

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MASSACHUSETTS

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	)	
Benjamin Edelman,	)	COMPLAINT FOR DECLARATORY AND
	)	INJUNCTIVE RELIEF
	)	
Plaintiff,	)	
	)	
v.	)	Civ. Action No. _____
	)	
N2H2, Inc.,	)	
	)	
Defendant.	)	

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PRELIMINARY STATEMENT

1. This action seeks declaratory and injunctive relief for Benjamin Edelman, a computer researcher, to establish his First Amendment and fair use rights to examine a controversial Internet content blocking program manufactured by defendant N2H2, Inc. (“N2H2”) and to share his research tools and results with others. The case presents novel issues of constitutional significance: a) the application of certain provisions of the Digital Millennium Copyright Act (“DMCA”) to restrict constitutionally protected computer research and innovation; b) the enforcement of a software license that severely restricts constitutionally protected computer research and innovation, in conflict with federal intellectual property law; and c) the public’s right to know what World Wide Web sites (“Web sites”) are blocked by Internet content blocking programs that are increasingly mandated by governments.

2. N2H2’s blocking program is designed to prevent access to certain Web sites categorized as objectionable. Several studies have documented serious flaws in N2H2’s blocking program and in similar programs. Mr. Edelman conducted one of these studies, which was recently relied upon as expert testimony by a federal district court. See *American Library Ass’n, Inc. v. United*

*States*, 201 F. Supp. 2d 401 (E.D.Pa. 2002), *notice of direct appeal to Supreme Court* filed 6/20/02 (striking down a federal law that mandates blocking programs in public libraries).

Because N2H2 refuses to disclose its full list of blocked sites to the public, all studies of the program have been necessarily limited. Mr. Edelman specifically asked N2H2 for a copy of the list for research purposes, which N2H2 refused to provide. The public has a strong interest in understanding the strengths and weaknesses in Internet blocking programs, which are used by many public schools, libraries and other government agencies around the world. Yet Mr. Edelman's proposed research, which should be fully protected by the First Amendment, puts him at risk of liability under the DMCA, the federal Copyright Act of 1976, state trade secrets law, and the non-negotiable N2H2 license. Mr. Edelman seeks a declaratory judgment and injunction to allow him to proceed with his research absent a threat of liability.

#### JURISDICTION AND VENUE

3. This case arises under the Constitution and laws of the United States and presents a federal question within this Court's jurisdiction under Article III of the Constitution and 28 U.S.C. §§ 1331 and 1338(a).

4. The Court has the authority to grant declaratory relief pursuant to the Declaratory Judgment Act, 28 U.S.C. §§ 2201 et seq.

5. The Court has supplemental jurisdiction over all related state law claims under 28 U.S.C. § 1367.

6. Venue is proper in this district under 28 U.S.C. § 1391(b).

#### THE PARTIES

7. Plaintiff Benjamin Edelman is a computer and technology consultant, and has worked for a variety of clients for the past nine years. He is a graduate of Harvard University, and is

entering Harvard Law School in the fall. He resides in Cambridge, Massachusetts. He brings this suit in his individual capacity.

8. Defendant N2H2, Inc. is a publicly traded company that develops and markets Internet content blocking programs. N2H2 is incorporated in the state of Washington, and maintains its principal place of business in Seattle, Washington.

#### STATUTORY & LICENSE PROVISIONS AT ISSUE

9. The following N2H2 license and statutory provisions are at issue in this case:

10. N2H2 license ¶ 1, “Software”:

Software. The "Software" means, collectively, (a) the downloaded N2H2 Internet filtering software, (b) N2H2's proprietary list of blocked URLs, as updated from time to time (the "Proprietary List"), (c) any related documentation, and (d) any Updates (defined below), modifications or enhancements to any of the foregoing. The Software is owned exclusively by N2H2 and/or its licensors. The Software is protected under copyright and other intellectual property laws of the United States and international copyright treaties. Upon installing the Software you acknowledge and agree to the terms of this Agreement.

11. N2H2 license ¶ 5, “Restrictions on Use”:

Restrictions on Use. You shall not copy or make any changes or modifications to the Software, and you shall not decrypt, decode, translate, decompile, disassemble, or otherwise reverse engineer the Software. You shall not, and shall not attempt to, circumvent or override any copy protection or access control mechanism or measures in the Software. You may not loan, rent, lease, sublicense or transfer the Software to others for any purpose. You agree to use all reasonable efforts to protect the Software from unauthorized use, modification, reproduction, distribution, decryption and other prohibited activities. You are not permitted to make any uses or copies of the Software that are not specifically authorized by the terms of this Agreement. N2H2 reserves all rights that are not expressly granted to you.

12. N2H2 license ¶ 6, “Confidentiality”:

Confidentiality. Each party agrees that unless it has obtained the other's prior written consent, it shall maintain the Confidential Information of the other party in confidence in accordance with the

provisions of this Agreement. Each party agrees to limit its disclosure of the other party's Confidential Information to as few persons as possible and only to those persons with a need to know and subject to an obligation not to misuse such information and to keep such information confidential, or employees or representatives of the party. Each party may produce extracts and summaries of the Confidential Information and may further make multiple copies of the Confidential Information, including extracts and summaries, consistent with and limited to such party's permitted use of same. The standard of care to be employed by each party with respect to the protection of the other party's Confidential Information shall be the standard of care employed by a reasonable person in protecting confidential information. The parties hereto each agree that upon the request of the party having proprietary rights to the Confidential Information referenced herein, the other party in possession of tangible materials containing the other party's Confidential Information shall promptly return such materials (and any copies, extracts, and summaries thereof) to the requesting party, or, with the other party's written consent, shall promptly destroy such materials (and any copies, extracts, and summaries thereof) and shall further provide the other party with written confirmation of same.

