

**NATIONAL INFORMATION INFRASTRUCTURE  
COPYRIGHT PROTECTION ACT OF 1995**

**HEARING**

BEFORE THE

**COMMITTEE ON THE JUDICIARY  
UNITED STATES SENATE**

ONE HUNDRED FOURTH CONGRESS

SECOND SESSION

ON

**S. 1284**

A BILL TO AMEND TITLE 17 TO ADAPT THE COPYRIGHT LAW TO THE  
DIGITAL, NETWORKED ENVIRONMENT OF THE NATIONAL INFORMATI-  
ON INFRASTRUCTURE, AND FOR OTHER PURPOSES

MAY 7, 1996

**Serial No. J-104-78**

Printed for the use of the Committee on the Judiciary



U.S. GOVERNMENT PRINTING OFFICE

39-968

WASHINGTON : 1997

For sale by the U.S. Government Printing Office  
Superintendent of Documents, Congressional Sales Office, Washington, DC 20540  
ISBN 0-16-054999-X

5521-65

COMMITTEE ON THE JUDICIARY

ORRIN G. HATCH, Utah, *Chairman*

STROM THURMOND, South Carolina  
ALAN K. SIMPSON, Wyoming  
CHARLES E. GRASSLEY, Iowa  
ARLEN SPECTER, Pennsylvania  
HANK BROWN, Colorado  
FRED THOMPSON, Tennessee  
JON KYL, Arizona  
MIKE DEWINE, Ohio  
SPENCER ABRAHAM, Michigan

JOSEPH R. BIDEN, JR., Delaware  
EDWARD M. KENNEDY, Massachusetts  
PATRICK J. LEAHY, Vermont  
HOWELL HEFLIN, Alabama  
PAUL SIMON, Illinois  
HERBERT KOHL, Wisconsin  
DIANNE FEINSTEIN, California  
RUSSELL D. FEINGOLD, Wisconsin

MARK R. DISLER, *Chief Counsel*

MANUS COONEY, *Staff Director and Chief Counsel*

CYNTHIA C. HOGAN, *Minority Chief Counsel*

KAREN A. ROBB, *Minority Staff Director*

(ii)

# CONTENTS

## STATEMENTS OF COMMITTEE MEMBERS

	Page
Hatch, Hon. Orrin G., U.S. Senator from the State of Utah .....	1

## CHRONOLOGICAL LIST OF WITNESSES

Panel consisting of Kenneth R. Kay, executive director, Creative Incentive Coalition, Washington, DC; John Bettis, American Society of Composers, Authors and Publishers, Los Angeles, CA; William W. Burrington, assistant general counsel and director of public policy, America Online, Inc., Vienna, VA; Robert L. Oakley, Digital Future Coalition, Washington, DC; and Daniel Burton, vice president of government relations, Novell, Inc., Orem, UT .....	7
--	---

## ALPHABETICAL LIST AND MATERIALS SUBMITTED

Bettis, John:	
Testimony .....	17
Prepared statement .....	27
Prepared statement of the American Society of Composers, Authors and Publishers .....	23
Responses to questions from Senators:	
Hatch .....	30
Thurmond .....	31
Leahy .....	32
Burrington, William W.:	
Testimony .....	34
Prepared statement .....	35
Burris, Hon. Conrad:	
Testimony .....	3
Prepared statement .....	4
Burton, Daniel F.:	
Testimony .....	49
Prepared statement .....	51
Kay, Kenneth:	
Testimony .....	7
Prepared statement .....	10
Responses of Creative Incentive Coalition (CIC) to questions from Senators:	
Hatch .....	15
Thurmond .....	18
Leahy .....	18
Oakley, Robert L.:	
Testimony .....	39
Prepared statement .....	41

## APPENDIX

### PROPOSED LEGISLATION

S. 1284, a bill to amend title 17 to adapt the copyright law to the digital, networked environment of the National Information Infrastructure, and for other purposes .....	65
---	----

(III)

## IV

### ADDITIONAL SUBMISSIONS FOR THE RECORD

	Page
Prepared statements of:	
Alex Alben .....	74
American Committee for Interoperable Systems .....	82
The American Farm Bureau Federation .....	86
The Association of National Advertisers, Inc. ....	92
Broadcast Music, Inc. ....	95
The Conference on College Composition and Communication; Caucus on Intellectual Property .....	100
Electronic Messaging Association .....	101
Home Recording Rights Coalition and the Consumer Electronics Manufacturers Association .....	103
Hugh Mackworth, chief executive officer, Digimarc Corp .....	105
National Association of Broadcasters .....	106
Garry L. McDaniels, president, Skills Bank Corp. on behalf of the Software Publishers Association .....	109
Frances W. Preston, president and CEO, Broadcast Music, Inc. ....	114
SESAC, Inc. ....	118
Letter to Senator Hatch from James R. Cregan, senior vice president/counsel, Magazine Publishers of America, dated May 17, 1996 .....	127

**NATIONAL INFORMATION INFRASTRUCTURE  
COPYRIGHT PROTECTION ACT OF 1995**

TUESDAY, MAY 7, 1996

U.S. SENATE,  
COMMITTEE ON THE JUDICIARY,  
Washington, DC.

