Class #1: Compilations consisting of lists of websites blocked by filtering software applications.

Summary: Previously, the Librarian of Congress decided to exempt this class of works from the access provisions of the Digital Millennium Copyright Act (DMCA). Research done under this exemption has resulted in a number of findings, many of which are of interest to the general public. It is therefore requested that this class be considered for renewal.

Facts/Argument: As a direct result of the initial round of hearings conducted during the years 1999 to 2000, the Librarian of Congress decided to exclude "compilations of lists of websites blocked by filtering software applications" from the Digital Millennium Copyright Act (DMCA). Several research projects already have taken advantage of this exclusion. The results of these studies have significantly benefited the public.

Ben Edelman's statistical work done for *Multnomah County Public Library et al.*, v. *United States of America, et al.* demonstrated that thousands of websites may be inappropriately categorized by filtering software applications.<sup>2</sup> Seth Finkelstein's research, recognized by the New York Times,<sup>3</sup> actually takes advantage of the previously granted DMCA exemption to figure out what is in the exact lists that are used for blocking.<sup>4</sup> Both these researchers findings, as well as the research of others, will be presented to the United States Supreme Court in the near future in the appeal of a challenge to the Children's Internet Protection Act.<sup>5</sup>

Without this exclusion, it is impossible to know in its entirety what websites any given filtering software application blocks. While statistical lists of randomly chosen websites may reveal some of what these products block, statistical sampling cannot possibly find everything.

Given that website filtering software is now actively used by parents, schools, libraries, corporations, and other parties, it is highly important to know what is blocked by these programs. Otherwise, important online resources and/or parts of history could be blocked, and no one would be the wiser.

<sup>&</sup>lt;sup>1</sup> 65 FR 64555-64574.

<sup>&</sup>lt;sup>2</sup> Edelman, Ben. "Sites Blocked by Internet Filtering Programs (expert report)". Last viewed 17 December 2002. Available online: http://cyber.law.harvard.edu/people/edelman/mul-v-us/

Lee, Jennifer. "Cracking the Code of Online Censorship." The New York Times. 19 July 2001. Available in print, various archival forms, and online (with free registration): http://www.nytimes.com/2001/07/19/technology/circuits/19HACK.html

Finkelstein, Seth. "Seth Finkelstein's Anticensorware Investigations - Censorware exposed." Last viewed 17 December 2002. Available online: http://sethf.com/anticensorware/

Technically, the Supreme Court will hear a case incorporating *Multnomah* as well as *American Library Association v. United States of America*, which were combined at a previous court level.

**Class #2:** Literary works, including computer programs and databases, protected by access control mechanisms that fail to permit access because of malfunction, damage or obsoleteness.

Summary: The Librarian of Congress previously decided to exempt "literary works, including computer programs and databases, protected by access control mechanisms that fail to permit access because of malfunction, damage or obsoleteness" from the access provisions of the Digital Millennium Copyright Act's access previsions for the current exemption period. And just like the previous period, literary works are still subject to malfunction, damage, or obsoleteness. It is therefore requested that this class be considered for renewal.

Facts/Argument: The Librarian of Congress decided to exempt "literary works, including computer programs and databases, protected by access control mechanisms that fail to permit access because of malfunction, damage or obsoleteness" from the access provisions of the Digital Millennium Copyright Act's access previsions for the current exemption period. But works from any era are subject to these three factors. It is therefore requested that this case be considered for renewal as an exemption to the access provisions of the DMCA for the next period (starting in October 2003).

If this provision is not renewed, literary works that have a misbehaving access control and are already deteriorating may continue to deteriorate further pending an era in which such materials can be recovered. This poses an immediate and significant threat to those that wish to utilize older items.

A discussion of how access-protected works may malfunction, deteriorate, and/or otherwise not work properly is included in the following case, as it is meant to expand and/or compliment this one.

Class #3: Literary works, including computer programs and databases, protected by access control mechanisms that are at high risk of failure in the near-term future because of malfunction, damage or obsoleteness. In order to invoke this case, the potential malfunction, damage, and/or failure must not be due intentional damage meant to invoke this clause.