Neither party shall use, in connection with this Agreement or any transaction contemplated by this Agreement, the name of the other or its parent company or any subsidiary or affiliated company in any publicity release, advertising, or other publicly distributed or posted materials (including, without limitation, customer lists), without securing the prior written consent of the party whose name is to be used. The confidentiality obligations of the parties pursuant to this Agreement shall remain in effect for a period of three (3) years from the date of first disclosure.

13. The provisions of the Digital Millennium Copyright Act of 1998, 17 U.S.C. §§ 1201 et seq., at issue in this case are:

§ 1201. Circumvention of copyright protection systems.

(a) Violations regarding circumvention of technological measures.

(1) (A) No person shall circumvent a technological measure that effectively controls access to a work protected under this title. The prohibition contained in the preceding sentence shall take effect at the end of the 2-year period beginning on the date of the enactment of this chapter.

(B) The prohibition contained in subparagraph (A) shall not apply to persons who are users of a copyrighted work which is in a particular class of works, if such persons are, or are likely to be in

the succeeding 3-year period, adversely affected by virtue of such prohibition in their ability to make noninfringing uses of that particular class of works under this title, as determined under subparagraph (C).

(C) During the 2-year period described in subparagraph (A), and during each succeeding 3-year period, the Librarian of Congress, upon the recommendation of the Register of Copyrights, who shall consult with the Assistant Secretary for Communications and Information of the Department of Commerce and report and comment on his or her views in making such recommendation, shall make the determination in a rulemaking proceeding for purposes of subparagraph (B) of whether persons who are users of a copyrighted work are, or are likely to be in the succeeding 3-year period, adversely affected by the prohibition under subparagraph (A) in their ability to make noninfringing uses under this title of a particular class of copyrighted works. In conducting such rulemaking, the Librarian shall examine—

- (i) the availability for use of copyrighted works;
- (ii) the availability for use of works for nonprofit archival, preservation, and educational purposes;
- (iii) the impact that the prohibition on the circumvention of technological measures applied to copyrighted works has on criticism, comment, news reporting, teaching, scholarship, or research;
- (iv) the effect of circumvention of technological measures on the market for or value of copyrighted works; and
- (v) such other factors as the Librarian considers appropriate.

(D) The Librarian shall publish any class of copyrighted works for which the Librarian has determined, pursuant to the rulemaking conducted under subparagraph (C), that noninfringing uses by persons who are users of a copyrighted work are, or are likely to be, adversely affected, and the prohibition contained in subparagraph (A) shall not apply to such users with respect to such class of works for the ensuing 3-year period.

(E) Neither the exception under subparagraph (B) from the applicability of the prohibition contained in subparagraph (A), nor any determination made in a rulemaking conducted under subparagraph (C), may be used as a defense in any action to enforce any provision of this title other than this paragraph.

(2) No person shall manufacture, import, offer to the public, provide, or

otherwise traffic in any technology, product, service, device, component, or part thereof, that--

(A) is primarily designed or produced for the purpose of circumventing a technological measure that effectively controls access to a work protected under this title;

(B) has only limited commercially significant purpose or use other than to circumvent a technological measure that effectively controls access to a work protected under this title; or

(C) is marketed by that person or another acting in concert with that person with that person's knowledge for use in circumventing a technological measure that effectively controls access to a work protected under this title.

(3) As used in this subsection--

(A) to "circumvent a technological measure" means to descramble a scrambled work, to decrypt an encrypted work, or otherwise to avoid, bypass, remove, deactivate, or impair a technological measure, without the authority of the copyright owner; and

(B) a technological measure "effectively controls access to a work" if the measure, in the ordinary course of its operation, requires the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work.

(b) Additional violations.

(1) No person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof, that--

(A) is primarily designed or produced for the purpose of circumventing protection afforded by a technological measure that effectively protects a right of a copyright owner under this title in a work or a portion thereof;

(B) has only limited commercially significant purpose or use other than to circumvent protection afforded by a technological measure that effectively protects a right of a copyright owner under this title in a work or a portion thereof; or

(C) is marketed by that person or another acting in concert with

that person with that person's knowledge for use in circumventing protection afforded by a technological measure that effectively protects a right of a copyright owner under this title in a work or a portion thereof.

(2) As used in this subsection—

(A) to "circumvent protection afforded by a technological measure" means avoiding, bypassing, removing, deactivating, or otherwise impairing a technological measure; and

(B) a technological measure "effectively protects a right of a copyright owner under this title" if the measure, in the ordinary course of its operation, prevents, restricts, or otherwise limits the exercise of a right of a copyright owner under this title.

(c) Other rights, etc., not affected.

(1) Nothing in this section shall affect rights, remedies, limitations, or defenses to copyright infringement, including fair use, under this title.

#### 14. 37 CFR § 201.40. Exemption to prohibition against circumvention.

(a) General. This section prescribes the classes of copyrighted works for which the Librarian of Congress has determined, pursuant to 17 U.S.C. 1201(a)(1)(C) and (D), that noninfringing uses by persons who are users of such works are, or are likely to be, adversely affected. The prohibition against circumvention of technological measures that control access to copyrighted works set forth in 17 U.S.C. 1201(a)(1)(A) shall not apply to such users of the prescribed classes of copyrighted works.

