

**PEER-TO-PEER COMPUTING:
ANTITRUST QUESTIONS FOR A FLEDGLING TECHNOLOGY**

By Charles T. C. Compton and Scott A. Sher*

Industry giants like Intel are touting peer-to-peer (“P2P”) computing as the third generation of the Internet—following world-wide access (the advent of web protocols to allow connectivity) and Mosaic (the World Wide Web to allow interface).¹ Experts proclaim that P2P computing will usher in a new era of networked computing, allowing vast numbers of both business and individual users to communicate directly with each other without the need of a central server.² Industry leaders such as Intel, IBM, and Hewlett-Packard, as well as many of the smaller companies founded to design and develop P2P networks and protocols, have recently come together to form the Peer-to-Peer Working Group (the “Working Group”).³ The Working Group has been convened to develop a P2P community, create and promote P2P specifications that will ensure interoperability, support the development and proliferation of a “ubiquitous platform infrastructure,” and “evangelize” (*i.e.*, market) P2P computing as “the next computing revolution.”⁴

The Working Group—and those eventually implementing P2P technology—will face a panoply of intriguing antitrust issues. First, many companies linked in P2P networks will have the opportunity to obtain detailed “real-time” and highly sensitive information from competitors. Competitive information about customers, suppliers, prices, cost, and inventory may be far more extensive and sensitive than in typical business-to-business (“B2B”) computing environments, where central servers can act as “gatekeepers” for sensitive data.

Directly obtaining such information from competitors, with obvious opportunities for collusion, may well draw attention from government agencies and interested private parties.⁵

Second, P2P collaborators—specifically the members of the Working Group—must be cognizant of the antitrust risks that arise when significant industry players join forces to create standards for an emerging and potentially watershed technology. This paper looks at the emerging P2P technologies, the potential efficiencies that such technologies bring to the business world, and the antitrust risks raised by P2P—with special focus on the current effort to create standards for this new and potentially profound networking paradigm.

I.

THE PROMISE OF PEER-TO-PEER NETWORKS

P2P networking involves the direct exchange of data and computing resources between computers. The *Webopedia* defines peer-to-peer architecture as “[a] type of network in which each workstation has equivalent capabilities and responsibilities. This differs from client/server architectures, in which some computers are dedicated to serving the others.”⁶ Generally, P2P networks allow: (1) user interfaces to load outside of a Web browser; (2) user computers to act as both clients and servers; and (3) use of a system to connect multiple users.⁷

A. File Sharing.

The central, defining characteristic of any P2P network is the ability of each user to obtain information from every other user on the network instead of from a central server. In other words, “the collective contents of the network are at the command of each connected machine.”⁸

One of the earliest and most familiar examples of P2P networking is “instant messaging,” the most popular of which are the AOL Instant Messenger and Yahoo! Pager.⁹ Napster (like other sharing programs such as Gnutella) represents the next level of complexity in P2P networks: programs that allow individual user computers to connect with each other and share information (*e.g.*, MP3 music files) without going through a central server.¹⁰

P2P networks, however, offer much more potential to the business community. P2P will allow connected businesses to share the full range of corporate information directly with others connected to the network.¹¹ In the traditional search engine context, users must access a central index of content that oftentimes is days or months old. P2P networking, needing no servers, allows search engines to operate more efficiently on a real-time basis. For example, the startup company InfraSearch has created a platform that allows for P2P networked users to access the very latest content from other connected computers.¹² InfraSearch’s business plan envisions that the company’s search engine will be used in the B2B context.¹³ At present, B2B exchanges create searchable product catalogs by collecting data from suppliers and compiling that information in a central database; that central database then sorts and presents the information on the exchange. By the time the information is compiled and edited, it is oftentimes outdated. P2P search engines like InfraSearch conceivably will allow real-time access to the same information, without relying on a central storage unit, thereby giving the networked companies more recent and useful information. The B2B exchange will, to that extent, function much more efficiently, thereby attracting more participants and further enhancing the value of the network.¹⁴

B. Sharing Computing Resources.

In its more advanced conceptions, P2P networking will enable “grid computing” and “distributed computing,”¹⁵ theoretically allowing participants to access underutilized computer storage and power from other networked computers—for example, to perform supercomputer tasks.¹⁶ Potentially, grid and distributed computing will allow for all networked, unused computer capacity and storage to be put to use.

Entropy, one of the founding members of the Working Group, is developing technology that allows networked PCs to use idle computing power from other PCs. Entropy’s Web page reports that it has linked computers for many projects to date, involving environmental, economics, scientific and mathematical research, entertainment, and product design. Entropy envisions that its technology will allow nonprofit research organizations to use untapped computing resources from member PCs to perform functions generally relegated to high-cost supercomputers.¹⁷

C. The P2P Working Group.

The Working Group met for the first time last fall in an attempt to “synchronize” industry efforts to develop P2P technology and to “work[] together to identify and deploy industry specifications.”¹⁸ The Working Group also proposed the basic elements for successful development of a P2P infrastructure. The Group stressed that a single P2P model was essential to permit the development of rapid and reliable networks that allow for inter-component communication. Any P2P system, according to the Working Group, should be: (1) able to manage complexity; (2) autonomous; (3) secure; (4) accountable; (5) multi-lingual; (6) scalable; and (7) able to support a transparent user interface.¹⁹ While just beginning its

labors, the Working Group envisions developing detailed technical standards with common protocols in the not-so-distant future.

The P2P industry is in its infancy and potential antitrust concerns only loom in the background. No one player has, or threatens, market power. An established company has not developed a product that currently is operating in such a manner as to raise true information-sharing concerns. However, the time is not far off when real and substantial antitrust issues may arise. Other technology sea changes instruct us that—particularly in the Internet world—major competition issues may quickly arise which, if not anticipated, can wreak havoc and delay the intended benefits. Microsoft’s Windows, Intel’s graphics chip sets and HDTV are but a few examples. It is not premature, therefore, to consider the antitrust risks facing the implementation of P2P technology—especially if it explodes upon the scene with the growth and power predicted by the pundits.

II.

THE INFORMATION SHARING COLLUSION RISK

P2P computing promises to allow business competitors in various industries to come together into one network, with the capability of sharing real-time information. The benefits are apparent: For instance, in the B2B context,²⁰ the ability to obtain real-time price quotes from suppliers, rather than having to rely on information that is oftentimes hours, days or even weeks old, will make it far easier for companies to gauge and minimize the cost of supplies. With this benefit, however, comes a unique and expansive opportunity for collusion; imagine the potential price fixing mischief that could attend a P2P network consisting of Motorola, Nokia, and Ericsson if each had direct, immediate and unfettered access to their respective suppliers’ quotes or channel pricing.²¹

In the Federal Trade Commission's ("FTC") recently issued staff report concerning B2B marketplaces, "Entering the 21st Century: Competition Policy in the World of B2B Electronic Marketplaces," the agency discussed the potential concerns associated with information sharing in the new economy.²² The report makes clear that "in new markets, like those based in technology, . . . fundamental principles of antitrust and consumer protection still apply."²³ To that end, the FTC will examine B2B ventures using the rule of reason analysis, relying on the April 2000 *Antitrust Guidelines for Collaboration Among Competitors*²⁴ to analyze such ventures.²⁵

The basic antitrust guidelines for information sharing—whether among the P2P Working Group members or e-commerce ventures utilizing P2P technology—are neither new nor mysterious, and will not be labored here. Their application is highly fact-specific. Generally, protections must be put in place to lessen the P2P network's potential to facilitate collusion. These may include governance structures, software firewalls or filters and monitoring programs or devices to deal with changing operational realities.²⁶ Absent intentional collusion, the pro-competitive benefits of the collaboration will then be balanced against the remaining risks, in a standard rule of reason analysis.²⁷

The Working Group apparently recognizes the potential for collusive behavior in P2P-based networks. As a condition of membership to the Working Group, each prospective member must sign a "PtPWG Antitrust Guidelines" form.²⁸ These guidelines provide generally that "[t]he activities of the PtPWG are not intended to restrain competition or to harm consumers. The purpose of the PtPWG is to promote competition and the benefit consumers."²⁹ To that end, the guidelines propose that where actual competitors are involved in developing a computing system, such system shall not allow members to share "prices, discounts or terms or

conditions of sale . . . pricing methods, profits, profit margins or cost data, production plans, market shares. . . .”³⁰

The Working Group’s initial guidelines, though cosmetically helpful, are very general. As P2P networks are implemented, the true test will be structural safeguards and application of the antitrust guidelines “mete to the circumstances.”

Some companies have recognized the need for such structural protections against collusion. NextPage, Inc., a P2P company targeted to develop P2P infrastructure for companies with a large quantity of distributed content, has developed the NXT 3 e-Content Platform (“NXT 3”). NXT 3 presents a useful example of what P2P-based businesses can do to prevent potential competitors from having inappropriate access to competitively sensitive information, or misusing the confidential information necessarily available to them in achieving the P2P’s rewards. NXT 3’s Security protocols recognize that “[i]nformation, often dynamic in nature, is being shared with customers, suppliers, partners, and geographically distributed offices. Where access to business-critical information was once regulated by physical barriers and human control, information is now easily accessible by anyone from anywhere. The immediate problem becomes accurately controlling who has access to what. . . .”³¹ To that end, the NXT 3 platform provides that each user must provide authorization before entering the system. Each authorization code allows for different levels of access. A buyer of component widgets would therefore not have access to a seller’s future pricing information, even if the two were connected to the same P2P network.³² NXT 3 is concerned, of course, with protecting proprietary information for business purposes; but those concerns coincide with the antitrust concerns of controlling the flow of competitively sensitive information between collaborators.

III.

ANTITRUST STRUCTURE AND PROCESS RISKS IN STANDARD-SETTING

The key to a successful P2P technology, according to the Working Group, is interoperability.³³ All P2P infrastructures must have common protocols and standards to ensure that members can interface with each other—as the Working Group explains it, there must be an order to the “Babel.”³⁴ The Working Group’s central goal is to develop a universal P2P standard.³⁵

But for all the agreed procompetitive effects in setting standards to facilitate a fledgling technology such as P2P, there certainly are antitrust concerns. Robert B. Murdoch, in a recent article, concisely listed several:

Standard setting also has its downside and can result in anticompetitive effects. For example, where a small group of major industry participants get together to establish a standard from which the rest are excluded, the possibility for anticompetitive effects increases. Such denial of access to the standard could amount to a group boycott. The very nature of standard setting, which involves a certain degree of cooperation among competitors, reduces the amount of competition between those competitors. Innovation may be harmed once companies have agreed on the technology or standard to use; that is, companies may have a reduced incentive to work on developing a better, more effective standard. Companies may exceed the permissible scope of standard setting and try to achieve other, anticompetitive goals. Finally, through abuse of the standard-setting process, such as failing to disclose an important intellectual property right when required to do so, companies may adversely affect competition in the relevant market.³⁶

The Working Group recognized that its attempt to standardize the P2P computing infrastructure would carry some such antitrust risk. In the Working Group’s antitrust guidelines, each member was required to agree to the following:

To the extent that the PtPWG develops, promulgates, approves, or adopts proposed standards or specifications, adherence to such proposed standards or specifications shall be voluntary on the part of its members, and shall in no way be compelled or coerced by the PtPWG or any committee or member thereof, it

being solely a voluntary and unilateral decision on the part of the particular member or members as to whether to adhere to or comply with any such proposed standard or specification.³⁷

Further recognizing the potential for antitrust scrutiny, the Working Group has thus far opened its membership to all. To become a member, one must only submit an application with the required membership fee.³⁸

At this point, the Working Group's criteria for interoperable P2P systems are broad goals, which should generate little controversy or antitrust risk. In providing for open membership and voluntary standards, moreover, the Working Group has initially defused large portions of the antitrust risk. The devil, however, truly will be in the details as the technology matures and the Working Group starts formulating standards for interoperability, protocols and other technical specifications. Pressure may build to limit membership for efficiency's sake, or to mandate aspects of the standards to ensure their success. One of the larger participants could start attending more to its own competitive agenda for P2P. The Working Group and its members will then do well to heed the antitrust guidance found not just in case law, but also in agency guidelines and speeches, business review letters, recent enforcement activity and private litigation.

A. Open Versus Closed Standard Setting.

Associations trying to develop standards for new technologies are always faced with a difficult choice on whether to restrict membership to a subset of all of the industry participants (*i.e.*, formulate a "closed standard") or open the membership and standard setting process to all. There are certain benefits and detriments to both, from a legal and business perspective.³⁹

Of course, open standard setting associations (such as the P2P Working Group in its current form) raise fewer antitrust concerns. An open association will not be as susceptible to

charges of group boycott in violation of Section 1 of the Sherman Act.⁴⁰ However, open standard setting associations often become mired in process; consensus is difficult to achieve. This may result in less or slower innovation. The competing visions of many participants may even hobble the association's effort to reach agreed standards. Even slight delay can be crucial in high-technology markets. As Assistant Director of the Office of Policy and Evaluation for the FTC David Balto has pointed out, in such markets "standards set by consensus may be obsolete before they are implemented. . . . [and] overinclusive standard setting may deter the incentive to innovate."⁴¹ In addition, open standard setting associations are hardly impervious to antitrust scrutiny. For example, a private party (perhaps a user of technology that results from the collective work of the association) or the government may still have a claim that some or all of the members in the organization acted collusively to restrict output or to disadvantage competing technologies, in violation of Section 1 of the Sherman Act.

While the use of open standard setting procedures may impair efficiency, they remain less vulnerable to antitrust attack than associations that are closed.⁴² First, closed groups more easily enable an individual firm or group of members to use the standard to establish market or monopoly power; excluded participants may be muscled out of the market.⁴³ Second, closed standard setting associations may also be susceptible to charges of boycott. In *Northwest Wholesale Stationers v. Pacific Stationary & Printing Company*, the plaintiff brought suit against a wholesale purchasing cooperative that refused to admit it to the cooperative.⁴⁴ Applying the rule-of-reason test, the Court concluded that the arrangement was not illegal under Section 1 because the association did not have market power.⁴⁵ Nevertheless, it is clear that when a standard setting organization is closed, courts will pay special attention to market power and the potential for anticompetitive effects.⁴⁶ The standard-setting process also draws more scrutiny.

B. The Importance of Process.

In addition to looking at the pro and anticompetitive effects arising in standard setting organizations, courts also pay special concern to the role of process. Courts are concerned with how standards are chosen, whether members have real opportunity for input, and whether the standard is applied evenly to members and nonmembers alike.⁴⁷

In the seminal 1988 case of *Allied Tube & Conduit Co. v. Indian Head, Inc.*,⁴⁸ the Supreme Court was confronted with an association that published a voluntary code of standards for certain electrical equipment. The association decided not to accept plastic conduit—a cheaper and arguably better substitute for steel—as a potential industry standard. The maker of the plastic conduit challenged the association’s decision on antitrust grounds, claiming that participants that used and developed the steel conduit had employed unfair tactics to prevent the association from choosing plastic conduit as the standard—essentially stifling competition. The Supreme Court, in deciding whether such conduct was immune under the *Noerr-Pennington* doctrine, concluded that the association’s conduct was grossly inappropriate and could amount to an unlawful group boycott in violation of the Sherman Act.⁴⁹

Courts will pay special attention to ensure that the process of choosing a standard is fair. *Allied Tube*, noting that “private standard-setting associations have traditionally been objects of antitrust scrutiny,”⁵⁰ emphasized that where care is taken to implement “safeguards sufficient to prevent the standard-setting process from being biased by members with economic interests in restraining competition,” such standard-setting agreements should withstand antitrust scrutiny, unless the anticompetitive effects are particularly severe.⁵¹

As with information sharing, the Working Group antitrust guidelines recognize the antitrust significance of fair and consistent process. The operative language in the Group’s antitrust guidelines, however, is vague and rather gentle:

Any specifications which may be developed, promulgated, approved, or adopted by the PtPWG in order to effectuate its purposes shall be based upon relevant considerations, and shall not be based upon any effort, intention, or purpose to unreasonably reduce or eliminate competition in the sale, supply and furnishing of products and services.

By contrast, the HAVi group guideline on process is far more specific.⁵² The Working Group would do well to reinforce its commitment to process with more specific rules.

The Working Group must also be sensitive to placing any future restrictions on participants, or requiring exclusivity, as it starts proposing detailed interface standards. The Working Group includes members of substance and even power in their respective markets. Intel, IBM and no doubt others have been subjected to private and government claims of monopoly conduct at other times and places. These members have stakes in many different markets that likely will be affected by P2P technology. The individual members of the Working Group will also need to exercise caution as real standard setting begins, to not only ensure fair process in the choice of standards, but also to fairly apply, with consistent, established ground rules, any future restriction on use or requirements of exclusivity. To that end, restrictions and exclusivity should be neither broader nor longer-lived than necessary to accomplish the pro-competitive purpose: the prompt, widespread, and useful introduction of P2P technology.

C. Application of the Rule of Reason.

When deciding whether a restraint is reasonable under Section 1 of the Sherman Act, courts use one of three standards: (i) *per se* analysis, (ii) full rule of reason analysis, and (iii) an “abbreviated” or “Quick Look” rule of reason analysis.⁵³ *Per se* analysis is appropriate only where the restraint (*e.g.*, price-fixing, some tying arrangements and group boycotts) “ha[s] such predictable and pernicious anticompetitive effect, and such limited potential for procompetitive benefit. . . .”⁵⁴ Rule of reason analysis will apply where “the reasonableness of [the challenged

conduct] cannot be ascertained without a more thorough analysis of their beneficial and pernicious effects in the relevant” market.⁵⁵

Courts have been disinclined to condemn standard-setting activities, especially using the *per se* rule.⁵⁶ As the Supreme Court stated in *Federal Trade Commission v. Indiana Federation of Dentists*: “We have been slow to condemn rules adopted by professional associations as unreasonable *per se*, and, in general, to extend *per se* analysis to restraints imposed in the context of business relationships where the economic impact of certain practices is not immediately obvious.”⁵⁷ In *California Dental Association v. Federal Trade Commission*, the Supreme Court moved further away from *per se* or “Quick Look” labeling of conduct. The Court endorsed a more flexible approach that tailors the scope of market analysis to the circumstances presented in the case.⁵⁸ In practical effect, after *California Dental* the burden of proof shifts less slowly, and weighs less heavily, on the antitrust defendant—at least in novel or untested market settings.⁵⁹ After *California Dental*, the antitrust analysis of a standard-setting activity involving new technology should enjoy even more latitude under the rule of reason.

IV.

RECENT STANDARD SETTING DEVELOPMENTS

A. DVD Business Review Letters.⁶⁰

The Department of Justice has issued two significant business review letters in the last two years approving standard-setting patent pools for Digital Versatile Discs (“DVDs”).⁶¹ In these DVD business reviews, industry leaders (including Philips, Sony and Pioneer) asked the Department to approve patent pools designed to allow standards to be set for the production and configuration of DVDs and DVD player/recording equipment.⁶²

DVDs, which offer substantially more storage capacity than compact discs, operate in several different media, including audio and video. The companies that petitioned for approval had proposed standard specifications for DVDs and DVD players.⁶³ Under the proposed arrangement, one of the petitioning companies (Philips) would aggregate the patents and subsequently license them to companies seeking to develop DVDs and DVD players. In total, more than 200 “essential” patents were to be pooled—in essence, all those necessary to develop an industry standard. Philips was required to grant licenses to the technology on a nondiscriminatory basis to all interested third parties.

Under the proposed arrangement, the three petitioning collaborators remained free to license their technologies independently of the patent pool. In addition, of course, they retained generous royalty rights in the technology that they licensed. One of the conditions that each licensee agreed to in taking a license in the pooled patent technology was to grant back to the licensors and fellow licensees “on reasonable, nondiscriminatory conditions comparable to those set forth herein,” any patents that the licensee owned or controlled that were essential to the DVD technology as set forth in the standard-setting specifications—thereby ensuring that the pool maintained all essential technology to develop DVDs.⁶⁴

The Antitrust Division favorably reviewed the proposition, first noting that, in general, standard setting has both procompetitive benefits and anticompetitive effects: such arrangements “provide competitive benefits by integrating complementary technologies, reducing transaction costs, clearing blocking positions, and avoiding costly infringement litigation.”⁶⁵ At the same time, “patent pools can restrict competition, whether among intellectual property rights within the pool or downstream products incorporating the pooled patents or in innovation among parties to the pool.”⁶⁶ In approving this patent pool, the DOJ emphasized the significant procompetitive justifications of the proposed standard-setting

scheme and the narrowness of the patent pool. The agency noted that the scope of the license was limited only to essential patents as determined by a third party expert; the license would still allow companies to develop “nonessential” DVD technology.⁶⁷ The DOJ also considered the fact that the technology would be distributed on a nondiscriminatory basis, and finally, that the licensees and licensors would be free to license their technology outside of the scope of the patent pool.⁶⁸

B. In the Matter of Dell Computer Corporation.

In 1995, Dell Computer Corporation settled a Complaint brought by the FTC for interfering with an industry’s voluntary standard-setting process.⁶⁹ Dell was a member of the Video Electronics Standards Association (“VESA”), created to establish a design standard for faster graphics performance “bus” technology.⁷⁰ As a member of VESA, Dell certified that it did not know of preexisting technology that was infringed upon by the VESA proposed bus standards.⁷¹ Later, after the standards were set and after the technology was introduced, Dell threatened to assert previously undisclosed intellectual property rights against users of the VESA bus technology.⁷² The FTC brought suit, and as part of a consent decree, Dell agreed to drop all of its patent claims.⁷³

Expanding upon previous standard-setting cases, the FTC charged Dell with undermining the standard-setting process. The FTC noted: “Voluntary standard-setting in high tech industries results in greater compatibility among products, which in turn gives consumers a broader range of choices.”⁷⁴ At the same time, “[o]pen, industry-wide standards also benefit consumers because they can be used by everyone without cost.”⁷⁵ The FTC complained that Dell unreasonably restrained trade by first committing to, and then, attempting to block, the same standard. Such conduct, according to the FTC, ultimately hindered the development of

bus technology because companies feared that Dell would assert its patent rights against them if they used the VESA standard. Dell's conduct also raised the costs of doing business because companies had to spend valuable research and development money to try to develop another standard pending resolution of Dell's patent claims. Finally, the FTC claimed that Dell's attempt to block the standard had a potentially chilling effect on future industry standard-setting efforts.⁷⁶

The *Dell* consent decree has been criticized as too expansive. As Commissioner Azcuenaga noted in dissent, the FTC's complaint neither required proof that Dell intentionally withheld its patent in an attempt to mislead VESA, nor did it require a showing that Dell acquired or extended its market power.⁷⁷ The viability of the FTC's claims in *Dell* in the courts is uncertain. There is no doubt, however, that *Dell* is precedent for the FTC, and participants in standard-setting organizations must be wary of its reach and scope. Recent litigation filed against Rambus Inc. vividly illustrates the point: members of a standard-setting association that withhold relevant intellectual property, either intentionally or not, may later find their assertion of those IP rights challenged, if not barred.

C. The Rambus Litigation.

In August 2000, Hyundai Electronics Industries ("Hyundai") and Micron Technology, Inc. ("Micron") brought separate lawsuits against Rambus Inc. ("Rambus"), alleging that Rambus violated the antitrust laws by improperly manipulating the standard-setting process.⁷⁸ These suits were in response to litigation previously initiated by Rambus, alleging that Hyundai, Micron and several other companies infringed several of Rambus's patents relating to synchronous DRAM ("SDRAM") high-speed memory technology and the memory and logic chips implementing that technology.⁷⁹

Relying on the *Dell* complaint and consent decree, Hyundai and Micron alleged that Rambus violated the rules of the Joint Electronic Devices Engineering Council (“JEDEC”) Solid State Technology Association, the semiconductor engineering standardization body. In the early 1990s, JEDEC coordinated the development of technology standards for SDRAM, so that memory from different suppliers would be compatible with each other and with the modules and systems that use SDRAM. According to the complaints, Rambus, as a member of JEDEC, attended the meetings where the standards were set. However, “instead of participating in the JEDEC standard-setting process in good faith, Rambus subverted the process, using this collaboration with its competitors to secure market power” by failing to disclose to JEDEC the existence of patent rights and patent applications that would leave susceptible to claims of infringement, products that relied upon the JEDEC standards.⁸⁰ The complaint alleges that, after the standard was adopted, in violation of Sections 1 and 2 of the Sherman Act, Rambus brought infringement actions against companies such as Hyundai and Micron that had developed products following the JEDEC standards—a classic *Dell* claim.⁸¹

Rambus moved to dismiss Hyundai’s antitrust claims. The District Court dismissed the Section 1 claim for failure to allege a cognizable conspiracy between Rambus and other JEDEC members (who had no knowledge of Rambus’ alleged patent applications or plans).⁸² In contrast, Judge Ronald Whyte concluded that Hyundai’s Section 2 claim would survive, citing *Dell*:

The FTC’s finding in *Dell Computer Corp.*, 121 F.T.C. 616 (1996), that Dell’s participation in standard-setting unreasonably restrained trade where Dell intentionally failed to disclose its patent to the standards association, supports the court’s conclusion that a *defendant’s failure to disclose relevant patent rights to a standard-setting body and subsequent assertion of those rights against other members of the body may constitute an antitrust violation under Section 2 of the Sherman Act.*⁸³

In the parallel action filed by Micron in Delaware, the Court also denied Rambus' motion to dismiss Micron's monopolization claims—which were also based on a *Dell* theory.⁸⁴ These early decisions in the Rambus actions add weight to the FTC's position in *Dell* that manipulating the standard-setting process by withholding crucial patent information can give rise to antitrust liability.⁸⁵ Indeed, recent news reports indicate that the FTC has also opened an investigation of Rambus' actions.⁸⁶ Thus, members of standard-setting organizations like the P2P Working Group need to worry about disclosing relevant patent rights they might later assert—both because of potential FTC scrutiny, and possible private claims of Section 2 liability, with the specter of treble damages.⁸⁷

CONCLUSION

Competitor collaboration has become a hallmark of high technology industries. Indeed, words like “coopetition” have been coined to describe the joint activities compelled by rapid technological change, the importance of intellectual property and network effects, and other characteristics of technology markets. Hence, the recent federal guidelines on competitor collaboration and intellectual property licensing. Collaboration in a wide range of standard setting associations has been a particular feature of high technology markets. Standard setting has increasingly become a prerequisite of the successful development and rapid introduction of new products and technologies into the marketplace.

The importance of standard setting, and the procompetitive benefit of product interoperability in our networked age, are now well recognized in any assessment of antitrust liability. Enforcement agencies and courts have seen the importance of technology to our economy, and rule of reason analysis has increasingly been applied in “new economy”

industries. The antitrust environment is therefore favorable for standard setting organizations attempting to launch fledgling technologies like P2P networking.

The P2P Working Group, in its first months, seems to have been properly cognizant of the special antitrust vulnerabilities arising in any standard setting organization—especially one comprised of industry leaders. By providing for an open standard setting group, with voluntary adherence to standards and an expressed (if vague) commitment to process in the conduct of its activities, the Working Group has taken important first steps in shielding its decision-making process from antitrust scrutiny.

As the Working Group launches into the hard work of setting specific technical standards, however, the antitrust issues will become much more pressing and, perhaps, the open structure may need to close for many good reasons. Antitrust guidelines may need to be strengthened or added. Economic choices will be made that will invariably disadvantage some, possibly resulting in a substantial economic and competitive impact. Increasingly detailed information will be exchanged among Working Group companies that are fierce competitors in their “day jobs.”⁸⁸ The activities and decisions of the Working Group, moreover, will be highly visible to both private plaintiffs and the antitrust enforcement agencies. *Dell*, the Rambus litigation and even *Microsoft* all stand as beacons to the aggrieved private plaintiff.

It therefore will be imperative, if the Working Group is to fulfill the promise of P2P networking, that it remain diligent to the antitrust risks and sensitive to the evolving guidance offered by courts and agencies.

* Chris Compton is a partner and Scott Sher is an associate of Wilson Sonsini Goodrich & Rosati, P.C., Palo Alto, California.

¹ See Bob Knighten, Peer to Peer Computing (Presentation to Peer-to-Peer Working Group, October 12, 2000, San Jose), available at http://www.peer-to-peerwg.org/specs_docs/collateral/PtP_IDF_Rev1.11-web.pdf (slides 7-8). How big is P2P computing? According to Intel Capital, the investment arm of Intel, it has reviewed more than 80 P2P business plans to date. While the more well-known of these P2P companies include music content sites such as Napster, many more perform more practical operations. See Hassan Fattah, *Powering Prospects*, RED HERRING MAGAZINE, 186, 186 (Dec. 4, 2000), available at <http://www.redherring.com/mag/issue86/mag-powering-86.html>.

² See Justin Hibbard, *Can Peer-to-Peer Grow Up?*, RED HERRING MAGAZINE, 86, 90 (Dec. 4, 2000), available at <http://www.redherring.com/mag/issue86/mag-grow-86.html>.

³ See Press Release, Intel Forms Peer-To-Peer Working Group (Aug. 24, 2000), available at <http://www.intel.com/pressroom/archive/releases/cn082400.htm>. The meeting's attendees included representatives from high-technology leaders such as Intel, IBM and Hewlett-Packard, and emerging P2P companies including Freenet, Kalepa, Enfish Technology, and Entropia. See Members, <http://www.peer-to-peerwg.org/members/index.html>; see also *Peer-to-Peer Summit Attendees*, O'REILLY NETWORK, available at http://www.oreillynet.com/pub/a/linux/2000/09/22/p2p_attendees.html.

⁴ See Welcome First Meeting Peer-to-Peer Working Group (Presentation to Peer-to-Peer Working Group, October 12, 2000) ("*Welcome*"), available at <http://www.peer-to-peerwg.org/meetings/00-10-12/collateral/Welcome.pdf> (slide 5).

⁵ See generally Robert B. Bell and William F. Adkinson, Jr., *Overview: The B2B Explosion, Antitrust Issues Raised by B2B Exchanges*, 15 ANTITRUST ABA 1, 18 (Fall 2000); Gail F. Levine and Hilla Greene, *Antitrust Guideposts for B2B Electronic Marketplaces*, 15 ANTITRUST ABA 26, 26 (Fall 2000).

⁶ WEBOPEDIA, available at http://www.webopedia.internet.com/TERM/p/peer_to_peer_architecture.html. The Peer-to-Peer Working Group defines P2P computing as the "sharing of computing resources by direct exchange." See Peer-to-Peer Working Group, available at <http://www.peer-to-peerwg.org/index.html>.

⁷ See Bradley Mitchell, *What Is P2P, Really?*, COMPUTER NETWORKING (Sept. 30, 2000), available at <http://www.computernetworking.about.com/compute/computernetworking/library/weekly/99093000a.htm>.

⁸ See HIBBARD, *supra* note 2, at 86.

⁹ See Jason Zien, *Peer-to-Peer (P2P) Networks*, About.com (July 31, 2000), available at <http://internet.about.com/industry/internet/library/weekly/2000/99073100a.htm>.

¹⁰ See generally *A&M Records, Inc. v. Napster, Inc.*, No. 99-5183 MHP (N.D. Cal. 1999).

¹¹ See, e.g., *Napster—The Start of an Information Sharing Revolution?*, available at <http://www.create-it.com/etbStory.cfm?etb=2b>.

¹² See <http://www.gonesilent.com> (gonesilent.com is the working name for the company as it develops a business plan).

¹³ See HIBBARD, *supra* note 2, at 90.

¹⁴ See *id.* InfraSearch is not the only company trying to stake a claim in the P2P-B2B world. Pointera is another company that is developing its own search engine. See <http://www.pointera.com/company>. Pointera was founded in 1999, and boasts management from Microsoft, Nortel and Alantec, with advisors and backers from AOL, Amazon.com, Netscape, Microsoft, Cisco and Intel. See *id.*

¹⁵ See <http://www.entropia.com>.

¹⁶ See Ian Foster, The Grid Forum (Presentation to Peer-to-Peer Working Group, Oct. 12, 2000), available at http://www.peer-to-peerwg.org/members/collateral/The_Grid_Forum.pdf (slide 8). Several companies other than Entropia have developed useful, but still considered relatively primitive, grid computing functions, including SETI (“Search for Extra-Terrestrial Intelligence”), which allows members linked into the network to volunteer untapped computer resources to analyze data from telescopes that search for yet-undetected extra-terrestrial life outside of our solar system. See <http://setiathome.ssl.berkeley.edu/>.

¹⁷ See <http://www.entropia.com>.

¹⁸ See Ian Foster, The Grid Forum, slide 15, available at http://www.peer-to-peerwg.org/members/collateral/The_Grid_Forum.pdf.

¹⁹ See Bob Knighten, Peer to Peer Working Group Technical Committees, available at http://www.peer-to-peerwg.org/meetings/00-10-12/collateral/Technical_Committees.pdf (slide 6).

²⁰ B2Bs are those electronic marketplaces to facilitate B2B commerce. B2Bs allow businesses to “search, source, specify, negotiate/bid, order and receive goods and services that are needed in order to operate.” See FTC Staff Report, *Entering the 21st Century: Competition in the World of B2B Electronic Marketplaces: A Report by Federal Trade Commission Staff* (Oct. 26, 2000) (hereinafter *FTC B2B Report*), available at <http://www.ftc.gov/os/2000/10/index.htm#26>.

²¹ See generally BELL and ADKINSON, JR., *supra* note 5, at 18; LEVINE and GREENE, *supra* note 5, at 26; *Antitrust Guidelines for Collaborations Among Competitors* (hereinafter *Collaboration Guidelines*), § 3.31(b) (Report from the Federal Trade Commission and the United States Department of Justice, Apr. 2000), available at <http://www.ftc.gov/os/2000/04/ftcdojguidelines.pdf>.

²² See *FTC B2B Report*, *supra* note 20, Part 3, p. 1.

²³ See *id.* at Part 3, p. 2.

²⁴ See *Collaboration Guidelines*, *supra* note 21, § 3.31(b).

²⁵ See *FTC B2B Report*, *supra* note 20, at Part 3, p. 2-3.

²⁶ See Molly Boast and John Nannes, Remarks at the American Conference Institute, “Public Policy Intent on B2B Exchanges: The Regulators’ Perspective” (New York City, Dec. 12, 2000).

²⁷ See, e.g., *Collaboration Guidelines*, *supra* note 21, at § 2.2 (“Competitor collaborations also may facilitate explicit or tacit collusion through facilitating practices such as the exchange or disclosure of competitively sensitive information. . . .”). Under the *Collaboration Guidelines*, such risk must be weighed against the procompetitive justifications of collaboration. See, e.g., *id.* at § 2.1 (“[A] competitor collaboration may enable participants to offer goods or services that are cheaper, more valuable to consumers, or brought to market faster than would be possible absent the collaboration.”).

In fact, this is the same analysis that the agencies have employed in their analysis of joint ventures that pose the risk of improper information sharing. For example, in 1991, the Department gave a favorable review in one business review letter analyzing the “Affiliated Distributors” joint venture. Affiliated Distributors (“AD”), a proposed joint venture consisting of regional utility companies, allowed for joint bidding for utility contracts. The Department looked favorably upon the joint venture because the venture set up firewalls to prevent AD members

from learning the prices that other AD members were charging or intend to charge in a bid. AD members only had access to aggregate bidding practice (rather than segregated bidding information by bidder).

The Department of Justice noted:

By enabling AD members to compete for national accounts that they could not otherwise serve, the program could enhance competition. The arrangement appears to be structured in a way to minimize the possibility that the program could facilitate collusion among members. Negotiations will be conducted independently by AD, not by its members, and members will not learn of quotations submitted by other individual members.

Affiliated Distrib., 1992 WL 219059 (D.O.J., Feb. 8, 1991); *see also* Independent Drug Wholesalers Group, 1987 WL 124097 (D.O.J., May 21, 1987) (same); Consent Order, In the Matter of General Motors Corp., et al., 103 F.T.C. 374 (Apr. 11, 1984).

²⁸ *See* PtPWG Antitrust Guidelines R0.1, available at http://www.peer-to-peerwg.org/members/collateral/PtP_Antitrust_Guidelines.pdf.

²⁹ *Id.*

³⁰ The Working Group's antitrust guidelines also deal expressly with the obvious opportunity for collusive behavior among its members, as they collaborate and share information in standard setting. *See id.*

³¹ *See NXT 3 Security Services Whitepaper*, p. 1, available at www.wordstream.co.nz/Docs/NXT3/Security.htm (White Paper (pdf)); *see also* *NXT Security Services*, p. 1 (Dec. 28, 2000), available at <http://www.wordstream.co.nz/Docs/NXT3/SecurityTechBenefits.htm>.

³² *See id.* at p. 2; News Release, "Nz Release of NextPage NXT 3 Platform to Allow Secure, Peer-to-Peer Access and Exchange of Business-Critical Content Over the Web" (Oct. 10, 2000), available at http://www.lawsite.co.nz/news_nxt3.htm.

³³ *See Welcome*, available at <http://www.peer-to-peerwg.org/meetings/00-10-12/collateral/welcome.pdf> (slide 15).

³⁴ The reference is to the biblical tower where each worker spoke a different language, making effective communication to complete the tower impossible. *See* Bob Knighten, Peer-to-Peer Working Group Technical Committees, available at <http://www:peer-to-peerwg.org/meetings/00-10-12/collateral/Technical-Committees.pdf> (slide 7).

³⁵ The antitrust agencies have recognized the importance of interoperability and common protocols in high-technology industries:

In many high-tech industries, collaboration is necessary to share the risks of innovation and to combine technologies and products that may be complementary. As a pure technical matter, without agreement on technical interface standards, such networks cannot be formed.

David Balto, *Emerging Antitrust Issues in Electronic Commerce*, Speech before the Antitrust Institute (Nov. 12, 1999), available at <http://www.ftc.gov/speeches/other/ecommerce.htm>.

³⁶ Robert B. Murdoch, *Antitrust and e-Commerce*, THE ANTITRUST COUNSELOR, 2, 6 (Dec. 15, 2000).

³⁷ See PtPWG Antitrust Guidelines R0.1, available at http://www.peer-to-peerwg.org/members/collateral/PtP_Antitrust_Guidelines.pdf.

³⁸ See *Members*, available at <http://www.peer-to-peerwg.org/members/index.html>.

³⁹ For a comprehensive discussion of open versus closed standard setting see Michael J. Shallop, *The IPR Paradox: Leveraging Intellectual Property Rights to Encourage Interoperability in the Network Computing Age*, 28 AIPLA Q.J. 195, 220-221 (Summer 2000) (hereinafter *The IPR Paradox*); see also Carole E. Handler and Julian Brew, *The Application of Antitrust Rules to Standards in the Information Industries—Anomaly or Necessity*, 14 NO. 11 COMPUTER LAW. 1, 3-4 (Nov. 1997).

⁴⁰ See, e.g., *Northwest Wholesale Stationers v. Pacific Stationary & Printing Co.*, 472 U.S. 284 (1985); see also John D. Croll, Brian M. Martin, *The Role of Antitrust Enforcement in Standardization in High Technology Industries*, SC71 ALI-ABA 111, 114 (Mar. 1998).

⁴¹ David Balto, *Standard Setting in a Network Economy*, 617 PLI/PAT 297, 302 (Sept. 2000); see James J. Anton & Dennis A. Yao, *Standard-Setting Consortia, Antitrust, and High-Technology Industries*, 64 ANTITRUST L.J. 247, 258-59 (Fall 1995).

⁴² Michael Shallop provides a substantial list of standard-setting organizations in a recent article that provides excellent background into the development of such organizations and the intellectual property concerns associated with them. See *The IPR Paradox*, *supra* note 39, at 214-15. Among the examples Shallop points to are the American National Standards Institute (“ANSI”), The Institute of Electrical and Electronics Engineering, Inc. (“IEEE”) and the World Wide Web Consortium (“W3C”), all of which are open standard-setting associations that allow all companies and individuals to join to help shape the industry standards. See *id.* at 215-16. On the other hand, the HAVi and Bluetooth standard setting consortiums are closed and restrict membership. See *id.*; see, e.g., <http://www.havi.com>. HAVi (Home Audio Video Interoperability) is a closed standard setting organization that has developed protocols allowing all manner of digital consumer electronics and home appliances to communicate with each other. HAVi’s members include eight of the largest manufacturers: Grundig AG, Hitachi Ltd., Matsushita Electric Industrial Co. (Panasonic), Royal Philips Electronics, Sharp Corporation, Sony Corporation, Thomson Multimedia and Toshiba Corporation. HAVi, while rejecting the label of “standard setting organization,” also has established antitrust guidelines very similar to those used by the Working Group. See <http://www.havi.org/about/antitrust.html>.

⁴³ “[I]n the case of a standard that effectively requires the use of a proprietary technology, the standard, if adopted (whether *de facto* or by formal process), can imbue the technology with market power that it previously lacked. Thus there is the potential for monopolization, or more minimally a raising of rivals’ costs, through the conjunction of an adopted standard and a proprietary technology.” BALTO, *Standard Setting in a Network Economy*, *supra* note 41, at 302 (quoting ANTON & YAO, *supra* note 41, at 261).

⁴⁴ 472 U.S. at 296.

⁴⁵ See *id.*

⁴⁶ See *Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 468 U.S. 492 (1988); see also *American Soc’y of Mech. Eng’rs v. Hydrolevel Corp.*, 456 U.S. 556 (1982); *Radiant Burners, Inc. v. Peoples Gas Light & Coke Co.*, 364 U.S. 656 (1961).

⁴⁷ See *DM Research, Inc. v. College of Amer. Pathologists*, 170 F.3d 53, 57 (1st Cir. 1999) (liability found in standard setting cases generally only where “standard was deliberately distorted by competitors of the injured party. . . .”); see also *Clamp-All Corp.*, 851 F.2d 478 (rule of reason applies); see BALTO, *Standard Setting in a Network Economy*, *supra* note 41, at 607.

⁴⁸ 468 U.S. at 508-09. The Court did not reach the ultimate issue of whether the conduct in that case constituted a group boycott in violation of the antitrust laws. *See id.* at 499 n. 3.

⁴⁹ *Id.* at 503.

⁵⁰ *Id.* at 500.

⁵¹ *Id.* at 502 (citing *American Soc’y of Mech. Eng’rs*, 456 U.S. at 570-73).

⁵² The HAVi guidelines provide:

Any specifications which may be developed or approved by the membership of HAVi in order to effectuate the purposes of HAVi based solely and exclusively upon technical considerations and upon the merits of objective expert judgments and thorough procedures and shall in no way be based upon any effort, intention or purpose of any of its members to reduce or eliminate competition in the sale, supply and furnishing of products and services.

See <http://www.havi.org/about/antitrust.html>.

⁵³ *See* *California Dental Ass’n v. FTC*, 526 U.S. 756, 769-70 (1999); *see also* *Continental Airlines, Inc. v. United Airlines, Inc. et al.*, 2001 WL 25507, at *7 (E.D. Va. Jan. 5, 2001).

⁵⁴ *State Oil Co. v. Khan*, 522 U.S. 3, 10 (1997) (applying the rule of reason); *see* *Northern Pac. Rwy. Co. v. United States*, 356 U.S. 1 (1958) (applying the per se rule).

⁵⁵ *See* *Continental Airlines, Inc.*, 2001 WL 25507, at *7; *see also* *NCAA v. Board of Regents of Univ. of Okla.*, 468 U.S. 85 (1984) (applying the rule of reason).

⁵⁶ *See* *Consolidated Metal Prods., Inc. v. American Petroleum Inst.*, 846 F.2d 284, 291-93 (5th Cir. 1988) (affirming summary judgment for the defendant where plaintiff claimed that the institute and its members conspired to delay the plaintiff’s entry into the market. Court held that the decision to delay certification of the plaintiff’s business was made within the normal parameters for the association, and because there were no procedural irregularities, the association’s activities were lawful.); *Clamp-All Corp. v. Cast Iron Soil Pipe Inst.*, 851 F.2d 478, 487 (1st Cir. 1988) (Court affirms summary judgment in favor of the Cast Iron Soil Pipe Institute brought by a manufacturer of competing pipe couplings. The plaintiff argued that the association’s coupling standard was designed to stifle competition. The Court disagreed, holding that “joint specification development, promulgation, and adoption efforts would seem less expensive than having each member of CISPI make duplicative efforts . . . [and also] . . . help[ed] to assure product quality.”). *But see* *Indiana Fed’n of Dentists*, 476 U.S. at 460-61 (Supreme Court concluded that standard setting was clearly anticompetitive and declined to use full rule of reason analysis. The Court held that such “proof of actual detrimental effects . . . obviate[d] the need for an inquiry into market power, which is but a ‘surrogate for detrimental effects.’”) (internal citations omitted); *American Soc’y of Mech. Eng’rs*, 456 U.S. at 577 (Court concluded that association set standards, and deliberately misinterpreted its own code, to injure plaintiff; full rule of reason analysis was unnecessary due to obviousness of anticompetitive effects with no procompetitive justification.).

⁵⁷ 476 U.S. 447, 458 (1986) (internal citations omitted).

⁵⁸ 526 U.S. 756. *Continental Airlines* applied the California Dental Association’s rule of reason analysis in determining whether a non-price restriction—in that case, a restriction placed on the size of carry-on baggage—was unreasonable. *See* *Continental Airlines*, 2001 WL 25507, *7.

⁵⁹ *Id.* at 775 n. 12. *See also* David Balto & Robert Pitofsky, *Antitrust and High-Tech Industries: The New Challenge*, 606 PLI/PAT 513, 530-31 (June 2000) (“Antitrust plays an important role in establishing the rules of the road for dealing with standard-setting. Yet these rules are based generally in cases that seem to bear little relevance to the types of technology-driven issues that are critical to contemporary standard-setting. Most standard-setting cases focus on relatively narrow procedural issues. They provide guidance on how to meet procedural standards to alleviate any competitive concerns, but these strictures may be so wooden as to stifle the ability to develop standards in a prompt and effective fashion.”); *see also* BALTO, *Standard Setting in a Network Economy*, *supra* note 41, at 302.

⁶⁰ Recent agency enforcement regarding standard setting are not, of course, limited solely to the high-technology world. In 1995, the Department of Justice brought suit against the American Bar Association (“ABA”) for, *inter alia*, violation of Section 1 of the Sherman Act. *See* Compl. for Plaintiff, United States of America v. American Bar Ass’n, No. 95-1211 (D.D.C. June 27, 1995), available at <http://www.usdoj.gov/atr/cases/f0200/0254.htm>. Most significant to this analysis, the Complaint alleged that the ABA used impermissible standard-setting requirements to set faculty salaries, which in essence “unreasonably restricted competition in the law school labor market and have had the effect of ratcheting up law school salaries.” *Id.* at ¶ 16. In addition, the Complaint alleged that the ABA, in its standards for accreditation, impermissibly required law schools to be not-for-profit institutions. *Id.* at ¶ 17. The Complaint alleged that this “[s]tandard erects an unnecessary entry barrier against proprietary law schools, and prevents these schools, some of which provide their professional staff with lower salaries and fewer amenities, from providing competition to professional law school staffs at ABA-approved schools.” *Id.* at ¶ 18. *See also* Press Release, Department of Justice, Justice Department and American Bar Association Resolve Charges That The ABA’s Process For Accrediting Law Schools Was Misused (June 27, 1995), available at http://www.usdoj.gov/opa/pr/Pre_96/June95/363.txt.html.

For a discussion of recent standardization proposals in other industries, see Daniel E. Lazaroff, *Sports Equipment Standardization: An Antitrust Analysis*, 34 GA. L. REV. 137 (Fall 1999) (discussing recent actions involving the sports equipment industry); Thomas A. Piraino, *A Proposal for the Antitrust Regulation of Professional Sports*, 79 B.U. L. REV. 889, 933 (Oct. 1999) (standard setting in the professional sports industries).

⁶¹ *See* Press Release, Department of Justice, Justice Department Approves Joint Licensing of Patents Essential for Making DVD-Video and DVD-ROM Discs Players (June 10, 1995), available at <http://www.usdoj.gov/atr/public/busreview/2485.htm>; Press Release, Department of Justice, Justice Department Approves Joint Licensing of Patents Essential for Making DVD-Video and DVD-ROM Discs and Players (Dec. 16, 1998), available at <http://www.usdoj.gov/atr/public/busreview/2121.htm>. The Department of Justice allows businesses to submit business review letters as a way to get informal agency preclearance for proposed business schemes. An interested party submits a letter to the agency, describes in detail the plans for the venture, and receives a written opinion letter from the agency. Oftentimes, there is a back-and-forth between the interested party and the agency to vet concerns relating to the venture and to provide more information (and sometimes assurances) to help inform the agency’s decision.

⁶² *See* Letter from Phillips, Sony, and Pioneer to Department of Justice (July 29, 1998), available at 1998 WL 890334 (there are no pin cites available to these letters).

⁶³ *See id.*

⁶⁴ *See id.*

⁶⁵ *See* Letter from Joel I. Klien, Assistant Attorney General, Antitrust Division, to Phillips, Sony, and Pioneer (Dec. 16, 1998), available at 1998 WL 890334.

⁶⁶ *See id.*

⁶⁷ *See id.*

68 *See id.*

69 *See* Compl. for Plaintiff, In the Matter of Dell Computer Corp., No. C-3658, available at 1996 WL 350997 (F.T.C.) (hereinafter *Dell Complaint*); *see* Press Release, Federal Trade Commission, Dell Computer Settles FTC Charges; