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BY HAND

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Library of Congress
James Madison Memorial Building
Room LM-403
101 Independence Avenue, S.E.
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Re: Docket No. RM 2002-4
Exemption to Prohibition on Circumvention of Copyright
Protection Systems for Access Control Technologies

Dear Mr. Carson:

Thank you for your letter of June 24, 2003 raising additional questions related to my May 14, 2003 testimony in the above-captioned proceeding. I have set forth my answers below, and then turn to the issues you noted were left open from my testimony.

I should note at the outset, however, that because the Office's questions were very detailed, my answers are very detailed. Thus, there is a risk of losing perspective. I caution the Office not to fall into that trap. As explained in my testimony and further explained below, the fact is that record companies have commercially distributed in the U.S. a miniscule number of CDs with technological protection measures ("TPMs") – some 0.05% of the CDs shipped from calendar year 2001 to date (the period during which TPMs have been used on U.S. commercial releases). [1] That tiny number cannot be said to have had any material effect to date – and certainly not a substantial one – on the ability of users to make noninfringing uses of sound recordings. The proponents of the exemptions do not seriously suggest otherwise.

Instead, their cases are based on an asserted fear of future harm because record companies have not forsworn the possibility of using protective technologies, which

[1] Our calculations are based on manufacturers' unit shipments for calendar years 2001 and 2002 and estimated half-year data for 2003.

Congress encouraged them to use by enacting Section 1201. Going forward, record companies may or may not widely accept Congress' invitation to use TPMs to protect their works so that providing the public access to recordings remains economically viable. But that is impossible to predict at this point, as it is impossible to predict the performance characteristics of products using TPMs that have not been invented or brought to market. Under the rules of this proceeding, speculation concerning these matters is not a sufficient basis to grant an exemption. As the Copyright Office has noted, recognizing any exemption based on "likely adverse effects" in the future "requires proof that adverse effects are more likely than not to occur . . . and the burden of proving the expected adverse impact is more likely than other possible outcomes is on the proponent of the exemption." 67 Fed. Reg. at 63,579. In addition, the kind of harm asserted – an alleged inconvenience to a handful of users rather than impairment of the nonprofit and transformative uses emphasized by Congress, *see* 17 U.S.C. § 1201(a)(1)(C)(ii) and (iii) – could not possibly outweigh the harm that an exemption would cause. Accordingly, the record of this proceeding, as supplemented by this letter, does not sustain an exemption with respect to sound recordings distributed on CDs protected by TPMs, no matter how narrowly drafted such an exemption might be.[2]

Written Questions

Your letter posed two questions (numbers 1 and 3 (except 3(G))) seeking a range of information concerning specific CD releases incorporating TPMs, including descriptions of the TPMs and information concerning problems that users may have had playing the CD releases. Your letter also posed two questions (numbers 2 and 3(G)) concerning the plans of RIAA members to release CDs with TPMs during the next three years. Because my answers to questions 1 and 3 (except 3(G)) involve the same small set of CD releases, I take those questions together and begin with them first.[3] I then turn to questions 2 and 3(G).

> ***1. Please identify all sound recordings that you or your members are aware of that have been released in the United States in the compact disc format with technological protection measures covered by 17 U.S.C. §1201(a) or (b).***

[2] As I testified, the various proposed "classes of works" relating to sound recordings are themselves defective, and that would provide a sufficient basis for the Office to decline to grant any of the proposed exemptions. However, because the Office did not ask about the proposed class definitions, I do not repeat those arguments here.

[3] While questions 1 and 2 are limited to compact discs "released in the U.S.," question 3 does not contain this limitation. We assume this was an inadvertent omission. If the Office is in fact seeking information concerning sound recordings released outside the United States, we would endeavor to provide it, but note that gathering this information would be highly burdensome, and RIAA's ability to obtain this information may be quite limited. We also would question the relevance of such information to this proceeding.

3. Are you or your members aware of any instances in which technological measures that control copying of sound recordings have prevented any devices that ordinarily can play compact discs from playing the content on any compact discs containing those technological measures?

