## To members of the U.S. Copyright Office,

I support extending the exemption to the DCMA for "jailbreaking" phones, tablets, and video game consoles. I am a hobbyist and learning to become a developer for these devices.

## Class 5 Devices: Smartphones and Tablets

I have owned a Motorola Droid 1 for 2 years, and currently own a Motorola Droid Bionic, running Android. I am an enthusiast for heavily modifying the way my device functions. To do this, I must have at least root access, and in some cases, an open bootloader on the device. One program, "RootDim", needs root access to lower the device's brightness level below that which the phone was programmed to allow. This makes the device much more usable late at night and less of a nuisance to others in public places. Another app, "Tasker", allows me to completely automate certain tasks and settings based on certain conditions. For example, when I am usually in church, it can turn on my GPS to check to see if I am near my church building, and automatically silence my phone accordingly. The useful possibilities provided by this app are endless. However, this app needs root to perform all the condition checks and run many tasks.

With root access and an open bootloader, I can install customized versions of Android on my phone. These customized versions often optimize all aspects of the system and add many new features. For example, I have installed toggle buttons in my notification area to toggle GPS, brightness, and wifi quickly and easily from anywhere in the phone UI. An completely open bootloader on my device (present on the Droid 1, but not the Bionic) would allow me to install a custom kernel. This means the device's processor can be overclocked to run faster or underclocked to save power, and the overall phone performance can be improved even more. In the process of installing new customized versions of Android, I use an app called "Titanium Backup" to easily backup my apps and settings. This allows me to efficiently test one version against another, all while keeping my personal data and progress. Without root, this app can not function. All of these apps require root access or a jailbroken phone. They were never intended to violate copyright law. Since piracy prevention on apps requires server-side authentication, device modifications pose no legitimate threat to piracy.

In my technology class at school, we are beginning to learn to develop apps for Android devices. We will initially use Google App Inventor, but intend to move onto coding fully in Java. This will give many students in my class and across the country extremely valuable hands-on experience in programming and a head start on potential careers later in life. Manufacturers locking down and denying access to run unsigned code will be nothing short of detrimental to the vast educational opportunities in which my class and others like it currently thrive.

There are methods to gain "root" or "jailbreak" (gain administrative access to) my device. Some may raise the concern that this opens the door for piracy of apps. However, there are currently implemented means by which these apps can be secured from piracy. All apps sold through the Amazon app store require a user to be authenticated with their server, countering any attempts to backup and share the app.

**Class 5 Devices Summary:** Jailbreaking devices allows end users and enthusiasts to greatly extend the functionality of their device. It provides a platform for educating future programmers. There are effective measures currently in place to prevent piracy.

Class 3 Devices: Video Game Consoles

I am currently in my final year of high school and will soon be entering college to study for a

career in Computer Science or Computer Engineering. Programming will likely be a major part of my career. One of the most rewarding aspects of programming is loading up your personal application onto your own console and seeing it run for the first time. I have been the owner of a "jailbroken" PlayStation Portable (PSP). Since I purchased one of the earlier models, my PSP was built with few restrictions in place on running unsigned code. As such, I was able to "jailbreak" it and use it as a platform to test my code as I learned to program in C++.

**Class 3 Devices Summary:** Jailbreaking consoles opens a new platform for learning to program and creates opportunities for innovative games.

If current DMCA exemptions are not extended, these educational opportunities for me and future generations will be crushed by device manufacturers. The modding enthusiast communities help stimulate sales and interest in these devices. Without them, devices will never be able to truly live up to their full potential.

Sincerely,

Patrick Boatner

A student and enthusiast today. A successful computer engineer tomorrow?