

Short Comment Regarding a Proposed Exemption Under 17 U.S.C. 1201

Item 1. Commenter Information

Name: Hans Nielsen. Organization: The Exploiters (<https://www.exploitee.rs/>).

Item 2. Proposed Class Addressed

Proposed Class 20: Jailbreaking—Smart TVs

Item 3. Statement Regarding Proposed Exemption

The specific class of works we are addressing is operating system firmware for Smart TVs. Jailbreaking Smart TVs requires circumventing technological protections included in the operating system and bootloader firmware.

Streaming media players and Smart TVs are technologically identical, except for how they are connected to a given television, and both should be included in this category. Both share the same uses, the same hardware, and identical or very similar software. For example, the Sony NSZ-GT1 and NSX-40GT1 share a common platform with the same jailbreaking procedure, even though one is a streaming media / Blu-ray player and the other is a Smart TV.

The Joint Creators and Copyright Owners suggest that using a laptop is an alternative to jailbreaking Smart TVs. In effect, their comment says that an unlocked computer, where the ability to pirate is already accepted, is the correct device to use with a TV. This is not relevant to whether or not Smart TVs should be jailbreakable. Even if we accept this as relevant, it is unlikely that jailbreaking Smart TVs will lead to additional piracy, as any Smart TV owner who can jailbreak it almost certainly already owns a laptop. Smart TVs also don't have the necessary storage and processing power to run software such as Popcorn Time.

The Joint Creators and Copyright Owners are concerned about piracy of the proprietary copyrighted software in these Smart TVs. This is not a major issue and jailbreaking will not cause widespread application piracy. Applications that run on one TV are going to be difficult at best to modify to interoperate, or port, to other devices, as they will rely on proprietary DRM or a Trusted Platform Module. Smart TV operating system software is essentially impossible to port given how closely tied it is to very specific hardware details. Even without an exemption, it is possible to extract these applications as they are generally stored unencrypted. Additionally, any proprietary applications that could be ported to a jailbroken device will likely also run on an unlocked device with similar hardware such as a Nexus Player or a Raspberry Pi.

The Joint Creators and Copyright Owners state that since there is an unlocked device available (the Google Nexus Player), no exemption is required. That said, the rulemaking period covers the next three years, and Google's history of discontinuing hardware within three years of introduction means that circumvention will likely be required for much of this period.

Describing the details of how a given Smart TV is jailbroken is not necessary for this exemption. Given the wide variety of devices, each of which has its own unique configuration and weaknesses, listing specific technical methods for jailbreaking beyond bypassing signatures is an undue burden and also unfairly narrows the exemption. If specific technical methods are specified in an exemption, it is likely that device manufacturers can change their software in such a way that it is no longer covered by the exemption. Depending on the methods, manufacturers may be able to remotely update existing Smart TVs to exclude them from this class.