-58 (1993). Nimmer identifies two bases upon which courts impose liability for less than 100 percent verbatim copying: (1) "fragmented literal similarity" (where words, lines or paragraphs are copied virtually word-for-word, although not necessarily verbatim) and (2) "comprehensive nonliteral similarity" (where the "fundamental essence or structure" of a work is copied); see also II Paul Goldstein, Copyright § 7.2.1, at 13-17 (1989). Goldstein identifies three types of similarity: (1) where the infringing work "tracks" the original work "in every detail," (2) "striking similarity" (where a brief portion of both works is "so idiosyncratic in its treatment as to preclude coincidence,") and (3) similarities that "lie beneath the surface" of the works ("[i]ncident and

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to determine whether there has been sufficient non-literal copying to constitute substantial similarity between a copyrighted work and an allegedly infringing work.²¹¹ Judge Learned Hand articulated the well-known "abstractions test," where the expression and the idea are, in essence, treated as ends of a continuum, with infringement found if the allegedly infringing work crosses the line delineating the two.²¹² Such line, as Judge Hand recognized, is not fixed in stone; indeed, as he put it, its location must "inevitably be ad hoc" ²¹³ The "pattern" test has also been suggested, where infringement is found if the "pattern" of the work is taken (in a play, for instance, the "sequence of events, and the development of the interplay of characters").²¹⁴

The "subtractive" test – which dissects the copyrighted work, disregards the noncopyrightable elements, and compares only the copyrightable elements of the copyrighted work to the allegedly infringing work – historically had been the traditional method for determining substantial similarity.²¹⁵ Following the 1970 Ninth

characterization in literature, composition and form in art, and rhythm, harmony and musical phrases in musical composition"). *Id.* at 13 (citations omitted).

211 For a detailed analysis of the various tests that have been used, *see* 3 *Nimmer on Copyright* § 13.03[A] at 13-28 to 13-58 (1993).

212 *See Nichols v. Universal Pictures. Corp.*, 45 F.2d 119, 121 (2d Cir. 1930).

213 *See Peter Pan Fabrics Inc. v. Martin Weiner. Corp.*, 274 F.2d 487 (2d Cir. 1960).

214 *See* Zechariah Chaffee, *Reflections on the Law of Copyright: I*, 45 Columbia Law Review 503, 513 (1945).

215 *See Universal Athletic Sales Co. v. Salkeld*, 511 F.2d 904, 908-09 (3d Cir), *cert. denied*, 423 U.S. 863 (1975) (subtracting all but the "stick figures" from chart as non-protectible subject matter); *Alexander v. Haley*, 460 F. Supp 40, 46 (S.D.N.Y. 1978) (finding "alleged infringements display no similarity at all in terms of expression or language, but show at most some similarity of theme or setting. These items, the skeleton of creative work rather than the flesh, are not protected by the copyright laws.").

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Circuit decision in Roth Greeting Cards v. United Card Co.,²¹⁶ however, the "totality" test became popular for determining substantial similarity. The totality test compares works using a "total concept and feel" standard to determine whether they are substantially similar. Although predominantly used by the Ninth Circuit throughout the 1970s and 1980s,²¹⁷ the test was used by other circuits as well.²¹⁸ The Ninth Circuit further defines an "extrinsic/intrinsic" test in proof of substantial similarity in Sid & Marty Krofft Television Productions, Inc. v. McDonald's Corp.²¹⁹ The intrinsic portion of the test measures whether an observer "would find the total concept and feel of the works" to be substantially similar.²²⁰ The extrinsic portion of the test, meanwhile, is an objective analysis of similarity in ideas and expression based on "specific criteria that can be listed and analyzed."²²¹ Thus, this test requires substantial similarity "not only of the general ideas but of the expressions of those ideas as well."²²²

More recently, however, both the Ninth and Second Circuits have moved away from the totality test with respect to computer applications. In Data East USA, Inc. v. Epyx, Inc.²²³ the Ninth Circuit

²¹⁶ See 429 F.2d 1106 (9th Cir. 1970).

²¹⁷ See, e.g., Sid & Marty Krofft Television Prods., Inc. v. McDonald's Corp., 562 F.2d 1157 (9th Cir. 1977); McCulloch v. Albert E. Price, Inc., 823 F.2d 316 (9th Cir. 1987).

²¹⁸ See, e.g., Reyher v. Children's Television Workshop, 533 F.2d 87 (2d Cir. 1976); Atari, Inc. v. North American Philips Consumer Elecs. Corp., 672 F.2d 607 (7th Cir.), cert. denied, 459 U.S. 880 (1982); Atari Games Corp. v. Oman, 888 F.2d 878 (D.C. Cir. 1989); Whelan Assocs., Inc. v. Jaslow Dental Lab., Inc., 797 F.2d 1222 (3d Cir. 1986), cert. denied, 479 U.S. 877 (1987).

²¹⁹ 562 F.2d 1157 (9th Cir. 1977).

²²⁰ See Pasillas v. McDonald's Corp., 927 F.2d 440, 442 (9th Cir. 1991).

²²¹ See Brown Bag Software v. Symantec Corp., 960 F.2d 1465, 1475 (9th Cir. 1992).

²²² Krofft at 1164.

²²³ 862 F.2d 204 (9th Cir. 1988).

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rediscovered "analytic dissection of similarities" in the substantial similarity determination of video games. Similarly, the Second Circuit in Computer Associates International, Inc. v. Altai, Inc.²²⁴ fashioned an "abstraction-filtration-comparison test" for a job scheduling program that combined Judge Learned Hand's "abstraction" test to separate idea from expression, and "filtration" reminiscent of traditional "subtraction" analysis in filtering protectible from non-protectible material.

In addition to the shifting tide of substantial similarity tests, there is dispute as to the appropriate "audience" for determining substantial similarity. The "ordinary observer test" alluded to in Arnstein v. Porter,²²⁵ and followed in a number of Second Circuit decisions²²⁶ considers the question of substantial similarity from the viewpoint of the "average lay observer."²²⁷ The Fourth Circuit, however, set forth a modified test in Dawson v. Hinshaw Music Inc.,²²⁸ requiring the ordinary observer to be the "intended" audience for the particular work. Relying on decisions of both the Ninth and Seventh Circuits,²²⁹ the court in Dawson stated:

224 982 F.2d 693 (2d Cir. 1992); see Sega Enters. Ltd. v. Accolade, Inc., (9th Cir. 1993); Autoskill Inc. v. National Educational Support Systems, Inc. (10th Cir. 1993).

225 154 F.2d 464 (2d Cir. 1946).

226 See, e.g., Peter Pan Fabrics, Inc. v. Martin Weiner Corp., 274 F.2d 487 (2d Cir. 1960); Ideal Toy Corp. v. Fab-Lu Ltd., 360 F.2d 1021 (2d Cir. 1966); Eden Toys, Inc. v. Marshall Field & Co., 675 F.2d 498 (2d Cir. 1982).

227 Ideal Toy Corp. at 1023 n.2

228 905 F.2d 731 (4th Cir. 1990).

229 See Aliotti v. R. Dakin & Co., 831 F.2d 898, 902 (9th Cir. 1987) (holding that perceptions of children must be considered in substantial similarity analysis because they are intended market for product); Atari, Inc. v. North American Philips Consumer Elecs. Corp., 672 F.2d 607, 619 (7th Cir.), cert. denied, 459 U.S. 880 (1982) (holding that "[v]ideo games, unlike an artist's painting, . . . appeal to an audience that is fairly indiscriminating insofar as their concern about more subtle differences in artistic expression").

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[i]f the lay public fairly represents the intended audience, the court should apply the lay observer formulation of the ordinary observer test.

However, if the intended audience is more narrow in that it possesses specialized expertise, . . . the court's inquiry should focus on whether a member of the intended audience would find the two works to be substantially similar.²³⁰

The challenge of this test, especially in more advanced technologies, is determining when, if ever, a work is not directed to an audience possessing specialized expertise.

The ability to manipulate works in digital format raises an issue with respect to infringement of the reproduction and derivative works rights. A copyrighted photograph, for instance, can be manipulated in the user's computer in such a way that the resulting work is not substantially similar to the copyrighted work (in fact, it may bear little or no resemblance to the copyrighted work upon which it was based). The initial input of the copyrighted work into the user's computer may be an infringement of the copyright owner's reproduction right, but the infringing (or noninfringing) nature of the resulting work is less clear. Although courts traditionally rely on a "substantial similarity" test to determine infringement liability, neither the meaning of "derivative work" nor the statutory standard for infringement appears to require an infringing derivative work to be substantially similar.²³¹

²³⁰ Dawson at 736.

²³¹ An infringer is anyone who violates "any of the exclusive rights" of the copyright owner. 17 U.S.C. § 501(a) (Supp. V 1993). One of the exclusive rights is "to prepare derivative works based upon the copyrighted work." 17 U.S.C. § 106(2) (1988). A "derivative work" is a work "based upon one or more preexisting works, such as a . . . condensation, or any other form in which a work may be recast, transformed, or adapted." 17 U.S.C. § 101 (1988) (definition of "derivative work"). The Ninth Circuit has suggested that "a work is not derivative unless it has been substantially copied from the prior work." See Litchfield v. Spielberg, 736 F.2d 1352, 1357 (9th Cir. 1984) (emphasis added). It is unclear, however, whether the court is suggesting that a derivative work must be substantially similar to the prior work or that it simply must incorporate in some form a portion of the prior work, as noted in the legislative history. See House Report at 62, reprinted in 1976 U.S.C.C.A.N. 5675.

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b. INFRINGING IMPORTATION

The exclusive right to distribute copies or phonorecords includes the right to limit the importation of "copies or phonorecords" of a work "acquired outside the United States" into the U.S. without the authority of the copyright owner.²³² Such unauthorized importation, whether it be of pirated items (i.e., "copies or phonorecords made without any authorization of the copyright owner")²³³ or "gray market" works (i.e., those copies or phonorecords legally produced overseas for foreign distribution, but not authorized for the U.S. market), is an infringement of the exclusive right to distribute.²³⁴

The applicability of the importation provisions to the transmission of works into the United States via the NII (or GII) may be debated. Nevertheless, the importation right is an outgrowth of the distribution right, both of which refer to "copies or phonorecords."²³⁵ A data stream can contain a copyrighted work in the form of electronic impulses, but those impulses do not fall within

The court noted that there is "little available authority" on infringement of the derivative works right. See id.

232 17 U.S.C. § 602(a) (1988).

233 House Report at 169, reprinted in 1976 U.S.C.C.A.N. 5785.

234 U.S. copyright law differs from trademark law in this respect. Trademark law does not prohibit the parallel importation into the United States of genuine trademarked products, i.e., products legally produced overseas for foreign distribution and imported into the United States by other than the authorized U.S. manufacturer, distributor or licensee. The quality or specifications of the product produced for foreign distribution may differ from those of the product manufactured for distribution in the U.S. market. Additionally, warranties offered by the U.S. manufacturer, distributor or licensee may not apply. However, the sale of the "gray market" trademarked product in the United States does not generally constitute trademark infringement or unfair competition.

235 See discussion of transmissions and the distribution right supra pp. 37-41.

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the definition of "copies" or "phonorecords." Therefore, the transmission of copyrighted works via international communication links fails to constitute an "importation" because no "copies" or "phonorecords" are being imported. If the infringing literary work was being physically shipped into the U.S. in the form a paper copy of a program, a CD-ROM disk or even stored on a memory chip, then this could be an infringing importation if the above discussed conditions exist, but it would appear that Section 602 could not be used to block the electronic transmission of such material.²³⁶

c. CONTRIBUTORY INFRINGEMENT AND VICARIOUS LIABILITY

Direct participation in the infringing activity is not a prerequisite for infringement liability, since the Copyright Act grants to copyright owners not only the right to exercise the exclusive rights, but also the right "to authorize" the exercise of those rights. According to the House Report, the inclusion of the right "to authorize" was "intended to avoid any questions as to the liability of contributory infringers" -- those who do not directly exercise the copyright owner's rights, but "authorize" others to do so.²³⁷ Other than the reference to a copyright owner's right "to authorize" exercise of the exclusive rights, however, the Copyright Act does not mention or define "contributory infringement" or "vicarious liability," the standards for which have developed through case law.²³⁸

If someone has the "right and ability" to supervise the infringing action of another, and that right and ability "coalesce with an obvious and direct financial interest in the exploitation of

236 The Customs Service would be ill-equipped to deal with such infringing transmissions if they did fall within Section 602.

237 See House Report at 61, reprinted in 1976 U.S.C.C.A.N. 5674. There must be a direct infringement upon which contributory infringement or vicarious liability to be based.

238 The concepts of contributory and vicarious liability are well-established in tort law. Contributory infringement of intellectual property rights was first codified in patent law. See 35 U.S.C. § 271(c) (1988).

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copyrighted materials – even in the absence of actual knowledge" that the infringement is taking place, the "supervisor" may be held vicariously liable for the infringement.²³⁹ Vicarious liability is based on a connection to the direct infringer (not necessarily to the infringing activity).

The best known copyright cases involving vicarious liability are the "dance hall" cases, where vicarious liability was found when dance hall owners allowed the unauthorized public performance of musical works by the bands they hired, even if the owners had no knowledge of the infringements and had even expressly warned the bands not to perform copyrighted works without a license from the copyright owners.²⁴⁰

"Contributory infringement" may also be found when "one who, with knowledge of the infringing activity, induces, causes or materially contributes to the infringing conduct of another."²⁴¹

239 Shapiro, Bernstein & Co. v. H.L. Green Co., 316 F.2d 304, 307 (2d Cir. 1963) (holding that company that leased floor space to phonograph record department was liable for record department's sales of "bootleg" records despite absence of actual knowledge of infringement, because of company's beneficial relationship to the sales).

240 See, e.g., Dreamland Ball Room, Inc. v. Shapiro, Bernstein & Co., 36 F.2d 354 (7th Cir. 1929); Famous Music Corp. v. Bay State Harness Horse Racing & Breeding Ass'n, Inc., 554 F.2d 1213 (1st Cir. 1977); KECA Music, Inc. v. Dingus McGee's Co., 432 F. Supp. 72 (W.D. Mo. 1977). Indeed, the "cases are legion which hold the dance hall proprietor liable for the infringement of copyright resulting from the performance of a musical composition by a band or orchestra whose activities provide the proprietor with a source of customers and enhanced income. He is liable whether the bandleader is considered, as a technical matter, an employee or an independent contractor, and whether or not the proprietor has knowledge of the compositions to be played or any control over their selection." Shapiro, Bernstein & Co. v. H.L. Green Co., 316 F.2d 304, 307(2d Cir. 1963)(citing some 10 cases).