(b) Classes of copyrighted works. Pursuant to the authority set forth in 17 U.S.C. 1201(a)(1)(C) and (D), and upon the recommendation of the Register of copyrights, the Librarian has determined that two classes of copyrighted works shall be subject to the exemption found in 17 U.S.C. 1201(a)(1)(B) from the prohibition against circumvention of technological measures that effectively control access to copyrighted works set forth in 17 U.S.C. 1201(a)(1)(A) for the period from October 28, 2000 to October 28, 2003. The exempted classes of works are:

(1) Compilations consisting of lists of websites blocked by filtering software applications; and

(2) Literary works, including computer programs and databases, protected by access control mechanisms that fail to permit access because of malfunction, damage or obsolescence.

## FACTUAL ALLEGATIONS

### I. N2H2 and Blocking Programs

15. N2H2 develops, markets and licenses a type of computer program that, when installed on a computer that can access the Internet, blocks access to Web sites that N2H2 categorizes as objectionable. N2H2 offers several versions of its blocking program to the public. Its line of “Bess” blocking products is targeted primarily at schools and libraries, while the “Sentian” line of programs is targeted primarily to business and government organizations. The programs are designed to be installed on a computer server that is remotely connected to a number of other computers that provide Internet access.

16. N2H2’s blocking program and similar programs offered by other vendors typically operate in the following manner. If a blocking program is operating on a computer, the blocking program prevents the user from accessing content that has been categorized by the program’s vendor. Upon attempting to access a blocked site, the user is presented with a screen indicating that access to the requested site has been denied by the blocking program. The program’s list of sites to block, or “block list,” is embodied in a software file distributed as part of the blocking program and can contain hundreds of thousands of Web sites representing millions of pages of Web content. Sites are represented on the list by their Web addresses; the most common form of Web address is a Uniform Resource Locator, or “URL” (e.g., <http://www.mad.uscourts.gov/> is the URL for the Web site of the U.S. District Court of Massachusetts).

17. Each Web site represented in a block list has been placed by the blocking program vendor into one or more categories of content, or blocking categories. Blocking program vendors like N2H2 develop their own blocking categories with unique category definitions. N2H2’s blocking categories include “Adults Only,” “Drugs,” “Gambling,”



“Hate/Discrimination,” “Nudity,” “Pornography,” “Profanity” and “Sex.” (A complete list of N2H2’s blocking categories, and the definitions of those categories, are available on N2H2’s Web site, <http://www.N2H2.com>.) Each Web site on a block list is placed into one of the categories, and blocking program customers can choose what type of content they want to block by enabling particular blocking categories.

18. Although N2H2 claims that the methods used to develop the N2H2 block list are proprietary and confidential, most blocking program vendors follow the same general steps.

19. Initially, the blocking program vendor uses a variety of automated and manual methods to harvest the addresses of Web sites which potentially contain content that falls within that blocking program vendor’s blocking category definitions. These harvesting methods may include the following: (a) using search engines to search for particular key words commonly associated with a blocking category; (b) following links from a variety of online directories; (c) reviewing lists of newly registered domain names; (d) buying or licensing lists of URLs from third parties; (e) reviewing Internet access logs maintained by customers; and (f) reviewing other submissions from customers and the public.

20. The list of harvested URLs is then winnowed down to those URLs most likely to lead to content matching a blocking category. For example, automated key word analysis tools may be used to tentatively prioritize or categorize the content at each URL.

21. Finally, most blocking company vendors claim that human staff review every Web site before final placement of a URL on the block list. If the site or page is found to match one or more blocking categories, that site or page’s URL is placed on the corresponding block list. Once categorized, sites are rarely reviewed again.

22. N2H2 and other blocking programs offer customization features that allow customers to add or remove individual Web sites from the block list. These customizations, however, only affect the behavior of the blocking program on the computer network of the customer making them; they do not affect the block list distributed with the blocking program to other customers.

23. N2H2 distributes its block list as a component of its blocking program. The company frequently updates the block list, which is then automatically downloaded onto its customers' computers.

24. N2H2 considers the contents of its block list, and the methods used to develop it, to be proprietary trade secrets. N2H2 only distributes the block list in an encrypted form, so users of the program cannot know in advance what sites will be blocked, or review the list for accuracy.

II. The Effectiveness of N2H2's Blocking Program is a Legitimate Area of Scientific Research and Public Inquiry

25. The availability of sexually explicit speech on the Internet is a hotly debated issue of public concern, as evidenced by the United States Congress' repeated attempts to regulate it. See, e.g., the Communications Decency Act ("CDA") (criminalizing indecent speech on the Internet), 47 U.S.C. §§ 223 et seq., and the Child Online Protection Act ("COPA") (criminalizing "harmful to minors" speech on the Web), §§ 47 U.S.C. 231 et seq. Blocking programs are designed to prevent access to sexually explicit and other content on the Internet. *See Reno v. ACLU* (suggesting that such programs may be of some use to parents in the home.), 521 U.S. 844, 854-5 (1997). Congress requires every Internet Service Provider to inform its customers of the availability of blocking programs. 47 U.S.C. § 230. In 2000, Congress passed the Children's Internet Protection Act ("CIPA"), which mandates that public libraries and public schools receiving certain federal funds install blocking programs on all of their computer terminals in

order to block access to speech that is obscene, harmful to minors, or child pornography. 20 U.S.C. § 9134 and 47 U.S.C. § 254.