Summary: The Librarian of Congress previously decided to exempt "literary works, including computer programs and databases, protected by access control mechanisms that fail to permit access because of malfunction, damage or obsoleteness" from the access provisions of the Digital Millennium Copyright Act's access previsions for the current exemption period. But during my personal reading of the Library's explanations, I did not notice any discussion on how to handle works that are likely to fail in the near-term future.

It is therefore requested that the Librarian of Congress either renew the previous exemption case with an additional clause permitting, or to add an additional allowed case to allow recovery of works likely to fail in the near term future, when such failure is not intentionally aggravated to invoke this clause.

This case as a whole is meant to cover routine issues due to old age, known system flaws, etc. It is NOT meant to cover when someone puts a literary work into a fire (causing permanent damage), bathes a computer program in an acid bath, etc with the intention of forcing this case into effect. The phrase "near-term future" is meant to be a period within the foreseeable future; for the sake of argument in this comment submission, I would recommend a period of three years from the date a work is analyzed to see if access to said work is permitted under this case.

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<sup>&</sup>lt;sup>6</sup> 65 FR 64562 Section III.C.2

Facts/Argument: The Librarian of Congress decided to exempt "literary works, including computer programs and databases, protected by access control mechanisms that fail to permit access because of malfunction, damage or obsoleteness" from the access provisions of the Digital Millennium Copyright Act's access previsions for the current exemption period. But this clause only covers literary works that are already experiencing one or more modes of failure. If an access control has failed, there is a high probability that a literary work meant to be accessed under the current clause has already lost significant amounts of data. Clearly, it is desirable to recover as much of a work as possible <a href="before">before</a> it is definitely known that information is lost.

It is also possible for a work to start losing data while the access control to said work is still functioning properly. It is therefore important to permit archival work to be performed prior to the point when the access control mechanism itself fails. In order to perform archival tasks, one might need to gain access to the work in ways not typically allowed by the access control system. This case is specifically meant to allow such access.

There are a number of literary works out there that already may qualify for this exemption should it be approved. Consider the case of a computer program stored on cassette or reel-to-reel tape. One obstacle that such literary works would encounter is "bleed-through" (a.k.a. "print-through"), in which the magnetic encoding of one layer of tape bleeds to the layer immediately wrapped above and below it. Over time, this can cause a significant echoing effect, potentially confusing reading devices.

Another issue that affects these two mediums face is tape degradation/decomposition, which causes tape layers to stick to and "peel off" onto each other. This may result in the tape tearing itself when played, causing further loss of data.

Literary works do not have to be stored magnetically to be at risk for loss. One set of works always at high risk of failure are video arcade systems based on Capcom's CPS2 system. CPS2-based video games are known to commit "suicide." This is because the primary CPS2 circuit board stores a series of decryption keys for the game encrypted onto it in a battery-powered memory chip.

When a CPS2-based video game's primary circuit board battery dies, said board needs to be sent back to Capcom so the battery can be replaced and the board reprogrammed for a fee. Should Capcom decide to stop offering this service, all video game consoles based on the CPS2 system would immediately be at high risk of permanently becoming useless.

A generic situation which would cause a user to be unable to access a literary work while the access control still functions properly is when the access control is contained in the work's installation routine. As the public may or may not be aware, most software programs utilize an install system, which (among other tasks) may attempt to verify a user's legitimacy.

Installers typically attempt to read a set of data that is usually compressed for transport, and install the work contained therein partially or fully uncompressed on a user's reading/accessing device. Should

This example, as well as those following, are NOT meant to be limiting factors; rather, they are being supplied as representative subclass(es) of works.

<sup>&</sup>quot;Capcom CPS2 Suicide." Last viewed: 18 December 2002. Available Online: http://www.arcadezone.org/faqs/cps2/suicide.html Note that I am NOT vouching for the accuracy and/or legality of the battery replacement procedure detailed here; this work is referenced for its discussion on CPS2-based games often stop working.

the installer be unable to read any of its data, the work may not be installed. Some installers may leave scraps behind when they fail; others may result to deleting everything they accomplished simply because a single data item was inaccessible.

