

DMCA exemption comments, by Ken Arromdee

CLASS OF WORKS (1)

Class of works 1 is: Audiovisual works on DVD protected by the Content Scrambling System (CSS).

TECHNOLOGICAL MEASURE

DVDs are typically encrypted with CSS; in order to play the DVD, the content must be decrypted. Unauthorized decryption involves circumventing a technological measure that controls access. There are several well-known court cases dealing with unauthorized decryption, which the motion picture industry has been trying to stamp out.

NONINFRINGEMENT ACTIVITY PREVENTED

The problem for consumers is that with CSS, access controls have been combined with use controls--controls which affect how an owner of a legally obtained copy of the work may use it. The user may not play a DVD intended for a foreign "region", and if a DVD prohibits particular uses, the user may be unable to skip commercials (such as on some Buena Vista DVDs), change audio tracks (such as the 1931 Dracula, which prohibits switching between the main audio and the commentary), switch subtitles off, or use features such as fast-forward, rewind, and pause. In practice, users also cannot play DVDs on Linux.

It is not possible to circumvent the use controls without circumventing the access controls. The DVD Copy Control Association (DVDCCA) has tied them together by a very simple method: DVDs cannot be played without being decrypted. The DVDCCA will only license the decryption to companies who agree to make their DVD players obey the usage restrictions above (except for playing on Linux, which I deal with below). So only an unlicensed player can ignore those restrictions, but creating and using an unlicensed player is circumvention.

The ability to play DVDs on Linux is a special case. As pointed out in the 2000 rulemaking, the DVDCCA has claimed to be willing to license Linux players, and "Linux players... should be available in the near future". The near future is now the present, such players are not generally available (except for one OEM player with negligible market penetration), and this isn't a coincidence.

The main CSS-related reason why in *practice* Linux players can't be licensed is that though technically, Linux DVD players are allowed, they are only allowed in a way incompatible with how Linux is used in reality.

Much Linux software, and particularly media-playing Linux software, is typically developed as open source, unlike Windows software. The basic concept of open source is that all users should be free to examine the source code of, modify, and distribute the program (see the official OSI Open Source Definition at http://www.opensource.org/docs/definition_plain.php). Typical Linux distributions are mostly or all open source. In fact, programs such as "mplayer" and "xine" are already available as open source--and as released they play everything that one would expect a Linux media player to play with the exception of CSS-encrypted DVDs.

Being legally licensed to make a player involves signing a non-disclosure agreement which is inherently incompatible with open source (since publishing source code amounts to disclosing all the specifications it uses). The contractually required usage restrictions above are also incompatible with open source (if a user can modify the program, he could remove the restrictions). Furthermore, open source developers are often hobbyists without the resources available to businesses. While there are no royalties on CSS, the DVDCCA's own web site (www.dvdcca.org) lists a \$15000 "annual administrative fee" which is prohibitive to a typical open source developer. As a result, while DVD players on Linux are not outright prohibited, they are restricted in ways that make it unlikely that there will ever be common.

Other Methods of Performing Activity

The 2000 rulemaking suggests that restriction of DVDs is not very harmful partly because the works in question "are also readily available in analog format", so that someone wishing to make a noninfringing use can use the analog VHS version instead. This may have been true in 2000, but the market is changing. Even a casual visit to a video store makes it obvious that VHS is being phased out. For more detail, I examined the first 15 DVD releases on amazon.com for January 21 2003:

101 Dalmations II
2019: After the Fall of New York
24 Hour Party People
8 Women
AV:X.09 - Happy2bhardcore - Old Skool
Abbott & Costello Show Vol. 5 (and 6)

Ablaze
The Adventures of Huck Finn
An Affair to Remember
African Thrills/Couples of Boulogne
Ahmad Jamal Live
Ai Yori Yoshi
Albino Alligator
All or Nothing
All in the Family-Complete 2nd Season

The following are also available on VHS: 101 Dalmations II, 24 Hour Party People, Abbott and Costello, Ablaze, Adventures of Huck Finn, An Affair to Remember, Albino Alligator, All or Nothing. (Scattered episodes of All in the Family are available, but not the whole season). So about half of new DVDs have no VHS release--and even this understates the problem because several of the above titles were released on VHS in the pre-DVD era and the makers might not be willing to continue to produce VHS. It may safely be said that this trend will continue, and that in the future most DVD content won't be available in VHS format.

It has been claimed that the region code restriction isn't burdensome because the consumer may buy a second DVD player with a different region code. But the very fact that the region code system is widely used suggests otherwise. The industry obviously believes that region coding works. This implies a belief that any workarounds (such as buying a second player) are too burdensome for consumers to use widely--otherwise, they'd use them, and region coding wouldn't work. It would not make sense for buying a second player to be both so impractical that it doesn't cause region coding to fail already, yet so practical that it is a viable alternative to circumvention.

Moreover, while purchasing a second DVD player might allow playback of foreign DVDs, it would not prevent the other use restrictions. (Interestingly, some use restrictions are more of a problem on foreign DVDs in the first place--for instance, French and German DVDs are notorious for not allowing subtitles to be removed.)

LEGALITY OF NONINFRINGING USE

Playing legally obtained DVDs using features of one's choice and on the operating system of one's choice would obviously be legal if it wasn't for anti-circumvention laws.