The committee met, pursuant to notice, at 10:12 a.m., in room SD-106, Dirksen Senate Office Building, Hon. Orrin G. Hatch (chairman of the committee) presiding.

Also present: Senator Specter.

**OPENING STATEMENT OF HON. ORRIN G. HATCH, A U.S.  
SENATOR FROM THE STATE OF UTAH**

The CHAIRMAN. We are happy to welcome you all out this morning to this very important hearing on the National Information Infrastructure Act.

Good morning. This is the second in a series of hearings on the National Information Infrastructure [NII] Copyright Protection Act, S. 1284. On behalf of the Committee on the Judiciary, I would like to welcome our distinguished witnesses, as well as all who have come to observe this proceeding.

I would also like to note, at the outset, that Senator Leahy, who has expressed a great interest and has been very involved in this legislation, is unable to be here due to a death in the family. Our condolences certainly go out to Senator Leahy and his whole family.

I introduced the NII Copyright Protection Act, with my distinguished colleague, Senator Leahy, as cosponsor, to begin the process of establishing the rules of the road for the information highway and the information superhighway to come. Today, an estimated 10 to 40 million Americans access the Internet and its graphic component, the World Wide Web, through online access providers, and the total of Internet users is growing by some 15 percent each month.

The range of products and services available on this digital network is amazing—electronic mail, bulletin board services, digital books, digital magazines and newspapers, computer software, sound recordings, video games, and motion pictures, just to name a few. Even Senator Leahy and I have web pages, although I haven't seen them listed under "What's Cool" lately. [Laughter.]

But what we have now is only the promise of what is to come. The information superhighway will link not only computers, but also telephones, televisions, radios, fax machines, and more into an

(1)

advanced, high-speed, interactive, broad-band digital communications system.

At the beginning of the automobile age, I am sure that a paved road elicited wonderment. Only the visionary could foresee the interstate highway system of today. To realize the potential of digital networks, we must create a legal environment that encourages more and more products and services to go online.

Despite the array that currently exists, many content providers are holding back. They are anxious about their property rights, mainly because the digital format that provides quick, easy, and economical access also facilitates massive unauthorized copying and distribution, instant and perfect copies everywhere and every time.

We must not forget that these, "content providers," are not only the big guys that some people love to hate, but also the thousands of men and women authors, composers, artists, programmers, performers, et cetera, whose creativity is rewarded through the commercial exploitation of copyrighted works. Indeed, individual creators should be as, if not more concerned than big commercial enterprises about the potential of massive digital piracy, since, for the first time, digital networks provide individual creators with the alternative of economical self-publication.

At the same time, I appreciate the balance that the Copyright Act draws between creator's rights and user's rights. Many people take to the highways for the sheer pleasure of driving and not all roads have tolls. The doctrine of fair use and the idea/expression dichotomy apply to S. 1284, as they do to the rest of the Copyright Act.

In addition, I am concerned about online access provider liability and the problem of interconnectivity. I am encouraged by the ongoing negotiations on online service provider liability, both the ones chaired by Congressman Goodlatte and the ones organized by the parties themselves. Fair use is also under discussion and I am hopeful that with both of these issues, agreement will be reached. I understand that agreement has already been reached between representatives of the visually impaired and the publishing industry.

At this hearing, we cannot hope to deal adequately with these issues and with other issues raised by the bill, such as the library exemption and copyright management information. At least one other hearing will be necessary, in my view. This hearing has been structured, however, to touch on all the major themes of the bill.

We have with us this morning a representative of a coalition of content providers and a representative of a coalition of online service and access providers. We also have a witness from a company with both perspectives. A witness from a performing rights society will bring a unique perspective to the discussion, and there will be a witness who will question the wisdom of the whole enterprise that we are talking about.

Now, I welcome all of these perspectives. I am not wedded to every word of the text of this bill, although I agree with its basic thrust. As you know, the text of the bill comes from the report of the Working Group on Intellectual Property Rights of the Information Infrastructure Task Force. It is an excellent starting point for this committee as we begin the process of fine-tuning. Indeed, I rec-

commend the report, also called the White Paper, as valuable background material to our deliberations. In the end, however, Congress will produce its own bill and its own legislative history.

Now, at this point we have with us a distinguished member of the Commerce Committee, Senator Burns, from Montana, and we will turn to you, Senator Burns, for any comments you would care to make.

**STATEMENT OF HON. CONRAD BURNS, A U.S. SENATOR FROM THE STATE OF MONTANA**

Senator BURNS. Thank you, Mr. Chairman, and good morning. Thank you for allowing me this short testimony this morning. I have a full statement, if I could put it in the record.

The CHAIRMAN. Without objection, we will put the full statement in the record.