241 Gershwin Publishing Corp. v. Columbia Artists Management, Inc., 443 F.2d 1159, 1162 (2d Cir. 1971) (holding management firm's authorization of clients' performances of copyrighted compositions to be contributory infringement).

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Contributory infringement is based on a connection to the infringing activity (not necessarily to the direct infringer). A contributory infringer may be liable based on the provision of services or equipment related to the direct infringement.²⁴²

SERVICES

A contributory infringer may be liable based on the provision of services related to the infringement. Courts have found contributory infringement liability, for instance, when a contributor chose the infringing material to be used in the direct infringer's work,²⁴³ and when a contributor was responsible for the day-to-day activities where the infringement took place.²⁴⁴

Copyright owners may allege contributory infringement in NII-related cases against service providers, such as BBS operators. As noted earlier, the court in Playboy ²⁴⁵ found the BBS operator directly liable for the display of the unauthorized copies on the service, as well as the "distribution" of unauthorized copies to subscribers. However, another court recently cited the Playboy case in finding that the plaintiff had established a prima facie case of contributory infringement by a BBS operator. In Sega Enters. Ltd. v. MAPHIA,²⁴⁶ the court issued a preliminary injunction against the

242 A library is exempted from liability for the unsupervised use of reproducing equipment located on its premises provided that the equipment displays a copyright law notice. 17 U.S.C. § 108(f)(1). This exemption does not apply to the user of such equipment, see 17 U.S.C. § 108(f)(2), and no other provider of equipment enjoys any statutory immunity.

243 See Universal Pictures Co. v. Harold Lloyd Corp., 162 F.2d 354, 366 (9th Cir. 1947) (rejecting defendant's argument that as an employee, he was not responsible for his employer's decision to use infringing material, in light of defendant's personal selection and appropriation of the protected material).

244 See Boz Scaggs Music v. KND Corp., 491 F. Supp. 908, 913 (D. Conn. 1980) (finding defendant liable based on own admission of responsibility and control over radio performances of protected works).

245 Supra note 113.

246 Supra note 117.

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BBS operator based on the operator's "role in copying [Sega's copyrighted video games], including provision of facilities, direction, knowledge and encouragement."²⁴⁷ The court found that the BBS operator had knowledge of the uploading and downloading of unauthorized copies of Sega's copyrighted video games and that it solicited the copying of the games.²⁴⁸

Two recent libel decisions may provide additional guidance.²⁴⁹ In Auvil v. CBS "60 Minutes"²⁵⁰ the court held that a network affiliate which exercised no editorial control over the network

²⁴⁷ Sega, supra note 117, at *18. The court found a prima facie case for both direct infringement, based on the BBS operator's permitting of the uploading of the copyrighted games onto the BBS, and contributory infringement, based on the operator's "role in copying" the games. Id. at *17-18.

²⁴⁸ Sega, supra note 117, at *7. A class action against another BBS operator was recently filed which seems to allege both direct and contributory infringement. See Frank Music Corp. v. Compuserve Inc., Civil Action No. 93 Civ. 8153 (JFK) (S.D.N.Y.) (complaint filed Nov. 29, 1993). The Complaint alleges that defendant, by providing access to its BBS by subscribers, engaged in: (1) "permitting, facilitating and participating in the recording of performances of the [Plaintiffs' works] into, and storing such recordings in, Compuserve's computer database by permitting and enabling its paying subscribers to upload such performances thereto"; (2) "maintaining a storage of unauthorized recordings of [the Plaintiffs' works] (uploaded by its subscribers) in and as part of Compuserve's computer database"; and (3) "permitting, facilitating and participating in the recording (i.e. re-recording) of the performances of [the Plaintiffs' works] (theretofore stored in its computer database) by permitting and enabling its paying subscribers to download such recorded performances therefrom." Complaint at 6-7. In addition, the Plaintiffs allege that Compuserve had "control over the nature and content of materials stored in its Bulletin Board and downloaded therefrom"; that Compuserve "had actual knowledge of, or in the exercise of reasonable diligence could have determined, the nature and content of materials stored in its Bulletin Board and downloaded therefrom"; and that Compuserve "had actual notice, or in the exercise of reasonable diligence could have determined, that recordings of [the Plaintiffs' works] were uploaded (recorded) to, stored in, and downloaded (re-recorded) from its computer database." See Complaint at 7.

²⁴⁹ Defamation cases may be distinguished, however, based on the knowledge requirement, which is absent in copyright infringement cases.

²⁵⁰ 800 F. Supp. 928 (E.D. Wash. 1992).

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broadcast (although it had the power to do so) served only as a conduit and was not liable for republishing defamatory statements.²⁵¹ Despite the fact that the affiliate had some idea of the content and had access to the broadcast hours before it aired, the court refused to hold it liable for defamation contained therein. The court found it unrealistic to force, in effect, the creation of editorial boards "which possess sufficient knowledge, legal acumen and access to experts to continually monitor incoming transmissions and exercise on-the-spot discretionary calls or face . . . million dollar lawsuits at every turn."²⁵² The court borrowed reasoning from book seller cases -- "one who only delivers or transmits defamatory material published by a third person is subject to liability if, but only if, he knows or had reason to know of its defamatory character"²⁵³ -- finding "no logical basis for imposing a duty of censorship on the visual media which does not likewise attach to the print chain of distribution."

It is interesting to note, however, that in this case, the court found that the injured parties are not impaired by limiting conduit liability in defamatory actions to those situations where culpability is established; "[t]he generating source, which in a national broadcast will generally be the deepest of the deep pockets, may still be called upon to defend."²⁵⁴ This likely would not be true in BBS cases, where the generating source -- a BBS subscriber -- may not have as deep pockets and the BBS operator and, in fact, may be unidentifiable.

251 *Id.* at 931. The state common law in this case holds a person who "republishes" defamatory statements made by another liable. Given the broadness with which the jurisdiction had interpreted republication, the court assumed, for purposes of disposition of the affiliate defendants' motion for summary judgment that the affiliates did republish the defamation.

252 *Id.*

253 *Id.* at 931-32 (quoting *Dworkin v. Hustler Magazine, Inc.*, 634 F. Supp. 727, 729 (D. Wyo. 1986) quoting *Restatement (Second) of Torts* § 581).

254 *Id.* at 932.

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A similar result was reached in Cubby, Inc. v. CompuServe Inc.²⁵⁵ In that case the court held that libelous material uploaded to a BBS by a subscriber did not subject the BBS to damages for libel. The court determined that a BBS was a "distributor" (akin to a public library or bookstore) rather than a "republisher," and thus liable only if it "knew or had reason to know of the allegedly defamatory . . . statements" that had been uploaded.²⁵⁶

EQUIPMENT

Contributory infringement liability may also be based on the provision of equipment or other instrumentalities or goods used in or related to the infringement. The leading case is Sony Corp. v. Universal City Studios, Inc.,²⁵⁷ a 5 to 4 decision by the Supreme Court, in which the majority of the Court held that the manufacturer of videocassette recorders was not a contributory infringer for providing the equipment used in the unauthorized reproduction of copyrighted works. Borrowing a patent law principle, the Court reasoned that manufacturers of staple articles of commerce that are capable of substantial noninfringing uses should not be held liable as contributory infringers.²⁵⁸ The Court held:

[T]he sale of copying equipment, like the sale of other articles of commerce, does not constitute contributory infringement if the product is widely used for legitimate, unobjectionable purposes. Indeed, it need merely be capable of substantial noninfringing uses.²⁵⁹

255 776 F. Supp. 135 (S.D.N.Y. 1991).

256 Id. at 141.

257 464 U.S. 417 (1984).

258 Id. at 440.

259 Id. at 442. The Court cited two principles of patent law, but used only one as the appropriate analogy for copyright law:

The Copyright Act does not expressly render anyone liable for infringement committed by another. In contrast, the Patent Act expressly brands anyone who "actively induces infringement of a patent" as an infringer, 35 U.S.C. § 271(b), and further imposes

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The Court determined that the key question was whether the video cassette recorder was "capable of commercially significant noninfringing uses."²⁶⁰ The Court also held that in an action for contributory infringement against a manufacturer of copying devices, "the copyright holder may not prevail unless the relief that he seeks affects only his programs, or unless he speaks for virtually all copyright holders with an interest in the outcome."²⁶¹

The dissent²⁶² did not agree that the patent "staple article of commerce" doctrine of contributory infringement was applicable to copyright law.²⁶³ Recognizing the "concerns underlying the 'staple

liability on certain individuals labeled "contributory" infringers, § 271(c).

Id. at 434-35. Section 271(b) of the Patent Act provides, "Whoever actively induces infringement of a patent shall be liable as an infringer." 35 U.S.C. § 271(b) (1988). Section 271(c) provides, "Whoever sells a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer." 35 U.S.C. § 271(c) (1988).

260 *Id.* at 442. "In order to resolve that question, we need not explore all the different potential uses of the machine and determine whether or not they would constitute infringement. Rather, we need only consider whether on the basis of the facts as found by the District Court a significant number of them would be noninfringing." *Id.* The Court declined to "give precise content" to the issue of how much use is needed to rise to the level of "commercially significant." *See id.*

261 *Id.* at 446.

262 Of the four dissenting Justices, two remain on the Court today (now-Chief Justice Rehnquist and Justice Blackmun, who recently announced his impending retirement from the Court). Two of the Justices in the majority remain on the Court (Justice Stevens, who delivered the opinion of the Court, and Justice O'Connor).

263 *See Sony, supra* note 6, at 490 n41 (Blackmun, J., dissenting) ("The doctrine of contributory patent infringement has been the subject of

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article of commerce' doctrine," the dissent concluded that "if a significant portion of the product's use is noninfringing, the manufacturers and sellers cannot be held contributorily liable for the product's infringing uses."²⁶⁴

If virtually all of the product's use, however, is to infringe, contributory liability may be imposed; if no one would buy the product for noninfringing purposes alone, it is clear that the manufacturer is purposely profiting from the infringement, and that liability is appropriately imposed. In such a case, the copyright owner's monopoly would not be extended beyond its proper bounds; the manufacturer of such a product contributes to the infringing activities of others and profits directly thereby, while providing no benefit to the public sufficient to justify the infringement.²⁶⁵

Other cases against producers or providers of the instrumentalities of infringement since Sony generally have not been successful.²⁶⁶ However, the court in the recent Sega case²⁶⁷ issued a

attention by the courts and by Congress . . . and has been codified since 1952, . . . but was never mentioned during the copyright law revision process as having any relevance to contributory copyright infringement."); see also id. at 491 (disagreeing that "this technical judge-made doctrine of patent law, based in part on considerations irrelevant to the field of copyright . . . should be imported wholesale into copyright law. Despite their common constitutional source, . . . patent and copyright protections have not developed in a parallel fashion, and this Court in copyright cases in the past has borrowed patent concepts only sparingly.")

264 See Sony, supra note 6, at 491. Examples of such products would be typewriters, computers, cameras, and fax machines.

265 Sony, supra note 6, at 491-92.

266 See, e.g., Vault Corp. v. Quaid Software Ltd., 847 F.2d 255 (5th Cir. 1988) (seller of computer programs that defeat anti-copying protection is not liable as contributory infringer because programs can be used to enable user to make legal archival copies of copyrighted computer programs under Section 117, which the court found to be a substantial noninfringing use). But see RCA Records v. All-Fast Sys., Inc., 594 F. Supp. 335 (S.D.N.Y. 1984)

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preliminary injunction against a BBS operator who sold special copiers, the "only substantial use" of which was to copy Sega's copyrighted video games.²⁶⁸ The court found that Sega established a prima facie case of contributory infringement by the BBS operator based on the operator's "advertising, sale and distribution" of the video game copiers.²⁶⁹

d. CONFLICT OF LAWS

Conflict of laws issues may arise in NII-related copyright infringement actions. Resolution of these issues determines what law the court should apply. If the infringer and the infringement occur in the United States, the U.S. Copyright Act would apply. However, different situations may present themselves which will raise these issues. For instance, users in country A, where certain actions are not considered copyright infringements, may use works located on servers in country B, where such actions are. Which country's law controls the resolution of a copyright infringement dispute -- the country from which a copyrighted work is uploaded or the country where the host server is located? In the case of direct transmissions, which country's law applies -- the country of origin of the transmission or the country of the reception? It may be that rights of the copyright owner are exercised in each country. This issue, however, may be no more problematic than current conflicts issues that arise due to the use of telephones, fax machines or modems in international commerce.

(operator is liable for contributory infringement based on its provision of sound recording facilities where public could make unauthorized phonorecords).

²⁶⁷ Supra note 117.

²⁶⁸ See Sega, supra note 117, at *13.

²⁶⁹ See Sega, supra note 117, at *19. The court found that there was "no need to make archival copies of [Sega's] ROM game cartridges" because the "ROM cartridge format is not susceptible to breakdown" and Sega would replace defective cartridges. See id. at *13. The court also found that it was unlikely that customers would buy the copiers, at a cost of \$350, for the purpose of backing up Sega's video game programs, which sold for \$30 to \$70 each. Id.

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6. INTERNATIONAL IMPLICATIONS

a. BACKGROUND

Other countries -- including Finland, Japan and Sweden -- and the European Union are initiating their own studies of the means to promote the development of national information infrastructures. For example, on February 7, 1994, Swedish Prime Minister, Carl Bildt, addressed the Swedish Academy of Engineering Sciences and called for the creation of a national coalition to spearhead the development of an advanced Swedish information infrastructure. It is important to note that the task force which the Prime Minister is assembling will include, among others, representatives of the Ministry of Justice who will be responsible for the development of rules for the protection of intellectual property in the system. On March 3, 1994, Commissioner Bangemann, Vice President of the European Commission met with Secretary of Commerce Ronald Brown and Assistant Secretaries Bruce Lehman and Larry Irving to discuss the possibilities for U.S.-EU cooperation in regard to the NII.