26. As Mr. Edelman's own research has shown, several other national governments require their citizens to use blocking software. See <http://cyber.law.harvard.edu/filtering/>. China, Saudi Arabia, the United Arab Emirates, and other countries route all Internet traffic through commercially purchased or privately created blocking programs, in order to block their citizens from accessing religious or political speech on the Web that the governments dislike. N2H2 is one of the blocking program vendors currently competing for the contract to supply Saudi Arabia with blocking technology. See Jennifer 8. Lee, "Companies Compete to Provide Saudi Internet Veil," *N.Y. Times*, November 19, 2001, available at <http://www.websense.com/company/news/companynews/01/111901.cfm>; see also Human Rights Watch, *Free Expression on the Internet* (2000), available at <http://www.hrw.org/wr2k/Issues-04.htm>).

27. Congress itself has commissioned studies that have documented how blocking programs erroneously block or "overblock" many Web sites. See, e.g., the Commission on Child Online Protection's Report to Congress, October 20, 2000, available at <http://www.copacommission.org/report/>; see also National Research Council, *Youth, Pornography, and the Internet* (Dick Thornburgh & Herbert S. Lin, eds., 2002), available at [http://bob.nap.edu/html/youth\\_internet/](http://bob.nap.edu/html/youth_internet/). These studies also discuss "underblocking," i.e., blocking programs' failure to block a significant amount of inappropriate content.

28. Because blocking programs inevitably block access to protected speech while failing to prevent access to illegal speech, a three-judge panel recently held that the library provisions of CIPA are an unconstitutional restriction on protected speech. See *American Library Ass'n, Inc.*

*v. United States*, 201 F. Supp. 2d 401 (E.D.Pa. 2002) (“*ALA v. US*”), *notice of direct appeal to Supreme Court* filed 6/20/02. In reaching its decision, the court relied in part on Mr. Edelman’s expert testimony on overblocking. (Mr. Edelman’s expert report is available at <http://cyber.law.harvard.edu/people/edelman/mul-v-us/>). See also *Mainstream Loudoun v. Board of Trustees of Loudoun County Library*, 24 F.Supp.2d. 552 (E.D.Va., 1998) (holding that an individual public library’s policy of mandatory blocking was unconstitutional).

29. The CIPA provisions requiring use of blocking programs in public schools have not been challenged and are currently in force at schools around the country. According to the National Center for Education Statistics, over 65,000 public schools used some sort of blocking program in the year 2000. N2H2’s 2001 Annual Report and other promotional materials on N2H2’s Web site state that over 40% of those schools (attended by over 16 million students) currently use N2H2’s program, making N2H2 the leader in the education market. N2H2 advertises its blocking program as being “CIPA compliant.” N2H2 also controls a significant portion of the library market, and its blocking program is used by at least five state governments, including those of Florida, Ohio, Tennessee, Utah and Wyoming.

30. The ability of literally millions of public school students, public library patrons, government employees and others to access protected speech on the Internet is dependent on the accuracy of N2H2’s block list. Yet because N2H2 refuses to make its block list available to the public, there is currently no study that fully documents the accuracy of the program, and no meaningful quantitative analysis of the list’s accuracy, comprehensiveness, or bias. Without access to N2H2’s block list, the remaining options for studying the program are necessarily inadequate. As the *ALA v. US* court points out, because access to the list is prohibited, “the only way to discover which URLs are blocked and which are not blocked...is by testing individual

URLs with filtering software, or by entering URLs one by one into the ‘URL checker’ that most filtering software companies provide on their web sites.” 201 F. Supp. 2d at 429-30. As the court further observed, the “fundamental problem” with this approach, however, is selecting a universe of Web sites or Web pages to serve as the set to be tested. *Id.* at 437. No researcher will ever be able to collect and test, in a practical and methodologically sound manner, the two billion and growing URLs on the Web. The *ALA v. US* court thus found that all of the studies of blocking programs submitted by the parties seriously underestimate the actual amount of overblocking. *Id.* at 437-47.

31. Encryption and copy protection technologies have been the subject of a great deal of computer research in the past several years. Effective encryption research is crucial to improving security for electronic transactions and digital content.

32. Reverse engineering is an accepted practice with a long history in the scientific and computer research communities. Reverse engineering has generally been acceptable even where the purpose is to create a competing product, because it can lead to improvements in products that will benefit consumers. Where the primary purpose of reverse engineering is to expose flaws in government-mandated products, there is an even stronger public interest in protecting the practice.

### III. Benjamin Edelman and His Proposed Research

#### A. Research History and Goals

33. Computer researcher Benjamin Edelman graduated from Harvard College with an Economics A.B. and an A.M. in Statistics in the spring of 2002, and will be entering Harvard Law School as a student in the fall. Mr. Edelman has worked as a freelance technology consultant for the past nine years, serving a variety of individual clients, small businesses and

non-profit organizations. He has worked on Internet technology issues, specifically, since 1994. Mr. Edelman is currently employed part-time as a researcher at Harvard Law School's Berkman Center for Internet & Society.

34. Mr. Edelman has also served as a consulting and testifying expert witness for a variety of clients. He provided expert testimony in a Pittsburgh federal court on the topic of web server log analysis and Internet retransmission of television content in the case of *The National Football League v. TVRADIONOW Corporation (iCraveTV)*. He prepared an expert declaration in the *Washingtonpost.Newsweek Interactive Company, LLC, v. the Gator Corporation* in Virginia federal court.

