

## Featured News

### Title: Patent Licensing In The Cloud: Antitrust Risks

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### Article:

Law360, New York (October 03, 2012, 2:26 PM ET) -- It is well established in the United States that a patent holder generally has broad discretion to determine how it uses or licenses its patents. The [U.S. Supreme Court](#)'s bottom-line principle expressed in *Trinko* — that companies are free to refuse to deal with anyone — applies to intellectual property as it does to other property rights.[1] As the [U.S. Department of Justice](#) and [Federal Trade Commission](#) have expressed, “the unilateral right to refuse to grant a patent license is a core part of the patent grant.”[2] And as patent holders generally are free to refuse to license their patents, they also generally are free to impose any restrictions they wish on licenses that they do grant.[3]

This general rule holds as well in the rapidly growing and changing cloud computing industry. Nevertheless, the antitrust laws do impose some limits on a patent holder's rights, and as a result patent licensing and litigation have become significant competitive issues in the technology industry in recent years. Companies licensing patents in the cloud should be aware that certain licensing practices in the cloud might have anti-competitive effects that could trigger antitrust concerns. This article reviews, at a high level, whether the nature of cloud computing raises special antitrust risks, and if so, when a company should consider further review of its licensing practices.

### An Overview of Cloud Computing

Cloud computing is the provision of data or applications on demand, over the Web, to remote users. The cloud can best be viewed as a “stack” consisting of five layers — hardware, virtualization, infrastructure as a service (“IaaS”), platform as a service (“PaaS”), and software as a service (“SaaS”) (see diagram [here](#)).

Each layer depends on interface and protocol interoperability to those above and below it for the cloud to work properly. For example, when a user opens a photograph in her [Facebook](#) account on her smartphone, she is using a SaaS application (the Facebook app) to retrieve data (the digital photograph file) stored in remote hardware (the Facebook servers) that are collectively managed by virtualization software and an operating system. If the remote hardware fails, then neither the SaaS application nor the data can be retrieved, and the user experience collapses.

Within each broad layer is an abundance of potential product and technology markets that are similarly codependent: servers and mainframes with connected storage devices and networking gear; server, mainframe, and cloud operating systems; video compression and streaming software; search engines; webmail; online advertising; and others. Surrounding these is an overlapping series of products (and potential markets) such as smartphones, tablet computers, PCs, set-top boxes, and game consoles. Many, and likely most, of the underlying technologies in these markets are subject to intellectual property protections.

To recoup investments and obtain cost predictability, players at all levels in the cloud rely on patent licensing, frequently in the form of cross-licenses and portfolio licenses that provide a form of “patent peace” to the parties. The licensing practices are particularly important to the heavyweight patent holders that compete across multiple markets in the cloud. One player that competes in several cloud-related markets, [IBM Corp.](#), perennially has been one of the top two patent holders in the world. [Apple Inc.](#),

Microsoft Corp., Amazon.com Inc., Hewlett Packard Co., and Oracle/Sun also possess significant patent portfolios and compete with one another within the cloud industry. And recently, Google Inc. appears to be scrambling to catch up.

## **Antitrust Risks in the Cloud**

Cloud computing represents a disruptive “paradigm shift” potentially comparable to the emergence of the Internet and the personal computer. As such, the cloud presents opportunities for companies to leverage rapid technology change to challenge previously dominant competitors in once-unassailable markets.

And like the Internet and the PC before it, the cloud promises tremendous potential efficiency and innovation benefits for consumers and the economy. This virtually guarantees that competition authorities around the world will closely watch cloud-related markets for potential antitrust violations. For patent licensors, some of the most important antitrust risks include: (1) market power and tipping points; (2) tying and package licenses; and (3) standards setting and patent pools.

### ***1) Market Power and Tipping Points***

As described above, the cloud consists of multiple intersecting and overlapping markets. As a result, cloud computing may present scenarios where a company that has market power in one cloud market can use that market power to foreclose competition in adjacent markets. This is especially the case because of the need for interoperability between technologies in the cloud. A company that holds patents covering protocols and other links between a monopoly product and products in another market can expect greater scrutiny of its licensing practices. This is especially the case in jurisdictions, such as the European Union, where monopoly leveraging is a more viable claim than in the United States).