These questions make the unprecedented request that RIAA report detailed information concerning each and every CD release that has ever incorporated a TPM. That request suggests a shifting of the burden of proof in this proceeding that is very troubling. Congress concluded when it enacted Section 1201 that use of TPMs is, on balance, access-facilitating and to be encouraged. This proceeding was intended to be a "fail-safe mechanism" that applies "in exceptional cases." 65 Fed. Reg. at 64,558 (quoting H.R. Rep. No. 105-551, pt. 2, at 36). Thus, it is the burden of the proponent of an exemption to make a prima facie case in support of its proposed exemption. 67 Fed. Reg. at 63,581. In a situation worthy of an exemption, the proponent should have no difficulty meeting that burden, because the harm to the public that might justify an exemption should be widely-felt, open and notorious. This proceeding is not intended to be – nor should it be turned into – a forum in which copyright owners are required to make a triennial accounting of their use of TPMs so that the Office can hunt for problems or potential problems that have not manifested themselves to a sufficient degree that the proponent can easily meet its burden of proof. Here, the fact that the Office has thought it necessary to request the information sought in questions 1 and 3 demonstrates the failure of proof by the proponents and the lack of a widely-felt, open and notorious problem that might justify an exemption. Recognizing, however, that the Office seeks clarity from me concerning this matter, I have done my best to investigate and answer these questions.

These questions seek a variety of information concerning each CD release protected by TPMs. Most of that information is specific to the release. The release-specific information, where available to me, is set forth in the chart attached as Exhibit A. In the body of this letter, I describe the information set forth in Exhibit A and also set forth certain information that pertains to all or most of the releases and warrants a more detailed treatment than would be possible in the chart.

Identity of CDs Commercially Released in the U.S. that Include TPMs (Questions 1(A) and 3(A)) and the Number Distributed (Question 1(B))

In connection with your letter, RIAA worked very hard to investigate use of TPMs on CDs commercially released in the U.S. by each of the major record companies and by the other labels that produced CDs identified by the submitters of reply comments 30 through 78 as being copy protected (to the extent they could be identified by the information submitted by the commenters). Based on that investigation, RIAA is aware

of only fifteen CD titles released in the United States with TPMs.[4] The first several columns of Exhibit A identify them and set forth the number distributed.

The TPM Used and Whether It Is an Access Control, a Copy Control or Both (Questions 1(C), 3(B) and 3(H))

The next column of Exhibit A identifies the particular TPM used. I note that the TPMs protecting all but one of those releases are Macrovision products. A Macrovision representative testified at the May 14 hearing, and by way of further general background, I have attached as Exhibit B copies of selected pages from Macrovision's website describing its current TPM offerings.

In Questions 1(C) and 3(H) you also specifically asked whether each TPM is an access control, a copy control or both. As you know, Section 1201 has separate provisions addressing TPMs that "effectively control[] access to a work," 17 U.S.C. § 1201(a)(3)(B), and that "effectively protect[] a right of a copyright owner under this title," 17 U.S.C. § 1201(b)(2)(B).[5] Whether any particular TPM solution is strictly the former or the latter, or incorporates elements of both, is a factual question that requires examination of the particular characteristics of the TPM in light of the relevant statutory definitions.

[4] In my testimony, I indicated that there had been nine such releases. Tr. 180. I have become aware of six more. Five of these were produced and manufactured by independent Latin labels and distributed by one of the major record companies. To the extent that any of these may have been released by the time of my testimony, word of the protected release had not made its way from the independent label, to the major's distribution arm, to its legal and business affairs department, and then to me by the time of my testimony. I also learned of one protected CD that was inadvertently released in the U.S. In addition, since my testimony, I have learned, as described below, that the German album I described (Tr. 180) was not in fact protected, but that the German manufacturer of that album distributed in the U.S. a very small number of units of a protected CD single from that album.

[5] I note that the statute does not specifically address the consequences of a particular TPM being both an access control and a copy control. However, under the plain language of the statute, it would seem that the TPM – or at least its access control aspects – should be protected from the act of circumvention under Section 1201(a)(1). I understand that some have suggested that in the case of a hybrid TPM, the lack of a statutory prohibition on the act of circumvention of copy controls might override the express statutory prohibition on the act of circumvention of access controls and effectively create some kind of privilege for the circumvention of access controls combined with copy controls. However, it would be a very strange indeed to interpret a statute so that its silence trumps its express provisions. Any such suggestion is clearly wrong.

