UNITED STATES COPYRIGHT OFFICE

## • Long Comment Regarding a Proposed Exemption Under 17 U.S.C. § 1201

Please submit a separate comment for each proposed class.

[ ] Check here if multimedia evidence is being provided in connection with this comment ITEM A. COMMENTER INFORMATION

## **DVD Copy Control Association**

DVD Copy Control Association ("DVD CCA"), a not-for-profit corporation with its principal office in Morgan Hill, California, licenses the Content Scramble System ("CSS") for use in protecting against unauthorized access to or use of prerecorded video content distributed on DVD discs. Its licensees include the owners of such content and the related authoring and disc replicating companies; producers of encryption engines, decrypters hardware and software); and manufacturers of DVD players and DVD-ROM drives.

#### **Advanced Access Content System Licensing Administrator**

Advanced Access Content System Licensing Administrator, LLC ("AACS LA"), is a cross-industry limited liability company with its principal office in Beaverton, Oregon. The Founders of AACS LA are Warner Bros., Disney, Microsoft, Intel, Toshiba, Panasonic, Sony, and IBM. AACS LA licenses the Advanced Access Content System ("AACS") technology that it developed for the protection of high-definition audiovisual content distributed on optical media, primarily Blu-ray Discs. AACS LA's licensees include the owners of such content and the related authoring and disc replicating companies; producers of encryption engines, decrypters (hardware and software); and manufacturers of Blu-ray Disc players and Blu-ray Disc drives.

As ultra-high-definition products gain popularity in the marketplace, AACS LA has developed a separate technology for the distribution of audiovisual content in ultra-high-definition digital format. This technology is identified as AACS2, and not AACS 2.0. This distinction in nomenclature is significant, as the latter would suggest that AACS2 is a successor version of the technology which has replaced AACS as distributed on Blu-ray Discs. It has not. AACS2 is a distinct technology that protects audiovisual content distributed on Ultra HD (UHD) Blu-ray Discs, a newer, distinct optical disc format which will not play on legacy (HD) Blu-ray Disc players. Proponents here do not identify UHD Blu-ray Discs or AACS2 in their discussion of relevant technological protection measures. In fact, Proponents make no mention of either CSS and/or AACS technologies. While a Proponent states that AI auditing "can entail circumvention of technological protection measures on code, or software[,]" this, like much of Proponents' comments, are far too vague to meet the specificity requirements of this proceeding. Openpolicy, Initial Comment at 5.

#### **Representatives**

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#### ITEM B. PROPOSED CLASS ADDRESSED

Proposed Class 4: Computer Programs—Generative AI Research

#### **ITEM C. OVERVIEW**

DVD CCA and AACS LA object to the proposed class as Proponents have failed to create an evidentiary record upon which to grant the request. And, even if they had, researching generative AI models for bias is, as of yet, a nascent field of study – which, if enabled to circumvent DVD and Blu-ray players, as well as display devices such as UHD TVs, poses a significant risk to the overall content protection system, which includes the distribution of motion pictures on DVD and Blu-ray Discs.

## ITEM D. TECHNOLOGICAL PROTECTION MEASURE(S) AND METHOD(S) OF CIRCUMVENTION

The TPMs of concern to DVD CCA and AACS LA are the Content Scramble System

("CSS") used to protect copyright motion picture content on DVDs and the Advanced Access

Content System ("AACS") used to protect copyrighted motion picture content on Blu-ray Discs.