The secondary limitation of this case is necessary to ensure that no one will intentionally damage a work in order to gain the right to bypass any access controls the work may contain. Such actions would be detrimental to the rights of the copyright holder.

Class #4: Literary works, including computer programs and databases, that can only be accessed indirectly via an access control.

*Summary:* Sometimes, access control mechanisms only allow a user indirect access to a work. A literary work may be sealed away in a vault, stored on a medium sealed inside another, accessed only indirectly via an interpreter, etc.

Such situations often leave the work's owner/licensor no clue as to the health of the literary work itself. It is therefore critical that a user be able to access a work itself as well as its storage medium in order to determine its status. This case is meant to compliment case #3.

Facts/Argument: Sometimes, access control mechanisms only allow a user indirect access to a work. A literary work may be sealed away in a vault, stored on a medium sealed inside another, accessed only indirectly via an interpreter, etc. Examples of literary works often stored in these types of situations include computer programs supplied in cartridge format, and "sealed" access devices where the media is permanently installed into a single reader which is then provided to the end user. A subset of these devices often incorporates tamper detection, which may erase or prevent further access to a work if the item is opened.

In these cases, a work's owner/licensor has no clue or very little as to the health of the literary work. It is therefore critical that a user be able to access a work itself in order to determine its status.

In order for this case to be valid, however, "access control" for a work has to be clearly separated from its "interface." It is arguable that an Internet-based interface to a work provides indirect access, as a user likely will never see the server they connect to. Such a system, via a login system or other means, also could be an access control mechanism.

It would clearly be improper to flood a service provider with requests purely to see if their database was intact. I would be curious to see how the reply commenters treat this issue, as well as what modifications to this case they propose.

This case is meant to compliment case #3, as it provides a method for users to determine if a work is at high risk of failure.

**Class #5:** Literary works, including computer programs and databases, protected by access control mechanisms that fail to permit access because of the copyright owner and/or their designated agent fail to provide the necessary support means.

Summary: This case was contained within case #2 as a permissible reason to bypass an access control for the current period. But the fact that this was allowed was only made clear by the Library's comments. When a copyright holder, company, or other party in charge of maintaining an access control fails to support users of said access control means, the access control technically has not malfunctioned, been damaged, or become obsolete; rather, the access control provider is just being stubborn.

It is therefore requested that the Librarian of Congress renew case #2 as before, but also clarify it by adding this case. Since the final report in response to the previous comment period covered this contingency, adding this case (assuming case #2 is renewed) should be a trivial matter.

Facts/Argument: Access control mechanisms often require the authorization of a third party to use a product. For example, a user may be supplied with an "access key" to a work, which must be entered prior to use. This access key may or may not further require a randomly supplied pseudo-random secondary key generated at the user's end. Such a pseudo-random key is then supplied to the copyright holder and/or their designated agent to be used to create yet a third "authentication key". One or more of these three basic keys may be required once, may be required periodically, and/or may require entry via manual or automatic means every time a user accesses a literary work.

Typically, an agent of the copyright holder or the holder themselves handles requests for these keys (sometimes stored on "dongles"), as well as the support issues arising therein. But most copyright holders do not wish to maintain their works forever. Instead, they typically specify an "end of life" date, which may or may not be released to the public.

After such a date, the copyright holder, at their discretion, may refuse to support a product. This refusal to support may include refusal to help users access their purchased works.

When a person loses the keys to their home, they can always call a locksmith to regain access. However, the only locksmith often available to replace a lost or reissue an actively changing access key is the copyright holder and/or their agent. It is therefore important to insure that users always have access to their products should the copyright holder or their designated agent refuse or otherwise be unable to handle an access control issue.

The risk to the copyright holder due to allowing forced entry of a work they are not willing to support is negligible, as refusal to support a particular product is a sign that the copyright holder no longer wishes or is able to profit from it.