This is the sort of factual question that is probably best addressed by a court on the basis of a fully developed record. The Office does not need to reach the question in this proceeding given the proponents' utter failure of proof of harm, and it may not be appropriate for the Office to express a view on the question given the limited technical information in the record of this proceeding. RIAA has not previously had occasion to undertake a detailed analysis of the classification of each and every CD TPM solution available in the marketplace and does not have all the technical information about these TPMs that might be relevant to such an analysis.[6] However, based on the limited amount of information available to RIAA concerning the specific TPMs identified in Exhibit A, it appears to me that each should be considered both a copy control and an access control.

A TPM "'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." 17 U.S.C. § 1201(b)(2)(B). The TPMs at issue here all qualify as copy controls because they are intended to, and do in fact, prevent or restrict copying in the ordinary course of their operation. The proponents of the various exemptions generally directed to what they have chosen to characterize as copy-protected CDs must agree, because they state their cases in terms of copy controls. *See, e.g.*, Comments of The Electronic Frontier Foundation ("EFF") and Public Knowledge at 3 (seeking an exemption for copy-protected CDs); Comments of IP Justice at 8 (stating that "copy-restricted CDs" have been distributed).

A TPM "'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." 17 U.S.C. § 1201(a)(3)(B). Each of the TPMs identified in Exhibit A "effectively controls access to a work" because these TPMs all are used under the authority of the copyright

[6] As I testified, the details of the operation of each TPM are proprietary to the technology vendors, and the vendors protect the secrecy of their solutions both to avoid competitive injury and to avoid compromising their security and effectiveness. To the extent that RIAA's member record companies using a particular TPM have access to such information, they too are concerned that making public the details of the TPM configurations they use could compromise their security and effectiveness, and in any event they are bound by nondisclosure agreements. Therefore, RIAA does not have access to detailed technical information concerning any of these technologies. In view of the transparency of this proceeding, as well as the allocation of the burden of proof, it is not appropriate to require copyright owners or their trade association to obtain access to, and to supply, confidential information concerning the details of any TPM, and certainly not of each and every TPM available in the marketplace, at the risk of compromising their security and effectiveness or, if they do not do so, having an indeterminate range of sound recordings exempted from the benefits of Section 1201(a). However, I have done my best to answer the question based on the same kinds of public information available to the proponents of the exemption.

owner to control access on different platforms, and in each case, the TPMs require the application of a certain process or treatment to obtain access.

By way of background, standard CD players and CD-ROM drives use different processes to read the data from CDs. Specifically, standard CD players read discs continuously and sequentially from beginning to end, much as a stylus and cartridge read a vinyl record on a turntable, while CD-ROM drives use a process that involves reading separate blocks of data from the CD using addressing information contained on the CD, buffering them, and then reasssembling them. The TPMs at issue here exploit these differences to control access.

Ten of the fifteen CDs identified in Exhibit A were intended to be accessed using both standard audio CD players and CD-ROM drives, although access by CD-ROM drives was controlled. That is, two instances of each recording appear on the disc, in two separate "sessions," and CD-ROM drives were intended to be denied access to the first session (which was designed to play only on CD players), while CD-ROM drives were to be given access to the second session.[7] In at least nine of the ten cases, a proprietary player, which applies a particular process or treatment, was included on the disc and is required to access the second session of the multisession disc. The remaining five CDs identified in Exhibit A (*i.e.*, those protected with Macrovision SafeAudio) were intended to be accessed only by players that apply the process or treatment of reading the disc sequentially like a standard CD player (because the TPM rendered them inaccessible using a CD-ROM drive). Use of such a TPM can be more secure than use of a TPM that permits access using a CD-ROM drive, because if a CD-ROM drive cannot access a disc, it certainly cannot copy it.

These access control measures are to be distinguished from mere format incompatibilities or platform requirements. These access control measures were applied to discs of a format that otherwise could be read by the relevant devices, and they were specifically engineered to block access by certain devices to all or part of the content on the disc. They thus would seem to qualify as access control measures in a way that a mere format incompatibility or platform requirement would not. For example, the CD format itself should not be considered an access control, even though a CD cannot be read using a turntable and one could in a sense say that a turntable does not apply the proper process or treatment.[8]

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[7] From the perspective of the listener seeking to experience a private performance of the recording, the two sessions are essentially sonically identical.