35. Mr. Edelman was qualified as an expert and offered testimony concerning the effectiveness of blocking programs in *ALA v. US*, 201 F. Supp. 2d at 442-47. He analyzed several leading blocking programs, including N2H2's. To do this, he designed and used an automated software tool to collect URLs from the Yahoo! online directory and the Google search engine. He then tested each collected URL to determine which ones were blocked. By analyzing the content of those URLs that were blocked, he identified thousands of examples of Web sites that are erroneously blocked. However, Mr. Edelman's study was necessarily limited by his lack of access to the full block lists. As the *ALA v. US* court explained,

Edelman tested only 500,000 unique URLs out of the 4000 times that many, or two billion, that are estimated to exist in the indexable Web. Even assuming Edelman chose the URLs that were most likely to be erroneously blocked by commercial filtering programs, we conclude that many times the number of pages that Edelman identified are erroneously blocked by one or more of the filtering programs that he tested.

Id. at 442.

36. Given the ongoing use of blocking programs by schools and other customers around the world, and the strong public interest in their accuracy, Mr. Edelman now wishes to continue his study of N2H2 by researching the full block list.

37. N2H2 refused Mr. Edelman's direct request for a copy of the block list. Thus, in order to conduct his research, Mr. Edelman must "reverse engineer" N2H2's blocking program.

"Reverse engineering" is a process used to gain access to the functional elements of a software program in order to learn how it works.

38. Mr. Edelman's proposed research will consist of five primary steps: (1) reverse engineering a licensed copy of the blocking program in order to discover what measures prevent access to and copying of the block list; (2) creating and using a software tool ("the circumvention tool") to circumvent those measures and access the block list; (3) analyzing the block list to determine its accuracy; (4) publishing the results of his analysis and the block list; and (5) distributing his circumvention tool to facilitate other fair and non-infringing uses of the block list.

#### B. Reverse Engineering the Block List's Protection Measures

39. In order to reverse engineer N2H2's blocking program and identify weaknesses in the block list's protection measures, Mr. Edelman intends to use one or more of the following techniques. These techniques will be performed manually and using automated software of Mr. Edelman's own design.

- Copying the encrypted block list and manually reviewing it.
- Conducting a pattern analysis of the encrypted block list. For example, if Mr. Edelman can determine that a specific series of data is repeated from time to time in the encrypted block list, he could determine the pattern of data that separates records within the list.

Furthermore, since many URLs include the characters “www.” and “.com”, Mr. Edelman could determine the encrypted versions of these characters in order to decode portions of the list.

- Copying the encrypted block list after each periodic update, and comparing copies to track changes. Analysis of discrete changes would reveal information about the format, structure or ordering of the encrypted block list.
- Reviewing how the blocking program accesses computer memory when it checks requested URLs against the block list. If the program consistently accesses a particular portion of the encrypted block list file whenever a given URL is requested, this pattern would reveal information about the format, structure and ordering of the encrypted block list.
- Encoding the URLs of Web sites known to be blocked using standard encryption methods, and then comparing results with the encrypted block list. A match between a URL encoded by Mr. Edelman and a portion of the encrypted block list file would yield information about the encryption method.
- Reviewing the portion of the blocking program’s software code that accesses the block list. If Mr. Edelman locates and isolates this part of the program, he can then use a software tool to monitor its operation, and to isolate and replicate the methods used to decode the block list.
- Decrypting the block list. If Mr. Edelman discovers the specific method of encryption, he will try to decrypt the list directly by using an automated process to find the encryption key.



### C. The Circumvention Tool

40. Using information derived through reverse engineering, Mr. Edelman intends to create a software tool to circumvent the block list's protection measures. The sole function of this circumvention tool, when executed, will be to interoperate with the N2H2 blocking program in an attempt to circumvent the measures preventing access to and copying of the encrypted block list. Mr. Edelman intends to modify the tool as necessary until it succeeds and generates a copy of the block list in a decrypted, readable format.

41. One of the software tools designed by Mr. Edelman to automate his reverse engineering techniques may also succeed in decrypting all or a portion of the list. If so, Mr. Edelman will have inadvertently designed a circumvention tool, albeit one slower and less efficient than the tool he intends to design specifically for that purpose.

### D. Analysis of the Block List

42. After using his circumvention tool to create a readable copy of the block list, Mr. Edelman intends to use a variety of manual and automated systems to identify URLs on the list that have been miscategorized and therefore erroneously blocked by the program.

43. Mr. Edelman also intends to conduct a benchmark test, i.e., he intends to measure the accuracy and comprehensiveness of N2H2's block list against any other competing block lists available to him. For example, the block list for the blocking program "Net Nanny" is not encrypted and therefore is available for review by the public. Mr. Edelman intends to compare the Net Nanny block list to N2H2's list, theorizing that sites blocked by only one program are more likely to be erroneously blocked.

E. Publication of Research Results and Block List, Distribution of Circumvention Tool

44. After completing his research, Mr. Edelman intends to prepare and publish a written analysis of his work for distribution to the public. For each erroneously categorized URL, he will include information about the blocking category, the scope of the block (whether it applies to one page or several, and if so how many), and other page-specific information obtained from the block list. He will report the data in varying levels of detail, groupings, and orderings. He also intends to publish some or all of the specific data that led to his conclusion that the reported URLs were erroneously blocked.

45. Mr. Edelman also intends to publish the full copy of the N2H2 block list to enable others to make fair use of it. Publication of the full block list will allow other researchers to analyze and verify his work, and to conduct their own analyses of the data. For example, other researchers may wish to analyze the list in search of bias as to a specific type of content or viewpoint, such as lesbian and gay speech, or political speech. Current and potential N2H2 customers, including thousands of public schools, public libraries, government agencies, could use the block list to evaluate the accuracy of N2H2's blocking program, and to report new mistakes to N2H2. Makers of other blocking programs could evaluate N2H2's block list, and improve the accuracy of their own lists with additions and modifications from N2H2's.