Like other technology industries, the cloud also presents risks of tipping points, where one company’s product becomes an accepted standard. This potential for market tipping can be exacerbated by the presence of network effects or high barriers to entry, just as in more mature technology markets. Providers that operate across multiple cloud markets — and especially providers that are dominant in one or more markets — therefore should carefully review licensing practices to avoid being accused of leveraging market power in one area of the cloud into another area of the cloud.[4]

### ***2) Tying and Package Licenses***

Another, related risk arising from the multiple layers of cloud markets is that of anti-competitive tying or bundling. Generally, a distinction exists between patent-to-product tying and patent-to-patent tying. In patent-to-product tying, the patent owner “uses the market power conferred by the patent to compel customers to purchase a product in a separate market that the customer might otherwise purchase from a competitor.” U.S. Philips Corp. v. Int’l Trade Comm’n, 424 F.3d 1179, 1189-90 (Fed. Cir. 2005).

Courts have found such licenses to constitute antitrust violations or patent misuse, and companies should be wary of any such conditions in patent licenses. See, e.g., United States v. U.S. Gypsum Co., 333 U.S. 364, 400 (1948); Int’l Salt v. United States, 332 U.S. 392, 395 (1947); Virginia Panel Corp. v. MAC Panel Co., 133 F.3d 860, 868-69 (Fed. Cir. 1997).

By contrast, in most cases, companies may offer a license to a portfolio (or package) of patents without undue concern about potential antitrust risk. See Philips, 424 F.3d at 1190-91. However, package licenses can raise antitrust issues if a company that owns rights to essential patents forces licensees take a license to nonessential patents, and that coercion forecloses competition from commercially viable alternative technology. Id. at 1194. Therefore, patent holders who offer package licenses including both essential and non-essential patents should carefully review portfolio licenses, bundles, and package licenses to ensure that they do not present such risks.

### 3) Standards Setting and Patent Pools

As with other technology industries, the need for interoperability in the cloud means that companies often must conform to industry standards to be serious providers of products or services providers. Where this is the case, special issues may arise. Most standards-setting organizations require participants whose patents read on an adopted industry standard to promise to license their patents on terms that are “reasonable and nondiscriminatory” (“RAND”).

Any such promise places an immediate limitation on what is otherwise freedom to license on terms the patentee desires. Antitrust risks, as well as other contractual or tort law risks, may flow from undertaking a RAND obligation if those obligations are not fulfilled.[5] In addition, similar issues may arise in the context of patent pools, where bundles of patents from different patent owners are collected in one pool for licensing subject to the kinds of commitments the DOJ has required in approving patent pools.[6]

In sum, companies can expect that the licensing practices that are increasingly commonplace in cloud computing, as elsewhere, likely are pro-competitive and in line with well-settled legal principles. However, the importance of the cloud and its nature mean that antitrust authorities will closely watch any licensing conduct in the cloud. In addition, any licensing that implicates more than one potential product market — especially where a patent owner has a monopoly in one market — could prompt greater scrutiny. In such cases, patent owners in the cloud should carefully review licensing strategies for potential antitrust risks.

--By Richard Rinkema and David Smutny, [Orrick Herrington & Sutcliffe LLP](#)

*Richard Rinkema is a senior associate and David Smutny is a partner in Orrick's Washington, D.C., office.*

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[1] See *Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407 (2004) (“[A]s a general matter, the Sherman Act ‘does not restrict the long recognized right of [a] trader or manufacturer engaged in an entirely private business, freely to exercise his own independent discretion as to parties with whom he will deal.’”) (citing *United States v. Colgate & Co.*, 250 U.S. 300, 307 (1919)).

[2] U.S. DEP’T OF JUSTICE AND FED. TRADE COMM’N, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION (2007) (“JOINT ANTITRUST/IP GUIDELINES”), at 6.

[3] See *General Talking Pictures Corp. v. Western Electric Co.*, 305 U.S. 124, 127 (1938) (“The practice of granting licenses for restricted use is an old one. So far as it appears, its legality has never been questioned.”); *Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700, 706 (Fed. Cir. 1992) (“Restrictions on use are judged in terms of their relation to the patentee’s right to exclude from all of part of the patent grant.”).

[4] Because companies in the cloud frequently acquire businesses in adjacent markets or decide later to enter previously uncontested adjacent markets, an “Aspen Skiing” scenario may arise in this context. For example, a company that licenses software to hardware providers, and then enters the hardware business itself, should be wary of changes to existing licensing practices that could be viewed as anti-competitive attempts to foreclose hardware competition. See JOINT ANTITRUST/IP GUIDELINES at 28 (liability could attach “when a patent owner refuses to continue to license under circumstances paralleling those in Aspen”); *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985).

[5] See, e.g., *Broadcom Corp. v. Qualcomm Inc.*, 501 F. 3d 297 (3d Cir. 2007).

[6] See, e.g., JOINT ANTITRUST/IP GUIDELINES at 65-85; Letter from Thomas Barnett to William Dolan and Geoffrey Oliver, Oct. 21, 2008 (RFID patent pool), available at <http://www.justice.gov/atr/public/busreview/238429.htm>.