[8] Similarly, true elements of access control are not to be confused with happenstance, or malfunctioning copy controls (the touchstone of the class proposed by EFF). A particular TPM is not an access control because it "happen[s] to prevent the playing of sound recordings on certain devices" (Question 3(H)). One can certainly envision copy controls that might be technologically incompatible with certain devices. Such incompatibilities would not seem to be access controls. Neither can a copy control be transformed into an

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Playability (Questions 3(C), (D), (E) and (F))

You asked several questions directed at playability problems consumers have experienced with protected CDs. It is important to keep such problems in perspective. The number of protected CDs that have been commercially released in the U.S. to date is miniscule – some 0.05% of the CDs shipped from calendar year 2001 to date. Among that miniscule number of protected discs, record company customer care data indicate that the experience with playability problems is itself very small – less than 0.07%. Thus, since calendar year 2001, it is almost exactly ten times more likely that a consumer will have been struck by lightning (0.00035%)[9] than that any particular disc he or she purchased is a protected CD with a reported playability problem (0.000035%). And not even all of those problems can actually be attributed to TPMs. Even where playability problems can be blamed on a TPM, they are almost always unintended side effects – which technology providers and record companies are working hard to remedy and avoid.

It is important not to lose sight of the fact that CD technology is a real feat of engineering. Tens or hundreds of millions of players, which may have various other functions and are made by numerous manufacturers, generally perform successfully the delicate act of reading the billions of discs – both protected and not – that have been manufactured by countless CD manufacturers. However, the sheer number of devices and variance in their engineering, as well as the continual blurring of the line between computers and consumer electronics devices, inevitably means that the incidence of playability problems with both protected and unprotected discs, while very low, will exceed zero. That should be irrelevant to this proceeding, which concerns only the effects of Section 1201's prohibition on the circumvention of access controls, not the very low incidence of playability problems associated with CDs.[10] However, in the following paragraphs I go to some length to provide you with detailed playability

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access control by malfunctioning. The statutory definition of an access control requires examination of the ordinary course of operation of a TPM, and asks whether the TPM requires the application of information, or a process or a treatment, to obtain access. 17 U.S.C. § 1201(a)(3)(B). Malfunction is not the ordinary course of operation of any technology, including a TPM. I believe that the TPMs discussed above are both copy and access controls because they were engineered in a way that meets the statutory definitions of both copy and access controls, not because of happenstance or malfunction.

[9] http://www.crh.noaa.gov/cys/svrwx/summer/lightning/mon_23JUN03.htm ("the nationwide odds of being killed or injured by lightning are about 1 in 700,000 for each year of your life"). The fraction 1/700,000 was multiplied by 2.5 years to produce 0.00035%.

[10] "In this triennial proceeding, effects on noninfringing uses that are unrelated to section 1201(a)(1)(A) may not be considered." 67 Fed. Reg. at 63,579.

information because I believe record companies can feel justifiably proud about the performance of their products.

There are several reasons why a protected CD might not play in a particular device that plays some other CDs. These include that (1) the device does not apply the process or treatment required to access the disc; (2) some incompatibility or defect that is not a TPM affects the device and/or disc; or (3) the operator made some error in using the player hardware or software. The fact that complaints have been made does not indicate their cause, or even whether they were in fact experienced, because determining why a particular disc does not play in a particular player requires a forensic examination of the disc and player that is certainly not possible here. Thus, the fact that the reply commenters or others have experienced playability problems with particular CDs is really probative of nothing. However, some general observations are possible.

With respect to use in devices that do not apply the process or treatment required for access, as noted above, five of the fifteen CDs identified in Exhibit A (accounting for only about 4.2% of the protected discs distributed as identified in Exhibit A, or about 0.002% of the CDs commercially distributed in the U.S. since calendar year 2001) were intended to be accessed only by standard CD players. The other releases identified in Exhibit A – some 95.8% of the protected CDs commercially released in the U.S. to date – were intended to be accessible using both CD players and CD-ROM drives. However, it is my understanding that some devices, principally certain high-end car CD players, DVD players and Macintosh computers, could not access these discs because they tried to access the discs like CD-ROM drives (*i.e.*, they could not read the first session like a standard CD player) and could not execute the software necessary to access the second session. I understand that some technology providers are working on TPMs that will work on Macintosh computers. In addition, while the labeling of protected CDs is wholly outside the scope of this proceeding, and the presence or absence of labeling should in no way affect the outcome of the proceeding, I note that all but two[11] of the releases identified in Exhibit A were prominently labeled to reflect the facts set forth above, and detailed customer care and usage information was often provided through package inserts and websites. Because the Office seemed interested in the subject at the May 14 hearing, I have attached as Exhibit D copies of the packaging and inserts of the labeled protected CDs.

