ITEM A. COMMENTER INFORMATION

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ACT | The App Association, representing more than 5,000 app companies and software firms that create and license digital content, submits the following comments to the United States Copyright Office (“Copyright Office”) in response to its Notice of Proposed Rulemaking (“NPR”) concerning possible temporary exemptions to the Digital Millennium Copyright Act’s (“DMCA”) prohibition against the circumvention of technological measures that control access to copyrighted works. The App Association is widely recognized as the foremost authority on the $143 billion app ecosystem and its intersection with governmental interests. As the only organization dedicated to the needs of small business app developers and tech innovators around the world, the App Association advocates for an environment that inspires and rewards innovation while providing the resources to help our members leverage their intellectual assets to raise capital, create jobs, and drive innovation.
ITEM B. PROPOSED CLASS ADDRESSED

Proposed Class 6: Computer Programs- “Jailbreaking”

ITEM C. OVERVIEW

The App Association opposes the proposed new class 6 exemption for “general –purpose portable computing devices” and the Electronic Frontier Foundation’s (EFF) revised proposal that covers voice assistant devices “carried” or “used in a home,” with the added purpose of enabling and disabling hardware features on such devices. The proponents of the proposed exemption have not provided sufficient rationale to meet the standard necessary to grant expansion of exemptions to this class of works. In addition, the proposed inclusion of “voice assistant devices” is overbroad and would expose app developers and consumers to harm that far outweighs any potential impact on non-infringing uses of copyrighted works.

ITEM D. COMMENTS IN OPPOSITION OF PROPOSED CLASS 6 EXEMPTION

1. The proponents for Proposed Class 6 have failed to meet the standard required to grant an exemption.

In the NPR, the Copyright Office sets the standard for granting a temporary exemption from the prohibition on circumvention dictated by the DMCA. The DMCA allows exemptions when “persons who are users of a copyrighted work are, or are likely to be in the succeeding 3-year period, adversely affected by the prohibition… in their ability to make non-infringing uses under [title 17] of a particular class of copyrighted works.” The proponents’ Petition for a New Exemption and Round 1 Comments fails to provide evidence to support the claim that users of voice assistant devices are or are likely to be harmed in their ability to make non-infringing uses of copyrighted works without an expansion of the existing jailbreaking exemption.
Proponents’ arguments for the proposed Class 6 exemption on jailbreaking are insufficient to support granting an expansion to the current rule. The proponents rely on the rationale used to grant previous and current exemptions as a reason to expand the proposed class by merely asserting that voice assistant devices are similarly situated to the previously granted exemptions. The proponents argue that because a voice assistant device is a similarly situated device in the family of personal computing devices, it should be included within the exemption because users want to make changes to the hardware features. The “because I want to” argument fails to acknowledge the growing marketplace for low-cost, open source hardware available for programming. Large manufacturers are not preventing developers and their customers from innovating personalized functionality on voice assistant devices.

There are several open source electronics platforms available to the public for programming. For example, Raspberry Pi\(^1\) and Arduino\(^2\) are just two companies that provide hardware options, with prices starting as low as $12. The open source software and hardware enable users to create personalized home automation with voice assistant devices, allowing them to control temperatures, sound, lights, appliances, and security in their homes. The Copyright Office does not need to expand the current jailbreaking exemption to include these devices because users are not, and are not likely to be, harmed by the inability to circumvent the technical protection mechanisms (TPMs) on these devices because there is a low-cost alternative that allows them to develop customized functions.

2. **Proposed Class 6 is not Narrowly Defined and Would Expose App Developers and Consumers to Harm**

The proposed addition of “voice assistant devices” to the current exemption would capture a broad and poorly defined category of devices. As a result, it can potentially undermine the apps on these devices by creating an environment favorable to unauthorized, illegal, and counterfeit apps, which would negatively impact the app industry and its consumers.