Senator BURNS. I appreciate your leadership on this issue. As you know, whenever we passed the telecom bill and reformed the telecommunications industry, we knew by all of these new technologies that something would have to be done in order to protect the intellectual property that would be transmitted on this great new highway, and the copyright law is very important in protecting that intellectual property as we move into a global economy where business is conducted over a global information infrastructure.

However, this reform doesn't get us all the way there. There are other areas that we have to address, but I don't think I have ever seen in my lifetime the amount of opportunity that will open up to the young people who are just now entering the work force in this country because telecommunications opens many, many doors. As the Senator from Utah, the chairman of this committee, understands, in our States we have to do something to eliminate distances and this is one technology that does that. In other words, it opens up doors to our rural States, our students that go to school in our rural areas and do not have access or maybe even exposure to the educational opportunities that young people in the urban areas do.

So with that also opens up great business opportunities. No matter where you live, you will do business around the world and never really leave home. But with that, of course, comes piracy and the dangers. The unprecedented access to the exchange of information over that infrastructure exposes users to breaches of confidentiality, the destruction of their intellectual property and, of course, outright theft.

Now, while reforming the copyright laws will give companies a legal cause of action to recover for economic espionage, it will not, standing alone, prevent that espionage, and I think that is basically what we want to do. I appreciate your leadership on this. I know how interested you are because it is very, very important to our home States, but it is also important to this country because as technology turns over—and technology, as it grows and turns over, has a tendency to displace workers—we have to use that same technology for furthering education and furthering opportunities in a global economy. I appreciate your being aware of that and your leadership on this issue.

I will submit my statement and I thank you very much for allowing me to testify.

The CHAIRMAN. Well, thank you, Senator Burns. We appreciate your work in these areas. You take it very seriously and this committee is happy to have your wisdom and we will look forward to reading the whole statement. So thank you for being here.

Senator BURNS. Thank you.

The CHAIRMAN. Thank you.

[The prepared statement of Senator Burns follows:]

**PREPARED STATEMENT OF SENATOR CONRAD BURNS**

Mr. Chairman, thank you for this opportunity to testify before your Committee today. I believe that S. 1284, the National Information Infrastructure [NII] Copyright Protection Act of 1995, is a good first step in protecting intellectual property in the Information Age, and therefore, I support this legislation.

I believe that we are on the threshold of the Information Age—an era which promises an explosion in economic growth, technological innovation and educational opportunities that could improve the standard of living and the quality of life around the world. To achieve this promise, businesses and the Federal Government have worked together over the past several years to develop the Global Information Infrastructure [GII], the electronic pathways that will carry vast quantities of valuable commercial, scientific, educational, and personal information between individuals, companies and customers, companies and their subsidiaries, doctors and patients, and teachers and students.

While the GII offers unprecedented access to and exchange of information, it also exposes users to breaches of confidentiality, disruption of their operations, destruction of their intellectual property and outright theft. These are serious concerns, because electronic data in digital form is emerging as the most valuable currency in the Information Age. Users of the GII have the need, right, and responsibility to protect access to, and the confidentiality of, their information. They also have the right and responsibility to determine the appropriate type and strength of protection for their communications over the GII.

I believe that the only way to adequately protect intellectual property as we move into the Information Age, is to enact legislation to make present laws applicable to digital communications, and to loosen up the present trade restrictions on encryption. S. 1284 gets part of the way there.

Mr. Chairman, we all understand that copyrighted products have traditionally been sold in stores or through catalogues where a hard copy if you will, of a book or compact disk, for example, is exchanged. That was a simple world, and copyright protection was easy then.

The difficulty of insuring that intellectual property is protected is increased when products can be posted on, and downloaded from, the Internet. I would clarify today that the copyright infringement in today's world doesn't exist because people are taking materials off the World Wide Web sites of legitimate content owners. Today, organizations like Time Warner are not putting all of their paper-world content on the Internet precisely because of the concern of protecting their intellectual property.

But content owners do understand the potential of distributing products over the Internet. And these folks also know that the issues of copyright and encryption are integrally linked. And so, in my remarks here today about this important copyright issue, I want to make sure that the Members of this Committee understand the integral link between copyright and encryption.

If I'm trying to buy an electronic copy of the Lion King movie, or a song from the soundtrack from the Lion King, how does that become a secure transaction? First, it will be important to identify myself to the vendor, so that they know that, in fact, it is Conrad Burns buying the product. One way for me to do that, is for me to give the vendor the public portion of my encryption key. The vendor then can use my public key to encrypt that song as well as the information about the time and place of purchase. Once all that information is encrypted, the only way I can play that song is to decrypt it with my private key. All the world can use my public key to encrypt something, because it is provided to the world by a certificate authority service provider, such as Verisign, Nortel, or GTE. However, only I can decrypt this transaction because only I hold my private key. So when that vendor knows it is encrypted that way, they know that only Conrad Burns will get it, because only Conrad Burns has the private key. At the point of sale, the merchant might have