[11] One of those was the German-manufactured CD single "Genesis.1." It was an early release of a very small number of units of a CD single from an album that was subsequently released without any TPM. The other was "Diamonds on the Inside," which was not prominently labeled because it was not intended to be protected. It was protected only because the incorrect master was inadvertently used in the manufacture of some of the CDs released. Once the error was discovered, the record company that released it provided prominent consumer notices in retail locations and online to alert consumers to the issue and to offer a refund in the event of playability problems.

With respect to incompatibilities and defects, they can affect any model of player or CD release. Even in the case of a protected CD, a playability problem may be caused by incompatibilities or defects, rather than the TPM. For example, in the reply comments in this proceeding, 37 different releases that we could sufficiently identify (including four that were not actually music CDs) were asserted to be protected because of playability problems, but in fact only three of those 37 had been commercially released in protected form in the U.S. I have set forth in Exhibit C the information we were able to learn concerning the releases identified in the reply comments to illustrate that many playability problems asserted to have been due to TPMs were probably due to incompatibilities, defects or operator error. Thus, even among the small number of consumers who filed comments in this proceeding, the complaints from those who have probably never seen a protected CD drown out the complaints of the handful of people who have experienced playability problems with a protected CD released in the U.S.

The case of VNV Nation's album "Futureperfect" (reply comment 44) is instructive. That release was produced and originally manufactured by Dependent Records, a German record company. Some of the German discs were imported and distributed in the U.S. by Metropolis Records, which subsequently manufactured and distributed further discs under license. When RIAA first contacted Metropolis prior to my testimony, Metropolis told us that it thought the original Dependent release incorporated TPMs, but the discs Metropolis manufactured did not. However, when we contacted Dependent to obtain more detailed information for this letter, we learned that its discs did not in fact incorporate TPMs either (although it did distribute in the U.S. a very small number of copies of a protected CD single of one track from the album). Instead, the artist had asked Dependent to manufacture CDs that were completely black in color (even on the data side). Dependent told us that the black CDs worked fine in virtually all CD players, but that it had received a small number of complaints that the disc did not play in certain older devices. But blackness is not a TPM (at least in this case). In short, playability problems can result from diverse, complex and sometimes unexpected causes, and diagnosis of their causation requires real investigation, which the proponents of the exemption have evidently not done. The Office should not fall into the trap of assuming that undiagnosed playability problems are indicative of either the presence or failure of TPMs.

Perhaps more important than causation, and certainly easier to quantify, the available data show that the incidence of playability problems with protected CDs (whether caused by the TPM or otherwise) is extremely low. I have set forth in Exhibit A the specific incidence of complaints of playability problems received by the producers of the CDs, where available. Notably, these range between approximately .03% and 0.14% of sales of such CDs, with the weighted average being 0.066%. That is, in a release where 100,000 protected discs were distributed, a record company might expect to receive about 66 complaints of playability problems.

It bears emphasis that even the very low percentage of complaints record companies have received concerning protected CDs cannot wholly (or perhaps primarily) be attributed to the presence of TPMs. Record companies have customer care departments because there are complaints caused by incompatibilities and defects in the case of almost every CD release. It appears that the incidence of consumer complaints concerning unprotected CDs ranges up to about 0.1%. The incidence of consumer complaints of playability problems with protected CDs is in the same range, meaning that the effects of application of a TPM are not clearly a more frequent explanation of playability problems than other factors. In addition, a complaint is not necessarily even indicative of a real problem with the disc at all, because there is always the possibility of operator error (particularly in accessing the second session of a multisession CD) or a complaint motivated by the desire to obtain a refund.[12]