## ITEM E. ASSERTED ADVERSE EFFECTS ON NONINFRINGING USES

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## I. Introduction

DVD CCA and AACS LA object to the proposal to the extent that it would permit the circumvention of AI systems incorporated in any part of the digital content protection ecosystem. Indeed, while the proposed exemption does not focus on any particular industry, such as motion pictures or their distribution methods, the proposed unbridled exemption, which purports to permit the circumvention of unlimited number of services, systems, and products incorporating generative AI, would license the circumvention of DVD and Blu-Ray players and other products comprising the digital content protection ecosystem, if granted. Consumer electronics manufacturers, including those who are licensees of DVD CCA and AACS LA's content protection technologies, are incorporating artificial intelligence at various points in the content distribution ecosystem. For instance, manufacturers are specifically incorporating AI systems into DVD and Blu-ray disc playback devices and TVs to digitally enhance, or "up-res", digital content to better align the performance of motion pictures to the ultra-high-definition resolution. Further, to the extent motion pictures, TV shows, or other audiovisual works comprise some part of the material used to train a generative AI system, a number of those works are likely to have been distributed on optical discs protected by CSS or AACS (and perhaps incorporated into such training material via the exemption afforded for text and data mining). Proponents have not addressed generative AI in these products and whether the term "generative AI" also applies to the corpora of training material ingested by the AI system as well as to the algorithm(s) by which the AI system uses such training material in generating its output. They have thereby failed to provide any information, let alone the requisite information, to evaluate whether the circumvention prohibition is adversely affecting their alleged noninfringing use of motion pictures distributed on DVD and Blu-ray discs or any other part of the digital content ecosystem.

As the foregoing observations with respect to motion pictures are equally true with regard to the overall breadth of the proposed exemption, the proposed exemption must be denied. Should the Register nonetheless find the proposed exemption is warranted, then the exemption should be refined to exclude DVD and Blu-ray Disc playback products and devices, products and devices incorporating DVD and Blu-ray products/devices, audiovisual content on CSS- and AACSprotected DVDs and Blu-ray optical discs, and other products intended for the lawful access to copyrighted expressive works.

## A. Robustness and Compliance Rules Are Integral to a Secure Digital Ecosystem

DVD and Blu-ray Disc players are integral and foundational parts of a secure digital ecosystem promoting the distribution of high-quality motion picture and other visual media content to consumers. Any circumvention of DVD or Blu-ray Disc players poses the risk of exposing player keys or compromising other elements necessary to comply with the applicable robustness or compliance rules. AI is included in players and displays for a number of reasons, such as to "up-res" lower-resolution digital content to ultra-high-definition. Consequently, any circumvention for the purpose of research on these AI elements poses the risk that keys will be exposed and other elements compromised. These other elements flow from the careful licensing arrangement between rights holders and manufacturers that ultimately ensure the integrity of the digital ecosystem as a whole.

Licensed manufacturers agree to build their playback devices in compliance with requirements that these devices resist attacks that (i) jeopardize the technological protection measures employed to protect the content and/or (ii) would otherwise permit access to the product's signal when content is "in the clear" (unencrypted) passing from one device component

to the next. These requirements are set forth in what are generally called "robustness rules."<sup>1</sup> Circumvention of TPMs for the purpose of investigating generative AI models implicates and frustrates the security of the DVD and Blu-ray Disc players, as circumvention has the potential to undo those manufacturer design elements, developed in compliance with the robustness rules, leaving the technological protection measure compromised and/or the unencrypted content exposed.

In addition to compliance with the robustness rules, the integrity of the digital ecosystem also depends on preserving the particular distribution offerings that rights holders have intended to offer to consumers. Accordingly, manufacturers wanting to participate in a particular distribution platform such as the production and sale of DVD or Blu-ray Disc players agree to rules governing how these products will handle the content entrusted to their products, namely by specifying some boundaries regarding the products' functionality. For instance, such rules might require that any decrypted content going out certain outputs (*e.g.*, unprotected analog outputs) be at something less than the maximum possible audio and/or video resolution. These requirements prescribing how protected content should be handled are embodied in what is referred to as "compliance rules," and the compliance rules are intended to keep copies of copyrighted works distributed on any one particular platform from cannibalizing other distribution models.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> See, e.g., NTIA Letter, n.56 Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies (Docket No. 2014-07) (Sep. 18, 2015).

<sup>&</sup>lt;sup>2</sup> For a discussion of how robustness rules and compliance rules are necessary to preserve the digital ecosystem, *see generally Report and Order and Further Notice of Proposed Rulemaking*, FCC 03-273 (MB Docket 02-230) (In the Matter of Digital Broadcast Content Protection) available at https://docs.fcc.gov/public/attachments/FCC-03-273A1.pdf.

