UNITED STATES DISTRICT COURT WESTERN DISTRICT OF MISSOURI CENTRAL DIVISION

Parents, Families and Friends of Lesbians)
and Gays, Inc., et al.,)
Plaintiffs,))
V.) Case No. 2:11-cv-04212
)
Camdenton R-III School District, et al.,)
)
Defendants.)

DECLARATION OF DAVID HINKLE IN SUPPORT OF PLAINTIFFS' MOTION FOR PRELIMINARY INJUNCTION

- 1. My name is David Hinkle. I am a self-educated software developer who has worked in the software development field since 1996. Beginning in 1999, I led the development of the software now known as "CIPAFilter," which is sold to public schools to meet the requirements of the Children's Internet Protection Act ("CIPA"). Since 1999 I have been employed by DerbyTech, Inc., the licensor of CIPAFilter. Through my work at DerbyTech, Inc., I am generally familiar with the Internet filtering industry, particularly in connection with filters supplied to public schools to meet the requirements of CIPA.
- 2. Internet filtering solutions first appeared not long after the public began using the Internet in the 1990s. Most of the early filtering solutions were developed for parents and private schools. Some of those filters were designed to filter out more than sexually explicit

content -- for example, some filters designed for religious schools and parents also filtered out websites treating sexual subjects, or viewpoints that the religious schools found objectionable.

- 3. When Congress passed CIPA in 2000, a new market was created for Internet filtering for public schools. At that time, I realized there would be a need for a filter that would filter out sexually explicit content but would otherwise be viewpoint-neutral—that is, not seeking to filter out any content beyond sexually explicit content, and not seeking to filter any other content based on political, ideological, religious, or other viewpoints. I developed CIPAFilter along those lines.
- 4. Internet filters designed to filter out sexually explicit content can work through various methods, including blacklists, whitelists, and real-time assessment. If blacklists and/or whitelists are used, however, they must be constantly updated, because enormous amounts of new sexually explicit content are added to the Internet daily. Because of the problem of identifying and cataloging new pornographic sites and materials, CIPAFilter works on real-time assessment basis and does not depend on blacklists for filtering sexually explicit content. (CIPAFilter does use some whitelists, because of special issues associated with some mainstream non-pornographic websites that would otherwise trigger automatic filters because they contain Java script code which itself includes filters for profanity. We also use some special blacklists -- for example, to specifically exclude sites which otherwise elude our realtime assessment filter and to control access to groups of high profile sites such as Facebook and YouTube.) Although no Internet filter can be 100% effective in screening out sexually explicit content, we have studied the effectiveness of CIPAFilter by comparing it to lists of sexually explicit content developed through Internet searches, and have found its effectiveness to be 95 to 99%.

- 5. CIPAFilter is one of a number of professionally developed filters designed for public schools operating under CIPA. Our competitors include Blue Coat, Lightspeed, M86, and Netsweeper. The public school market demands that these filters solve the problem identified by CIPA (the need to filter sexually explicit content so that it does not get through to public school students) while also not impeding the schools' educational mission -- for example, by over-filtering and removing useful educational and informational resources.
- 6. Using CIPAFilter, and publicly available resources from Blue Coat, Lightspeed, M86, and MOREnet (which runs a version of Netsweeper), I tested how these professional Internet filters handled Plaintiffs' websites listed in paragraphs 34, 38, 41, and 44 and the additional LGBT websites listed in paragraph 47 of the First Amended Complaint in this action. (URLBlacklist categorized all of these websites as "sexuality.") Neither CIPAFilter nor, the other leading filtering companies placed any of these websites in sexually explicit categories that must be blocked under CIPA. The list of categories and accompanying definitions for Lightspeed, Blue Coat, and M86 are attached as exhibits to this declaration. *See* Exhibits A-C (attached).
- 7. DerbyTech offers CIPAFilter to small public schools for as little as a \$1600 initial investment and \$600 a year. I understand from DerbyTech's sales staff that Blue Coat, Lightspeed, M86, and Netsweeper offer their products at competitive rates. I also understand that MOREnet, based at the University of Missouri, provides Internet service to most if not all school districts in Missouri, and it offers its school district customers a competitively priced private-label version of Netsweeper.
- 8. Though it varies from product to product, most of these products can be installed in by school districts as little as two or three hours by installing a piece of hardware or

downloading the software from the Internet.