It should come as no surprise that the incidence of playability problems with protected CDs is very low. Providers of TPMs and the record companies that use them have been very concerned about playability problems and the overall user experience. TPMs are not introduced into commercial products without extensive testing and careful thought. Protected CDs that are intended to be accessible using a certain class of devices are, like unprotected CDs, accessible using the overwhelming majority of the intended devices. And the number of people who want to play their music on an atypical player – whether it be a Mercedes car stereo, an old DVD player, or something else – simply is not that large relative to the number of people who play their music on the wide range of devices on which protected discs play flawlessly. Also, since every CD listed on Exhibit A is intended to be playable on any standard CD player – a device that is virtually ubiquitous in American homes and on our streets in portable form, and widely available at very low and ever-falling prices[13] – the playability "issue," viewed in context, dwindles into insignificance. Comments in this proceeding from a small number of people who have experienced playability problems with protected CDs, buried in a larger number of comments from people who have experienced playability problems with unprotected CDs, are simply not indicative of a substantial adverse effect on noninfringing uses of the type this proceeding was intended to remedy.

2. Do any of your members intend to release sound recordings in compact disc format with technological protection measures in the United States between now and October 28, 2006?

[12] Record companies have typically marked on their protected products that consumers can return them for a refund if they experience playability problems.

[13] For example, Best Buy offers a six-disc CD player for $49.99. *See* http://www.bestbuy.com/site/olspage.jsp?id=cat03034&navHistory=cat00000%2Bcat03000%2Bcat03030&type=category&navLevel=4.

3(G). Describe the extent to which your members intend to employ such measures between now and October 28, 2006.

The potential future development and use of TPMs is a subject of ongoing internal consideration within each of the major record companies, and any specific public discussion of those issues would be premature.[14] Only one company indicated that it may conduct selected pilot projects this year. Those pilots would involve a SunnComm TPM, but the company has not yet determined other aspects of those pilots. At least some of the other companies are evaluating the available technologies and might be interested in deploying technologies that meaningfully protect their copyrights while simultaneously providing the consumer with a satisfactory user experience. Given record companies' sensitivity to providing the consumer with a satisfactory user experience, it is simply not clear whether CD TPMs will be used to a significant degree between now and October 28, 2006, and certainly it cannot be concluded that the proponents of any exemption have carried their burden of proving that this outcome is likely more than any other outcome over the next three years.[15] Because this burden is far from having been met, it follows that proponents have also failed to carry their burden of proving that the performance characteristics of any TPMs that might be used are such as to inflict a burden on non-infringing uses of a particular class of sound recordings that is sufficiently substantial that it can be concluded that the applicability of section 1201(a)(1)(A) is likely to cause an adverse impact on the ability to carry out those uses.

Remaining Questions from the Hearing

Having reviewed the May 14, 2003 hearing transcript to discern the questions referenced in your letter, I have phrased them below as I understand them.

If an access control measure prevents a user from playing an audio compact disc on a personal computer, is she adversely affected in her ability to make a noninfringing use by virtue of the prohibition on circumvention? (See Tr. 202-04)

No, and certainly not in a way or to a degree that would warrant an exemption in this proceeding.

[14] I also note that the major record companies often distribute products that are produced and manufactured by independent labels. The major record companies and RIAA have no knowledge of any plans by such independent labels with respect to future use of TPMs.

[15] I note that some of the smaller labels identified in Exhibit A or C as having used TPMs in the past told us that they do not presently intend to use TPMs in the future. Thus, one cannot validly infer from past use of a TPM that a record company is likely to increase its use of TPMs in the future.

As a threshold matter, I should be clear that this question is directed at a very limited circumstance. Only five of the fifteen CDs identified in Exhibit A, all of them produced by independent labels and accounting for only 4.2% of the protected discs distributed as identified in Exhibit A (and only about 0.002% of the CDs commercially distributed in the U.S. since calendar year 2001), were intended to be accessed only by standard CD players. The other 99.998% of CDs shipped during this period, including the other ten CD titles identified in Exhibit A, are intended to be playable on both standard CD players and personal computers equipped with CD-ROM drives, with the minimal exceptions noted above. This is, of course, an unsurprising state of affairs. Record companies, and certainly the major record companies, want to provide consumers with a satisfactory user experience. For that reason, they have generally been leery of embracing TPMs that would prevent a user from playing a CD on a personal computer, either by design or because of related technological incompatibilities. I believe it is unlikely that record companies will apply TPMs to a substantial number of future U.S. commercial releases unless they would be playable on most computers, which seems to address the matter of primary concern to the proponents of an exemption and effectively renders your question moot.