Without taking into account, from the outset, rules for the effective protection of intellectual property, the development of the international information superhighway will be severely hindered. How disparate domestic information superhighways will evolve into a Global Information Infrastructure (GII) will depend on the rules of the road, and one of the most important of those sets of rules is ensuring protection for the works of intellectual property that moves through international channels and into the emerging national information infrastructures. Adequate and effective protection of intellectual property in international commerce must be ensured.

Development of the GI will make international copyright laws a concern for every user of the system. When the globe is blanketed with digital information dissemination systems, a user in one country will be able to manipulate information resources in another country in ways that may violate that country's copyright laws. Because copyright laws are territorial, and the standards of protection embodied in the international conventions leave room for national legislative determinations, acts that may be an infringement in one country may not be an infringement in another country. The

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complexity that such a system creates will make doing "electronic business" over the information superhighways difficult unless we move promptly to identify needs for protection and initiate efforts to work toward a new level of international copyright harmonization.

U.S. copyright industries are significant contributors to the United States' current trade accounts, reducing our balance of payments deficit by some \$34 billion in 1990. Inadequacies in the present system of intellectual property protection for copyrights and neighboring²⁷⁰ or related rights and the consequent losses to these industries from piracy and from trade barriers arising from differences in forms of protection have been estimated to cause losses to these industries of \$12 to 15 billion annually. Improved protection for copyrights and neighboring rights would contribute to reducing these losses and improving the balance of payments.²⁷¹

An important aspect of the participation of foreign entities through a GII in the United States domestic information infrastructure is the provision of adequate and effective intellectual property protection in the country wishing to participate. To the extent that participation in the NII can be linked to the provision of intellectual property protection, it will promote the ability of U.S. businesses to use the NII and the GII to communicate works to foreign consumers via other countries' information infrastructures. If we are to ensure that commercial enterprises will make full use of the capabilities of the NII to communicate and deliver information and entertainment products, there must be assurances that their intellectual property rights will be protected effectively under strong copyright laws in all countries participating in a GII.

However, in considering such linkages, careful consideration will have to be given to obligations under international intellectual property treaties and other international agreements such as the North American Free Trade Agreement (NAFTA) and the General

²⁷⁰ "Neighboring rights" are discussed *infra* pp. 86, 90-91.

²⁷¹ See Stephen E. Siwek & Harold W. Furchtgott-Roth, International Intellectual Property Alliance, Copyright Industries in the U.S. Economy (1993).

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Agreement on Tariffs and Trade (GATT), especially in view of the recently completed Uruguay Round with its various intellectual property and market access provisions.

b. THE INTERNATIONAL FRAMEWORK

In the 1970's, then-U.S. Register of Copyrights Barbara Ringer observed that if Justice Story considered copyright to be the metaphysics of the law, then international copyright is its cosmology. That message is brought home to us in 1994 by the need to evaluate the applicability of copyright in the context of the complexities of international commerce in information and entertainment products via advanced information infrastructures.

First, we must understand that there is no such thing as an international copyright, but rather a system of international copyright law. There are several international treaties that link together most of the major trading nations of the world and provide nations with a means for protecting, under their own laws, each others copyrighted works and similar materials. This situation is further complicated because there are two major legal traditions applicable to the protection of what we in the United States regard as copyrighted works. To understand the complexities of the international copyright law system and the international treaties, it is necessary to have a basic appreciation of these two major legal regimes.²⁷²

The United States and other countries that follow the Anglo-American legal tradition have "copyright systems," the principal focus of which is on protecting the author's economic rights. The

²⁷² See generally Stephen M. Stewart, International Copyright and Neighbouring Rights, (2d ed. 1989) (hereinafter "Stewart"). Stewart presents a summary of international copyright principles and summaries of the copyright laws of a number of countries. Stewart also identifies socialist copyright laws as a category. However, since the demise of the USSR, the former socialist countries have moved rapidly to enact Western-type copyright legislation. The recently enacted copyright law of the People's Republic of China also follows the civil law model.

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theory of our system is that providing such protection will induce the creation of more works which will "promote the progress of science" and redound to the public benefit.

Countries that follow the civil law tradition, however, regard authors' rights as natural human rights, or part of one's right of personality. As a part of this tradition, the protection of so-called "moral rights" of the author is an essential part of the system.²⁷³ Moral rights normally include the right of an author to be named as the author of a work and the right to object to uses of the work which could bring dishonor or discredit on the author's reputation. In these civil law systems, moral rights reflect a part of the author's personality and are non-transferable, and may be not waivable. Economic rights, in many instances, may be subordinated to moral rights. Under these systems, only works which are original, in that they reflect the personality of the author, are entitled to protection. Productions that do not meet this originality requirement, but still merit some protection, are protected under a system of "neighboring rights." Needless to say, with such divergent theoretical bases sometimes the copyright and the authors' rights systems are in conflict. One of these areas of conflict is in the nature and level of rights for owners of neighboring rights.

Neighboring rights are similar to the rights protected by copyright or authors' rights and are applied to protect the rights of producers of phonograms, performers and broadcasters. Under the copyright system, many of the rights covered under neighboring rights are actually copyright rights. For example, under the U.S. copyright law, sound recording producers and performers are regarded as joint authors of sound recordings. Under droit d'auteur (or authors' rights) systems, such producers' and performers' rights would be protected as neighboring rights. Neighboring rights, while similar in economic character to authors' rights, are protected generally at a lower level and are entirely separate and distinct from the higher-level rights granted to authors.

²⁷³ Stewart at 6.

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INTERNATIONAL TREATIES

The World Intellectual Property Organization (WIPO) is responsible for the administration of, and activities concerning revisions to, the international intellectual property treaties.²⁷⁴ The principal WIPO copyright conventions include the Berne Convention for the Protection of Literary and Artistic Works (Paris 1971) (hereinafter "Berne Convention"),²⁷⁵ the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (hereinafter "Rome Convention"),²⁷⁶ and the Geneva Convention for the Protection of Producers of Phonograms Against the Unauthorized Reproduction of their Phonograms (Geneva Phonograms Convention).²⁷⁷ WIPO also administers the Paris Convention for the Protection of Industrial Property (Stockholm 1967) which is not discussed in this report.

²⁷⁴ There are 143 members of the Convention Establishing the World Intellectual Property Organization (WIPO) as of January 1, 1994. Done at Stockholm on July 14, 1967; entered into force for the United States on August 25, 1970. 21 UST 1749; TIAS 6932; 828 UNTS 3.

²⁷⁵ Berne Convention (with Appendix) for the Protection of Literary and Artistic Works of September 9, 1886, completed at Paris on May 4, 1896, revised at Berlin on November 13, 1908, completed at Berne on March 20, 1914, revised at Rome on June 2, 1928, at Brussels on June 26, 1948, at Stockholm on July 14, 1967, and at Paris on July 24, 1971, amended at Paris on July 24, 1979. Done at Paris on July 24, 1971; entered into force for the United States on March 1, 1989. There are 105 members of the Convention.

²⁷⁶ International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations. There are 45 members of the convention, but the United States is not a member. The Rome Convention is jointly administered by WIPO, the International Labor Organization (ILO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO).

²⁷⁷ Convention for the Protection of Producers of Phonograms against Unauthorized Duplication of their Phonograms. Done at Geneva on October 29, 1971; entered into force on April 18, 1973; for the United States on March 10, 1974. 25 UST 309; TIAS 7808; 888 UNTS 67. There are 50 members of the Convention as of January 1, 1994.

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UNESCO²⁷⁸ and WIPO jointly administer the Universal Copyright Convention (Paris 1971) (hereinafter "UCC"),²⁷⁹ which is a lower-level copyright convention that was negotiated in the years following World War II largely to bring the United States into the world of international copyright. Virtually all of the members of the UCC are also members of the Berne Convention, and by the terms of the conventions the Berne Convention governs relations between members of both.

The Berne Convention is the principal international copyright convention, and is the largest and most detailed. The United States joined the Berne Convention in 1989. While it is generally regarded as providing adequate international standards of protection, some believe that it should be updated account for advances in electronic communications and information processing technology. Its members come from the world's major legal traditions -- the Anglo-American common law copyright system and the European civil law droit d'auteur system. However, despite its level of detail, as previously noted, and in part because it must accommodate differing legal traditions, in some areas its standards may be insufficient to deal with the world of digital dissemination of copyrighted works.

The principal treaty for the protection of neighboring rights, the Rome Convention, was adopted in 1961, and is considered by many to include standards that are inadequate for dealing with the problems raised by current technological advances and the level of trade in the products and services affected by its operation. It provides for the protection of producers of phonograms against unauthorized reproduction of their phonograms, for performers to prevent certain reproductions and fixations of their performances and it provides limited rights for broadcasting organizations. It also provides for protection against certain "secondary uses" of phonograms, such a broadcasting, but it contains the ability for

²⁷⁸ UNESCO is the United Nations Educational, Scientific and Cultural Organization.

²⁷⁹ Universal Copyright Convention, as revised, with two protocols annexed thereto. Done at Paris on July 24, 1971, entered into force on July 10, 1974. 25 UST 1341; TIAS 7868.

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members to reserve on this right. The United States does not belong to the Rome Convention.

The Geneva Phonograms Convention provides for the protection of phonograms against unauthorized reproduction and distribution for a minimum term of 20 years. It does not provide for a performance right in sound recordings. The United States belongs to the Geneva Phonograms Convention.

WIPO has convened a Committee of Experts on a Possible Protocol to the Berne Convention to account for developments since the 1971 revision of the Convention, and a Committee of Experts on a New Instrument for the Protection of Performers and Producers of Phonograms to consider how to provide improved rights for performers and producers of phonograms.

c. COPYRIGHT HARMONIZATION

The performers and the kinds of performances to which neighboring rights apply are not universally agreed. This has led to divergent regimes for the protection of economically important rights, both among industrialized and developing countries. A consequence of this divergence is that U.S. performers and producers have been denied the ability to share in remuneration for the use of their products and performances in some countries. Heretofore, there has not been strong support for the establishment of a system of statutory performers' rights in the United States. Historically, this has been because of the opposition of producers who are concerned that the establishment of performers' rights could upset the balance of power among producers and performers in contractual negotiations and collective bargaining. Also, broadcasters have concerns over the possible implications that such a course of harmonization might have for the establishment of performance rights in sound recordings.

In addition to the traditional WIPO forum, other international bodies now have a significant role in intellectual property policy formulation. The recently-concluded Trade-Related Aspects of Intellectual Property Agreement (hereinafter "TRIPs Agreement") under the Uruguay round of trade negotiations in the General Agreement on Tariffs and Trade (hereinafter "GATT") sets significant

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standards for the protection of copyright and related rights. And most importantly, it contains provisions to ensure that parties to the TRIPs Agreement fully implement its obligations.

d. NATIONAL TREATMENT

The principle of national treatment is the cornerstone of the great international intellectual property treaties – Berne and Paris. It is also the keystone of international trade treaties, including, of course, the GATT. It is of enormous significance to our copyright industries. Generally, the principle of national treatment means that under a nation's laws, a foreigner enjoys no lesser rights and benefits than a citizen of that nation receives, subject to the specific terms of the relevant international conventions. In other words, a German work as to which copyright enforcement is sought in the United States would be treated under the law exactly as if it were a U.S. work for the purposes of the copyright law.

However, some argue that rights should be granted only on the basis of reciprocity. This concept, called "material reciprocity," means that we should grant a right to a foreigner only if his or her country grants our citizens the same right. Under this scenario, the German citizen would only be able to obtain protection under the U.S. law to the extent that German law provided the same, or at least equivalent, rights to a U.S. citizen.

THE BERNE CONVENTION

Article 5(1) and 5(2) of the Berne Convention establish the principle of national treatment for works protected by copyright.²⁸⁰

²⁸⁰ Article 5 provides:

- (1) Authors shall enjoy, in respect of works for which they are protected under this Convention, in countries of the Union other than the country of origin, the rights which their respective laws do now or may hereafter grant to their nationals, as well as the rights specially granted by this Convention.
- (2) The enjoyment and the exercise of these rights shall not be subject to any formality; such enjoyment and such exercise shall be independent of the existence of protection in the country of origin of the work. Consequently, apart from the provisions of

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Under Article 5(1), there is an obligation to grant to nationals of countries of the Berne Union national treatment in respect of the rights specifically covered by the Convention. This point is not disputed.²⁸¹ However, with respect to any new rights which may be hereafter granted, some have taken the position that the national

this Convention, the extent of protection, as well as the means of redress afforded to the author to protect his rights, shall be governed exclusively by the laws of the country where protection is claimed.

(3) Protection in the country of origin is governed by domestic law. However, when the author is not a national of the country of origin of the work for which he is protected under this Convention, he shall enjoy in that country the same rights as national authors.

(4) The country of origin shall be considered to be:

(a) in the case of works first published in a country of the Union, that country; in the case of works published simultaneously in several countries of the Union which grant different terms of protection, the country whose legislation grants the shortest term of protection;

(b) in the case of works published simultaneously in a country outside the Union and in a country of the Union, the latter country;

(c) in the case of unpublished works or of works first published in a country outside the Union, without simultaneous publication in a country of the Union, the country of the Union of which the author is a national, provided that:

(i) when these are cinematographic works the maker of which has his headquarters or his habitual residence in a country of the Union, the country of origin shall be that country, and

(ii) when these are works of architecture erected in a country of the Union or other artistic works incorporated in a building or other structure located in a country of the Union, the country of origin shall be that country.

281 See World Intellectual Property Organization, BCP/CE/III/3, Report of the Committee of Experts on a Possible Protocol to the Berne Convention. Third Session. June 21 to 25, 1993, 20-21 (June 25, 1993).

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treatment obligation applies only to the minimum rights in the Convention.²⁸²

THE ROME CONVENTION

The fundamental problem with the Rome Convention is that, while it generally imposes a national treatment obligation, it permits a number of reservations and exceptions that allow a Member to avoid that obligation for important rights otherwise provided for in the Convention. Article 3.1 of the TRIPs Agreement provides that "[i]n respect of performers, producers of phonograms and broadcasting organizations, this obligation [national treatment] only applies in respect of the rights provided under this Agreement."²⁸³ It also provides that a Member may avail itself of the "possibilities provided in . . . paragraph 1(b) of Article 16 of the Rome Convention . . ." relating to reciprocity for the broadcasting right in respect of phonograms.²⁸⁴

THE TRIPs AGREEMENT

Additionally, the TRIPs Agreement includes a national treatment obligation.²⁸⁵ In respect of copyright the TRIPs national

282 *Id.* at 21

283 *See* Trade-Related Aspects of Intellectual Property, Final Act Embodying the Results of the Uruguay Round of the Multilateral Trade Negotiations, Office of the U.S. Trade Representative, Dec. 15, 1993.