#### **II.** The Proposed Class Does Not Constitute a Proper Class

## A. The Requests Would Go Beyond the Statutory Limitation Requiring Exemptions from This Rulemaking to Apply Only to Those Beneficiaries Specifically Determined Pursuant to the Rulemaking

Proponents at no point define "generative AI" or provide a single example of generative AI. In fact, one proponent suggests that the proposed exemption encompasses "broader categories of AI systems or deployments, that extend beyond generative AI." *See* Openpolicy at 2. Proponents appear to assert that, so long as AI researchers are examining "bias," "broad sets of undesirable social impacts," and/or "other harmful or undesirable outputs in AI systems," researchers should have carte blanche to circumvent TPMs. This proposal must fail as this rulemaking cannot create such broad, unfocused, and unbound categorical exemptions.

The House Commerce Committee (the "House Committee"), which created the rulemaking during its consideration of the World Intellectual Property Organization Internet Treaties, which,

<sup>&</sup>lt;sup>3</sup> Section 1201(a)(1).

in part, became Section 1201, did not contemplate a regulatory proceeding that would result in broad waivers to the general prohibition on circumvention, such as an exemption for any and all fair use under Section 107 or for any and every activity permitted under Section 110 (1) (the classroom exception). Instead, the House Committee foresaw "selectively waiv[ing] [the prohibition against circumvention] for limited time periods, . . . for a particular category of copyrighted materials."<sup>4</sup>

Not only did the House Committee envision any exemption to be selective and particular, it also anticipated that any exemption would be fully evaluated in the rulemaking and based on the rulemaking record (in keeping with the statutory requirement that any exemption be "pursuant to the rulemaking,"<sup>5</sup>Indeed, the House Committee Report instructs that any exemption resulting from the rulemaking is to flow directly from the "development of a sufficient record as to how the implementation of these technologies is affecting the availability of works in the marketplace for lawful uses."<sup>6</sup> Most importantly, the House Committee was quite clear that "the rulemaking proceeding should focus on distinct, verifiable and measurable impacts, [and] should not be based upon de minimis impacts . . . ."<sup>7</sup> This instruction, alone, renders the current request impossible to grant, as this rulemaking could never handle the quantum of evidence that would be necessary to support an unbound exemption for the broad investigative purposes contemplated by Proponents.

Finally, Congress directed that a particular class of work should "be a narrow and focused subset of the broad categories of works of authorship than is identified in Section 102 of the

<sup>&</sup>lt;sup>4</sup> House Commerce Committee Report at 36.

<sup>&</sup>lt;sup>5</sup> Id. at 36.

<sup>&</sup>lt;sup>6</sup> House Committee Report at 37.

<sup>&</sup>lt;sup>7</sup> *Id.* at 37.

Copyright Act (17 U.S.C. § 102)."<sup>8</sup> Clearly, the broad and unlimited class advanced by Proponents cannot be considered "narrow and focused," as Congress demands. A proposed class limited only by an undefined use (*i.e.*, generative AI) and by unbounded references to wide ranging purposes (*i.e.*, investigating "bias," "broad sets of undesirable social impacts," and/or "other harmful or undesirable outputs in AI systems") is effectively without any limit at all, further militating against acceptance of this proposed new exemption.

1. The Scope of the Proposed Class Is Impermissibly Broad

The scope of the proposed class is impermissibly broad. In its Notice of Proposed Rulemaking, the Office observed that proposal "does not cabin the proposed exemption to a specific set of users, only describing them as 'researchers' and does not discuss how TPMs prohibit, or are likely to prohibit, researchers from accessing the software within the generative AI models."<sup>9</sup> In filing their initial comments, Proponents have neglected to develop any record, let alone an appropriate record containing examples of specific sets of users or clear descriptions of any particular TPMs which control access to generative AI models.<sup>10</sup> Instead, Proponents have pointed to various policy discussions concerning auditing artificial intelligence models and suggested that the proposal is akin to the exemption for good-faith computer research.

Even if true, which it demonstrably is not, Proponents' observations do not satisfy the requirements that a class be narrow, as Congress instructed. This proceeding has considered the

<sup>&</sup>lt;sup>8</sup> *Id.* at 38.

<sup>&</sup>lt;sup>9</sup> Exemptions to Permit Circumvention of Access Controls on Copyrighted Works 88 Fed Reg 72013, 72025 (Oct. 19, 2023) ("NPRM").

