

## **Proposed Class:**

5C. “Computer programs in the form of firmware or software that enable mobile communication handsets to connect to a wireless communication network, when circumvention is accomplished for the sole purpose of lawfully connecting to a wireless communication network.

## **Summary of the argument:**

I support this proposed exemption. Restricting a handset to a single wireless carrier (network) is a practice that harms consumers more than it helps the carrier (network). It makes as much sense as restricting a normal landline telephone to a particular provider or a car to a particular brand of gasoline. A consumer who pays for his phone should have the option of taking it to another compatible network. This allows the consumer to save money from purchasing another handset; reduce the waste that is generated by throwing away a handset that could simply be re-used by removing the restriction; and in the case of a person, who travels overseas, can save substantially by using a local SIM card and not having to pay international roaming fees.

In addition, in most other countries, unrestricted (“unlocked”) handsets are the normal way mobile phones are sold. Take China for example, the biggest market of mobile phones, where no carrier restricts the handsets they sell. In Europe, just about every mobile phone shop sells unrestricted handset and consumers often have several SIM cards from different network they swap and use with the same or different handset to use the best features from each network. In comparison, our carriers here in the US are much more restrictive and hostile to consumer’s choice and interest.

## **Factual and/or legal support:**

Section 1201 of title 17 of the United States Code prohibits two general types of activity: (1) the conduct of “circumvention” of technological protection measures that control access to copyrighted works and (2) trafficking in any technology, product, service, device, component, or part thereof that protects either “access” to a copyrighted work or that protects the “rights of the copyright owner,” if that device or service meets one of three conditions.

The key here is “circumvention of technological protection measures that control access to copyrighted works”. If it is determined that the single-network restriction placed in a handset is “original work”, then the single-network restriction placed by a carrier in a handset still should not qualify for copyright protection. As stated in Section 102 of the title 17 of the United States Code: *“(b) In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.”*

However, it is not determined that the single-network restriction placed in a handset even qualifies as “original work” or if it protects any copyrighted work in the handset.

The document "Copyright Basics" (<http://www.copyright.gov/circs/circ1.pdf>) explains:

### **What Is Not Protected by Copyright?**

Several categories of material are generally not eligible for federal copyright protection. These include among others:

- Works that have not been fixed in a tangible form of expression (for example, choreographic works that have not been notated or recorded, or improvisational speeches or performances that have not been written or recorded)
- *Titles, names, short phrases, and slogans; familiar symbols or designs*; mere variations of typographic ornamentation, lettering, or coloring; mere listings of ingredients or contents
- Ideas, procedures, methods, systems, processes, concepts, principles, discoveries, or devices, as distinguished from a description, explanation, or illustration
- *Works consisting entirely of information that is common property and containing no original authorship* (for example: standard calendars, height and weight charts, tape measures and rulers, and lists or tables taken from public documents or other common sources)

The protection measure implemented in the handset should not qualify as "original work" and it does not protect any copyrighted or "original work". As the founder of one of the early companies offering cell phone "unlocking" services, I am well qualified to comment on this topic. In all the cases from my experience working with a wide range of thousands of handsets, the removal of the restriction to enable a handset to be used, or to be programmed for use on another network involves entering the correct digits or "unlock code" to remove the restriction. In any events, such series of numbers are generally random in nature or generated by algorithms. These restrictions are no different than the security code that a user sets as access control to his handset, except for a different purpose. They are simply various combination and permutation of numbers, and cannot be considered "*original work*" to qualify as copyrighted material. What such restriction protects is the access to the parameters that used to access another network. Take a GSM phone for example, the "access control" is to the network information on the SIM card, which is not even part of the handset itself and not determined to be a copyrighted material.

Consider the following, in general, there are several types of restriction a mobile phone can have:

1. User code, the user can place a security method to prevent an unauthorized person from using his phone or access his information. This is usually activated every time a phone is powered on or not used for some times or certain features are accessed.
2. Phone security code, this can be used to prevent someone from powering on the phone or access security-enabled functions such as Factory Reset, etc. This is usually activated when the user is trying to perform a high-level security function with maximum potential loss of information.