284 *Id.*

285 Article 3 (National Treatment) provides:

1. Each Member shall accord to the nationals of other Members treatment no less favourable than that it accords to its own nationals with regard to the protection of intellectual property, subject to the exceptions already provided in, respectively, the Paris Convention (1967), the Berne Convention (1971), the Rome Convention and the Treaty on Intellectual Property in Respect of Integrated Circuits. In respect of performers, producers of phonograms and broadcasting organizations, this obligation only applies in respect of the rights provided under this Agreement. Any Member availing

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treatment provision incorporates the standards of the Berne Convention, but in respect of neighboring rights, it allows members to impose the exceptions to national treatment permitted by the Rome Convention.²⁸⁶ Permitting such exceptions can lead to problems in the implementation of a GII.

itself of the possibilities provided in Article 6 of the Berne Convention and paragraph 1(b) of Article 16 of the Rome Convention shall make a notification as foreseen in those provisions to the Council for Trade-Related Aspects of Intellectual Property Rights.

2. Members may avail themselves of the exceptions permitted under paragraph 1 above in relation to judicial and administrative procedures, including the designation of an address for service or the appointment of an agent within the jurisdiction of a Member, only where such exceptions are necessary to secure compliance with laws and regulations which are not inconsistent with the provisions of this Agreement and where such practices are not applied in a manner which would constitute a disguised restriction on trade.

286 Article 4 (Most-Favoured-Nation Treatment) provides:

With regard to the protection of intellectual property, any advantage, favour, privilege or immunity granted by a Member to the nationals of any other country shall be accorded immediately and unconditionally to the nationals of all other Members. Exempted from this obligation are any advantage, favour, privilege or immunity accorded by a Member:

(a) deriving from international agreements on judicial assistance and law enforcement of a general nature and not particularly confined to the protection of intellectual property;

(b) granted in accordance with the provisions of the Berne Convention (1971) or the Rome Convention authorizing that the treatment accorded be a function not of national treatment but of the treatment accorded in another country;

(c) in respect of the rights of performers, producers of phonograms and broadcasting organizations not provided under this Agreement;

(d) deriving from international agreements related to the protection of intellectual property which entered into force prior to the entry into force of the Agreement Establishing the MTO, provided that such agreements are notified to the Council for Trade-Related Aspects of Intellectual Property Rights and do

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THE NAFTA

The NAFTA includes a very broad national treatment provision that does not include the possibility of making the broad exceptions provided for under the TRIPs agreement.²⁸⁷

e. PRIVATE COPYING ROYALTY SYSTEMS

The manner in which portions of the audio and video private copying royalties that are collected in some European countries are distributed to claimants may prove to be an impediment to future development of the GII if a similar approach is adopted in respect of digital information dissemination systems. As an example, France's Law of July 3, 1985 (1985 Law) establishes a system of neighboring rights protection for performers, audiovisual communication enterprises, producers of phonograms and producers of videograms. The 1985 Law, *inter alia*, grants specified right holders an entitlement to equitable remuneration in respect of the private copying of their works. Some of the 1985 law's provisions are based on reciprocity and thus discriminate against, for example, foreign motion picture interests. Consequently, those provisions may be inconsistent with France's obligations under the Berne Convention and the UCC. If this pattern is followed in implementing future legislation, serious impediments to the development of the GII may arise.

f. MORAL RIGHTS

The author's moral rights are provided for under Article 6*bis* of the Berne Convention.²⁸⁸ The nature and scope of moral rights

not constitute an arbitrary or unjustifiable discrimination against nationals of other Members.

287 See North American Free Trade Agreement (hereinafter NAFTA), H.R. Doc. No. 159, 103d Cong., 1st Sess. (1993); 32 I.L.M. 289-456, 605-799 (1993).

288 Article 6*bis* provides:

(1) Independently of the author's economic rights, and even after the transfer of the said rights, the author shall have the

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varies considerably from country to country. The fact that these rights are non-transferable may create difficulties for the commercialization of works in the NII environment. A current draft report of the multimedia study committee of the Japanese Institute for Intellectual Property suggests that there may be a need to either permit the specific waiver of the right of integrity or to limit its application in the digital world.²⁸⁹

B. PATENT

Development of the NII will depend upon, and stimulate innovation in, many fields of technology, especially computer software, computer hardware and telecommunications. An effectively functioning patent system that encourages and protects innovations in these fields of technology is, therefore, important for the overall success of the NII. The most significant issues related to the effects of the NII on the patent system include the impact the NII will have on the quantity and quality of information available

right to claim authorship of the work and to object to any distortion, mutilation or other modification of, or other derogatory action in relation to, the said work, which would be prejudicial to his honor or reputation.

(2) The rights granted to the author in accordance with the preceding paragraph shall, after his death, be maintained, at least until the expiry of the economic rights, and shall be exercisable by the persons or institutions authorized by the legislation of the country where protection is claimed. However, those countries whose legislation, at the moment of their ratification of or accession to this Act, does not provide for the protection after the death of the author of all the rights set out in the preceding paragraph may provide that some of these rights may, after his death, cease to be maintained.

(3) The means of redress for safeguarding the rights granted by this Article shall be governed by the legislation of the country where protection is claimed.

289 See "Exposure '94: A proposal for the new rule of intellectual property for multimedia," Institute of Intellectual Property 18 (February 1994).

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from which to determine the patentability of inventions, as well as to judge the validity of patents.

The goals of the patent system are to encourage innovation and public disclosure of advances in technology. To this end, the patent system offers an incentive to inventors to publicly disclose their inventions in exchange for the exclusive right to prevent others from making, using or selling the patented inventions for 17 years.

Patent protection is available in the United States for inventions without differentiation as to the field of technology: "... any new and useful process, machine, manufacture, or composition of matter ..." can be patented.²⁹⁰ However, unlike copyright protection, an inventor must specifically request protection by filing a patent application and demonstrating that the invention meets all of the statutory requirements of patentability. Specifically, an invention must be new,²⁹¹ useful²⁹² and nonobvious.²⁹³ In addition, the inventor must fully describe and disclose the invention in the patent application.²⁹⁴

²⁹⁰ This language has been interpreted broadly by the Supreme Court in Diamond v. Chakrabarty, 447 U.S. 303, 309 (1980), wherein the Court held: The subject matter provisions of the patent law have been cast in broad terms to fulfill the constitutional and statutory goal of promoting "the progress of science and the useful arts." Congress employed broad language in drafting Section 101 precisely because such inventions are often unforeseeable. Congress and the Federal courts have developed a number of exceptions to patentability. These include exceptions for naturally occurring articles, laws of nature, methods of doing business, and computer programs. See Donald S. Chisum, Patents § 1.01 (1992).

²⁹¹ See discussion of 35 U.S.C. §102 infra notes 295-97 and accompanying text.

²⁹² To be eligible for patent protection, an invention must be either a process, an article of manufacture, a composition or a machine. Discoveries, laws of nature, mathematical algorithms, methods of doing business and the like are not eligible for patent protection. See 35 U.S.C. § 101.

²⁹³ See discussion of 35 U.S.C. § 103, infra.

²⁹⁴ See 35 U.S.C. § 112

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Once a patent application has been filed with the Patent and Trademark Office (PTO), the application is reviewed by an Examiner against the "prior art" to determine whether the patentability requirements of novelty ("new") and nonobviousness have been met. Generally speaking, "prior art" includes information that is publicly available prior to the filing date of a patent application.²⁹⁵ An invention satisfies the novelty requirement if it has not been publicly disclosed prior to the filing date of the patent application.²⁹⁶ Novelty exists unless the prior art completely discloses the invention that is claimed by the patent applicant.²⁹⁷ An invention satisfies the nonobviousness requirement if a "person of ordinary skill in the art"

²⁹⁵ Specifically, "prior art" is defined in 35 U.S.C. § 102:

A person shall be entitled to a patent unless —

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or

. . . .

(f) he did not himself invent the subject matter sought to be patented, or

(g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

²⁹⁶ Under U.S. law, an inventor has a one-year "grace period" to file a patent application. This grace period is invoked by inventors to avoid being barred from obtaining a U.S. patent when the invention has been publicly disclosed by another during the one year period before the inventor has filed a patent application. This grace period is not available in all countries. As a result, applicants must exercise care before disclosing their invention to avoid forfeiting patent rights in countries without a one year grace period.

²⁹⁷ For example, if a patent application is filed after an article is published in a technical journal which completely discloses the invention claimed in the patent application, the application will be rejected by the PTO on the grounds that the claimed invention lacks novelty.

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would not have viewed the invention as obvious in view of the prior art at the time the patent application was filed.²⁹⁸

The specific categories of prior art that are defined in Section 102 of the Patent Act can be used to deny the grant of a patent, or to invalidate a patent, on the grounds that the invention lacks novelty or is obvious.²⁹⁹ These include, generally speaking, patents issued by the United States or by other countries; printed publications distributed in the United States or abroad; evidence of public use or public disclosure of an invention in the United States; and evidence of a sale or offer to sell an invention in the United States.³⁰⁰ The NII will significantly improve the amount and availability of prior art. This, in turn, will have an impact on patentability determinations, whether made during the patent examination process or during challenges to patent validity through litigation in the Federal courts.

For example, a patent grants the owner the exclusive right to prevent others from making, using or selling the invention as it is defined in the patent.³⁰¹ A patent owner must exercise these patent

²⁹⁸ Section 103 of title 35, United States Code, sets forth the nonobviousness requirement, in pertinent part, as follows:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

²⁹⁹ The definition of prior art information in Section 102 also governs what information can be used in Section 103 non-obviousness determinations.

³⁰⁰ The specific requirements of these patent-defeating publications and public disclosures are set forth in detail in 35 U.S.C. § 102, discussed *infra* pp. 98-99.

³⁰¹ See 35 U.S.C. § 154 ("Every patent shall contain ... a grant to the patentee ... for the term of seventeen years ... of the right to exclude others from making, using, or selling the invention throughout the United States and, if the invention is a process, of the rights to exclude others from using or selling throughout the United States, products made by that process, referring to the specification for the particulars thereof.")

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rights against alleged infringers or run the risk of not being able to do so if found to have waited too long.³⁰² The patent owner has the burden of establishing patent infringement. Patent infringement is established by demonstrating that the accused product or process falls within the scope of the patent claims.³⁰³ A party accused of infringement can avoid liability by asserting that the patent does not cover, either literally or under the doctrine of equivalents, the accused product or process.³⁰⁴ The accused infringer can also assert that the patent is either invalid or unenforceable, or both.

Parties can challenge the validity of a patent in the Federal district courts or before the PTO. By statute, a patent is presumed valid.³⁰⁵ Thus, in district court, the party challenging patent validity must demonstrate through clear and convincing evidence that the patent fails to satisfy one or more of the statutory criteria of

302 See 35 U.S.C. § 271(a) ("Except as otherwise provided in this title, whoever without authority makes, uses or sells any patented invention, within the United States during the term of the patent therefor, infringes the patent.")

303 The claims of a patent define the metes and bounds of the invention by specifically defining the features of an invention which are protected.

304 Literal infringement is established when the accused product or process contains each and every element set forth in the patent claims. However, in certain circumstances, a patent owner can establish infringement even if the accused product or process does not have each of the elements set forth in the claims. This type of infringement is known as infringement under the doctrine of equivalents, an equitable remedy designed to prevent misappropriation of the essence of the patented invention. Under the doctrine of equivalents, infringement is established by proving that the accused product or process "performs substantially the same function in substantially the same way to obtain the same result as the patented invention." See Graver Tank & Mfg. Co. v. Linde Air Prods. Co., 339 U.S. 605, 607 (1950).

305 See 35 U.S.C. § 282:
A patent shall be presumed valid. Each claim of a patent (whether in dependent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims; dependent or multiple dependent claims shall be presumed valid even though dependent upon an invalid claim. The burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity.

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patentability (e.g., novelty, utility, obviousness, or adequate disclosure).³⁰⁶ This is most often accomplished by submitting new prior art which was not considered by the PTO Examiner. The accused infringer then argues that this new prior art anticipates the claimed invention (i.e. the invention is not new because someone else had done it before the inventor) or that the claimed invention would have been obvious to one of ordinary skill in the art based on this new "prior art."

Likewise, prior art impacts the enforceability of a patent. For example, parties can preclude the enforcement of a patent, without specifically addressing the patent's validity. This is accomplished by establishing that the patent owner either misused its patent rights, or committed a fraud on the PTO incident to obtaining patent protection. For example, if it can be shown that the inventor withheld material prior art from the patent office so as to commit fraud on the PTO, the patent may be found to be unenforceable against infringers, even if the patent satisfies all patentability requirements.

In each of these scenarios, prior art plays an important role both in defining the state of the art at the time a patent application is filed and in justifying conclusions on the patentability of an invention or the validity of a patent. Because of this, it is imperative that all sources of information that relate to an invention be integrated into patentability determinations.

Access to these sources of information, particularly patents and printed publications, has been vastly improved through the use of electronic or on-line database services. These services document the existence and content of patents and printed publications, and in some instances, provide access to the complete text and electronic images of such documents. It is important to recognize that the information that can be retrieved through these services invariably exists as an original, paper document disseminated through

³⁰⁶ A party can also challenge the validity of a patent in a reexamination proceeding before the PTO. In such a proceeding, however, the basis for challenge is limited to novelty and obviousness in view of only certain types of prior art, namely, printed publications and patents.

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traditional publication channels (e.g., technical journals or publications, domestic and foreign patent documents).

The NII will dramatically change the way information is prepared and disseminated. It will improve the number, accessibility and quality of traditional on-line services. It will also foster creation of new forms of "electronic publications" that are different in character from traditional paper-based publications. Examples of such electronic publications could include electronic versions of traditional paper-based publications that supplement or reorganize presentation of the content of the paper-based publication; informally prepared information such as postings on electronic information forums and dissemination of news articles with technical content; and formally designed and developed electronic publications that are not printed on paper, but are entirely electronically disseminated.