STATUTORY AREAS:

Availability for use of copyrighted works: The companies involved in the motion picture industry have often claimed that piracy from illegal circumvention might discourage them from releasing DVDs, but there are several reasons why this is doubtful:

- Piracy is possible without circumvention. A bit-for-bit copy of an entire DVD onto another DVD, including all the encryption, is playable. Only a few kinds of piracy require decryption; namely, decrypting data from a DVD and distributing copies of that data in unencrypted form.
- Even the kind of piracy that requires decryption doesn't require that the decryption be unauthorized. A DVD ripper could be written to "hook" into an existing software player, capturing the unencrypted data produced by that player without using circumvention.
- There is no evidence that the few DVDs which are not CSS-encrypted (and thus would not require circumvention to pirate) are pirated any more frequently than DVDs which are encrypted.
- Allowing circumvention would not make piracy easier. Illegally circumventing would be as difficult as circumventing with an exception. One might argue (though I would dispute it) that distributing circumvention tools makes piracy easier, but this rulemaking is not about tools.
- Allowing circumvention would not make pirates harder to catch or prosecute. Conventional copyright law still applies even if an exemption exists, and all pirates would still be doing illegal activity that is just as easy to prosecute as it is now.

Availability for use of works for nonprofit archival, preservation, and educational purposes: The ability to play foreign DVDs is necessary before those DVDs can be used for nonprofit or educational purposes.

Impact on commentary, criticism, and research: Again, a DVD that can't be played can't be commented on, criticized, or used for research.

Effect of circumvention on the market: It is possible that allowing the playing of foreign DVDs would reduce the market for domestic DVDs, but the market for the foreign DVDs would increase by a corresponding amount. Overall, there would be no change.

Allowing users to skip commercials, freeze-frame, and similar uses, or playing DVDs on Linux, should have little effect on the market. All of these uses involve playing DVDs which must still be purchased. One might argue that if many users skip ads, DVD producers couldn't make as much money off of selling commercial time on DVDs, and that this could reduce the profit from the DVD, but considering that the sale of DVDs without ads are still quite healthy, it's unlikely that this would significantly hurt the market.

CLASS OF WORKS (2)

Class of works 2 is: Software and games that are played on video game machines.

This class of works was hard to define. Circumvention means accessing a work without the authority of the copyright owner. When a user runs unauthorized software on a game machine, the copyright owner of the *work*--i.e. of the unauthorized software--doesn't object. So arguably, this isn't circumvention.

However, a similar argument was made in *Universal vs. Reimerdes* with respect to Linux DVDs--that playing DVDs under Linux is not circumvention because the user is authorized to play the DVD--and was rejected. The US Second Circuit Court of Appeals said that the authority to view the DVD doesn't include the authority to decrypt, even though decryption is a necessary step for viewing.

Applying the court's reasoning to the running of unauthorized software would suggest that the owner of the unauthorized software has only granted the user the authority to run the software, but not to take the steps necessary for running the software. This would make it circumvention to run such software.

TECHNOLOGICAL MEASURE

Most modern video game systems (in particular, the Playstation, Playstation 2, and Xbox) include encryption. A video game will not play in the machine unless certain information on the disk, possibly including an encryption checksum, is correct. This information is not copied by typical copying methods, so pirated copies are prevented from playing on the system.

NONINFRINGEMENT ACTIVITY PREVENTED

The noninfringing activities prevented are two: Playing foreign games on

domestic players (similar to the region coding problem in class 1), and playing unauthorized software (such as Xbox Linux).

Again, access and use controls are merged, though in a different way from DVDs. In practice, the easiest way to make a machine capable of playing imports and unauthorized software involves making it able to play everything, which would include pirated games. In fact, just making a machine play pirated games is much easier than making it play imports--modifications that let a machine play pirated games but not imports are cheaper and easier to install (the "no-solder" mod that allows playing pirated games costs \$20 and can just be snapped in, while the "Magic 3" mod that allows playing imports has 23 wires to solder, appeared years later, and costs \$60)

Many import games are not released in the US market, or are only released in edited versions; examples include the removal of the "story mode" from the US version of Rival Schools 2 for the Dreamcast, or the game Building Baku for the Playstation 2, which is a puzzle game with a theme of blowing up buildings; because of the September 11 attacks, it will never be released in the USA. I own legitimate copies of each of those games and can't reasonably play them without circumvention.

(A similar argument to the DVD case applies for why buying a second player is not a good alternative: if buying a second player were truly practical, the region code system would have failed already.)

LEGALITY OF NONINFRINGING USE

Playing legally obtained foreign DVDs and running unauthorized (but non-pirated) software is obviously legal.

STATUTORY AREAS:

Availability for use of copyrighted works:

Availability for use of works for nonprofit archival, preservation, and educational purposes: Mostly not applicable.

Impact on commentary, criticism, and research: Mostly not applicable.

Effect of circumvention on the market: Again, allowing this circumvention would not make piracy easier (illegal circumvention is as easy as legal circumvention), nor would it make pirates harder to catch or prosecute, since piracy involves other steps that remain illegal. It is therefore unlikely that allowing circumvention would affect the market via increases in piracy.