46. Publication of the full block list will also assist customers who wish to make better use of the program's customization features. They could remove sites from the block list that do not meet their own standards. Customers could also share their block lists with other customers that have similar standards, e.g., public schools throughout a state could coordinate efforts to review

and customize the list, and in doing so create a list that is better tailored to their community standards.

47. Mr. Edelman also intends to distribute the circumvention tool. Because N2H2's block list changes over time, availability of the tool will allow other researchers and the public, including libraries and schools, to conduct ongoing analyses of the accuracy of the block list, in addition to verifying Mr. Edelman's results.

48. Distributing the tool can help researchers to develop new, similar tools for testing the accuracy of other blocking programs; distribution of the tool may also be of use to programmers who design or test software protection measures. Researchers and programmers may build on and improve Mr. Edelman's circumvention tool.

49. Human rights organizations and other activists studying global censorship may be able to use Mr. Edelman's circumvention tool or others based on it to determine what content is being blocked by those national governments using blocking software, such as Saudi Arabia and China.

50. Publication of the circumvention tool will also make it available to computer science professors and students for review and discussion of the state of the art in computer security. Researchers may analyze weaknesses in N2H2's security in order to avoid similar weaknesses in future computer security schemes. Publication of the tool will also allow N2H2 itself to better identify and correct weaknesses in its own software protection measures.

51. Neither publication of the block list nor distribution of the circumvention tool will prevent proper operation of N2H2's program. N2H2's customers will still be able to prevent users from accessing the content of sites on the block list.

#### IV. The Impact of the Laws on Mr. Edelman's Proposed Research

52. Although Mr. Edelman believes that his proposed research, tools, and publications are protected by the First Amendment, he reasonably fears liability for breach of the N2H2 license and other laws. The license and statutory provisions are chilling core scientific speech by Mr. Edelman on a matter of public interest to the detriment of his First Amendment rights. The terms of the N2H2 license are also contrary to federal intellectual property policy, which protects reverse engineering as a beneficial scientific practice for analyzing and improving software programs.

53. Without a declaration that he will incur no liability to N2H2 under the following provisions, Mr. Edelman will not go forward with this important research.

##### A. The N2H2 License

54. Use of N2H2's blocking program is severely restricted by a non-negotiable mass-market license ("the N2H2 license"). Once a customer purchases the program, N2H2 sends instructions by electronic mail for downloading the program from the Internet. Before allowing the customer to install the program after it is downloaded, N2H2 requires assent to the terms of the N2H2 license.

55. First, the N2H2 license states that users "shall not copy or make any changes or modifications to the Software, and...shall not decrypt, decode, translate, decompile, disassemble, or otherwise reverse engineer the Software." Mr. Edelman fears liability for breaching this provision because his research necessarily involves one or more of these prohibited acts.

56. Second, the N2H2 license refers to the N2H2 block list as proprietary and contains a clause prohibiting use or disclosure of N2H2's confidential information. Mr. Edelman fears

liability for breaching this provision because he intends to obtain the decrypted block list and disclose it to the public.

57. Mr. Edelman purchased a copy of the N2H2 blocking program on July 20, 2002. After N2H2 emailed him the download location and password, he downloaded the program on July 22, 2002. When Mr. Edelman began the installation process, he was presented with a copy of the N2H2 license on his computer screen, with the option of accepting the license terms and installing the program, or not accepting the license terms and not installing the program. Mr. Edelman refused to assent to the license terms and did not install the program.

B. Copyright Infringement

58. Although Mr. Edelman believes that his research is constitutionally protected and makes fair use of the N2H2 blocking program and block list, see 17 U.S.C. §§ 107 and 117, he fears liability under the Copyright Act of 1976, see 17 U.S.C. §§ 101 et seq.

59. Specifically, Mr. Edelman fears liability for copyright infringement because he must create copies of N2H2's blocking program and block list in the process of reverse engineering the blocking program, decrypting the block list, and analyzing the block list.

60. Mr. Edelman also fears liability for copyright infringement because he intends to publish his research results, including the block list.

61. Mr. Edelman also fears liability for copyright infringement because he intends to create and distribute a circumvention tool that may contain software code copied from N2H2's blocking program.

62. Mr. Edelman also fears liability for contributory or vicarious infringement because he intends to create and distribute a circumvention tool that would allow other users and researchers to obtain decrypted copies of the block list.

C. Trade Secret Misappropriation

63. Mr. Edelman fears liability for trade secret misappropriation because N2H2 has claimed that its block list and the encryption measures protecting the list constitute trade secrets. Although reverse engineering is traditionally a proper means of acquiring a trade secret, there is a risk of liability for misappropriation if Mr. Edelman's methods are considered improper means due to the confidentiality clause of the N2H2 license.

D. The Digital Millennium Copyright Act

64. The Digital Millennium Copyright Act ("DMCA") prohibits the "circumvention" of a "technological measure" controlling access to a copyrighted work. 17 U.S.C. § 1201(a)(1)(A). N2H2 uses encryption methods to prevent access to its block list. Mr. Edelman fears liability under this provision because he intends to circumvent the encryption controlling access to the block list.