This case was contained within case #2 as a permissible reason to bypass an access control for the current period. But the fact that this was allowed was only made clear to the general public by the Library's comments.<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> 65 FR 64564-64566 Section III.D.2

**Class #6:** Literary works (including computer software and databases), musical works, and motion picture works which are region encoded, and for which the nearly identical product except for being keyed for a region containing the United States does not exist for mass-market consumption within the United States.

*Summary:* Previously, the Librarian of Congress decided that this class of works did not qualify for an exemption. However, the Librarian did admit that this situation will have to be revisited should the situation change.

Since the time of the previous rulemaking, a number of factors have occurred that changed the situation. Major retailers have announced they are discontinuing and/or decreasing sales of non-region encoded products offerings in favor of region encoded ones. General sales estimates have shown sales of some of these to exceed those of the non-region encoded forms, with the likelihood of the variety of certain non-region encoded items to be shortly cut back and/or discontinued.

Region coded works, while providing the copyright holder with some benefits, also provide the consumer with significant drawbacks. Only "mass marketable" items tend to be sold in any given market, restricting those whose tastes do not match the average person's. Prior to the DMCA, those with different tastes from the mainstream were able to import works from other countries. Region coding, combined with other existing legislation, prohibits this in many cases.

An argument was made during the previous comment round that people wishing to use foreign works that contained region-code access controls could simply purchase products capable of playing them. But given these products are typically sold in foreign markets, they may not meet U.S. standards for import and/or sale. Products that can handle works from multiple regions often limit the number of times they can switch between regions, severely hampering owners of multi-region collections of works. Furthermore, the cost to purchase all the necessary support equipment can be orders of magnitude higher than the cost of importing the work itself, when there is no difference in storage formats other than that due to the region access code.

*Facts/Argument:* Previously, the Librarian of Congress decided that this class of works did not qualify for an exemption. However, the Librarian did admit that this situation will have to be revisited should the situation change. <sup>10</sup>

Since the time of the previous rulemaking, a number of things of occurred that make this issue worth revisiting. For instance, the Blockbuster video store chain, widely considered to be one of the largest in the United States, decided in 2001 to cut significantly back on its non-region encoded VHS selection due to slow sales. The research firm In-Stat/MDR recently released a study showing over 60% growth in region-encoded DVD player sales so far this year alone. The research firm In-Stat/MDR recently released a study showing over 60% growth in region-encoded DVD player sales so far this year alone.

But this argument is not limited to VHS cassettes versus DVDs. An example of literary works using region codes that existed long before VHS and DVD items started competing is video game software. While it is obvious that there is a mass market for video game software, video game companies often release products only to regions where they think they will do well. This has lead to dozens if not hundreds of games as well as their sequels only being released in certain markets.

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<sup>&</sup>lt;sup>10</sup> 65 FR 64569.

<sup>&</sup>quot;Blockbuster to cut VHS library; make room for DVDs." American City Business Journals, reprinted in the Dallas Business Journal. 10 September 2001. Available in print and online: http://dallas.bizjournals.com/dallas/stories/2001/09/10/daily3.html

<sup>&</sup>quot;DVD Market to Thrive as Players are Added to More CE Products (Press Release)." In-Stat/MDR. 17 December 2002. Available online: http://www.instat.com/press.asp?ID=458&sku=IN020044ME

When a video game is released to multiple markets, it is typically tailored to the believed "common consumer" of that region. The language (both type and vulgarity level), characters, challenges, and even the entire level of difficulty are all factors that distinguish copies of a game sold to two different markets.

The one thing typically preventing a video game system in one region from playing a game written for another is the region code. All the rest of the programming techniques are largely the same. The video game playing devices are also nearly identical, although importing of such equipment may be restricted due to reasons I will discuss later. Since the manufacturers of video games often do not release a work to every market they service, players in other markets have to import such works to the local one. Doing so at the moment carries substantial legal risks.

Herein lies the basic flaw with the previous region coding discussion. The Library's previous argument suggested that since there was a thriving mass market of works, and hence region coding was not an issue. Only mass marketable items tend to be sold in a mass market. Yet individual Americans are wildly diverse.