Electronic publications such as these will supplement the wealth of publicly accessible information that is used in patentability determinations and validity challenges to issued patents. However, these new types of electronically disseminated documents are different in character from traditionally printed and indexed patents and publications. For example, the information contained in the disclosure of electronic documents may not be printed originally on paper, and as such, may have no tangible evidence regarding the date the information was first publicly disclosed or even as to its existence. No guidelines or industry standards presently govern the memorialization of either the contents or the date of public disclosure of information in such documents. The degree of distribution of, or public accessibility to electronic documents is not presently measured and may prove unmeasurable. Yet, these are key factors used to determine whether a document is in the prior art. In addition, the content of such documents, particularly informally created documents, may not be subject to any form of peer review or content screening. This, in turn, could influence the evaluation of information in electronic documents that could affect patentability. Likewise, these factors may also have a direct impact on the challenges made to the validity of an issued patent based on prior art.

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C. TRADEMARK

A trademark is quite different from either a copyright or a patent. A trademark is any word, name, symbol or device, or any combination thereof, that serves to identify and distinguish the source of one party's goods or services from those of another party. A service mark is the same as a trademark, except that it identifies and distinguishes the source of services rather than goods. In this report, the terms "trademark" and "mark" are intended to refer to all types of marks.

The purpose of a trademark is twofold – to identify the source of products or services and to distinguish the trademark owner's goods and services from those of others. As long as a trademark fulfills these functions, it remains valid. Trademark ownership rights in the United States arise through use of a mark. Continued use of a mark is necessary to maintain trademark rights. The owner of a trademark is entitled to the exclusive right to use the mark. This entitlement includes the ability to prevent the use, by unauthorized third parties, of a confusingly similar mark. Marks used by unrelated parties are confusingly similar if, by their use on the same, similar, or related goods or services, the relevant consumer population would think the goods or services come from the same source.

Unlike patent and copyright law, Federal trademark law coexists with state and common-law trademark rights. Therefore, registration at either the Federal or state level is not necessary to create or maintain ownership rights in a mark. For example, priority of trademark rights between owners of confusingly similar marks, regardless of whether the marks are Federally registered, is based upon first use of the mark.³⁰⁷

³⁰⁷ Priority may also be established by the filing date of a Federal registration based upon an intent to use a mark (15 U.S.C. § 1051(b)) or a foreign filing (15 U.S.C. § 1126).

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Federal trademark law is embodied in the Lanham Act³⁰⁸ and is based upon the commerce clause of the Constitution.³⁰⁹ Therefore, to obtain a Federal trademark registration, in most cases³¹⁰ the owner of a mark must demonstrate that the mark is used in a type of commerce that may be regulated by Congress.³¹¹ Additionally, the Trademark Law Reform Act of 1988³¹² amended the Lanham Act to establish trademark rights, which vest upon registration following use of the mark in commerce, as of the filing date of a trademark application indicating a bona fide intent to use the mark in commerce.³¹³

Remedies against trademark infringement and unfair competition are available to trademark owners under both state and Federal law.³¹⁴ In this regard, the owner of a Federal trademark registration has certain benefits. In a court proceeding, registration on the Principal Register constitutes prima facie evidence of the registrant's ownership of the mark.³¹⁵ Registration on the Principal Register may also be used as a basis

308 15 U.S.C. § 1051 et seq. (1988 & Supp. V 1993). The Lanham Act, as amended, forms Chapter 22 of Title 15 of the U.S. Code.

309 The first Federal trademark law in the United States was found unconstitutional because it was premised on the patent clause of the Constitution.

310 Certain foreign-based applications may register without a showing of use in commerce. 15 U.S.C. § 1126(e).

311 15 U.S.C. § 1127 (1988 & Supp. V 1993). "The word 'commerce' means all commerce which may lawfully be regulated by Congress." This includes interstate commerce, commerce between the United States and a foreign country, and territorial commerce.

312 P.L. 100-667, 1988 U.S.C.C.A.N. (102 Stat.) 3935.

313 15 U.S.C. § 1051(b) (1988).

314 See 15 U.S.C. §§ 1114 - 1121, 1125(a) (1988 & Supp. V 1993) for relevant Federal law provisions. State and common law unfair competition provisions include such torts as passing off and dilution.

315 15 U.S.C. § 1057(b) (1988).

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to block importation of infringing goods³¹⁶ or to obtain remedies against a counterfeiter.³¹⁷ The Lanham Act provides that under certain conditions the right to use a registered mark may become incontestable.³¹⁸ Additionally, the Lanham Act provides for cancellation of registrations on certain grounds.³¹⁹

Existing legal precedent accepts electronic transmission of data as a service and, thus, as a valid trademark use for the purpose of creating and maintaining a trademark.³²⁰ Additionally, existing legal precedent applies the available remedies for infringement and unfair competition to such acts occurring through the unauthorized use of trademarks electronically.³²¹ However, in the future, with widespread access to and

316 15 U.S.C. § 1124 (1988).

317 15 U.S.C. § 1116(d) (1988); 18 U.S.C. § 2320 (1988).

318 15 U.S.C. § 1065 (1988).

319 15 U.S.C. § 1064 (1988).

320 See In re Metriplex Inc., 23 U.S.P.Q.2d 1315 (TTAB 1992), where the PTO's Trademark Trial and Appeal Board authorized registration of a mark identifying "data transmission services accessed via computer terminal" and accepted, as evidence of use of the mark, a print-out of the mark as it appeared on the computer screen during transmission.

321 In the recent case Playboy Enters. v. Frena, *supra* note 113, the operator of a subscription computer bulletin board system (Frena) transmitted as part of its bulletin board system photographs owned by Playboy Enterprises Inc. (PEI). PEI's trademarks were obliterated on some photographs transmitted by Frena and PEI's "Playboy" and "Playmate" marks appeared on other photographs transmitted by Frena. These transmissions were without authorization from PEI. The court found, in part, that Frena infringed PEI's registered trademarks when it used PEI's "Playboy" and "Playmate" marks in unauthorized transmissions of PEI's photographs as part of its computer bulletin board system. The court also found Frena to have committed acts of unfair competition, in violation of Section 43(a) of the Lanham Act (15 U.S.C. § 1125(a)), both by obliterating PEI trademarks from photographs and by placing its own advertisement on PEI photographs. Such acts made it appear as if PEI authorized Frena's use of the images on the bulletin board; see also Showtime/The Movie Channel, Inc. v. Covered Bridge Condominium Ass'n, 693 F. Supp. 1080 (S.D. Fla. 1988), in which the court found that interception of

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use of the NII, both the legitimate and infringing electronic uses of trademarks may increase. Further, unfair competition may increase in the context of the NII to the extent that it may be easier to copy or remove trademarks from electronically transmitted information than from labeled products or from services identified in print media.

The first opportunity for a court to define the legal relationship between trademarks and the registration and use of site names on the Internet is presented in a recently filed action in Federal district court in the Southern District of New York. The owners of the MTV cable network ("MTV") have filed an action seeking injunctive relief and monetary damages from a former employee who is offering a daily report about the rock music industry on the Internet using the site name "mtv.com." MTV is alleging, *inter alia*, trademark infringement and unfair competition.³²²

cable television programming broadcast via satellite which appropriates trademarks and trade names in a manner likely to cause confusion is unfair competition in violation of Section 43(a) of the Lanham Act (15 U.S.C. § 1125(a)).

In California, a U.S. District Court has entered a preliminary injunction against the owner of a computer bulletin board system based upon claims of copyright and trademark infringement and unfair competition. In *Sega Enters. Ltd. v. MAPHIA*, *supra* note 117, Sega demonstrated that the bulletin board system knowingly solicited the uploading and downloading of unauthorized copies of Sega's video games, and that whenever such a copy is played, Sega's trademark appears on the screen. Further, Sega's trademark appeared, with the BBS operator's knowledge, on file descriptors on the bulletin board. With regard to the trademark and unfair competition claims, the court concluded that there is support for the conclusion that the transferred games are counterfeit under the Lanham Act, and that confusion, if not on the part of the bulletin board users, is inevitable on the part of third parties who may see the copied games after they enter the stream of commerce.

322 To send and receive information on the Internet, various organizations connected to the Internet must register their domains, networks and autonomous systems numbers ("site names") with the Internet National Information Center (InterNIC). InterNIC performs this function under a cooperative agreement with the National Science Foundation. Within the context of a prescribed format, the Internet user may register any site name as long as the identical site name has not been previously registered with InterNIC by another party. According to InterNIC, there is no state or Federal

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D. TRADE SECRET

Unlike many of the other forms of intellectual property protection previously mentioned, trade secrets are protected solely through state law, not Federal law. Trade secret protection is very limited. A trade secret holder is only protected from unauthorized disclosure and use of the trade secret by others and from another person obtaining the trade secret by some improper means.³²³

There are several factors used to determine if subject matter qualifies as a trade secret. Among the factors considered are the extent of measures taken by the trade secret owner to guard the secrecy of the information and the ease or difficulty with which the information could be properly acquired or duplicated by others.³²⁴ Based on these considerations, the general rule is that subject matter cannot be successfully protected as a trade secret if it is widely distributed. However, if adequate security precautions are taken to ensure that access to the subject matter being distributed is treated as secret, the subject matter may still be considered a trade secret.

Whether trade secret owners distribute their trade secrets through the NII will largely depend on the extent that they believe that the secrecy of the trade secret will not be compromised by such a distribution. Consequently, if the NII is going to be used as a tool

statutory or regulatory authority under which InterNIC performs this registration function. Thus, InterNIC has no authority to refuse to register site names for a reason such as likelihood of confusion with a trademark. Furthermore, InterNIC does not conduct an examination of trademark or other records before registering a site name.

323 "A trade secret is commonly defined as any formula, pattern, device or compilation of information which is used in one's business, and which gives him an opportunity to obtain an advantage over competitors who do not know or use it." Restatement of Torts § 757, Comment b (1939).

324 *Id.* The trade secret owner may communicate the trade secret to others provided that those to whom the trade secret is communicated to pledge not to reveal the trade secret to others. *Id.*

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for disseminating trade secret information the NII must be equipped with adequate security measures to ensure that trade secrets distributed through the NII will remain secret.³²⁵

In addition to the concerns regarding security precautions, issues of jurisdiction may also arise in the context of using the NII as a vehicle to transmit trade secrets. Because trade secret protection is protected by state law, not Federal law, which state law controls the resolution of a trade secrecy issue – the place where the information is downloaded off the NII or the place where the trade secret owner first distributes the information via the NII for distribution – may become an issue in trade secret disputes. These jurisdictional issues, however, are no more problematic than present jurisdictional issues associated with the distribution of trade secrets and can be adequately resolved by the choice of law rules presently codified in state law.

To some degree whether trade secret owners distribute their trade secrets through the NII may also depend on the type of information products and services being disseminated. For instance, it has been suggested that the most common way to protect software is through trade secret protection.³²⁶ Unlike most trade secret information, computer programs can be copied and used without the copier ever understanding or viewing the information in a comprehensible form. Although the trade secrecy problems associated with computer programs are not unique to the NII, the capabilities of the NII may cause these problems to become more prevalent.

325 See discussion of methods of protection for material distributed through the NII *infra* pp. 106-111.

326 See CONTU Final Report at 127.

II. TECHNOLOGY

Technology can be used to protect copyrighted works against unauthorized access, reproduction, manipulation, distribution, performance or display. It can also be useful in the authentication of the integrity of copyrighted works and in the management and licensing of the rights in such works. Protection and management schemes based strictly on specific technologies may have limited usefulness due to the rapidly evolving nature of these technologies. Furthermore, if the systems developed are too cumbersome or complicated, consumers may reject works protected under such a system. However, to the extent that the marketplace will tolerate such measures, they can be useful in protecting copyrighted works.³²⁷

Technology-based protection of digital works can be implemented through hardware, software or a combination thereof. It can be implemented at the level of the copyrighted work or at other, more distant, levels. It can be used to prevent or restrict access to a work, as well as reproduction, adaptation, distribution, performance or display of the work.

A. CONTROLLING ACCESS TO PROTECTED WORKS

Unauthorized access to copyrighted works can be denied in two general ways: by restricting access to the source of the work, or by restricting manipulation of the electronic file containing the work.

³²⁷ For a detailed discussion of these and other applications of technology that may be used to provide protection for copyrighted works, see Symposium, Technological Strategies for Protecting Intellectual Property in the Networked Multimedia Environment, cosponsored by the Coalition for Networked Information, Harvard University, Interactive Multimedia Association, and the Massachusetts Institute of Technology (April 2-3, 1993); see also Morton D. Goldberg, Copyright and Technology: The Analog, the Digital, and the Analogy, Symposium, WIPO Worldwide Symposium on the Impact of Digital Technology on Copyright and Neighboring Rights, 37 (March 31 - April 2, 1993).

1. CONTROLLING ACCESS AT THE INFORMATION SERVER LEVEL

Information providers can control distribution of their digital works by controlling access to the source of these works – information or data servers. Access to these servers can vary from completely uncontrolled access (e.g., the full contents of their server are accessible without restriction), to partially controlled access (e.g., unrestricted access is granted to only certain data on a server) to completely controlled access (e.g., no uncontrolled access in any form is permitted). Access control is effected through user identification and authentication procedures (e.g., user ids and passwords) that deny access to unauthorized users to a server or to particular information on a server.³²⁸

Nearly all information providers, whether commercial on-line services such as Compuserve and America Online or dial-up private bulletin boards control access to not only their systems but also vary the nature of that access depending on the information a user wishes to access (e.g., access to certain data is conditioned on paying a higher fee, having greater access rights, etc.). On the Internet, users can connect to public servers through protocols such as gopher, file transfer protocol (ftp), telnet or the world wide web (www). Some information providers on the Internet grant full unrestricted access to all the information contained on their server. This means that anyone can access any data stored on the server. Other information providers restrict access to users that have maintained accounts, or, grant only limited access to unregistered users. For example, using ftp a user can often log on as an "anonymous" user (e.g., a user for which no account has been created in advance) but access through anonymous ftp is limited to certain data. Of course, an information provider can elect not to provide uncontrolled access (e.g., permit

³²⁸ Protection of works by means of access control mechanisms assumes that the system is not vulnerable to external means to circumvent access control. Existing systems may be vulnerable, for example, through passive monitoring during the exchange of unencrypted passwords. As a consequence, much current effort is directed to improving security at the access control level.

