Michael A. Rolenz 10 February 2003

"Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies"

Reply comments in support and amplification to Comment #35 of Fred von Lohmann of the Electronic Frontier Foundation and Public Knowledge

2. Descriptive Name Class : Class #1 (Copy-Protected CDs): Sound recordings released on compact disc ("CDs") that are protected by technological protection measures that malfunction so as to prevent access on certain playback devices.

Summary:

As pointed out in the comment, "copy protected" compact disks are really nothing more than a defective masquerade. In addition to the effects upon consumers, another reason to grant the exemption is for the impact of this so called copy protection upon the consumer electronics industry. If an exemption is not granted, then fixes, alterations, and upgrades to many consumer electronics would be classified as "circumvention devices" and banned under the DMCA.

Facts and evidence:

The first fact is that no copy protection scheme can possibly work for a bit for bit copy of a digital work is indistinguishable from the original.

The second fact is that once digital media is converted to analog it can be converted back to digital at the same fidelity.

The third fact is that the copy protection schemes for compact disks in use today are based upon differences between compact disk data and audio formats. In addition, they are based upon the assumption that an audio disk will be read as a data disk by the CD reader

Argument:

As discussed in the facts section, a bit for bit copy of a digital work is indistinguishable from the original. A device that does this inherently is a computer since a computer that only creates garbled bits would be useless. Classifying a computer as a circumvention device for the purposes of preserving "copy protection" would compromise, if not negate, its usefulness in other industries. Copy protection of software was a disaster in the 1980s and has been virtually abandoned by all but a few. Ultimately, copy protection must fail for this reason.

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The second fact dealt with analog to digital conversion and its reverse. It is a trivial matter to build such devices and to attach them to the appropriate output jacks (or simply the speaker wires). To classify these, or any other such device that re-encoded either analog or digital signals is to deny fair use. What fair uses would these permit? One would be media shifting. As is well known, vinyl records make up only a minuscule market. Cassettes are approaching that fraction. Yet many still have cassette players in their cars or have Sony Walkman. Media shifting has been recognized as fair use. Devices that permit that should be exempt from DMCA restrictions. 1

Lastly, as stated above, copy protections merely exploit the differences between audio and data compact disk formats. Are software, firmware, or the next generation of CD readers that allows that interoperability to be considered circumvention devices merely because they allow the reader to work?

Not only should the effects of CD "copy protection" on consumers be considered but also the effects upon the computer and electronics industry be considered as well. For these reasons, an exemption for "copy protected" CDs from the DMCA should be granted.

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¹ On a personal note, as someone with a frequency specific hearing loss in my right ear (25 dB at 5kHz), and a classical music lover, I have had to use a graphic equalizer to attempt to compensate for that loss for 20 yrs. The first equalizer I bought worked well. After that one ceased working I purchased another that has not worked out as well. My hearing loss is such that the compensation profile cannot readily be achieved using analog equalizers. Digital equalizers are part of nearly a part of every media player on computers but NOT part of any stereo system. It annoys me that this so called copy protection denies me that use of the computer.