Consider the case of an American wanting to learn Japanese. In order to do so, they must not only learn about the language, but the culture as well. The "Top 10" or even "Top 100" movies selling in the Japanese market will not be the same as the U.S. market, nor will either list be the same as such lists Korea, etc. Hence, while they may be able to find some Japanese movies in the U.S. market, they likely will not be able to find many of those that the Japanese market and hence Japanese culture considers significant.

When a work is imported to this country for mass sale, whether it is a video game, motion picture, or otherwise, it is typically adapted for the average U.S. audience. In the case of Japanese movies, all the local sayings tend to be replaced with alternative dialogue. The movie, if overly violent or religious, would be tempered down to fit our American lowest common dominator. The language itself would be changed.

In short: By the time a foreign work is sold especially to the United States' market, it typically has been edited so much that much of the original meaning of the work has been lost. To members of the particular culture that has been edited out, this is a major loss.

While the lack of no one work in its original form from another country may impact the United States, the combination of all the edits of all the works created abroad and then modified for release to our country is eliminating our diversity.

Some manufacturers attempt to make up for this by adding alternative sound tracks, etc. to regionencoded items. But this can only be done to an extent. For example, many cultures around the world tolerate blood, gore, sex, and similar things more than the average American. But releasing a version of a work with the option to put deleted scenes with all these back in clearly would turn away other potential purchasers.

There are also a lot of markets that while small in the United States are quite large abroad. For example, video game music soundtracks are quite popular in Japan. In fact, these soundtracks are so popular that video game music often gets rescored and played by orchestras.

Since audio works on compact discs tend to be universally readable, this market has attracted a number of small U.S. importers, which make a decent living off of it. But since these works too are transitioning to region-coded media, these small companies may soon go out of business.

Two compensating arguments have been made in support of region coding. The first states that many region-coded devices, such as DVD players, often allow a limited number of region switches. But a limited number of allowed region changes does not benefit anyone who has a collection of multiple items from multiple regions, as they would quickly run out of allowed region changes purely due to repetitively playing different works.

The second compensating argument proponents mention in favor of region encoding is that a user wishing to use foreign works can always import foreign players, and/or use converters to access a work. But this neglects the fact that the cost to import and/or otherwise acquire such items is significantly higher than the work itself, posing a significant burden on the end user.

Even if a work can be imported, the players, television sets, electrical adapters, etc. necessary to use such equipment may not be. For example: A DVD player or game system certified for use in Europe might have CE safety certifications allowing it to be sold there, but lack FCC certifications allowing it to be used in the United States. Yet, the both the U.S. player and the European one may access works in the same format (except for the region code). Different certifications would be required to sell a device in Russia, Japan, etc.; again, it is not guaranteed that such devices would be also certified for use in the United States.

It is agreed that some niche U.S. retailers stock media access devices capable of understanding and/or reading foreign formats. But these devices are highly expensive as compared to their region-locked counterparts, and largely meant for use in newsrooms and other such areas. Why should a consumer be forced to purchase industrial-strength or foreign equipment to enjoy their own culture? This is especially questionable since region coding systems tend to make insignificant changes to works that would otherwise be accessible.

Region coding is an artificial means to create separate markets that could utilize otherwise identical products. It is little wonder that outside the United States, a number of firms sell products that ignore region code schemes. One news report from a few years ago (which escapes me at the moment) discussed how even common European department stores were stocking "region-free" media players and/or adapters to make media players region free.

Ironically, foreign owners of region-ignorant media access devices typically do not use such devices to use works in ways not intended by the copyright holder. Owners of such players typically are trying to import works from the United States, since their local markets tend to lack the diversity that ours has.

While we may have the mass market to make up for it to an extent, we need to maintain our diverse culture. It is therefore recommended that the Librarian of Congress exempt accessing literary works, musical works, and motion picture works meant for sale in another region of the world other than the United States from the access provisions of the DMCA.

In order to appease copyright holders, a provision to disallow accessing foreign works when local works are identical except for the region setting is included. Since it is impossible to argue when a work is different enough to justify when a work is "significantly different," I have decided to err in favor of the public by using the term "nearly identical" in order to allow works with more than just a slight change to be imported.