<sup>&</sup>lt;sup>10</sup> Proponents have offered the regulatory language which would accommodate researchers engaged in "good faith AI alignment research," which, among other things, would be "solely for purposes of good-faith testing or investigation, of biased, discriminatory, or harmful outputs in an AI system . . . ." Hacking Policy Council Comments at 3. To the extent that proponents believe this regulatory language cabins their requests, they are merely putting the proverbial cart before the horse as the regulatory language flows from a developed record.

needs of computer security research since the 2006 Recommendation and the exemption for good faith security research was not recommended until the 2015 Recommendation. The Register simply cannot assume that the factual record that proponents has developed for computer security research provides the necessary basis to create a new exemption for a separate activity that may not even resemble computer security research.

Thus, the question becomes whether a permissible class may be refined from the record.<sup>11</sup> Information as to how the broad, impermissible class may be refined here is impossible to discern from Proponents' assertions. Proponents have provided no examples of what constitutes a generative AI model or what or which technological protection measures would likely need to be circumvented. Accordingly, Proponents have failed to provide the Register with a method of refining its otherwise impermissibly unfocused class.

#### 2. There Is No Technological Protection Measure Here

The dearth of information about the TPMs at issue, including whether generative AI models actually employ access controls, and the lack of an explanation as to how circumvention facilitates any noninfringing use, is fatal to the exemption proposal. Proponents only point to one recognizable access control, which is the creation of account that is presumably password portected. Hacking Policy Council at 3. However, nothing in the Proponents' comments suggests that Proponents are seeking to circumvent any password protection.

One Proponent does allege that several generative AI alignment testing methods "may be characterized as involving circumvention of technological protection measures to affect system behavior." Hacking Policy Comments at 3. They further state:

<sup>&</sup>lt;sup>11</sup> The NPRM for this proceeding provides, "the proposed classes represent only a starting point for further consideration in the rulemaking proceeding, and will be subject to further refinement based on the record." *See* NPRM, *supra* note 8 at 72024 (internal quotations and citations omitted).

Common AI alignment research techniques include bypassing guardrail programs or predefined rules that the AI system developers have established to align the system with human values, safeguard user interactions, prevent harmful or inaccurate system outputs, and protect against data extraction. A range of attacks may be used to bypass guardrails. For example, "jailbreak prompts" are deliberately crafted inputs to bypass content safeguards and manipulate generative AI into creating harmful output, such as by directing the AI system to ignore previous instructions, or by escalating user privileges on the system. Generative AI researchers may also circumvent automatic blocks on some inputs, as well as rate limits that restrict the volume or frequency of inputs to an AI system.

#### Id.

What is explained above as "bypassing guardrail programs or predefined rules" does not actually appear to control access to the copyrighted work, *i.e.*, to the AI model. Instead, these guardrail programs and rules are there "to align the system with human values, safeguard user interactions, prevent harmful or inaccurate system outputs, and protect against data extraction" – in short, "to affect system behavior." Hacking Policy Comments at 3 ("Several generative AI alignment testing methods may be characterized as involving circumvention of technological protection measures to affect system behavior."). Indeed, providing safeguards and preventing harm and inaccuracy would appear to be perfectly valid and desirable functions to preserve, rather than treat as an obstacle to be overcome. And, at any rate, overcoming or circumventing these guardrails does not provide any more or less access to the underlying copyrighted work, than any other interaction with the AI system.

Further, to the extent that a researcher can input alternative prompts, the researcher has already gained access to the AI model. This access was predicated on the researcher having an AI system account. The Proponent confirmed the same:

the copyright owner of the AI system may require a user account, the terms of which prohibit bypassing any protective measures or safety mitigations as a condition for permission to log in and use the system. By creating an account to access the system, an AI alignment researcher may be agreeing not to perform research.

Hacking Policy Comments at 3.

#### 3. No Nexus between TPMs and Generative AI Models

Assuming, *arguendo*, that one of the controls described above actually constitutes an access control, there is no nexus identified by Proponents between any TPM and any particular generative AI model. Adequately describing this relationship is more than a ministerial element of the rulemaking. It goes to the heart of whether circumvention is required or prohibited under Section 1201, and, ultimately, whether the prohibition is adversely affecting a noninfringing use. For example, in *Lexmark v. Static Control Components*,<sup>12</sup> the Sixth Circuit reversed the district court on the question of whether, in fact, circumvention had occurred:

It is not Lexmark's authentication sequence that "controls access" to the Printer Engine Program. See 17 U.S.C. § 1201(a)(2). It is the purchase of a Lexmark printer that allows "access" to the program. Anyone who buys a Lexmark printer may read the literal code of the Printer Engine Program directly from the printer memory, with or without the benefit of the authentication sequence, and the data from the program may be translated into readable source code after which copies may be freely distributed.<sup>13</sup>

*Lexmark* demonstrates that the possible implementation of a TPM does not automatically mean every alleged act of circumventing that TPM is prohibited under the DMCA. Thus, the rulemaking has correctly required some information and detail as to (i) the product, device, or service; (ii) the TPM in use on the referenced product, device, or service; and (iii) how circumvention of that specific TPM would occur. Absent that information, there is no basis to conclude that the circumvention prohibition is adversely affecting any noninfringing use.

4. No Evidence for a Class to Include DVD and Blu-ray Disc Products Is Proffered

Proponents have not introduced any information sufficient to include DVD or Blu-ray Disc playback devices (or any other device or service that would play back or otherwise display or

<sup>&</sup>lt;sup>12</sup> Lexmark Intern. v. Static Control Components, 387 F. 3d 522 (6th Cir. 2004).

<sup>&</sup>lt;sup>13</sup> *Lexmark*, 387 F.3d at 546-47.

perform motion pictures) in the proposed class. These products are protected by CSS and or AACS. The circumvention prohibition prohibits users of DVD and Blu-ray Discs from circumventing these access controls. As discussed above, this rulemaking is to consider whether the circumvention prohibition is adversely affecting the desired noninfringing use. Proponents have not proffered any evidence specific to motion pictures, and more specifically to motion pictures distributed on DVDs and Blu-ray Discs. Therefore, they have not made any showing that an exemption may even be warranted to circumvent CSS and or AACS.

#### **III.** The Circumvention Prohibition Is Not Causing Proponents' Harm

## A. Proponents Have Not Shown the Circumvention Prohibition Has Prevented the Research into Generative AI Models

Proponents erroneously assert that Section 1201 is adversely affecting them. They note that the current research exemption for security and safety may not cover some activities relating to generative AI research. However, Section 1201(a)(1) is a general prohibition, and exemptions created through this rulemaking are available only to those users who have independently demonstrated that the circumvention prohibition has adversely affected their noninfringing use. Proponents' arguments that merely lacking the benefit of the exemption applicable to security and safety research somehow constitutes harm to unrelated AI researchers is naked bootstrapping that impermissibly attempts to dodge the requirement of making an appropriate showing to support the proposed exemption.

## **B.** Terms of Use Are Likely Interfering with AI-Generative Research Not the Circumvention Prohibition

Proponents have also suggested that, in the absence of the exemption, they would have to acquire approval for the research from the AI system owner, which would "reduce the independence volume and diversity of testing." Hacking Policy Comments at 4. They explained that the terms of use for AI systems may "prohibit bypassing any protective measures or safety mitigations." *Id.* at 3. However, the terms of any applicable user agreements that may prevent research are not governed by Section 1201(a)(1), and no evidence has been provided demonstrating that Proponents are unable to, rather than simply preferring not to, engage with AI system owners to achieve their goals.

## **IV.** Statutory Factors Weigh Against the Creation of the Class

Analysis of the statutory factors also indicates the proposed exemption is improper.

## A. Availability for Use of Copyrighted Works

An exemption permitting the circumvention of DVD and Blu-ray Disc players would not make more works available or increase the use of copyrighted works. In the 2012 Recommendation, the Register considered a similar proposed exemption to bypass TPMs on video game consoles (*i.e.*, to jailbreak the consoles), and concluded, in the context of the first statutory factor, that a jailbreaking exemption for video game consoles would not result in the availability and use of more copyrighted works.