65. As authorized by Congress when it passed the DMCA, 17 U.S.C. § 1201(a)(1)(B), (C), the Library of Congress created an exemption from liability under 17 U.S.C. § 1201(a)(1)(A) for circumvention in order to gain access to "compilations consisting of lists of websites blocked by filtering software applications." 37 CFR § 201.40. Mr. Edelman fears that he may not qualify for this exemption, which is only available to "noninfringing users" of such compilations, 17 U.S.C. § 1201(a)(1)(D), and which may not apply to publication of the entire block list.

66. The DMCA also states that "[no] person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, device, component or part thereof," that is primarily designed, produced, or marketed for the purpose of, or has only limited commercially significant purpose or use other than, circumventing a technological measure that controls access to a copyrighted work. 17 U.S.C. § 1201(a)(2). Mr. Edelman fears liability

under Section 1201(a)(2) because he intends to create and distribute a software tool that allows circumvention of the encryption controlling access to N2H2's block list.

67. The DMCA also states that “[n]o person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof,” that is “primarily designed or produced for the purpose of circumventing protection afforded by a technological measure that effectively protects a right of a copyright owner under this title in a work or a portion thereof . . . .” 17 U.S.C. § 1201(b). Mr. Edelman fears liability under Section 1201(b) because he intends to create and distribute a software tool that allows circumvention of the encryption controlling access to N2H2's block list.

68. Even if Mr. Edelman qualifies for the exemption for circumventing a protection measure in order to gain access to “compilations consisting of lists of websites blocked by filtering software applications,” under 37 CFR § 201.40, that exemption specifically does not apply to 17 U.S.C. §§ 1201(a)(2) and 1201(b), which prohibits the tools necessary to achieve circumvention. See 17 U.S.C. § 1201(a)(1)(E). Without the ability to develop and use a software tool to assist in Mr. Edelman's research, he will be unable to circumvent the block list, and the circumvention exemption will be meaningless.

69. Although the DMCA contains an exemption for some limited forms of reverse engineering, Mr. Edelman fears that he does not qualify for this exemption because his research does not have “the sole purpose of identifying and analyzing those elements of the program that are necessary to achieve interoperability of an independently created computer program with other programs.” 17 U.S.C. § 1201(f).

## V. The Realistic Threat of Suit by N2H2

70. As discussed above, the statutory and license provisions at issue in this case directly prohibit the precise research and speech in which Mr. Edelman intends to engage. The N2H2 license unequivocally states that N2H2 considers all reverse engineering and copying of the block list to be legally prohibited.

71. In addition to the plain language of the N2H2 license, N2H2's past behavior indicates a willingness to pursue all legal remedies available to prevent access to its block list. N2H2 only allowed its representative to be deposed in the CIPA case subject to a confidentiality order, which also protected against disclosure of documents produced by N2H2. N2H2 refused a discovery request for the block list, which N2H2 characterized as confidential and proprietary trade secret information.

72. N2H2 also intervened during the *ALA v. US* trial to prevent disclosure of its confidential information in open court, demanding that the court be closed to the public during expert testimony on its block list building techniques, and that transcripts of that testimony be placed under seal. The court granted both of these requests. After the court heard the testimony in a closed session, it immediately ruled that the testimony did not warrant trade secret protection, and unsealed the testimony.

73. In collaboration with another researcher at the Berkman Center, Mr. Edelman personally contacted N2H2 by email to request access to the block list in May 2002. He identified himself as an academic researcher hoping to evaluate N2H2's list as part of a larger study documenting the efficacy of blocking programs generally. His request was flatly refused because, according to an emailed reply from an N2H2 representative, "I am sure that you have enough intelligence to know that [the list] is proprietary information and will not be shared. I am also sure that life



will some day bring you greater things to do with your time.” Mr. Edelman wishes to continue to research N2H2’s blocking program in his personal capacity. N2H2 has refused all other known requests for a copy of its block list.

### CAUSES OF ACTION

74. Plaintiff repeats the allegations of paragraphs 1 through 73 as if fully set forth herein.

#### First Cause of Action (no liability for breach of the N2H2 license)

75. Mr. Edelman is not liable for breach of the N2H2 license, because:

- a) the provisions are preempted by federal copyright law;
- b) enforcement of the provisions would be unconscionable;
- c) enforcement of the provisions would be contrary to federal and state public policy; and/or
- d) enforcement of the provisions would constitute a misuse of copyright.

#### Second Cause of Action (no liability for copyright infringement due to intermediate copying)

76. Mr. Edelman is not liable for direct infringement under the Copyright Act of 1976, 17 U.S.C. §§ 101 et seq., for any intermediate copying of the N2H2 program or the N2H2 block list necessary for his proposed research and reverse engineering of the program, because such copying is constitutionally protected by the First Amendment to the United States Constitution (hereinafter “First Amendment”) and/or constitutes a fair use consistent with 17 U.S.C. §§ 107 and/or 117.

#### Third Cause of Action (no liability for copyright infringement due to copying and distributing block list)

77. Mr. Edelman is not liable for direct infringement under the Copyright Act of 1976, 17 U.S.C. §§ 101 et seq., for copying or distributing the block list, and/or portions of the blocked

list, because such copying and distributing is constitutionally protected by the First Amendment and/or constitutes a fair use consistent with 17 U.S.C. § 107.

Fourth Cause of Action (no liability for contributory or vicarious infringement  
for distributing proposed software tool)

78. Mr. Edelman is not liable for contributory or vicarious infringement for distributing his proposed software tool because a) the tool has substantial non-infringing uses, i.e., it enables the public to make fair use of the block list, and b) Mr. Edelman is not supervising or acting in concert with actual infringers.

