Let Reverse-Engineering Go Forward

The U.S. Copyright Office's ruling in the Lexmark case makes it much harder for manufacturers to claim protection under the DMCA

The U.S. Copyright Office says competing component makers can mimic designs if they have easy, legal access to rivals' parts. Score one for aftermarket components makers -- and possibly for consumers. The U.S. Copyright Office ruled on Oct. 27 that Static Control Components, a small, private maker of printer parts in Sanford, N.C., was within its rights to break down the chip technology on toner cartridges made by competitor Lexmark (LXK) and reengineer the process to its own specifications.

Lexmark is suing Static Control in federal court in Lexington, Ky., where Lexmark is based, to try to stop it from making a competing aftermarket ink cartridge, and the litigation is still pending. But the Copyright Office ruling has quelled widespread concerns about the 1998 Digital Millennium Copyright Act (DMCA). A particularly controversial section of the law made it a crime to circumvent technology used to protect copyrighted material, be it music disks or computer chips.

The provision has been derided by computer programmers, academics, civil libertarians -- and many manufacturers -- for giving too much protection to copyright holders at the expense of innovation and lower prices. This latest ruling from Washington opens the door to some forms of permissible reverse-engineering under DMCA.

In order to fend off competitors of replacement toner cartridges for its printers, Lexmark employed a novel tack: It copyrighted a short string of computer code that enabled its printer engines to "talk" to a chip in Lexmark toner cartridges. Without this chip, replacement cartridges wouldn't work in Lexmark printers.

When Static Control mimicked the chip to make its cartridges compatible with Lexmark printers, Lexmark cried foul and sued under the DMCA. Static Control countered by asking the Copyright Office for permission under the DMCA to reverse-engineer the computer chips in Lexmark printers.

In a surprise ruling, Copyright Registrar Marybeth Peters found that Static Control didn't need the copyright office's permission because reverse-engineering a product for the purposes of making another product work with it -- the concept of interoperability -- already is protected under the DMCA. "Interoperability necessarily includes...concerns for functionality and use, and not only of individual use, but for enabling competitive choices in the marketplace," Peters wrote.

While the ruling shocked many in the copyright field, Peters premised her ruling on the fact that Static Control had easy and legal access to Lexmark's chip -- thanks to having bought a Lexmark printer. Under the DMCA, such access is a necessary requirement of legal reverse-engineering for interoperability purposes. And "since Lexmark's programs were available in the regular toner cartridge, these programs were claimed to be 'readily available' to Static Control," Peters wrote.

That interpretation still leaves key issues to be litigated in the courtroom. Among them: Did Static Control illegally obtain Lexmark's technology, as Lexmark charges. "It's not a ringing victory," says Robert L. Ellis, an intellectual-property attorney and chairman of the Ohio State Bar Assn.'s Digital Technology Law Committee. "What happens if the software is not readily available?"

Critics still fear that companies will use the DMCA to seek a tight grip on their markets. But for now they have something to cheer about.