[C]onsole access controls encourage the development and dissemination of highly creative copyrighted works by facilitating secure platforms for the development and distribution of video games and other applications. In addition to artwork, graphics and sound effects, a sophisticated video game may include storyline, character development, voiceovers, music and other expressive elements. Such a work is far more challenging and expensive to create than the typical smartphone application, for example, like a motion picture, it involves a team of creators and may require funding in the millions of dollars. It is difficult to imagine that one would choose to make such an investment without some hope that it could be recouped by offering the resulting product through channels that provide some measure of protection against unauthorized copying and distribution.<sup>14</sup>

The Register's analysis looked past the copyright in the code, and more fully considered the copyrights that the code is ultimately intended to protect – the video games. She noted that video

<sup>&</sup>lt;sup>14</sup> 2012 Recommendation at 51.

games are more akin to movies, creation of which requires a "team of creators" and "funding in the millions of dollars[.]"<sup>15</sup>

More importantly, the Register's reasoning confirms that motion pictures are the quintessential works warranting the full weight of the prohibition against circumvention. In fact, this respect for and protection of motion pictures distributed on CSS- and AACS-protected optical discs has been fundamental to the rulemaking since its inception, as no other types of copyrighted works have been as regularly and intensely subject to evaluation than motion pictures distributed on CSS and AACS-protected optical discs. Consequently, the reasoning behind the first statutory factor weighing against the creation of an exemption to circumvent video game consoles should weigh as much, if not more, against creating an exemption to circumvent those players that playback CSS or AACS-protected optical discs.

# B. The Effect of Circumvention of Technological Measures on The Market for or The Value of Copyrighted Works

The fourth statutory factor similarly countenances against an exemption for DVD and Bluray Disc players. Frequently, this factor is intertwined with the fourth factor of the fair use analysis (the effect of the market for the copyrighted work) as it, too, seeks to ascertain the effect of circumvention of access controls on the market for or value of copyrighted works. Thus, DVD CCA and AACS LA provide here a discussion of the fourth factor of fair use analysis before addressing the statutory factor.

## 1. The Concerns for the Value (or Market for the Work) for Players Approximate Concerns Identified in the Fair Use Analysis for Video Game Consoles

The Register's prior analysis of the jailbreaking of video game consoles is highly relevant to and instructive of their review of the fourth factor of the fair use analysis in the context of player

<sup>&</sup>lt;sup>15</sup> *Id*.

devices, as a DVD or Blu-ray Disc player is to motion pictures what video game consoles are to video games. In considering the fair use analysis in the context of the jailbreaking of video game consoles, the Register found, under the fourth factor, that the market or value for the code that protected the video game console would be diminished, and, accordingly, that this factor "weigh[ed] somewhat strongly against a finding of fair use."<sup>16</sup> The Register went on to find there was no persuasive basis to establish that jailbreaking a video game console was noninfringing. The Register reasoned that, once jailbroken, "the compromised code can no longer serve as a secure platform for the development and distribution of legitimate content."<sup>17</sup> The Register also concluded that the evidence supported the finding that the proposed circumvention of the code securing video game consoles was inextricably linked to piracy.<sup>18</sup>

Copies of motion pictures distributed on DVDs and Blu-ray Discs employ CSS and AACS content protection technologies which are fundamental to protecting the integrity of digital content ecosystem, which the Register recognized in the context of video game consoles as a "secure platform for the development and distribution of legitimate content."<sup>19</sup>

#### *a) Piracy Is Still a Consequence of a Compromised Digital Ecosystem*

Piracy takes advantage of weaknesses in the digital ecosystem. The first widely publicized hack of CSS, known as DeCSS, demonstrated this to be true, as DeCSS resulted from a single manufacturer's failure to protect against the discovery and theft of a single cryptographic player key. Once a key is discovered, the chain of events unquestionably leads to piracy, as it did in the case of the DeCSS hack. This led to pirates' quintessential quest over the years to rip DVD or

<sup>&</sup>lt;sup>16</sup> 2012 Recommendation at 44.

<sup>&</sup>lt;sup>17</sup> 2012 Recommendation at 44.

<sup>&</sup>lt;sup>18</sup> 2012 Recommendation at 43.

<sup>&</sup>lt;sup>19</sup> 2012 Recommendation at 44.

