

Proposal for 9th Annual IP Scholars Conference

Pioneering Peer-to-Peer and Other Disruptive Dual-Use Technologies **Michael A. Carrier, Rutgers University School of Law-Camden**

Innovation is crucial to us. Innovation is crucial to the U.S. economy. Innovation, however, has been threatened in recent years. Part of the blame lies with the copyright laws.

The laws of secondary liability, in particular, have stifled innovation. Dual-use technologies can be utilized (1) to create revolutionary new forms of interaction and entertainment or (2) to facilitate widespread copyright infringement. When confronted with the infringement unleashed by dual-use technologies such as peer-to-peer (P2P) file-sharing software, courts have crafted tests to distinguish between a technology's lawful and unlawful uses. These tests, however, have failed to sufficiently appreciate innovation. In this paper, I address these issues.

After providing an overview of P2P technology and the *Sony*, *Napster*, *Aimster*, and *Grokster* cases, I examine the creativity-innovation tradeoff. The tension arises since copyright infringement could harm creativity while attempts to punish intermediaries could stifle innovation. I address this tradeoff in the setting of P2P and CD sales, concluding that innovation is far more directly affected by the test selected than creativity. This conclusion is supported by the findings that (1) there are numerous reasons why CD sales have declined in recent years, (2) copyright holders have many potential remedies other than targeting P2P networks, (3) individual artists play a crucial role in creativity, and (4) innovation can create new markets and models for copyrighted works.

I then develop three types of asymmetries that threaten innovation. First, an *innovation asymmetry* downplays new technologies' future benefits and overemphasizes copyright owners' present losses. I contend that the costs of infringing uses can be quantified and are accentuated by the abundant evidence: because infringement has already occurred, plaintiffs need not speculate about future potential infringement. Surveys of downloaded works present tangible evidence of (often massive) copyright infringement to the court on a silver platter. Moreover, the costs are vivid in threatening the copyright industries' business models. Finally, all of the tasks needed to demonstrate harms from copyright infringement can easily be undertaken by the recording and motion picture industries.

In contrast, noninfringing uses are less tangible. It is difficult to put a dollar figure on the benefits of enhanced communication and interaction. The uses also are more fully developed over time. When a new technology is introduced, no one, including the inventor, knows all of the beneficial uses to which it will eventually be put. I offer numerous examples of inventions for which nobody foresaw the eventual popular and revolutionary use (including, just to pick two, the telephone, which Alexander Graham Bell thought would be used primarily to broadcast the daily news, and the phonograph, which Thomas Edison thought would be used "to record the wishes of old men on their death beds"). Finally, I contend that the disappearance of noninfringing uses (along with the new technology) will not be lamented, as it would be less likely to disrupt settled expectations.

Second, an *error-costs asymmetry* reveals that a technology's abandonment has a far more drastic effect than its wrongful continuation. Antitrust's error-costs analysis minimizes the "false positive" costs that arise when courts erroneously punish lawful activity. I import this concept into copyright. Courts' mistaken approval of technologies allowing copyright infringement may harm existing business models but often will not affect creativity. Erroneous condemnation, in contrast, directly harms innovation by permanently stifling technologies.

Third, a *litigation asymmetry* ensnares small technology makers in a web of complex tests and unaffordable lawsuits. I contend that protracted litigation is expensive and favors those with deep pockets. In contrast, upstart dual-use manufacturers often lack the financial resources to wage lengthy legal battles. Given that some of the most revolutionary innovation comes from small inventors, such consequences are severe. A legal standard that does not resolve the issue of secondary liability at an early stage of the proceedings will lead to debilitating uncertainty and exert a chilling effect on innovation. I recount several cases in which technology companies were forced into bankruptcy as a result of litigation.

Because of these asymmetries, I call for a return to the most deferential test, articulated by the Supreme Court in *Sony*, which protects technologies "capable of substantial non-infringing uses." I show that such a rule is far more likely to promote innovation than any other analysis. In particular, it is likely to promote radical and disruptive innovation offered by technologies such as the VCR, TiVo, YouTube, and P2P software. I conclude by showing how P2P offers an antidote to present and future issues, including centralized cloud computing and Google's search engine predominance.