

Intellectual Property & Technology Law Journal

formerly *Journal of Proprietary Rights*

Edited by the Technology and Proprietary Rights Group of Weil, Gotshal & Manges LLP

VOLUME 17 • NUMBER 4 • APRIL 2005

Patenting Cloning and Stem Cell Technology: 1 Controversy and Comparison in the United States and Europe

The ethical, moral, and patenting issues surrounding both stem cell technology and cloning are not likely to be resolved soon or to the complete satisfaction of everyone affected by such technology, whether they be patients searching of a cure, inventors seeking to protect their ideas, or companies looking to profit from these technologies.

Monique A. Morneault, Gregory G. Schlenz, and Amy M. Crout Ziegler, attorneys with the law firm of Wallenstein Wagner & Rockey, Ltd. in Chicago, explore a variety of potential compromises that might address the parties' concerns, while still rewarding inventors for their developments through patent protection.

Copyright Registration and Damages for 7 Infringement of Photographs

When advertisers, advertising agencies, and publishers receive claims of infringement from photographers and other artists, both sides of the dispute need to understand the ground rules for negotiating a reasonable settlement that will allow them to avoid the costs and risks of litigation. Additionally, artists in particular need to understand the copyright registration process and its benefits if they hope to settle such disputes for a reasonable amount after paying legal fees. In this article, **Mary M. Luria and Ashima A. Dayal**, partners at Davis & Gilbert LLP, consider recent cases addressing the scope of damages that may be available to plaintiffs in infringement litigation and recommend to both potential plaintiffs and defendants how best to protect themselves when creating and using creative works and how to resolve any ensuing claims short of litigation.

Obvious Inventions and the Nature 10 of the Problem Being Solved

Technological innovation occurs when the solution to a previously existing technical problem is discovered. The solution enables a process or apparatus to be more efficient, powerful, or otherwise improved in some manner. The patent system should and therefore does consider these solutions patentable.

In this article, **Thomas C. Chuang** reviews the development in patent law, from cases recognizing that identifying the source of a problem should constitute a patentable invention in the context of an obviousness analysis to those that moved the analysis away from the narrow focus of whether the inventor identified the source of a problem, requiring only that the problem addressed by the invention be any different problem than that disclosed in the prior art references, to the current cases that examine whether the invention addressed the same problem as the prior art references.

One Bundle, Many Antitrust Laws: 14 The Dilemma for Digital Products

A longstanding question in the software debate is whether operating systems and components such as browsers and media players are really separate products bundled as one or simply an integrated product with multiple functions. The debate often plays out in the classic game of supply and demand. Consumers often prefer a bundled product that provides more value for the money. In response, the technology sector offers one package of combined services or a suite of software. The costs of offering a product that packages several items together are relatively low and results in a win-win situation when price savings and low costs are passed to consumers.

Braden Cox, Technology Counsel at the Competitive Enterprise Institute, a public policy organization based in Washington, DC, believes that product bundling in digital technologies only will increase. Although he acknowledges that it is easy to think of bundling as anticompetitive tying, he believes that economic justifications show that this concern is overblown. Indeed, he argues, the widespread use of tying, even by dominant players in this industry, indicates that this is typically a beneficial practice. Mr. Cox concludes that antitrust regulators should not assume that tying is *per se* illegal but should recognize that a rule of reason approach is more appropriate, given that bundled software often delivers significant consumer benefits.

One Bundle, Many Antitrust Laws: The Dilemma for Digital Products

By Braden Cox

A longstanding question in the software debate is whether operating systems and components such as browsers and media players are really separate products bundled as one or simply an integrated product with multiple functions. The debate often plays out in the classic game of supply and demand. Consumers often prefer a bundled product that provides more value for the money. In response, the technology sector offers one package of combined services or a suite of software. The costs of offering a product that packages several items together are relatively low and results in a win-win situation when price savings and low costs are passed to consumers.

Enter antitrust legal concepts to force separation of products in a manner that is often at odds with the singular progression of a market. This view is based on the theory that bundling products to a particular operating system or encryption technology can predatorily squeeze out competitors that offer only single products.

