Before the
COPYRIGHT OFFICE
LIBRARY OF CONGRESS
Washington, D.C.

In the Matter of	)	
Technical Measures:	)	**Docket No. 2021-10**
Public Consultations	)	**Submitted February 8, 2022**
	)	

STATEMENT OF INTEREST AND COMMENTS
OF THE MOTION PICTURE ASSOCIATION, INC.

I. INTRODUCTION

The Motion Picture Association, Inc. ("MPA") is pleased to provide comments in response to the Notice of Inquiry ("NOI") regarding Technical Measures: Public Consultations, published at 86 Fed. Reg. 72,638 (Dec. 22, 2021) (Docket No. 2021-10), which also serves as our statement of interest to participate in the consultations on this topic.

The MPA is a not-for-profit trade association founded in 1922 to address issues of concern to the motion picture industry. The MPA's member companies are: Netflix Studios, LLC, Paramount Pictures Corporation, Sony Pictures Entertainment Inc., Universal City Studios LLC, Walt Disney Studios Motion Pictures, and Warner Bros. Entertainment Inc. These companies and their affiliates are the leading producers and distributors of filmed entertainment in the theatrical, television, and home-entertainment markets.

Copyright piracy is an enormous worldwide problem. Every year, US-produced movies are illegally downloaded or streamed 26.6 billion times and US-produced television episodes are

illegally downloaded or streamed 126.7 billion times.[1] Piracy of filmed entertainment costs the U.S. economy $29.2 billion and over 230,000 jobs each year.[2] Piracy continues unabated despite the consistent and widespread use takedown notices. Accordingly, we believe that combatting online piracy requires a number of approaches, including the greater use of technical measures by both rightsholders and service providers to identify and protect copyrighted works online. MPA members individually invest in the development of these technologies and have partnered with many online service providers ("OSPs") to expand their use.

We therefore appreciate the opportunity to provide these answers and participate in the upcoming consultation meetings.

II. RESPONSES

(Question 1) Rightsholders: Please identify any technical measures currently used or in development by you, your organization, company, industry, or sector to identify or protect copyrighted works online. How do these technical measures affect your ability to protect your copyrighted works online?

Technical Measures to Identify Works

EIDR: The Entertainment Identifier Registry Association (EIDR) is a not-for-profit industry association that assigns unique numbers to audiovisual assets. The EIDR number system has become an industry standard and is widely used in legitimate online commerce to facilitate distribution and monetization of titles.

Fingerprinting: Fingerprinting is technology that extracts and summarizes components of a video in a set of hashes, resulting in a fingerprint that is unique for each file. Unlike metadata or

[1] 2019 US Chamber of Commerce Study (https://www.theglobalipcenter.com/wp-content/uploads/2019/06/Digital-Video-Piracy.pdf)
[2] *Id.*

watermarks (discussed below), fingerprints are not added to the file but maintained in a separate database.

Metadata: Metadata is information added to a file containing information about the file. Audiovisual works contain both basic metadata (information specific to the film such as title and credits) and digital-asset metadata (information specific to the digital file such as date of creation and file size). Together this information is unique to a given digital file and can be used to identify it provided it is not removed by the unauthorized distributor.

Technical Measures to Protect Works

Automated Content Recognition ("ACR"): ACR is a technology by which the audio and/or visual content of a particular file is matched against a reference fingerprint of a work (discussed above) supplied by the copyright owner. OSPs use ACR to identify unauthorized duplicates of a copyrighted work, and can then take various actions, including declining to allow them to be publicly posted. This process is sometimes known as "filtering." YouTube's Content ID is one of the more well-known examples of filtering. Today ACR is the mostly widely used and effective technology for the protection of copyrighted works online. Many of the larger OSPs have implemented ACR technologies, including for MPA members' content, but their use is far from universal.