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only those with accounts to access their server), provided appropriate security measures are implemented.

Thus, control over access to a server may be used as one of the first levels of protection for the works found on it.

2. CONTROLLING ACCESS AT THE FILE LEVEL

A second level of control over protected works can be exerted through control measures tied to the electronic file containing the work. These measures can range from special "rendering" or "viewing" software supplied by an information provider that is necessary to view or use the work to encryption techniques that prevent the file from being manipulated in any fashion.

One type of restriction can be implemented through "rendering" or "viewing" software. Such systems require (1) a proprietary or unique file format that can only be read by certain software and that is developed or controlled by the information provider and (2) software that incorporates both a "control" measure to prevent viewing or use of a work without authorization from the information provider and "manipulation" functions to permit the user to view or use the work. Rendering or viewing software can be written to deny access if the user enters unauthorized identification or an improper password. Rendering software can also be written to deny access if the work is not an authorized copy (provided that sufficient information regarding authorized use is included in header information and it is sealed with a digital signature).³²⁹

A second type of restriction is encryption. In its most basic form, encryption amounts to a "scrambling" of data using mathematical principles that can be followed in reverse to "unscramble" the data. Encryption technologies can be used to deny access to the work in a usable form. File encryption simply converts a file from a manipulatable file format (e.g., a word processor

³²⁹ For example, the software may deny access to a work if the electronic file containing the work has been altered or information stored in the file does not match data supplied by a user necessary to open and use the file. See discussion of digital signatures *infra* pp. 111-12.

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document or a picture file that can be opened or viewed by appropriate general purpose software packages) to a scrambled format.³³⁰ Authorization in the form of possession of an appropriate password or "key" is required to "decrypt" the file and restore it to its manipulatable format.

Encryption techniques use "keys" to control access to the data that has been "encrypted." Encryption keys are actually numbers that are plugged into a mathematical algorithm and used to scramble data using that algorithm. Scrambling simply means that the original sequence of binary digits (i.e., the 1s and 0s that make up a digital file) is transformed using the mathematical algorithm into a new sequence of binary digits (i.e., a new string of 1s and 0s). The result is a new sequence of digital data that represents the "encrypted" work.³³¹ Anyone with the key (i.e., the number used to scramble the data according to the specified mathematical algorithm) can decrypt the work by plugging the number into a program that applies the mathematical algorithm in reverse to yield the original sequence of digital signals.³³² Although perhaps most commonly thought of as a

330 Rendering or viewing software may integrate encryption and file manipulation into a single software package. In other words, the rendering software, after getting a password, will decode the file and permit the user to manipulate the work (e.g., view it or listen to it), but only with the provided rendering software.

331 An algorithm is a set of logical rules or mathematical specification of a process which may be implemented in a computer.

332 A widely publicized encryption technique is referred to as "public key" encryption. Public key encryption transforms the work using an algorithm requiring two particular keys -- a "public" key and a "private" key. The keys have complementary roles. Data encrypted using a public key can only be decrypted using a secret, private key. For instance, a copyright owner could encrypt a work using the public key of the intended recipient; then, only the intended recipient could decrypt a copy of the work with his private key. No secret (private) keys need to be exchanged in this transaction. Without the private key of the intended recipient, the work cannot be read, manipulated or otherwise deciphered by other parties. Of course, if a decrypted copy is made and shared, then others could manipulate the work unless other means are used to protect it.

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tool for works transmitted via computer networks, encryption can and is used with virtually all information delivery technologies, including telephone, satellite and cable communications. Of course, once the work is decrypted by someone with the key, there may be no technological protection for the work if it is stored and subsequently distributed in its "decrypted" or original format.

Export of cryptographic technologies is restricted for military and security purposes. However, there is an ongoing review of policies governing the export of computer and networking technologies and there has been some relaxation of prior controls.

B. CONTROLLING USE OF THE WORK

Hardware and/or software can provide protection against unauthorized uses of copyrighted works. For instance, the Audio Home Recording Act requires circuitry in digital audio recording devices and digital audio interface devices that controls serial copying.³³³ The circuitry in the hardware is programmed to read certain coding information contained in the "digital subcode channel" of digital sound recordings and broadcasts. Based on the information it reads, the hardware circuitry will either permit unrestricted copying, permit copying but label the copies it makes with codes to restrict further copying, or disallow copying. The serial copy management system implemented by this circuitry allows unlimited first generation copying – digital reproduction of originals (such as CDs distributed by record companies), but prevents further digital copying from those reproductions.³³⁴

Systems such as these can be implemented through hardware, software or both, using the concepts discussed above (e.g., rendering software and encryption technology). For example, files containing works can include instructions used solely to govern or control distribution of the work. This information might be placed in the

³³³ See 17 U.S.C. § 1002 (Supp. V 1993).

³³⁴ See H.R. Rep. No. 102-873(I), 102d Cong., 2d Sess., reprinted in 1992 U.S.C.C.A.N. 3578, 3579-80, 3583 n15.

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"header" section of a file³³⁵ or another part of the file. In conjunction with receiving hardware or software, the information, whether in the header or elsewhere, could be used to limit what can be done with the original or a copy of the file containing the work. It could limit the use of the file to read-, view-, or listen-only. It could also limit the number of times the work can be retrieved, opened, duplicated or printed.

C. AUTHENTICATING THE WORK

Mathematical algorithms can be used to create digital signatures that, in effect, place a "seal" on a digitally represented work. These algorithms can be implemented through software or hardware, or both. Digital signatures can play an important role in ensuring data integrity.

A digital signature is a unique sequence of digits that is computed based on (1) the work being protected, (2) the digital signature algorithm being used, and (3) the key used in digital signature generation.³³⁶ Generating a digital signature uses cryptographic techniques, but is not encryption of the work; the work may remain unencrypted so it can be accessed and used without decryption. In fact, digital signatures and encryption can be used simultaneously to protect works. Generally, a signature is computed for a copyrighted work first and then the work (including the seal) is encrypted. When the work is to be used, the work is decrypted, then the signature (i.e., the seal) is verified to be sure the work has not been modified (either in its original or encrypted

335 A "header" is a section of a digital work where information, data, codes and instructions may be embedded. Such information may actually be embedded anywhere in the work, but for ease of reference, this Report refers to such information as embedded in a header. Terms such as "label" and "wrapper" are also used to refer to what this Report refers to as a "header."

336 The signature is generated using the binary digits of the work plus the value of the private key as inputs to the computation defined by the algorithm. Thus, the digital signature for an information object is a unique sequence of digits for that work. Specifically, a signature is not the same for different works using the same private key.

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forms). If the work is never changed, the seal need never be removed or changed. If the work is changed, a new seal must be computed on the revised information.

Generating a digital signature is called "signing" the work. Both the digital signature and the public key are often appended to signed copyrighted works (or they may be stored in a header). The signature serves as a "seal" for the work because the seal enables the information to be independently checked for unauthorized modification.³³⁷ If the seal is verified (independently computed signature matches the original signature), then the copyrighted work is a bona fide copy of the original work — i.e., nothing has been changed in either the header or the work itself.

D. MANAGING RIGHTS IN THE WORK

Software-based systems for tracking and monitoring uses of copyrighted works are contemplated in the development of the NII. Software-based systems may also be used to implement a licensing of rights and metering of use. A combination of access controls, encryption technologies and digital signatures can be used by copyright owners to protect, license and authenticate their works on the NII.

Information included in files can be used to inform the user about ownership of rights in a work and authorized uses of it. For instance, information can be stored in the header of a file that provides information regarding authorship, copyright ownership, date of creation or last modification, and terms and conditions of authorized uses. It can also support search and retrieval based on bibliographic records.

337 Anyone who has access to an information object, also has access to the digital signature for the object and the public key of the rightsholder. Consequently, the digital signature for the object may be recomputed and used to independently confirm the integrity of the object by comparing it to the digital signature appended to the object.

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Electronic licenses may be used in connection with works offered via the NII. Electronic contracts may be analogous to the "shrink wrapped" licenses used for prepackaged software.³³⁸ Providers may inform the user that a certain action – the entering of a password, for instance, to gain access to the service or a particular work, or merely the use of the service – will be considered acceptance of the specified terms and conditions of the electronic license.

The Library of Congress' Electronic Copyright Management System may be instrumental in rights management. The proposed system, which is under development, has three distinct components: (1) a registration and recordation system, (2) a digital library system with affiliated repositories of copyrighted works, and (3) a rights management system.³³⁹ The system will serve as a testbed to gain experience with the technology, identify issues, prototype appropriate standards, and serve as a working prototype if full deployment is pursued later.

338 "Shrink wrapped" is a term used to describe licenses and contracts which are enclosed with prepackaged software and which contain a notice whose operative message is: "Opening this package constitutes agreement to the terms and conditions of a legally binding agreement stated below. If you do not agree to these terms and conditions, then do not open the package."

339 See R.E. Kahn, "Deposit, Registration and Recordation in an Electronic Copyright Management System," Proceedings of Technical Strategies for Protecting Intellectual Property in the Networked Multimedia Environment, Interactive Multimedia Assoc., Annapolis, MD, 21401-1933, Jan. 1994. The registration and recordation system will be operated by the Library of Congress and will enable electronic filing of documents, automated registration and recordation of transfers of ownership and other copyright-related documents. The digital library system will be composed of a set of distributed repositories for copyrighted works, and will support search and retrieval based upon an electronic bibliographic record. The rights management system will be a distributed system which will permit use of selected copyrighted materials on the Internet, and will have some on-line rights-granting services. Electronic mail will be used to license nonexclusive rights, with or without recordation of the transactions.

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E. DEVELOPMENT OF STANDARDS

Some level of interconnection, interoperability and standardization of telecommunications, computer, wireless, satellite, broadcast and cable TV technologies and networks may be essential to achieve the Administration's vision of the NII. Government, industry or the marketplace may desire or require certain technological standards related to the NII. There has been much discussion of standardization of encryption technology, protocols, interfaces, headers and electronic licenses for purposes such as interoperability, interconnectivity and ease of information management or use. Use of these standards can make systems designed to protect intellectual property effective without imposing unacceptable limitations or burdens on access to or use of works through the NII.

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III. EDUCATION

Effective education of the public about intellectual property rights is crucial to the successful development of the NII. There seems to be an attitude by some on the Internet, for instance, that you check your copyrights at the door when you enter that domain. There is a general lack of awareness by the public about intellectual property rights in their own works, as well as in the works of others. The task of education, however, is not without difficulty.

Perhaps the best places to start will be the schools, where millions of children will be connected to the NII. There is, however, no "national curriculum" to which a special section on NII-related intellectual property rights could be added. However, a development and distribution process for wide-spread intellectual property education can be established, by working with, among others, those responsible for defining the role the advanced information infrastructure will play in schools, as well as the state and national educational organizations involved in setting the educational principles and standards utilized in the curricula of more than 17,000 school districts throughout the United States.

A brief review of the major organizations involved in education technology for schools is set forth below. This list is not intended to be exhaustive. Efforts to effectively distribute an intellectual property education program will involve national, state and local organizations.

In addition to local school district officials, there are numerous educational organizations actively involved in devising plans and recommendations on how services available via the NII should be delivered and used by schools. The school audience to be reached includes students of all ages, as well as administrators, teachers and professors. Both public and private school systems must be involved.

The kindergarten to twelfth-grade (K-12) school audience to be educated about intellectual property and the NII can be broadly classified into three segments: learners; pre-service; and in-service or professional development. The "learners" segment consists of children who are in the school system. The "pre-service" segment

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includes students currently in the school system who will go on to become teachers. The "in-service" or "professional development" segment consists of those professionals who are currently teachers or education administrators. Each group must be reached. The teachers who are educated about intellectual property rights today will be replaced in the future by the children moving through the school systems now. A similar approach should be taken in defining the audience to be reached on the university and graduate school level.

An intellectual property education program could be developed by individual state school officials, or distributed to them for their consideration. The Council of the Chief State School Officers (CCSSO) could be helpful in that regard.

Other educational organizations will also be useful in the promotion of intellectual property education. These organizations include the National Education Association, the American Federation of Teachers, the National Board for Professional Teaching Standards, the National Association of Teachers Colleges, the American Association of Community Colleges, the National School Board Association, the National Association of Elementary School Principals, the National Association of Secondary School Principals, the National Association of Independent Schools, the National Council of Teachers of Mathematics, the National Council of Teachers of English, and the National Science Teachers Association. Contact with the National Parent Teachers Association may also prove successful in reaching the parents of school-age children.

Intellectual property education can also be incorporated into the plans and recommendations that are currently being developed by educational organizations on how educators can best utilize the NII.

The National Education Goals Panel and the recently created National Educational Standards and Improvement Council ("NESIC") are both involved in the mission of promoting national education goals, including educational standards. As part of this effort, for example, the National Education Goals Panel is working on a set of principles for technology and how technology can be used in promoting education. Intellectual property education materials could be included as part of the Panel's principles under development in

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the area of staff and child development. Educational technology specialists in the Department of Education and other educational organizations, who share the objective of bringing the NII to schools, are also great resources.

The public library is another ideal place for intellectual property education. National library organizations, such as the American Library Association, the American Association of Law Libraries or the Special Libraries Association, could provide invaluable assistance. The nationwide network of 78 Patent and Trademark Depository Libraries could also be instrumental in the dissemination of intellectual property information to the public. Many of these depository libraries are affiliated with universities and colleges throughout the country.

Additional means of education, particularly those that use the NII itself, will also be explored and developed.

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IV. PRELIMINARY FINDINGS AND RECOMMENDATIONS

These preliminary findings and recommendations represent the result of the Working Group's examination to date. While the findings and recommendations are preliminary, specific language is offered with proposals for legislative change to obtain more detailed public comment.

A. THE LAW

It is difficult for intellectual property laws to keep pace with technology. When technological advances cause ambiguity in the law, courts rely on the law's purposes to resolve that ambiguity. However, when technology gets too far ahead of the law, and it becomes difficult and awkward to apply the old principles, it is time for reevaluation and change. "Even though the 1976 Copyright Act was carefully drafted to be flexible enough to be applied to future innovations, technology has a habit of outstripping even the most flexible statutes."³⁴⁰

The coat is getting a little tight.³⁴¹ There's no need for a new one, but the old one needs a few alterations.

