

Commenter's Name: Doug Brunner  
Proposed Classes: 5A and 5D

Class 5A (cell phone jailbreaking):

Description of proposed class, copied from summary page:

Computer programs that enable wireless telephone handsets to execute lawfully obtained software applications, where circumvention is accomplished for the sole purpose of enabling interoperability of such applications with computer programs on the telephone handset.

Brief summary of argument, copied from summary page:

Cellular phones are increasingly sophisticated computing devices, capable of running applications from a variety of software vendors. Several mobile phone providers, however, have deployed technical measures that prevent subscribers from installing applications from vendors of their choice, instead forcing customers to purchase their applications only from the providers' preferred sources. There is no copyright-related rationale for preventing iPhone owners from decrypting and modifying the device's firmware in order to enable their phones to interoperate with applications lawfully obtained from a source of their own choosing.

My specific information:

I own an Apple iPhone 2G, which incorporates a music player. For loading music on the device to be played back by this music player, Apple provides a software program called iTunes. However, this program is only available for the Windows and Mac OS operating systems, and my primary operating system is Linux, so I have to reboot my computer into a different operating system in order to load music onto the device. In addition, iTunes has a "flat file" method of displaying the contents of a music library (a simple list of each track in the library, which can be sorted by different parameters of the user's choice) which is extremely difficult to use for large music libraries.

There is an alternate method, described at <http://lifehacker.com/388785/sync-your-iphone-wirelessly-in-linux>, which allows the use of several third party music organizing applications with the iPhone, including my preferred application, Amarok. Amarok incorporates, among other things, a music browser that organizes tracks by artist and album and allows only the name of the artist or album to be displayed until the user clicks on a box to show the full list of tracks in that category. This interface allows even a very large music library to be examined and managed far more easily than iTunes allows.

However, using this method requires that the phone be "jailbroken": its firmware must be changed to allow the use of third party applications. The specific application needed is OpenSSH, an application that allows an authenticated remote device to connect to the iPhone via WiFi (IEEE 802.11 wireless networking) and transfer files to it. Connection via the USB interface that iTunes uses has not yet been implemented, because the interface has been difficult to reverse engineer; see <http://mlipod.sourceforge.net/wiki/IPhone>.

Furthermore, in iPhone software versions 2.0 and higher (which all users are prompted to install in order to obtain bug fixes and improved functionality) require a cryptographic hash based on the hardware of the phone and the music placed on the phone to be written to a location in the phone's memory. The hash algorithm is unknown, and Apple has issued a DMCA takedown notice to the developers attempting to reverse engineer it, asserting that the hash function is part of the digital rights management scheme they use to protect the music

they sell online. There have been reports of a way of circumventing this hash protection by further changing the software on the phone (see <https://help.ubuntu.com/community/PortableDevices/iPhone>, in the "Syncing iPhones and iPods Touch w/ Firmware 2.x" section), but this modification does not in any way avoid the problem of having to "jailbreak" the phone.

Class 5D (cell phone unlocking):

Description of proposed class, copied from summary page:

Computer programs in the form of firmware that enable wireless telephone handsets to connect to a wireless telephone communication network, when circumvention is accomplished for the sole purpose of lawfully connecting to a wireless telephone communication network, regardless of commercial motive.

Brief summary of argument, copied from summary page:

Prior commenter The Wireless Alliance joins with ReCellular and Flipswap, cellular recycling and reuse companies, to urge renewal of the exemption granted in its favor in the 2006 rulemaking for unlocking cell phones. Using a mobile handset on the network of the customer's choosing is pro-competitive and non-infringing. The customer neither copies the firmware, nor exercises any exclusive right the copyright owner has in it. Rather, the circumventor accesses the firmware merely to reprogram it to work on a different network, or to utilize a different SIM card. Granting the exemption benefits consumers and the environment.

My specific information:

Customers wishing to buy an iPhone from Apple have always been required to purchase a wireless service contract from AT&T that includes unlimited wireless data service, at a cost of \$20 per month more than an equivalent service plan without the data service (or \$30 per month for 3G data service on newer iPhones). I did not want or need this service, so I unlocked my iPhone using software freely available online (ZiPhone, and later QuickPwn, to maintain the unlock with the newer software versions) and used the SIM card from my old phone, allowing me to keep the service plan I was previously using with AT&T.