DEPARTMENT OF JUSTICE

Promoting Innovation through Competition

Rachel Brandenburger
Special Advisor, International
Antitrust Division
U.S. Department of Justice

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Good morning. Thank you so much for inviting me to participate in this most interesting discussion about promoting innovation through intellectual property and competition law and policy at the Second BRICS International Competition Conference. It is a privilege to participate in this conference.

China has a long history of innovation and technological inventions. Paper, as we know it, was invented in China in 105 C.E. by Ts'ai Lun. Recipes for gunpowder were recorded in 1044, during the Song Dynasty. Decimal mathematics (including the calculation of pi), the invention of porcelain and silk, and the making of noodles, all originated in China.

Let's now fast forward to today, and let's try to imagine how different our daily lives would be without technological change. Who even knew a few years ago what a smart phone or tablet was? Let alone how widely available they would become. Indeed, our vocabulary expands as we embrace these new technologies. We exchange recommendations for new "apps" with abandon; there are apps for reading books and newspapers, finding recipes, transcribing dictation, locating restaurants, taking walking tours, identifying flora, and very many others as well.

Each of us has a vital interest in creating an environment in which inventions are, and continue to be, made and where innovation, which includes the process of commercializing inventions, can thrive. Given the role of technological innovations in today's economy, it is vital to recognize the importance of fostering an overall business climate that encourages innovation.

Innovation drives human progress and economic growth. Indeed, modern economics teaches us that technological change is the primary driver of economic growth. The U.S. Department of Commerce reported in 2010 that technological innovation is linked to three-quarters of the United States' growth rate since the end of World War II.[1] As the Report states, examples of innovations that contribute to growth "are so numerous and diverse as to be beyond cataloguing."[2]

Innovation-based growth produces high-paying jobs: average compensation per employee in innovation-intensive sectors in the U.S. increased 50% between 1990 and 2000 – nearly 2 ½ times the national average.[3] Conversely, impediments to innovation can be very costly to society; the Department of Commerce Report I just mentioned explains the current large backlog in the processing of patent applications in the United States could ultimately cost the U.S. economy billions of dollars annually in "forgone innovation."[4] The Report also states that delay and uncertainty in the patent system, as well as poor quality patents "make private investments in innovation less likely and undermine the potential for economic growth and job creation."[5]

Innovation drives economic growth because it promotes consumer welfare and economic efficiency through technological change. How does this economic growth occur? Innovation can lower costs by creating more efficient methods of production and distribution to markets. Innovation can also lead to the introduction of new or improved

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[1] Arti Rai, *et al.*, Patent Reform: Unleashing Innovation, Promoting Economic Growth & Producing High-Paying Jobs, U. S. Dep't of Commerce (Apr. 13, 2010) at 2 (citing research that 2.5 of the 3.4% average U.S. growth rate since World War II came from factors "intimately linked to innovation" – capital investment and increased efficiency), a*vailable at:* http://www.commerce.gov/sites/default/documents/migrated/Patent_Reform-paper.pdf.
[2] *Id*. at 2.
[3] *Ibid*.
[4] *Ibid*.
[5] *Id.* at 4.

products that catch the attention of consumers, and increase consumer choice. Innovation can also lead to the development of new technologies that leap over existing technologies and facilitate the entry of new competitors aiming to replace today's leading firms. In recorded music, for example, we have moved from storing recorded sound on the phonographic cylinder, to the gramophone disc, to the long-playing vinyl record, to the compact cassette, to the compact disc, to the MP3 player, and now, to the cloud.

As former U.S. Assistant Attorney General for Antitrust Christine Varney put it last year, "[i]nvention and innovation are critical in promoting economic growth, creating jobs, and maintaining our competitiveness in the global economy."[6] She further explained that: "[p]rogress in technology and production processes drives prices down and quality up, while expanding the range of consumer choices…. [I]nnovation is an essential element not only of economic growth, but of human progress as well. We thus have a vital interest in seeing it flourish."[7]

Today, it is widely recognized that the successful promotion of innovation requires both competitive markets and the protection of intellectual property rights because each drives innovation in complementary ways, creating the right incentives for innovative activity to take place. If firms are shielded from open competition, they will not have the incentives to invest in the research and development that breeds successful innovation.