Reconciling the difference between desirable and illegal bundling behavior is extremely difficult, perhaps more difficult viewed against the backdrop of the global regulatory scale. Antitrust law is assuming increasingly global proportions, subjecting US firms to multiple and conflicting rules on competitive behavior. The US Department of Justice (DOJ) antitrust case against Microsoft spawned similar ongoing cases in the European Union, Japan, and Korea. Ironically, antitrust law and intellectual property—two of America's greatest exports—are now conflicting on a global scene.

Why Bundle? The Economics of Digital Technology

The digital technology industry, including DVD movies, music files, software programs, etc., is characterized by economists as a “declining cost industry,” in which average production costs decrease with each new unit produced. Other declining cost industries include airlines, entertainment, pharmaceuticals, and telecommunications. In all of these industries, the challenge is similar: The amount that one must charge to pay for overhead is small compared to the amount that one

must charge to remain viable.

New technology products often require significant upfront investment with high research and development costs. Despite high initial costs, once software or other digital products have been developed, the cost of reproducing that product, the “marginal cost,” is miniscule. Incorporating large upfront costs into a product's price is a challenge because determining how much to charge over marginal cost is extremely difficult in practice.

Nobel Laureate Ronald Coase of the University of Chicago long ago noted that a declining cost industry must find some way to finance itself. In his 1946 article, “The Marginal Cost Controversy,” he explains that there are two main ways to achieve the necessary level of revenue, via creative multipart pricing or through some form of government subsidy. The government subsidy approach inevitably entails government regulatory and/or price controls, as there are no “free” subsidies. The market approach works by price differentiation and product bundling.

The traditional explanation for bundling is that companies use it to discreetly implement an otherwise unprofitable price discrimination scheme that would anger consumers. Charging a flat price to all customers is often impractical, which is why software companies license their software with tiered pricing arrangements by number of users, size of the organization, and whether the firm is for-profit, nonprofit, or a government. A firm charging different customers diverse prices for a nearly identical product or service is referred to as price “discrimination” or “differentiation.”

Price differentiation is one way to recover declining average costs. Microsoft plans to launch low-cost versions of its Windows software in developing countries. The software contains some limitations. It allows users to open only three applications onscreen at a time, restricts the number of tasks people can perform and hinders activities such as instant-messaging. The software also offers very limited word-processing capability, no out-of-the-box Internet access and a screen resolution that does not support many newer computer games.

Another cost recovery mechanism is to tie two items together. Apple's iPod music player and iTunes music download service is an example of tying software to hardware. The iPod plays only songs downloaded from

Braden Cox serves as Technology Counsel at the Competitive Enterprise Institute, a public policy organization based in Washington, DC. He may be reached at bcox@cei.org.

iTunes. Apple's digital rights management (DRM) technology limits the use of music files to the QuickTime media player installed on the user's computer, iTunes, and the iPod and also limits the number of times a particular play list can be burned onto a CD. Apple purchases music from record labels similar to the way that grocery stores must first acquire food before selling it to consumers.

The economic case for this sort of tying is that the limitation of songs to the hardware device helps keep Apple's music downloading costs low to make money on iPod sales. The licensing costs from the record labels allow for only minimal profit from the sales of songs themselves. Without the combined business model, Apple would not be able to offer an as extensive, well-organized music library that is generally regarded as the best among the music download Web sites. Sony has a similar product offering with its hardware Walkman player and online music store called Connect. Music files downloaded from Connect play only on Sony's proprietary music player.

Consumer and Regulatory Misunderstandings

In February 2005, a French consumer association, UFC-Que Choisir, sued both Apple and Sony, alleging that both companies' music services were anti-competitive. Earlier this year, a California plaintiff filed a lawsuit against Apple, alleging that making iTunes music available only to iPod users was a violation of antitrust law.

Many consumers and regulators incorrectly equate a firm's ability to price discriminate or bundle with its having monopoly or undue market power. Most economists argue that a perfectly competitive market pushes price toward marginal cost, and it is only an occasional aberration that requires some allowance for up front capital costs. This mantra often finds its way into regulatory policy, especially antitrust law. Antitrust regulators view with suspicion what they consider undue deviations from marginal cost pricing.

Internet commerce provides a perfect case study for how bundling different goods together offers benefits to consumers. As an example, package deals from travel agents and online travel sites often provide consumers great savings. Hotel rooms and airline seats adhere to declining cost economics: The fixed cost of the building and airplane are large, but the cost of cleaning one extra room or flying one extra passenger is negligible. Product bundling allows hotels and airlines to fill excess inventory at a price that won't compete with its regular fares but will still allow it to make a profit.