Blu-ray Discs as a source for online piracy.<sup>20</sup>

## b) Hacked DVD and Blu-Ray Discs Remain Sources for Piracy

Using software enabled by stolen decryption keys to read DVDs and Blu-ray Discs and then obtaining the digital content in the clear (often referred to as "ripping"), is still a significant source for piracy. Quite recently, the Department of Justice announced the indictment of members of the "Sparks Group," who misrepresented themselves over a ten-year period to obtain advance distribution copies of "nearly every movie released by major production studios" and motion pictures distributed on DVDs and Blu-ray Discs meant for retail.<sup>21</sup> According to the release, the accused pirates then ripped the discs and disseminated the film and TV content via the Internet prior to the retail release date."<sup>22</sup>The release described the activity as follows:

Sparks Group members then used computers with specialized software to compromise the copyright protections on the discs, a process referred to as "cracking" or "ripping," and to reproduce and encode the content in a format that could be easily copied and disseminated over the Internet. They thereafter uploaded copies of the copyrighted content onto servers controlled by the Sparks Group, where other members further reproduced and disseminated the content on streaming websites, peer-to-peer networks, torrent networks, and other servers accessible to the public. The Sparks Group identified its reproductions by encoding the filenames of reproduced copyrighted content with distinctive tags, and also uploaded photographs of the discs in their original packaging to demonstrate that the reproduced content originated from authentic DVDs and Blu-Ray discs.<sup>23</sup>

<sup>&</sup>lt;sup>20</sup> "Over the years, TV shows and movies have become the most popular pirated materials. Apart from accessing them on an [legitimate streaming services], pirates deploy other efforts such as ripping DVDs or Blu-ray discs[.]" Mark Mulready, *How Do Pirates Get Ahead of OTT Video Providers?* (Oct. 5, 2022) available at https://blog.irdeto.com/video-entertainment/pirates-are-primed-to-compete-in-the-streaming-wars/.

<sup>&</sup>lt;sup>21</sup> Acting U.S. Attorney Announces Federal Charges and International Operation to Dismantle Online Piracy Group, Press Release, Department of Justice (Aug. 26, 2020) ("DOJ Press Release") available at https://www.justice.gov/usao-sdny/pr/acting-us-attorney-announces-federal-charges-and-international-operation-dismantle-0 (last visited Feb. 20, 2024).

<sup>&</sup>lt;sup>22</sup> Id.

Just as the indictments against the Sparks Group show that they relied on ripped consumer market discs, online streaming piracy is generally well understood to be fueled by content ripped from discs using software implementing circumvention tools. For example, the Digital Citizens Alliance August 2020 Report, *Money for Nothing: The Billion-Dollar Pirate Subscription IPTV Business*, points to ripped Blu-ray Discs as a source for this piracy.<sup>24</sup>



Figure 7 – Content theft

## c) Piracy and Its Harms

This piracy undoubtedly leads to significant harm. In the above case of indictments against the Sparks Group, the Department of Justice stated that "Sparks Group has caused tens of millions

<sup>&</sup>lt;sup>24</sup> Digital Citizens Alliance and NAGRA, Money for Nothing: The Billion-Dollar Pirate Subscription IPTV Business.

of dollars in losses to film production studios."<sup>25</sup> The Digital Citizens Alliances Report, largely intended to show the billion-dollar industry that online streaming piracy has become, cites to other reports that have quantified the loss to the "U.S. economy [to be] at least \$29.2 billion in lost revenue each year."<sup>26</sup>

These recent accounts are consistent with what has been known about the effects of piracy for some time. A study prepared for the U.S. Patent and Trademark Office, providing a systematic review of the literature, pointed out that "if the shutdown of one popular piracy site — Megaupload.com — caused a 6.5-8.5 percent increase in digital movie revenues in spite of all of the video piracy that remained after Megaupload, total losses to rightsholders from piracy in the home market could be quite substantial."<sup>27</sup>

Since the resulting piracy of film and television content flows, in part, from the circumvention of CSS- and AACS-protected optical discs, rights holders can ill afford permitting any circumvention that may interfere with or disrupt the integrity of the carefully considered content protection ecosystem. Licenses covering technologies like CSS and AACS are more than simple transactional agreements permitting decryption of the content on discs. Instead, they are composed of and rely on multilayer commitments requiring careful manufacturer design elements and deliberate device functionality, as the robustness and compliance rules may prescribe. As in the chain of events leading to the DeCSS circumvention tool, even unintentional acts can

<sup>&</sup>lt;sup>25</sup> DOJ Press Release, *supra* note 22.

<sup>&</sup>lt;sup>26</sup> Digital Citizen Alliance Report at 1 n.4 (citing Digital Video Piracy: Impacts of Digital Piracy on the U.S. Economy (GIPC, June 2019)).