1. DISTRIBUTION BY TRANSMISSION

a. THE DISTRIBUTION RIGHT

A transmission of a work is not necessarily only the transmission of a performance or display of the work.³⁴² In the world of high-speed, digital systems, it may be a transmission of a reproduction of the work. This may be the case, for instance, when a computer program is transmitted from one computer to ten other

³⁴⁰ H.R. Rep. No. 101-735, 101st Cong., 2d Sess. 7 (1990), reprinted in 1990 U.S.C.C.A.N. 6935, 6938 (report accompanying legislation granting copyright owners of computer software an exclusive rental right).

³⁴¹ See supra p. 8.

³⁴² See 17 U.S.C. § 101 (1988) (definition of "transmit").

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computers. When the transmission is complete, the original copy remains in the transmitting computer and the results of the reproduction — ten different copies of the work — reside in the memory of, or in storage devices associated with, the other computers. This dissemination by transmission results essentially in the "distribution" of copies of the work.³⁴³ Therefore, the Working Group recommends that the Copyright Act be amended to reflect the fact that copies of works can be distributed to the public by transmission, and such transmissions fall within the exclusive distribution right of the copyright owner.

The Working Group recommends that Section 106(3) of the Copyright Act be amended to read as follows:³⁴⁴

(3) 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, or by~~ transmission.

The Working Group also recommends other related amendments to the definition of "transmit" and the importation prohibitions.

The Working Group recommends that the definition of "transmit" in Section 101 of the Copyright Act be amended to clarify that reproductions, as well as performances and displays, can be transmitted, and to delineate between those transmissions that are communications of performances or displays and those that are distributions of reproductions.

How to delineate between these types of transmission is a difficult, but necessary, issue to resolve. The transmissions themselves hold no clues; one type often looks the same as the other during the transmission. To delineate between those transmissions that are communications of performances or displays and those that

343 In contrast to "standard" distributions, in the case of a distribution by transmission, the distributor also retains a copy of the work.

344 Any language added by a proposed amendment is underscored. Proposed deletions are indicated by ~~strike-throughs~~.

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are distributions of reproductions, then, one must look at both ends of the transmission. Did the transmitter intend to communicate a performance or display of the work or, rather, to distribute a reproduction of the work? Did the receiver simply hear or see the work or, rather, receive a copy of it? This analysis rests upon the "primary purpose or effect" of the transmission.

The Working Group recommends that the definition of "transmit" be amended to read as follows:

To "transmit" a performance or display is to communicate it by any device or process whereby images or sounds are received beyond the place from which they are sent. 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. In the case when a transmission may constitute both a communication of a performance or display and a distribution of a reproduction, such transmission shall be considered a distribution of a reproduction if the primary purpose or effect of the transmission is to distribute a copy or phonorecord of the work to the recipient of the transmission.

The Working Group also recommends that the prohibitions on importation be amended to reflect the fact that, just as copies of copyrighted works can be distributed by transmission in the United States, they can also be imported into the United States by transmission. Although we recognize that the U.S. Customs Service cannot enforce a prohibition on importation by transmission, given the global dimensions of the information infrastructure of the future, it is important that copyright owners have the other remedies for infringements of this type available to them. Therefore, the Working Group recommends that Section 602 of the Copyright Act be amended to read as follows:

(a) Importation into the United States, whether by carriage of tangible goods or by transmission, without the authority of the owner of copyright under this title, of copies or phonorecords of a work that have been acquired outside the United States is an infringement of

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the exclusive right to distribute copies or phonorecords under section 106, actionable under section 501.

b. PUBLICATION

The legislative history to the Copyright Act makes clear that "any form of dissemination in which a material object does not change hands . . . is not a publication no matter how many people are exposed to the work."³⁴⁵ Thus, a transmission of a performance or display via the NII would not constitute publication, since a material object does not change hands.³⁴⁶ However, in the case of a transmission of a reproduction, the recipient of the transmission ends up with a copy of the work. Therefore, the Working Group recommends that the definition of "publication" in Section 101 of the Copyright Act be amended to remove the rigid "changing hands" requirement:

"Publication" is the distribution of copies or phonorecords of a work to the public by sale or other transfer of ownership, ~~or by~~ rental, lease, lending, or by transmission. The offering to distribute copies or phonorecords to a group of persons for purposes of further distribution, public performance, or public display, constitutes publication. A public performance or display of a work does not of itself constitute publication.³⁴⁷

³⁴⁵ See House Report at 138 (emphasis added), reprinted in 1976 U.S.C.C.A.N. 5754.

³⁴⁶ See discussion supra notes 32-33 and accompanying text.

³⁴⁷ The second sentence of the definition – adopted originally to ensure that theatrically distributed movies were "published" and thus eligible for copyright protection under prior law – would appear to apply often to works made available by display on bulletin board systems or similar services.

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c. FIRST SALE DOCTRINE

The first sale doctrine allows the owner of a particular, lawfully-made copy of a work to dispose of it in any manner, with certain exceptions.³⁴⁸ It seems clear that the first sale model – in which the copyright owner parts company with a tangible copy – should not apply with respect to distribution by transmission, because under current applications of technology, a transmission involves both the reproduction of the work and the distribution of the reproduction. In the case of transmissions, the owner of a particular copy of a work does not "dispose of the possession of that copy or phonorecord." A copy of the work remains with the first owner and the recipient of the transmission receives a reproduction of the work. Therefore, to make clear that the first sale doctrine does not apply to transmissions, the Working Group recommends that Section 109 of the Copyright Act be amended to read as follows:

(a) (1) Notwithstanding the provisions of section 106(3), 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.

(2) This subsection does not apply to the sale or other disposal of the possession of that copy or phonorecord by transmission.

d. OTHER RELATED AMENDMENTS

The legislative changes outlined above give rise to some difficult issues. The term "distribute" (or a variant form of the term), which is not defined, is used more than 90 times in the Copyright Act.³⁴⁹ Moreover, the term is used in the definition of "publication,"

³⁴⁸ See discussion of rental rights with regard to phonorecords and copies of computer programs supra notes 165-67 and accompanying text.

³⁴⁹ This number does not include the use of the term in Chapters 9 and 10, which have separate definitions of the term for the purposes of those

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which, in its variant forms, is used more than 100 times. Therefore, care must be taken to identify and analyze all of the ramifications of a change in the Section 106 right to distribute.

The Working Group is in the process of completing that process and welcomes public comment in this regard. The Working Group is analyzing whether each of the limitations of the copyright owner's distribution right should apply with respect to distribution by transmission.³⁵⁰

2. TECHNOLOGICAL PROTECTION

The ease of infringement and the difficulty of detection and enforcement will cause copyright owners to look to technology, as well as the law, for protection of their works. However, it is clear that technology can be used to defeat any protection technology provides. The Working Group finds that legal protection alone may not be adequate to provide incentive to authors to create, unless the law also provides some protection for the technological processes and systems used to prevent unauthorized uses of copyrighted works.

Sufficient protection cannot be gained through suits for contributory infringement. Under the Sony decision, a manufacturer is not liable for contributory infringement if the device is capable of a "substantial noninfringing use," even if the device is rarely or never put to those uses, and even if the use to which it is primarily put is infringing.

The Working Group finds that prohibition of devices, products and services that defeat technological methods of preventing unauthorized use is in the public interest. Consumers of copyrighted works pay for the acts of infringers. The price of copyrighted works

chapters. It also does not include the 30 some times the Act refers to the distribution of royalties collected under the compulsory licensing systems.

350 These limitations include the limitation with regard to distribution by libraries (§ 108), the limitation with regard to ephemeral recordings (§ 112(c)), and the mechanical compulsory license (§ 115).

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for legitimate users is higher due to infringement losses suffered by copyright owners. The public will also have access to more works via the NII if copyright owners can more effectively protect their works from infringement.

Therefore, the Working Group recommends that the Copyright Act be amended to prohibit the importation, manufacture and distribution of devices, as well as the provision of services, that defeat anti-copying systems.

Legislation of this type is not unprecedented. The Copyright Act already protects sound recordings and musical works by prohibiting the circumvention of any program or circuit that implements a serial copy management system or similar system included in digital audio recording devices and digital audio interface devices. Section 1002 provides:

No person shall import, manufacture, or distribute any device, or offer or perform any service, the primary purpose or effect of which is to avoid, bypass, remove, deactivate, or otherwise circumvent any program or circuit which implements, in whole or in part, a [serial copy management system or similar system].³⁵¹

The Communications Act includes a similar provision:

Any person who manufactures, assembles, modifies, imports, exports, sells, or distributes any electronic, mechanical, or other device or equipment, knowing or having reason to know that the device or equipment is primarily of assistance in the unauthorized decryption of satellite cable programming, or is intended for any other activity prohibited by [Section 605(a)] shall be fined not more than \$500,000 for each violation, or imprisoned for not more than 5 years for each violation, or both. For purposes of all penalties and remedies established for violations of this paragraph, the prohibited activity

351 17 U.S.C. § 1002(c) (Supp. V 1993).

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established herein as it applies to each such device shall be deemed a separate violation.³⁵²

Precedent for this type of legislation is also found in the international arena. The North American Free Trade Agreement requires each party to make it a criminal offense to "manufacture, import, sell, lease or otherwise make available a device or system that is primarily of assistance in decoding an encrypted program-carrying satellite signal without the authorization of the lawful distributor of such signal" ³⁵³ In 1988, the United Kingdom enacted legislation prohibiting the manufacture, distribution or sale of a device designed or adapted to circumvent copy-protection systems.³⁵⁴

The Working Group recommends that Chapter 5 of the Copyright Act be amended to include the following new section 512:

No person shall import, manufacture or distribute any device or product (or any component or circuitry incorporated into any device or product), or offer or perform any service, the primary purpose or effect of which is to avoid, bypass, remove, deactivate, or otherwise circumvent, without authority of the copyright owner or the law, any process, treatment, mechanism or system which prevents or inhibits the exercise of any of the exclusive rights under Section 106.

The Working Group recommends other related amendments to provide civil causes of action and remedies for violations of the

352 47 U.S.C. § 605(e)(4) (1988).

353 See NAFTA, *supra* note 287, at art. 1707(a). The NAFTA also requires parties to make it a civil offense to "receive, in connection with commercial activities, or further distribute, an encrypted program-carrying satellite signal that has been decoded without the authorization of the lawful distributor of the signal or to engage in any activity prohibited under [the criminal provisions]." See NAFTA, *supra* note 287, at art. 1707(b).

354 See Copyright, Designs and Patents Act of 1988, Part VII, § 296.

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proposed prohibition. The Working Group recommends that Section 501 of the Copyright Act be amended to read as follows:

- (a) Anyone who violates any of the exclusive rights of the copyright owner as provided by sections 106 through 118 or of the author as provided in section 106A(a), or who imports copies or phonorecords into the United States in violation of section 602, is an infringer of the copyright or right of the author, as the case may be. Anyone who violates section 512 is an infringer of the copyright in a work that utilizes the process, treatment, mechanism or system which the violator's device, product or service circumvents.

The Working Group recommends that Section 503 of the Copyright Act be amended to read as follows:

- (a) At any time while an action under this title is pending, the court may order the impounding, on such terms as it may deem reasonable, of all copies or phonorecords claimed to have been made or used in violation of the copyright owner's exclusive rights, ~~and of~~ all plates, molds, matrices, masters, tapes, film negatives, or other articles by means of which such copies or phonorecords may be reproduced, and of all devices or products claimed to have been imported, manufactured or distributed in violation of section 512.

- (b) As part of a final judgment or decree, the court may order the destruction or other reasonable disposition of all copies or phonorecords found to have been made or used in violation of the copyright owner's exclusive rights, ~~and of~~ all plates, molds, matrices, masters, tapes, film negatives, or other articles by means of which such copies or phonorecords may be reproduced, and of all devices or products found to have been imported, manufactured or distributed in violation of section 512.

The Working Group also recommends that Section 506 of the Copyright be amended to read as follows:

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(a) **Criminal Infringement.** — Any person who infringes a copyright willfully and for purposes of commercial advantage or private financial gain shall be punished as provided in section 2319 of title 18.

(b) **Forfeiture and Destruction.** — When any person is convicted of any violation of subsection (a), the court in its judgment of conviction shall, in addition to the penalty therein prescribed, order the forfeiture and destruction or other disposition of all infringing copies or phonorecords and all implements, devices, products or equipment used in the ~~manufacture of such infringing copies or phonorecords~~ infringement.

The proposed prohibition on the importation, manufacture and distribution of devices and products, and the provision of services that circumvent anti-copying systems is intended to assist copyright owners in the protection of their works.³⁵⁵ Copyright owners who use anti-copying systems to protect their works may bring actions for infringement against persons who, inter alia, manufacture or distribute devices that circumvent those systems. The Working Group recognizes, however, that copyright owners may wish to use such systems to prevent the unauthorized reproduction, for instance, of their works, but may also wish to allow some users to deactivate the systems. Therefore, the proposed legislation prohibits only those devices or products, the primary purpose or effect of which is to deactivate such systems without authority. That authority may be granted by the copyright owner or by limitations on the copyright owner's rights under the Copyright Act.

Standing to bring actions for violations of the proposed legislation is granted only to copyright owners whose works are protected by the system that the violator's device, product or service circumvents; the manufacturers of anti-copying systems defeated by violators may not bring actions for the defeat of such systems.

³⁵⁵ Legislation of a similar type has been introduced with respect to technological protection of audiovisual works. See, e.g., S. 1096, 102d Cong., 1st Sess., 137 Cong. Rec. S. 6034 (1991); H.R. 3568, 101st Cong., 1st Sess., 135 Cong. Rec. H. 7924 (1989).

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The Working Group is not without some concerns regarding this proposal, particularly with regard to works whose term of copyright protection expires but are still protected by anti-copying systems, and works in the public domain. However, the Working Group believes the "primary purpose or effect" standard will allow for the distribution of devices that deactivate the anti-copying systems used in such works, and that the benefits of the proposed legislation outweigh the possible problems.