However, many people believe that consumers

should be able to see the price of each component of their purchased item.¹ This form of business transparency actually hurts consumers because business would stop offering lower prices if it would undercut sales at its regular prices. In addition, consumers also seem to invoke a fair use argument when they maintain that digital products should be transferable to any software or hardware platform. Limiting interoperability through DRM is one way of bundling products that enables price differentiation (and limits piracy).

A diverse global market requires diversity in pricing and bundling of digital products. The legal risk is that government regulators or the public at large will misconstrue the cost recovery strategies employed by declining costs industries as harmful to businesses and, ultimately, consumers.

Tying: Legally Speaking

Under antitrust law, tying is a *de facto* or *de jure* requirement that the customer must purchase a certain package of goods together. Tying is said to hurt competitors and innovation because it puts those companies that only offer one or more components of the package for sale individually as their primary product at a disadvantage. It is also implied that the company that does the tying has a significantly large market share so that it would hurt the other companies who sell only single components.

US Antitrust Law

Antitrust cases involving § 1 of the Sherman Act are analyzed according to a *per se* inquiry or a rule of reason. A *per se* violation means that certain kinds of restraints always violate § 1. Merely by showing that the restraint came into existence, the plaintiff proves its case under § 1 and defendants are not allowed to defend by saying that the restraint did not hinder competition.

The DC Circuit opinion in the Microsoft case discusses at-length technology tying.² Tying cases pose the difficult threshold question as to whether there are one or more products. This initial inquiry is made even more difficult when the product consists of software that *appears* as one tangible thing.

There are four elements to a *per se* tying violation:

1. The tying and tied goods are two separate products;
2. The defendant has market power in the tying product market;
3. The defendant affords consumers no choice but to purchase the tied product from it; and

4. The tying arrangement forecloses a substantial volume of commerce.

Other alleged tie-ins are judged under the rule of reason. The rule of reason analysis consists of three components:

1. The persons or entities to the agreement intend to harm or restrain competition;
2. An actual injury to competition occurs; and
3. The restraint is unreasonable as determined by balancing the restraint against any pro-competitive or pro-efficiency effects of the restraint.

The circuit court in *Microsoft* refused to apply the *per se* test and vacated and remanded the issue to the district court. The court explained that it classifies certain business relationships as *per se* violations only after considerable experience with them. The sort of tying arrangement that involves the integration of additional software functionality into a computer operating system is unlike any the court had considered before. The tying issue was never resolved in court because Microsoft and the US government settled before the remand could be considered by the district court.

Antitrust as a Global Concern

Recent European and Asian enforcement activity underscores the fact that, as business becomes global, so does antitrust. Indeed, the trend is for greater antitrust involvement in the technology sector, both in the United States and internationally. As a result, international antitrust threatens to become an increased barrier to trade.

Europe's attitude toward antitrust law, competition, and innovation has repercussions that go beyond the software industry. Indeed, there remains a great gulf between US and EU views on the nature of competition and unilateral behavior. This tension relates, in part, to the differences in each jurisdiction's antitrust law and philosophy.

There have always been differences on antitrust law. US law identifies competition and consumer benefit as the priorities when dealing with anti-competitive behavior. Europe, by contrast, has focused on competitor welfare rather than the welfare of consumers.

European companies with a dominant position in the market have a legal duty to not eliminate competition, while in the United States only monopoly power imparts this duty. US culture, reflected (partially) in antitrust law, holds that the competitive process of driving other companies out of business makes an economy efficient and innovative.

As the world's largest software company, it is not surprising that Microsoft is at the center of much international antitrust enforcement. In March 2004, the EC announced its ruling against Microsoft. It imposed a record \$665 million fine, mandated the licensing of certain software source code for server applications, and ordered the company to sell a version of Windows in Europe with Windows Media Player software code stripped out.

The primary focus of the EC ruling was on the impact of the company's products and market position on competitors such as Sun Microsystems and Real Networks. Microsoft was accused of anti-competitive behavior because it tied its Media Player into Windows. The EC considered the tying to be a *per se* violation, contrary to the DC Circuit Court's determination that the tying of one product to another does not inherently harm competition.