<sup>&</sup>lt;sup>27</sup> Brett Danaher, Michael D. Smith, and Rahul Telang, Piracy Landscape Study: Analysis of Existing and Emerging Research Relevant to Intellectual Property Rights (IPR) Enforcement of Commercial-Scale Piracy at 27 (March 20, 2020) (Prepared for the U.S. Patent and Trademark Office).

jeopardize the integrity of content protection ecosystem. Even well-intentioned exemptions can unintentionally impose undue stress on the digital ecosystem by encouraging activities that may leave a key to be discovered or compromised, which would, in turn, permit users to effectively strip the copyrighted content clear of its TPM technical and license obligation protections. This ultimately reduces the effectiveness of the system to a fraction of what both the rights holders expect and the licensed players manufacturers intend. Consequently, the exemptions are not warranted, and a review of the fair use factors make that conclusion even more evident.

## C. Fourth Statutory Factor Does Not Favor the Creation of the Exemption

An exemption for investigations into generative AI bias threatens the digital content ecosystem. The Register's explanation in the 2012 Recommendation regarding why this factor did not favor the creation of a repair exemption for video game consoles is particularly instructive in the context of the currently proposed exemption. In the 2012 Recommendation, the Register reasoned that an exemption which would permit circumvention of access controls on video game consoles protecting games and programs (directly analogous to the access controls on DVD and Blu-ray Disc players protecting motion picture content) would have the effect of decreasing the market for and value of the legitimate copyrighted works protected by the access controls:

As discussed above . . . , due to the particular characteristics of the video game marketplace, the circumvention of access controls protecting a console computer program so that it can be copied and modified for the purpose of enabling unauthorized applications has the effect of decreasing the market for, and value of, that program, as it can no longer serve to facilitate a secure gaming platform. Further, by enabling the ability to obtain and play pirated games and other unauthorized content, the dismantling of console access controls undermines the value of legitimate copyrighted works in the marketplace, many of which require a substantial investment of creative and financial resources to create.<sup>28</sup>

<sup>&</sup>lt;sup>28</sup> 2012 Recommendation at 52. This same reasoning has been applied in subsequent rulemakings. *See* 2018 Recommendation at 206 (noting that no persuasive evidence refute concern about market harm, "the Acting Register should reach a different conclusion than in 2012 or 2015, and so she does not.").

The Register, again, was concerned about the integrity of the overall content protection ecosystem, as she noted that the code "can no longer serve a secure gaming platform."<sup>29</sup> Similarly, any exemption that permits the circumvention of CSS and AACS technologies risks the security of the digital ecosystem. Accordingly, the fourth statutory factor weighs against the creation of an exemption for the purpose of researching generative AI models for bias, as such exemptions permit conduct that threatens to, even unintentionally, disrupt the manufacturers' implementation of the robustness and compliance rules, and thereby compromise the integrity of the overall content protection scheme. This would leave bad actors completely free to take advantage of these newly created vulnerabilities.

As noted in the 2012 Recommendation:

Motion pictures involve significant effort and expense to create and, once created, frequently become a vital part of American culture. The motion picture industry has a legitimate interest in preventing motion pictures from being copied in their entirety or in a manner that would adversely impact the market for or value of these works, including reasonable derivative markets.<sup>30</sup>

Since the resulting piracy of film and television content flows in part from the circumvention of CSS and AACS-protected optical discs, rights holders can ill afford permitting any circumvention that relaxes the bright line of the circumvention prohibition. Therefore, Proponents' alleged speculative harm certainly does not outweigh the proven harm piracy has caused rightsholders.

## V. Regulatory Language Should Exclude Motion Pictures

For the foregoing reasons, to the extent that the Register recommends an exemption, the exemption should exclude any generative AI model that works with, controls, or enhances the distribution or performance of motion pictures.

<sup>&</sup>lt;sup>29</sup> 2012 Recommendation at 49; *see also* 2018 Recommendation at 206.

<sup>&</sup>lt;sup>30</sup> 2012 Recommendation at 166.

## VI. Conclusion

For the reasons stated above, an exemption to circumvent TPMs in order to research generative AI models for bias is not warranted, as the Proponents have not met their evidentiary burdens to allow the Register to define a narrow class of noninfringing uses and negatively impacted users. And, even if they had – which they plainly and unequivocally did not— an exemption would still not be warranted as the exemption threatens existential harms, risking the digital ecosystem as a whole.

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