Web Crawlers: A web crawler is an automated program that searches the internet for particular files. MPA members and their agents use web crawlers to search for unauthorized copies of their copyrighted works and then use that information to send takedown notices to the relevant OSP that is hosting or otherwise enabling access to those unauthorized copies. Unfortunately, some OSPs block crawlers and limit the number of notices they accept.

Digital Rights Management ("DRM"): DRM is technology used to implement the terms of a digital transaction between a content distributor and its customer. The technology accomplishes this by limiting access to or copying of a copyrighted work so that a user's ability to access, copy and distribute the work does not exceed the rights the user has transacted for. For example, where a customer has obtained temporary "rental" access to a work, a DRM will prevent the customer from retaining a permanent copy. Similarly, when access to a library of works is to be permitted only while a user continues to pay the monthly charge for an online subscription service, a DRM can prevent a user from retaining permanent copies of the streamed content and verify that a user requesting access is a legitimate subscriber. MPA members apply DRM to their own works and have negotiated with many legitimate online distributors to include DRM. Indeed, a legitimate digital marketplace for copyrighted works would be impossible without DRM technologies to enforce the terms of agreed-upon online transactions. Examples of DRM used to protect the MPA members' works include the Content Scramble System ("CSS") on DVDs, the Advanced Access Content System ("AACS") on Blu-ray discs; various proprietary technologies such as Apple FairPlay, Microsoft PlayReady and Google Widevine on streaming platforms; High-bandwidth Digital Content Protection on HDMI cables that transmit copyrighted works; and authentication processes (e.g., passwords) that prevent unauthorized access to streaming services.

Watermarks: Audio and video watermarks are indicators included in an audiovisual work and can be perceptible or imperceptible. There are many different watermark technologies in the marketplace, and they are widely used by the film industry for different purposes. One common use is to display the copyright owner's logo to inform users that a work is protected by copyright. Watermarks are also used to identify the recipient of a downloaded copy so that the origin of an

infringing copy can be identified. In the streaming context, session-based watermarks can be inserted into the transmission so that an infringing copy circulating online can be traced back to the individual subscriber who unlawfully captured and redistributed it.

Geoblocking: Copyright owners often license their works on a country-specific basis to different platforms or distributors. This is done for a variety of commercial and legal reasons, including avoiding interference between the online distribution by an authorized distributor in one country with the exclusive rights of another distributor in a different country. To implement this, the user's location is determined using a variety of geolocation tools and access to a work on a distributor's service is permitted or denied as appropriate.

Website Blocking: Courts or administrative bodies around the world issue orders to internet service providers to block users' access to websites adjudicated to be devoted to piracy. These remedies have been implemented in over 40 countries around the world, including most of the European democracies, typically with the cooperation of the relevant ISPs. These remedies have proven to be an especially effective tool in steering consumers away from piracy sites and toward legitimate services, and there is no evidence that they harm the functioning of the internet.

(Question 4) To what extent are any of these technical measures being adopted or discussed as part of any within-industry or cross-industry endeavors, initiatives, or agreement(s)?

In 2006, MPA members Disney, Paramount, Sony Pictures, Universal, and Warner Bros., and then-member Twentieth Century Fox formed MovieLabs, Inc., a non-profit organization that would, among other things, develop new technologies to identify and protect copyrighted works online. Many technologies developed by MovieLabs are in widespread use in the film and television industry today. MPA members also successfully negotiated with various OSPs to

deploy technical measures to protect their works. For various reasons including abiding by antitrust laws and a lack of cooperation among industry groups, these agreements are typically negotiated between a single MPA member and a single OSP.

(Question 5) Are there any other processes that are ongoing for identifying voluntary solutions or to identify and implement technical measures? Are there alternative processes, other than those that may currently be in place, that would better identify and implement technical measures? Please be specific, as different technical measures may have different solutions in different industry sectors.