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\(^2\) See [https://www.arduino.cc](https://www.arduino.cc).
In its NPR, the Copyright Office refers to the legislative history of the DMCA, which explains that each class of works exempted from the circumvention prohibition is intended to “be a narrow and focused subset of the broad categories of works…identified in Section 102 of the Copyright Act.” While the proponents for the proposed expansion of the current exemption focus their discussion in the Round 1 comment on voice assistant devices such as the Amazon Echo, Google Home, and Apple HomePod, their definition could be interpreted to cover a range of personal computing devices that contain firmware access controls. This could essentially include any home computing device operated by voice commands. Without a clear understanding of the devices covered by this definition and the copyrighted works involved, it would run contrary to legislative history to grant the requested expansion to the current exemption.

The Copyright Office should consider the impact of these copyright protections on dynamic industries within the app ecosystem, as well as on the business models of the App Association’s software development member companies. Copyright protections remain a crucial underpinning of a variety of content delivery options, such as:

- Health devices with embedded software used for health-related decisions, ranging from lifestyle changes to medical treatments.
- Software-enabled financial tools that help countless Americans handle financial transactions.
- App-driven consumer and home-oriented products used for safety as well as convenience and entertainment.

All the above examples could be delivered on a voice assistant device and therefore could be included in the proposed exemption. The App Association urges the Copyright Office to reject the proposed new class 6 exemption on jailbreaking until it provides an explanation on the type and range of devices involved in the exemption, and the impact such an exemption would have on the mobile app ecosystem and the users who rely on software products and services.

In addition, granting an exemption for the jailbreaking of “voice assistant devices” would increase the risks to the mobile app economy by creating an environment favorable to unauthorized, illegal, and counterfeit apps.
Piracy currently presents a major threat to the success of App Association members and the billions of consumers who rely on digital products and services. Piracy, whether originating within the United States or abroad, threatens the creators of digital content by undermining their ability to innovate, invest, and hire. Piracy also threatens end-users’ confidence because it creates the potential for consumers to be victimized by illegal sellers who pose as legitimate content owners and sellers. Counterfeiting software apps can lead to customer data loss, interruption of service, revenue loss, and reputational damage. Further, with the rise of enterprise mobile app development, apps are being used to attack mobile users of an entire enterprise. While the criminal penalties for these activities (e.g., attacking a bank’s clients through a counterfeit version of their app) are likely a greater deterrent than the consequences for the violation of copyright laws, these criminal acts all begin with misappropriating application logic and application media content (brands, etc.). These threats have caused significant damage, and continue to pose substantial hazards, to app developers. It is essential that copyright owners be able to utilize encryption and other forms of access controls to combat these threats, but these protections may ultimately be undermined by jailbreaking.

The following example reflects the piracy issues faced by several app developers and tech companies. App Association member Busy Bee Studios’ children’s app Zoo Train was sold in the Google Play app store for $0.99. This app uses colorful animal shapes and animations in educational puzzles and spelling lessons for young children. During a search for the product, the app’s developers found an app in the Google Play store that used the same name and artwork, but was provided by a different publisher. This pirated app was free in the Google Play store, and displayed as a result of a search query for “Zoo Train,” but – unlike the true Zoo Train app – displayed advertisements to earn bogus revenue. The app also gained permission to control a user’s device to access phone dialer information, the address book, and the network stack to install itself to run in the background of the phone’s operating system to collect this information. In other words, the app implemented a malware stub that sits inactive but can be activated with a command to gather users’ person information.
Other innovative mobile app developers rely on firmware TPMs like authentication and encryption to allow legitimate uses of works and mitigate serious piracy threats. For example, Mimir Health makes cloud-based analytic software for healthcare executives and clinicians. The company’s products combine disparate healthcare data into one place, eliminating time wasted on data consolidation and preparing reports by hand. Using strong TPMs are essential to protecting patient data and maintaining client trust.

The requested expansion of the current exemption would open the door to an online environment where illegal and counterfeit apps could be distributed freely. Jailbreaking harms the integrity of apps and greatly increases the exposure to piracy. Proponents’ requested expansion of the current exemption is essentially an exemption to jailbreak TPMs on all software-enabled consumer products with voice assistant functionality. This is not necessary because developers, inventors, and tinkerers who want to build their own solutions have plenty of options available to them. Both closed and open source systems are flourishing, giving innovators and consumers the ability to choose the ecosystem that works best for them. Forced allowance of jailbreaking would greatly disturb this dynamic. The App Association urges the Copyright Office to reject the proponents’ request.