Current International Antitrust Developments

A December 2004 ruling by European Court of First Instance Judge Bo Vesterdorf rejected Microsoft's appeal to suspend the EC's sanctions during its appeals process. Microsoft has begun offering a reduced media version of its Windows operating system product.

The South Korean Fair Trade Commission (KFTC) is currently investigating allegations of unfair competitive practices against Microsoft. It is considering whether Microsoft violated South Korean law by integrating instant messaging and media playing capabilities into Windows.

In July 2004, trade officials in Japan alleged that Microsoft's contracts with computer manufacturers included unfair and restrictive conditions. Prior to the Japanese Fair Trade Commission's (JFTC) action, Microsoft voluntarily made changes to its licenses that are responsive to the concerns raised by the JFTC. Japanese authorities, however, are seeking retroactive changes to past licenses as well.

As the above antitrust activity indicates, there is a growing need for international coordination. More than 80 jurisdictions around the world now have laws regulating competition, increasing the possibility that global companies will come afoul of antitrust law somewhere. Recognizing the need for certainty, the United States and European Union have taken baby steps to avoid disparate outcomes. Cooperation agreements established in 1991 and 1998 allow governments to request that other nations enforce antitrust laws in specific situations. On a global scale, the International Competition Network (ICN) was created in 2001 by 14 countries, including the United States, European

Union, Japan, and Korea, to address convergence issues and to concentrate on targeted problems, such as merger review.

Future Impact on Technology Bundling

A dramatic reduction in the international impact of antitrust requires that governments rethink its own antitrust laws. As the world increases its antitrust visibility, the United States is rethinking its views on competition law. President Bush's bipartisan Antitrust Modernization Commission held its first meeting in July to scrutinize the Sherman Act in light of the dynamics of a technologically advanced society. Neelie Kroes, as new EU competition chief replacing Mario Monti, and other regulators across the world must similarly examine the real expectations and limitations of antitrust regulation and view competition globally.

Product bundling in digital technologies will only increase. Indeed, in February 2005, Google launched a new version of its toolbar that employs a new feature called Autolink that turns non-linked content on Web sites into hotlinks back to Google properties and other sites. When browsing a Web page with numerous addresses on it, for example, AutoLink will turn each of those addresses into direct links to the Google Maps database. In addition to addresses, it will also add links for book ISBNs, package tracking numbers, and vehicle identification numbers. Some people will likely argue that Google is to the Web as Microsoft is to PCs and that this steering arrangement is a vertical restraint of trade.

In addition, Microsoft is now offering antivirus and spyware removal tools as a free download. Microsoft even goes so far as to classify its malicious software removal tool as a critical update, along with updates for operating system and internet explorer security fixes. Competing antivirus and spyware firms may view this

offering as an illegal tie-in similar to the browser and media player arguments made in past antitrust actions against Microsoft.

It is easy to think of bundling as anticompetitive tying, but economic justifications show this concern is overblown.³ The widespread use of tying, even by dominant players in this industry, indicates that this is typically a beneficial practice. Antitrust regulators should not assume that tying is per se illegal. Rather, they should embrace the arguments made by the DC Circuit Court of Appeals recognizing that a rule of reason approach is more appropriate given that bundled software often delivers significant consumer benefits. Even Lawrence Lessig, a known critic of Microsoft, argued in *Wired* magazine "if every Microsoft innovation launches an antitrust investigation then innovation will move to companies that don't pay such a high price."⁴

Notes

1. Internet travel sites are cheating cities on taxes by pocketing the difference between the hotel room tax that they pay and the amount collected from consumers, the City of Los Angeles said in a lawsuit filed in Los Angeles Superior Court in December 2004. The suit alleges that companies including Priceline.com Inc., InterActiveCorp's Expedia Inc., Cendant Corp.'s Orbitz Inc., and Sabre Holdings Corp.'s Travelocity.com LP have underpaid transient occupancy taxes.
2. *United States v. Microsoft*, 253 F.3d 34, 84-97 (D.C. Cir.), *cert denied*, 534 U.S. 952 (2001).
3. Ahlborn, C., D. Evans and J. Padilla (2003), "The Antitrust Economics of Bundling: A Farewell to *Per Se* Illegality," *AEI-Brookings Joint Center for Regulatory Studies*, Related Publication 03-3 (February).
4. Lessig, Lawrence, "Antitrust Smackdown," *Wired*, June 2004, Issue 12.06.