Fifth Cause of Action (no liability for violation of trade secrets laws)

79. Mr. Edelman's circumvention and distribution of the block list does not violate trade secrets laws because:

- a) the block list is not a trade secret; or
- b) the block list is a trade secret, but Mr. Edelman's reverse engineering is a proper means of obtaining that secret; and the N2H2 license is unenforceable against Mr. Edelman.

Sixth Cause of Action (no liability for circumvention under DMCA)

80. Mr. Edelman's proposed circumvention of the access and/or copy control of N2H2's block list does not violate 17 U.S.C. § 1201(a)(1) of the Digital Millennium Copyright Act ("DMCA"), because:

- a) it falls within the Library of Congress ("LOC") exception at 37 CFR § 201.40, promulgated under the regulations authorized by 17 U.S.C. §§ 1201(a)(1)(B) and (C), allowing circumvention to gain access to "compilations consisting of lists of websites blocked by filtering software applications"; and/or

- b) it is a fair use consistent with 17 U.S.C. §§ 107 and 1201(c).

Seventh Cause of Action (no liability for creating and distributing a tool under DMCA)

81. Mr. Edelman's proposed creation and distribution of a software tool, for the purposes of achieving the circumvention described in para. 39-41 above, does not violate 17 U.S.C. § 1201(a)(2) or 17 U.S.C. § 1201(b) of the DMCA, because:

- a) it is a fair use consistent with 17 U.S.C. §§ 107 and 1201(c);
- b) it enables the public to make fair use of the block list consistent with 17 U.S.C. § 1201(c) and the LOC exception at 37 CFR § 201.40; and/or
- c) the tool will be capable of substantial, non-infringing uses.

82. In the alternative to paras. 80-81 above, 17 U.S.C. §§ 1201(a)(1), 1201(a)(2), and 1201(b) of the DMCA are unconstitutional as applied to Mr. Edelman's proposed research, because they are content-based restrictions on speech that fail strict or even intermediate scrutiny under the First Amendment.

PRAYER FOR RELIEF

WHEREFORE, plaintiffs respectfully request that the Court:

- A. Declare that Mr. Edelman is not liable for breach of the N2H2 license, because:
  - i) the provisions are preempted by federal copyright law;
  - ii) enforcement of the provisions would be unconscionable;
  - iii) enforcement of the provisions would be contrary to federal and state public policy; and/or
  - iv) enforcement of the provisions would constitute a misuse of copyright.
- B. Declare that Mr. Edelman is not liable for direct infringement under the Copyright Act of 1976, 17 U.S.C. §§ 101 et seq., for any intermediate copying of the N2H2 program or the

N2H2 block list necessary for his proposed research and reverse engineering of the program, because such copying is protected by the First Amendment and/or constitutes a fair use consistent with 17 U.S.C. §§ 107 and/or 117.

- C. Declare that Mr. Edelman is not liable for direct infringement under the Copyright Act of 1976, 17 U.S.C. §§ 101 et seq., for copying or distributing the block list, and/or portions of the blocked list, because such copying and distributing is constitutionally protected by the First Amendment and/or constitutes a fair use consistent with 17 U.S.C. § 107.
- D. Declare that Mr. Edelman is not liable for contributory or vicarious infringement for distributing his proposed software tool because the tool has substantial non-infringing uses, i.e., it enables the public to make fair use of the block list, and Mr. Edelman is not supervising or acting in concert with actual infringers.
- E. Declare that Mr. Edelman’s proposed circumvention and distribution of the block list does not violate trade secrets laws because:
  - i) the block list is not a trade secret; or
  - ii) the block list is a trade secret, but Mr. Edelman’s reverse engineering is a proper means of obtaining that secret, and the N2H2 license is unenforceable against Mr. Edelman.
- F. Declare that Mr. Edelman’s proposed circumvention of the access and/or copy control of N2H2’s block list does not violate 17 U.S.C. § 1201(a)(1) of the Digital Millennium Copyright Act (“DMCA”), because:
  - i) it falls within the Library of Congress (“LOC”) exception at 37 CFR § 201.40, allowing circumvention to gain access to “compilations consisting of lists of websites blocked by filtering software applications”; and/or

- ii) it is a fair use consistent with 17 U.S.C. §§ 107 and 1201(c).
- G. Declare that Mr. Edelman’s proposed creation and distribution of a software tool, for the purposes of achieving the circumvention described above, does not violate 17 U.S.C. § 1201(a)(2) or 17 U.S.C. § 1201(b) of the DMCA, because:
- i) it is a fair use consistent with 17 U.S.C. §§ 107 and 1201(c), 37 CFR § 201.40; and/or
  - ii) the tool will be capable of substantial, non-infringing uses.
- H. In the alternative to F. and G. above, declare that 17 U.S.C. §§ 1201(a)(1), 1201(a)(2) and 1201(b) of the DMCA are unconstitutional as applied to Mr. Edelman’s proposed research, because they are content-based restrictions on speech that fail strict or even intermediate scrutiny under the First Amendment.
- I. In accordance with the relief requested in A. – H. above, permanently enjoin defendant N2H2 from initiating litigation against Mr. Edelman.

Respectfully submitted,

July 25, 2002

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Ann Beeson  
Christopher A. Hansen  
Kevin S. Bankston  
American Civil Liberties Union Fdn.  
125 Broad Street - 18th floor  
New York City, New York 10004  
(212) 549-2500

Sarah R. Wunsch, BBO # 548767  
American Civil Liberties Union Fdn. of  
Massachusetts  
99 Chauncy Street, Suite 310  
Boston, Massachusetts 02111  
(617) 482-3170, ext. 323