The film industry has participated in many multi-stakeholder discussions to develop industry standards to address piracy. The CSS and AACS DRM technologies mentioned previously were developed and continue to be managed by a consortium of motion picture studios, consumer electronics, and information technology companies. In the online context, MPA has worked with partners such as the "Trustworthy Accountability Group" (TAG), payment processors and domain name registrars to establish "trusted notifier agreements" whereby information supplied by our members regarding unauthorized content will be acted upon. However, none of the online solutions has been universally adopted, and we are not aware of any technical solutions currently in development among a cross-industry group to address online piracy. Notably, DRM systems used by the major download and streaming platforms were developed by individual companies.

(Question 6) To what extent would the adoption and broad implementation of existing or future technical measures by stakeholders, including online service providers and rightsholders, be likely to assist in addressing the problem of online copyright piracy? What are the obstacles to adopting and broadly implementing such existing or future technical measures? Would the adoption and broad implementation of such existing or future technical measures have negative effects? If so, what would be the effects, and who would be affected?

While many technical measures exist in the marketplace, they have not been broadly adopted. Many reasons exist for this failure, but the main one is insufficient incentives on the part of OSPs to adopt them. Indeed, OSPs have a disincentive to participate in standard-setting efforts because their absence from the negotiation can be used to argue that the technology was not developed "pursuant to a broad consensus" of service providers, and therefore cannot be deemed a Standard Technical Measure under section 512(i) of the DMCA. This is not to say that all OSPs refuse to implement technical measures. As discussed above, we partner with many OSPs to do just that. But this implementation has produced a patchwork of measures, with each OSP deploying its own technologies and practices, often for a subset of copyright owners. OSPs obviously prefer to avoid the obligation to adopt a standard technology—but that is precisely what would be most effective for the copyright community.

While cross-industry technical measures have thus far not enjoyed great success, we believe the adoption and broad implementation of technical measures can greatly assist in addressing the problem of online copyright piracy. Of course, any technology carries the risk of abuse and overcorrection, but the measures in place today have generally not suffered from these issues. In fact, the anti-piracy tool most criticized by OSPs is the notice-and-takedown regime. Importantly, the complaint centers primarily on the existence of faulty and fraudulent notices that are due to human error and intentional abuse. Greater reliance on neutral technology such as ACR would reduce the incidence of this sort of human error. We believe technical measures

have far more upside than downside potential in improving the online environment for copyrighted works.

Small OSPs also argue that implementing technical measures is costly, and they should not have to use the same technology that a larger company does. We believe this is a red herring. Any site with so few infringing files that the volume can be addressed efficiently through manual review should not be required to deploy a technological solution. But any site with a large volume of infringements that cannot be effectively addressed in a timely manner should deploy a technical measure – even if the OSP is a small business. Unauthorized access to copyrighted works should not be a legitimate engine for an OSP's growth, regardless of its size. Moreover, there exist many "off the shelf" content recognition technologies that are affordable for even small OSPs.

(Question 7) Is there a role for government to play in identifying, developing, cataloging, or communicating about existing or future technical measures for identifying or protecting copyrighted works online? Can the government facilitate the adoption or implementation of technical measures, and if so, how? Are there technical measures or other standards used to protect copyrighted works online of which the government should be aware when implementing statutory or regulatory provisions, such as requirements for procurement, grants, or required data inventories?

The government is not well-positioned to develop technical measures, but that is not an area that requires a great deal of additional work. As discussed above, numerous technical measures have already been developed that could, if broadly adopted, significantly improve the environment for copyrighted works online. Rather, the government can play a role in bringing stakeholders together to work together to find solutions. We also support Congress granting the Copyright Office, together with other governmental agencies, the regulatory power to designate particular technologies as STMs.

(Question 8) Please identify any other pertinent issues not referenced above that the Copyright Office should consider in these consultations.

We are not aware of any other pertinent issues at this time but will bring any additional thoughts to the live consultations. We look forward to engaging on this topic with the Copyright Office and other stakeholders at those events.

Respectfully submitted,

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