- 9. Based on the District's reference to its "customized Internet filtering software," it appears that the District has designed its own filtering software based on open-source software that is freely available on the Internet. The open source software itself simply handles the task of actually blocking the objectionable sites. In order for it to function, the open source software must apply some filtering criteria obtained from some outside source. Generally this is done by using blacklists. The blacklists and other filtering criteria developed by professional filtering companies such as CIPAFilter are proprietary and are not available for use in connection with open source screening software. Hence, schools that utilize open source screening software must either develop their own database of blacklists, or somehow find a database of blacklists from a website called URLBlacklist.com.
- 10. A database of blacklists must be designed and maintained carefully in order to properly filter out sexually explicit content. One of the disadvantages of using URL Blacklist, for example, is that the provider is under no contractual duty to provide customer service or ensure that the blacklists maintain a high quality. Any blacklist must be constantly updated, or it will not be effective, because of the large amounts of new sexually explicit content that appear on the Internet each day. Moreover, if the blacklist categories group sexually explicit material together with useful educational and informational materials, the open source software using such blacklists will filter out those sites.
- 11. I have looked at the website <u>urlblacklist.com</u> (hereafter, "URL Blacklist") and downloaded a copy of the entire URL Blacklist database. The URL Blacklist website provides a set of blacklists, identified by various subjects, for use in connection with open source screening

software. The URL Blacklist website does not state that the blacklist database has been designed to comply with CIPA or to filter websites in a viewpoint-neutral manner. The website states that URL Blacklist does not provide any warranty or guaranty of service.

- 12. With respect to the URL Blacklist "sexuality" blacklist, I found the following:
- (a) The URL Blacklist "sexuality" blacklist contains relatively little sexually explicit content. I obtained the current URL Blacklist "sexuality" filter from URL Blacklist, and ran it through CIPAFilter. That blacklist contained 8271 entries, which is quite small compared the available websites on the Internet, which are counted in the billions. I performed an automated analysis of all the websites on the list, as well as a human spot check of several 200 website samples randomly selected from the list, and found that only 2% to 7% of entries on this list contain sexually explicit content.
- (b) I performed an automated analysis of the entire sexuality blacklist followed up by human testing of 500 randomly selected samples from the blacklist and found that 36% of the links on the "sexuality" blacklist are bad links -- that is, no Internet sites currently correspond to the listed domain, or the domain has been taken over by a spammer and turned into a "parking" site where the content is different from what it was when the list was originally created.
- 13. I also studied the "porn," "adult," "mixed_adult," "naturism," and "sexuality" blacklists from URL Blacklist. I believe that a school district that uses open source filtering software, combined with these lists, will find that that combination is not very effective in filtering out pornography, and has the side effect of filtering out informational and non-sexually explicit LGBT sites, for the following reasons.
- (a) The URL Blacklist blacklists are not effectively maintained and hence for that reason alone ineffective against new pornographic websites. I tested 200 randomly selected

websites from the URL Blacklist "porn," "adult," "mixed_adult," "naturism," and "sexuality" blacklists, which I understand the District is using, and found that 58% of them are bad links—that is, no Internet sites currently correspond to the listed domain, or the domain has been taken over by a spammer and turned into a "parking" site where the content is different from what it was when the list was originally created. Thus, based on this sample, a majority of the URLs listed in the URL Blacklist for the "porn," "adult," "mixed_adult," "naturism," and "sexuality" blacklists are either bad or irrelevant links.

- (b). In total, the blacklists for "porn," "adult," "mixed_adult," "naturism," and "sexuality" from URL Blacklist contain only 1,964,677 entries. I know from my experience that this is far lower than the number of sexually explicit websites available on the Internet.
- (c) When used against a random sample of 145 sexually explicit websites selected via a google search, the "porn," "adult," "mixed_adult," "naturism," and "sexuality" blacklists only blocked 68% of the websites in question. In contrast, CIPAFilter blocked 95% of the websites on the same list.
- 14. No filtering software is 100% accurate. Even the most reputable software may from time to time incorrectly classify a non-sexual website as pornography, or incorrectly classify a sexuality explicit website as non-sexual (and when these errors occur, they can be reported to the filtering company and corrected by a professional staff). Based on the foregoing analysis, however, I believe that URL Blacklist is significantly more likely than mainstream professional filtering companies to block non-sexual informational LGBT content and significantly less likely than mainstream professional filtering companies to block sexually explicit material.

Pursuant to 28 U.S.C. 1746, I declare under penalty of perjury that the foregoing is true and correct.

Executed on September 252011

David Hinkle