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[6] Christine A. Varney, Assistant Attorney General for Antitrust, *Promoting Innovation Through Patent and Antitrust Law and Policy*, Remarks as Prepared for the Joint Workshop of the U.S. Patent and Trademark Office, the Federal Trade Commission, and the Department of Justice on the Intersection of Patent Policy and Competition Policy: Implications for Promoting Innovation (May, 26, 2011), *available at*: http://www.justice.gov/atr/public/speeches/260101.htm.

[7] *Ibid.*

Intellectual property laws create incentives to innovate by establishing cognizable property rights in new products and processes. Intellectual property rights permit owners to exclude others from using these rights for a limited period of time, creating incentives for inventors (or those who commercialize inventions) to profit by conducting research, developing or improving products, and getting those products to the marketplace. In addition, in exchange for the limited period of exclusion, the invention must be disclosed to the public, thus allowing others to build on the shoulders of the inventors that precede them.

Competition between companies is a key driver of innovation and technological change. Competition pushes companies to innovate in order to profit from their innovations by being the first to develop and bring a new product to market or by increasing market share. The drive, for example, to build ever more powerful microprocessor chips to satisfy the needs of sophisticated consumers comes from producers constantly looking over their shoulders at their nearest competitors to see whose chip will be available first.

Competition laws play an important role in the innovation process by protecting the innovation incentives created by market competition. U.S. competition (or in our parlance, antitrust) laws foster and preserve a competitive marketplace by preventing anticompetitive conduct that impedes the competitive process, hinders innovation incentives, and harms consumers. As the DOJ-FTC joint report on Antitrust Enforcement and Intellectual Property Rights says, "Antitrust laws, in turn, ensure that new proprietary

technologies, products, and services are bought, sold, traded, and licensed in a competitive environment."[8]

It is relevant to today's discussion to note that when enforcing our competition laws, we seek to discourage anticompetitive activities that will harm innovation. We fully consider the procompetitive benefits of activities involving the exercise or protection of intellectual property rights, and challenge only those whose anticompetitive effects outweigh their pro-competitive efficiencies.

By way of illustration, I would like to explain how the competition agencies in the United States address innovation concerns when analyzing mergers – an enforcement area where innovation issues are likely to arise – and then briefly outline the tools we use to determine when the anti-competitive use of an intellectual property right may violate U.S. antitrust laws.

Analyzing Innovation Issues in Mergers

In the United States, the competitive effects of mergers and acquisitions are principally analyzed under Section 7 of the Clayton Act.[9] Under Section 7, the U.S. Department of Justice and the Federal Trade Commission (the U.S. Antitrust Agencies) assess what will likely happen if a merger is allowed to proceed as compared to what will likely happen if the merger does not take place. This process is inherently predictive, and certainty about the competitive effects of a transaction is seldom possible. We do not apply one single methodology when analyzing the competitive effects of mergers.

[8] Antitrust Enforcement and Intellectual Property Rights: Promoting Innovation and Competition, Issued by the U.S. Department of Justice and the Federal Trade Commission, April 2007, Introduction at 1, *available at*: http://www.justice.gov/atr/public/hearings/ip/222655.htm.
[9] 15 U.S.C. § 18.

Rather, we use a variety of analytical tools, which we tailor to the specific facts of each individual case.

As I am sure you know, the U.S. Antitrust Agencies jointly issued an updated version of the Horizontal Merger Guidelines in August 2010,[10] after an extensive consultation process both in the United States and internationally. Indeed, in today's globalized world, it would have been unthinkable for us to have undertaken such an exercise without seeking the input of our competition agency counterparts, the business community, consumers, academics, and legal advisors from outside, as well as inside, the United States.