3. COPYRIGHT MANAGEMENT INFORMATION

In the future, the copyright management information associated with a work may be critical to the efficient operation and success of the NII. The public should be protected from fraud in the creation or alteration of such information. Therefore, the Working Group recommends that Section 101 of the Copyright Act be amended to include the following definition:

"Copyright management information" means information associated with a copyrighted work, including, but not limited to, the name and other identifying information of the copyright owner, the terms and conditions for uses of the work, and identification codes such as an ISBN number.

The Working Group also recommends that Section 506 of the Copyright Act, which contains the prohibitions against fraudulent copyright notices and fraudulent removal of copyright notices, be amended to include the following new subsections (g) and (h):

(g) Fraudulent Copyright Management Information. — Any person who, with fraudulent intent, digitally links with a copy of a copyrighted work copyright management information that such person knows to be false, or who, with fraudulent intent, publicly distributes or imports for public distribution any work with which copyright management information that such person knows to be false is linked, shall be fined not more than \$2,500.

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(h) Fraudulent Removal of Copyright Management Information. -- Any person who, with fraudulent intent, removes or alters any copyright management information digitally linked with a copy of a copyrighted work shall be fined not more than \$2,500.

4. PUBLIC PERFORMANCE RIGHT

Unlike the analog transmissions of traditional broadcasting, digital transmissions may replace the current forms of distribution of phonorecords. In the very near future, consumers will be able to receive digital transmissions of sound recordings on demand -- for performance in the home or for downloading -- from the so-called celestial jukebox. The legal nature of such transmissions -- whether they are performances or distributions -- has been widely debated. As discussed above, the Working Group recommends that Section 106 of the Copyright Act be amended to make clear that copies or phonorecords can be distributed by transmission. The Working Group also recommends that a "primary purpose or effect" test be used to determine whether a transmission is a performance (or display) or a distribution. However, many of these transmissions will clearly constitute exercise of the public performance right -- a right which the Copyright Act fails to grant to copyright owners of sound recordings.³⁵⁶

The lack of a public performance right in sound recordings under U.S. law is an historical anomaly that does not have a strong policy justification -- and certainly not a legal one. Sound recordings are the only copyrighted works that are capable of being performed that are not granted that right. Therefore, to play a record on the radio without infringement liability, a radio station must get a license from, and pay a royalty to, the copyright owner of the underlying

³⁵⁶ Some transmissions that clearly constitute public performances may, in effect, substitute for distributions in the future. If consumers are offered a service through which they can receive a performance of any sound recording at any time, they may stop buying phonorecords. The market for distributed phonorecords may shrink to include only the providers of that service to consumers.

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musical work (i.e., the person or entity who owns the rights in the notes and the lyrics), but it does not have to obtain permission from, or pay a license fee to, the copyright owner of the sound recording or the performer on the record. The Working Group believes that it is time to rectify this inequity.

The Working Group notes that the Administration supports two bills introduced in Congress that would grant a limited performance right to sound recordings. The bills, H.R. 2576 and S. 1421, would add to the exclusive rights of a copyright owner in a sound recording the right to perform or authorize the performance of the sound recording by "digital transmission." The right granted in the bill is not the full performance right granted to other copyrighted works. For instance, the legislation would not change the law with respect to live public performances. It would also not touch analog transmissions – the transmissions currently received over the radio. It would only grant a right with respect to transmissions in a digital format – those that pose the greatest threat to the copyright owners of sound recordings.

5. FAIR USE

The Working Group has significant concerns regarding the ability of the limitations on copyright owners' exclusive rights – particularly those limitations found in Sections 107 (fair use), 108 (library exemptions) and 110(1) and (2) (educational uses) to provide the public with adequate access to copyrighted works transmitted via the NII. As more and more works are available primarily or exclusively on-line, it is critical that researchers, students and other members of the public continue to have the equivalent opportunity on-line to "browse" through materials on the "shelves" of their public library or school.

The Copyright Act exists for the benefit of the public. To fulfill its constitutional purpose, the law should strive to make the information contained in protected works of authorship freely available to the public. "Freely available," of course, does not necessarily mean "available free." The Working Group does not believe that authors should be required to donate access time to their works on-line, but some reasonable approach must be adopted

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to assure that the economically disadvantaged in this country are not cut out of, or further disadvantaged by, the information revolution. Public libraries and schools have provided some safeguard against this nation becoming a nation of information "haves" and "have nots." We must ensure that they continue to be able to assume that role.

Guidelines for library and educational use of printed matter and music were voluntarily adopted by diverse parties and set out in the House and Conference reports accompanying the 1976 revisions to the Copyright Act.³⁵⁷ While the principles should still be applicable, it is difficult and, perhaps, inappropriate, to apply the specific language of some of those guidelines in the context of digital works and on-line services.

Therefore, the Working Group will sponsor a conference to bring together copyright owner and user interests to develop guidelines for fair uses of copyrighted works by and in public libraries and schools. To increase the productivity of the conference, the number of participants will be limited. However, while participation will be by invitation, attendance at the conference will be open to the public.

The conference will be held this summer, and will be announced in the press, on the IITF Bulletin Board, and in the Federal Register.

6. LICENSING

With limited exceptions, intellectual property law leaves the licensing of rights to the marketplace. In certain circumstances, particularly where transaction costs are believed to dwarf per-transaction royalties, Congress has found it necessary to provide for compulsory licenses.³⁵⁸ The Working Group finds that under current

357 See House Report at 68-79, reprinted in 1976 U.S.C.C.A.N. 5659, 5681-92; H.R. Conf. Rep. No. 1733, 94th Cong., 2d Sess. 72-73 (1976), reprinted in 1976 U.S.C.C.A.N. 5810, 5813-14.

358 See, e.g., 17 U.S.C. § 111 (1988 & Supp. V 1993). The cable compulsory license was enacted to reduce the need for negotiations among thousands of

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conditions, additional compulsory licensing of intellectual property rights is neither necessary nor desirable. Transaction costs – and the attendant savings from compulsory licensing – can be minimized in a digital environment.

7. INTERNATIONAL

There is little dispute that worldwide high-speed digital communications networks will have an enormous effect on the way in which works of authorship will be created, stored, communicated to the public, distributed and paid for. This communication revolution is now bringing new opportunities and new challenges to creators and users of intellectual property. The full implementation of the NII and the GII will have an immense effect on our economy, and implementation of such systems internationally will have an equally broad impact on world-wide commerce. We must be committed to finding the means to preserve the integrity of intellectual property rights in the materials that will flow in the commerce created in this environment. This is a daunting challenge in the context of the U.S. domestic market. Today we are faced with an even greater challenge, to lay the groundwork for an international basis which ensures that the digital revolution will not disadvantage those whom we seek to protect.

As we move toward a world where dissemination of entertainment and information products through on-demand delivery services operating through interactive digital information communications networks is the norm, it may be necessary to harmonize levels of protection under disparate systems of copyright, authors' rights and neighboring rights, and consideration should be given to ways to bridge the gaps among these systems.

If the GII as well as national NIIs are to flourish, then the intellectual property rights that will undergird the economic structure supporting these infrastructures must unequivocally be

program copyright owners and hundreds of cable systems for the right to retransmit the copyrighted works programs that are included in the broadcast signals retransmitted by cable systems.

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granted in national legislation fully on the basis of national treatment for all rights and benefits. However, there is some controversy over the scope of the national treatment obligation under the Berne Convention and its application to what some may regard as newly created rights and subject matter. Similar questions arise under other international copyright and neighboring rights conventions as will be later discussed.

U.S. copyright legislation has granted rights that some may regard as new rights – rental rights in computer programs, sound recordings, and musical works embodied in sound recordings – exclusively on the basis of national treatment. The United States has instituted a system of royalties on blank digital audio recording media and digital audio recorders. Benefits from these rights have all been granted on the basis of full national treatment. We believe that this is consistent with our obligations under the Berne Convention and other international intellectual property and trade treaties and agreements.

The author or rights holder should be able to realize fully the economic benefits flowing from the free exercise of his or her rights in any country participating in a GII. This is required by Article 5 of the Berne Convention. To do otherwise in either a Berne Protocol or another agreement on copyright protection would be contrary to Article 20 because it would be a derogation of rights existing under Berne and not be an Agreement to "grant to authors more extensive rights than those granted by the Convention, or contain other provisions not contrary to this Convention" as provided for under Article 20.³⁵⁹ To protect new works or to grant new rights in respect of those or presently protected works on the basis of reciprocity, would be contrary to the letter and the spirit of the Convention.

359 Article 20 states:

The Governments of the countries of the Union reserve the right to enter into special agreements among themselves, in so far as such agreements grant to authors more extensive rights than those granted by the Convention, or contain other provisions not contrary to this Convention. The provisions of existing agreements which satisfy these conditions shall remain applicable.

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As the GII continues to develop through the international interconnection of NIIs, rules must be formulated to protect the economic rights of providers of entertainment and information products. Such rules should be based on principles of national treatment along the lines of the following:

1. Each country participating in the GII shall accord to nationals of another country participating in the GII no less favorable treatment than it accords to its own nationals with regard to all rights and benefits now, or hereafter, granted under its domestic laws in respect of literary and artistic works or fixations³⁶⁰ embodying such works.

2. Benefits shall include the same possibility to exploit and enjoy rights in the national territory of a country participating in the GII as the respective country grants to its own nationals.

3. No country participating in the GII shall, as a condition of according national treatment, require rights holders to comply with any formalities in order to acquire rights in respect of literary and artistic works or fixations embodying such works.

One of the most important issues will be what is the nature of a dissemination of a work or a fixation of a work in digital format? Is it a public performance of the work or fixation, an act of reproduction, or a distribution? How do rules concerning the right of importation apply in a digital environment? Just as these questions are critical in the domestic context, they are equally acute in the context of international treaties and harmonization of laws.

Additionally, the issue of multimedia works will take on an important international dimension. If these are regarded at the international level as works in a new, separate category, the issue of their coverage under the existing conventions and the rule of

³⁶⁰ This reference to fixations includes the subject matter of neighboring rights related to works and their performance.

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national treatment will be open to debate. If, however, they are subsumed into the existing categories of works, establishing meaningful rules internationally will be simplified.

Further study to determine what other rights may need to be adapted to the emerging digital environment are underway both in domestic and international fora. However some issues merit identification here, and one of those is the level of protection to be accorded to sound recordings.

Many believe that the time has come to bring protection for performers and producers of sound recordings into line with the protection afforded to the creators of other works protected under the Berne Convention. This includes providing high-level standards for rights and benefits granted on the basis of national treatment. This is necessary for a number of reasons. First, there is no just reason to accord a lower level of protection to one special class of creative artists. Second, the extent of international trade in sound recordings makes it imperative that standards of protection be harmonized at a high level. Third, and perhaps most importantly, the digital communications revolution - the creation of advanced information infrastructures - is erasing the distinctions among different categories of protected works and sound recordings and the uses made of them.

Concerns have been raised over the extent and scope of moral rights in the world of digital communications. Some believe that the ability to modify and restructure existing works make moral rights more important than ever before. Others take the view that moral rights must be rethought in the digital world. We agree with this view. New thought must be given to the scope, extent and waivability of moral rights in digitized information.

The harmonization issues most relevant to the NII arise in the context of WIPO efforts to establish a Possible Protocol to the Berne Convention (Berne Protocol) and a Possible New Instrument for the Protection of Performers and Producers of Phonograms (New Instrument). In the Berne Protocol, the relevant activities concern the protection of computer programs as literary works, protection for databases as compilations of information other than works, the possible elimination of compulsory licensing for broadcasting, and

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special provisions for the use of materials in digital distribution systems. In the New Instrument, the most relevant issues are the possible establishment of a public performance right for sound recordings (possibly limited to digital broadcasting) and the possibility of a digital distribution or dissemination right for sound recordings.

To attain the needed level of protection internationally, we must find ways to span the differences between the continental droit d'auteur and neighboring rights systems and the Anglo-American copyright systems. An essential element of this effort will be to harmonize levels of protection by establishing standards that can be implemented through either system.

B. TECHNOLOGY

Interoperability and interconnectivity of networks, systems, services and products operating within the NII will enhance its development and success. Standardization of copyright management (standardized header information and format, for instance) as well as technological protection methods (such as encryption) may also be useful. The question of whether any standards should be established, either through government regulation or industry consensus, however, is not within the purview of this Working Group. The issue of what those standards should be, if established, is similarly outside the scope of the area of inquiry of the Working Group.³⁶¹ If a standard is established, protection of intellectual property rights used in that standard is a concern of this Group.

The intellectual property rights implications of the standards-setting process are not new with the development of the NII. The Federal Communications Commission, for instance, has established standards in related areas without interfering with the legitimate rights of intellectual property rights owners.³⁶²

361 The IITF Committee on Applications and Technology has responsibility for addressing the issue of standards.

362 Recently, the FCC adopted technical standards that define a patented system as the A.M. radio stereophonic transmitting standard in the United States. See 58 Fed. Reg. 66300 (daily ed. Dec. 20, 1993). The FCC conditioned the

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The Working Group finds that in the case of standards to be established, by the government or the private sector, the owner of any intellectual property rights involved must be able to decline to have its property used in the standard, if such use would result in the unauthorized exercise of those rights. If the rights holder wishes to have its intellectual property as part of the standard, an agreement to license the necessary rights on a nondiscriminatory basis and on reasonable terms may be required. In the case of de facto standards, arising out of market domination by an intellectual property rights holder, unfair licensing practices can be dealt with through the antitrust laws.

C. EDUCATION

Effective education of the public about intellectual property rights is crucial to the successful development of the NII. Therefore, the principles of intellectual property law must be taught in our schools and libraries. Educational efforts to increase the public's awareness of their own intellectual property rights, as well as those of others, will increase respect for those rights. Clearer guidelines with respect to the exclusive rights of copyright and other intellectual property rights holders, as well as the limitations on those rights, will make compliance with the law easier.

Following its conference on fair use, the Working Group will sponsor a second conference on intellectual property education. The purpose of that conference will be to develop curricula that may be used in elementary and secondary schools. Additional means of education, particularly those that use the NII itself, will also be explored and developed. Participation in the conference will be by invitation, but all proceedings will be open to the public.

selection of the patented system as the standard on the agreement of the patent owner to license its patents to other parties "under fair and reasonable terms." Id. at 66301.