Returning to the question, in the case of a CD protected with a TPM that prevents a user from accessing it on a personal computer, a user is not adversely affected in her ability to make noninfringing uses to an extent that might warrant an exemption because she is still able to access the sound recordings on other platforms and through alternative media. As the Office concluded in rejecting a similar proposal for DVDs in 2000, users do not have an unqualified right to access works on any particular device of their choosing. *See* 65 Fed. Reg. 64,569; *Universal City Studios, Inc. v. Corley*, 273 F.3d 479 (2001) (finding no right to copy in the optimal method or format); *U.S. v. Elcom*, 203 F. Supp.2d 1111 (N.C. Cal. 2002) (citing with approval the *Corley* court's conclusions). Thus, a user's inability to access a recording from a CD on a computer would not warrant an exemption where she can access it on a readily available and reasonably inexpensive CD player. *See* 65 Fed. Reg. 64,569 (discussing the possibility of users' buying authorized DVD players). In addition, the sound recordings on such a CD are increasingly likely to be available for computer use online (not to mention on cassette or in other formats). Online music services make hundreds of thousands of sound recordings available to users for download to and use on computers. A user's inability to render a recording from a CD on a computer would not warrant an exemption where she can acquire a legitimate copy for computer use from a digital music service. S*ee* 65 Fed. Reg. at 64,568 (discussing the availability of VHS versions of works protected by CSS).

More generally, access controls by their nature limit noninfringing play and other rendering of works in those circumstances where the copyright owner has not authorized access. Thus, when copies of a work are distributed subject to an access control measure, there is always the possibility that someone who comes to possess a copy will not be able to engage in noninfringing acts of playing and otherwise rendering the work under some circumstances – whether because that person does not have the necessary decryption key

or password, the authorized time for that person's access has expired, the person wishes to access the work using an unauthorized device, or otherwise. For example, when technological measures controlling access to a work require use of a "dongle," *see* 65 Fed. Reg. at 64,564-66, a possessor of a copy cannot engage in private display or other acts of rendering the work without the dongle. Similarly, when access to a work on a DVD is protected with CSS, a possessor of a copy cannot render a private performance except on an authorized DVD player. *See* 65 Fed. Reg. at 64,567-70.

Congress was well aware when it enacted Section 1201 that controlling the conditions on which access is granted was likely to become an important method for record companies and other copyright owners to offer to consumers a wide range of delivery and price options for enjoying copyrighted works. To encourage precisely that result, Congress rejected arguments that possessors of copies should be free to circumvent access controls whenever they wish to engage in noninfringing acts, including accessing the works fixed in protected copies. Even if an access control can be said to affect users' in their ability to engage in noninfringing acts of accessing works on unauthorized platforms, it certainly was not Congress' intention that the Office exempt every commercial use of access controls on that basis, since such an exemption would swallow the rule Congress sought to create. *See* House Comm. on the Judiciary, 105th Cong., Section-by-Section Analysis of H.R. 2281, at 8 (Comm. Print 1998) (explaining that it is not necessary that any exemption be granted in this proceeding if the market for digital information develops in the way Congress thought most likely). To the contrary, it is clear from the text of Section 1201 that Congress was primarily concerned with possible effects on nonprofit and transformative uses, *see* 17 U.S.C. § 1201(a)(1)(C)(ii) and (iii), not with the convenience of users who might prefer to render a work on an unauthorized device. Thus, to the extent that an access control can be said to affect users' in their ability to engage in noninfringing acts of accessing works on unauthorized platforms, the issue to be decided by the Office in this proceeding must be whether any effect on use is so substantial as to warrant an exemption. "A proponent [of an exemption] must show that such problems are or are likely to become of such significance that they would constitute a substantial adverse effect." 67 Fed. Reg. at 63,580. Proponents of exemptions involving TPM-protected CDs have failed to make that showing.

Is it your understanding that record companies at the moment, are, in fact, marketing some CDs with the intent that those CDs cannot be played on certain devices that consumers use to play CDs? (See Tr. 204-06)

See my answers above.

* * *

I would be pleased to provide any further information that might be helpful to you as you move toward a determination this proceeding.

Best regards.

Sincerely,

Steven M. Marks

Enclosure