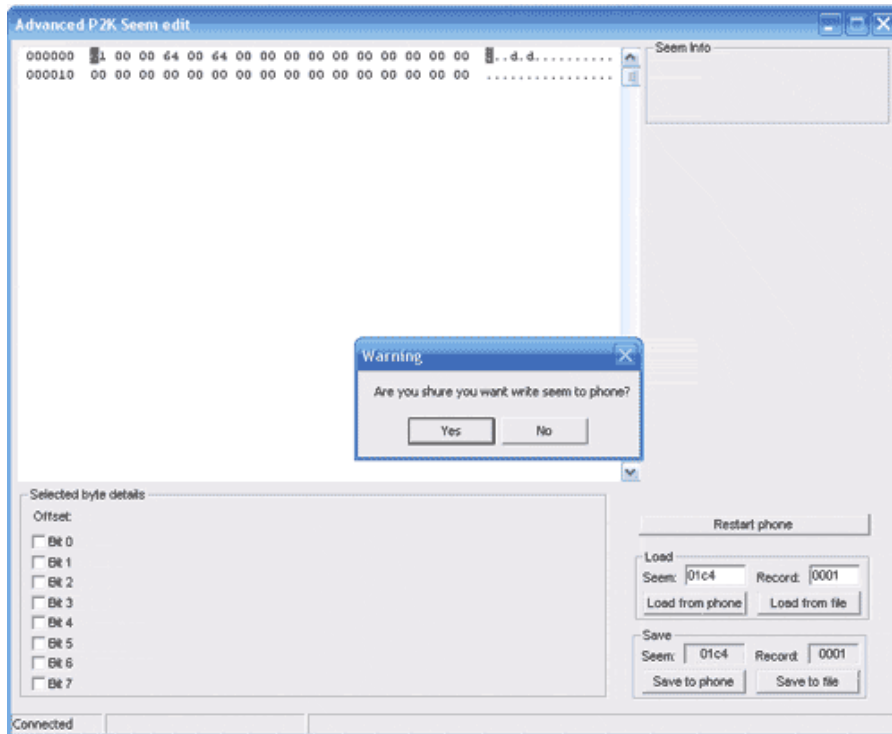
3. SIM Card PIN code, this is exclusively a protection for the SIM card so that if the user loses his SIM card, another person will not be able to access the SIM card without the proper PIN. This is only activated when the SIM is removed and placed into another phone or in some phones, when the phone is powered off and on again. (Applicable to GSM and iDEN handsets)
4. Service Provider Restriction: The artificial restriction in firmware software placed by the carrier to restrict the phone to one particular network. (A.k.a. Network Restriction). This is activated when a SIM or network programming information from another network is used in the phone.

The proposed exemption applies to the fourth item, Service Provider Restriction. However, in the end, the access control is very similar to the first three items, which all are accessible by the correct input of a sequence of digits. An example of unlock code for a handset is: 38123134.

For GSM (such as those from AT&T and T-Mobile) and iDEN (Nextel) handsets, all it is needed to permanently free the handset from the service provider (network) restriction is such “unlock code”. After inputting it, the user can use any SIM from any compatible network to enable new service.

CDMA handsets are more complicated to activate on a new network. However, it still requires removing the service provider restriction by entering the correct “unlock code” or reset it to zeros. After which, the right parameters such as the Preferred Roaming List (PRL) and NAM need to be programmed into the handset and the handset is ready for activation with the new network.

In many cases, to obtain such “unlock code”, one simply needs to call the original network which the phone was restricted. For example, nowadays T-Mobile will give unlock code to customers who have been in good standing for ninety days. This has been the case even before the first exemption on “mobile phone unlocking” was issued by your office. In other cases, special software or equipment can be used to read or reset the “unlock code” such as this one which allows the user to read or modify certain memory locations of some Motorola handsets.



I propose that the Copyright Office issues a ruling to clarify if such type of handset restriction is even copyrighted. It should not be. If it is not, then there is no need to exempt it from the DMCA. However, if it is determined that such system of restriction is to protect copyrighted work, and that DMCA does apply to circumvention of such restriction, it is necessary to continue the exemption.

### Concrete Examples

As the founder and former general manager of UnlockCellphone.com web site, I had helped thousands of customers to unlock their mobile phones. Starting with my own phone that I purchased used and I found out it was restricted to Cingular. At the time, Cingular refused to provide the unlock code to me and I had to use it on a trip abroad. At the time, I already had a foreign SIM card which I used every time on my trip and it saved me hundreds of dollars each time. Eventually I found a way to “unlock” the phone and was able to use it with my SIM card. It motivated me to educate and help the consumers like me to free their handset and help them to save money.

Over the last few years, my service has helped many people and organizations to benefit from the removal of this restriction. Some of the past customers include US consulates and embassy

offices, military members who have saved from buying another handset and expensive international roaming.

One Fortune 500 company used my service and unlocked many of its employees' cell phones. Those employees travel often abroad and needed to save money. By getting their handsets unlocked, they were able to buy a local SIM card abroad and save over \$400 each trip compared to paying the home carrier expensive roaming. How much can one save? Using local SIM card, incoming calls in most European countries are free and outgoing calls within the country cost anywhere from \$0.01 cent to \$0.30 a minute, whereas the roaming cost of the same call will cost around \$1 to \$2 a minute.

Most other customers just wanted to keep a phone they are already familiar and use it with a different network. Many were upset that the carrier restricted the handset and denied their unlocking request, which ironically, means this restriction also harms the carrier as well because they have dissatisfied customers.

By allowing people to remove the network restriction, they are able to save money, and reduce waste and pollution to the environment. It also helps the carriers to gain new customers who bring their own handsets and obtain higher customer satisfaction.

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