The revised Horizontal Merger Guidelines are primarily an exercise in transparency – matching the guidance to our actual practice as it has evolved during the 19 years since the last extensive revision of the Guidelines in 1992. Section 1 of the revised Guidelines states that harmful effects can result from a merger if it enhances market power by encouraging one or more firms "to raise price, reduce output, **diminish innovation**, or otherwise harm customers as a result of diminished competitive constraints or incentives."[11]

We look at both the short-term and long-term effects of mergers on competition. When evaluating the likely short-term effects of a merger on competition, the U.S. Antitrust Agencies ask whether new products from one merging firm would capture substantial revenues from the other merging firm. When evaluating the likely long-term effects of a merger on competition, the Agencies explore the effects of the merger on the future research and development efforts of the merging parties.

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[10] U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines (2010), *available at:* http://www.justice.gov/atr/public/guidelines/hmg-2010.pdf.

[11] *Id.* at 2.

Of course, a firm's incentive and ability to innovate depend on many market factors, including:

- the type of invention – is it a *new product* or a *new process* for making an old product?
- the type of innovation – is it an *incremental improvement* on an old product or process or does it *leap over* existing technologies and create an *entirely new one*?
- other factors such as:
    - the extent of competition in the market
    - barriers to entry
    - barriers to research and development
    - the dynamics of research and development, and
    - the existence of intellectual property rights and agreements to license such rights.

Let me turn next to a recent merger case in order to provide an overview of how the U.S. competition agencies have put the 2010 Horizontal Merger Guidelines into practice.

In January of this year, the Department of Justice (the Antitrust Division) filed a lawsuit concerning the proposed acquisition of the National Broadcasting Company (which operates the popular NBC television network in the U.S.) by Comcast, the largest cable company in the U.S..[12] The Department's lawsuit alleged that the transaction, as originally proposed, would have enabled Comcast to limit competition from its traditional

[12] Press Release, *Justice Department Allows Comcast-NBCU Joint Venture to Proceed with Conditions*, U.S. Department of Justice, January 19, 2011, available at: http://www.justice.gov/atr/public/press_releases/2011/266149.htm.

cable and satellite competitors. More specifically, the lawsuit alleged that Comcast's rivals need access to NBC programming to compete effectively against Comcast. Comcast would have less incentive to distribute NBC programming to Comcast's video distribution rivals than a stand-alone NBC, and those lowered incentives could have caused Comcast's rivals and their customers to face higher prices for NBC content. The lawsuit also alleged that the market would experience lower levels of investment, less experimentation with new models of delivering content, and less diversity in the types and range of product offerings.

What is relevant to today's discussion is that the Antitrust Division alleged that the transaction would enable Comcast to thwart competition from emerging online video distributors - OVDs - that are nascent competitors with the potential to transform, perhaps fundamentally, content distribution in the future. Thus, there would be harm to innovation in this emerging activity.

The settlement agreed between the Department and the merging parties and approved by the district court approved earlier this month, [13] allowed the transaction to proceed, conditioned on the parties' agreement to certain requirements. The settlement preserves new content distribution models that offer more products and greater innovation, as well as the potential to provide consumers access to their favorite programming on a variety of devices in a wide selection of packages. Under the

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[13] *See* Memorandum and Order, United States v. Comcast Corp., Civil Case No. 11-106 (D.D.C. Sept. 1, 2011), available at: http://www.justice.gov/atr/cases/comcast.html.

settlement, Comcast must make available to online video distributors the same package of broadcast and cable channels that it sells to traditional video programming distributors. In addition, the merged entity must offer online video distributors broadcast, cable, and film content that is similar to, or better than, the content the OVD receive from any of NBC's programming peers, including the ABC, CBS, and Fox networks. In this way, the Department is seeking to maintain and foster innovation.

Analyzing the Competitive Effects Regarding the Use of Intellectual Property Rights

The Antitrust Division is also concerned about innovation when we evaluate the competitive effects of specific intellectual property licensing practices in some of our civil investigations under the Sherman Act. As you know, Section 1 of the Sherman Act prohibits unreasonable agreements that harm competition. Section 2 of the Sherman Act primarily prohibits actions by a single firm that exclude competition in order to create or enhance a monopoly.[14] We apply the same antitrust analysis to IP-related activities as we do to other activities, taking into account the special features of intellectual property, such as the ease with which it can be used without authorization from the owner.

We recognize that there are substantial pro-competitive benefits that arise from technology licensing because such licensing permits a licensor and licensee(s) to combine complementary factors of production, such as the technology, manufacturing facilities, workers, and distribution networks.[15] As a result of licensing, technologies may be disseminated, new products may be introduced, production costs may be lowered,

[14] 15 U.S.C. §§ 1, 2.
[15] Antitrust Guidelines for the Licensing of Intellectual Property, Issued by the U.S. Department of Justice and the Federal Trade Commission, April 6, 1995, § 2.0 c (hereinafter "Antitrust-IP Guidelines") ("[T]he Agencies recognize that intellectual property licensing allows forms to combine complementary factors of production and is generally precompetitive.") *available at*: http://www.justice.gov/atr/public/guidelines/0558.htm.

incentives to invest in R&D may be created, and the parties may avoid infringement litigation. We analyze most IP licensing restraints on a case-by-case basis under the rule of reason, and we only challenge IP licenses if the anti-competitive effects outweigh the pro-competitive efficiencies.

The U.S. Antitrust Agencies also recognize – and importantly, our Supreme Court recognizes – that intellectual property rights do not necessarily create market power.[16] There may well be other products or technologies that may be close enough substitutes for consumers to prevent the assertion of market power by the intellectual property owner.

Also, the existence of market power does not mean that competition has been harmed. It is merely the first step in our effects-based analysis. We analyze the anti-competitive effects as well as the justifications (or pro-competitive benefits) of the licensing restraint in the relevant markets and balance them. In so doing, we ask whether the companies involved would have been actual (or are likely potential) competitors if the licensing restraint were not present. If the answer is no, it is unlikely that the agreement will harm competition.

We investigate whether a license restriction between competitors has harmed competition by, for example, facilitating coordination among competitors to increase price or reduce output, or limiting other firms from entering the market with a competing technology, or reducing incentives to innovate in the future. If we determine there is

[16] Antitrust-IP Guidelines § 2.2 ("The Agencies will not presume that a patent, copyright, or trade secret necessarily confers market power upon its owner."); *See Ill. Tool Works Inc. v. Indep. Ink, Inc.*, 126 S. Ct. 1281, 1284 (2006) ("[T]he mere fact that a tying product is patented does not support [a market power] presumption.").

harm to competition, we seek remedies that will eliminate the harm and restore competition.

We have had intellectual property laws in the United States since 1790, and antitrust laws since the passage of the Sherman Act in 1890. We have a long history of integrating these two bodies of law, a process that continues to this day. When evaluating a specific IP licensing restraint, we look to see whether our courts or the U.S. Antitrust Agencies have addressed the same or similar issues in prior cases. The U.S. Antitrust Agencies also take guidance from policy documents such as the 1995 DOJ-FTC Antitrust-IP Guidelines[17] and the 2007 joint DOJ-FTC report on Antitrust Enforcement and Intellectual Property Rights.[18] Like our recently revised Merger Guidelines, these documents were issued to promote transparency in our decision-making process.

Conclusion

The Antitrust Division's core mission is to protect competition and the competitive process – so that consumers benefit from lower prices and improved products and services, and greater choice. A competitive environment pushes companies to innovate or risk being relegated to the sidelines by the next generation of products or services. Intellectual property complements competition law by creating exclusive rights, facilitating commercialization, and encouraging public disclosure of new inventions.

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[17] The Antitrust-IP Guidelines state that the U.S. "intellectual property laws and the antitrust laws share the common purpose of promoting innovation and enhancing consumer welfare. The intellectual property laws provide incentives for innovation and its dissemination and commercialization by establishing enforceable property rights for the creators of new and useful products, more efficient processes, and original works of expression . . .The antitrust laws promote innovation and consumer welfare by prohibiting certain actions that may harm competition with respect to either existing or new ways of serving consumers." Antitrust-IP Guidelines § 1.

[18] *See* footnote 8, *supra*.

Innovation is promoted through the combination of respect for intellectual property rights and the preservation of competitive markets.

In sum, the Antitrust Division seeks to identify, challenge, and remedy anti-competitive business conduct that harms technological change and innovation. In that way, we help to ensure that human progress and economic growth are fostered through technological change and innovation.

Thank you very much.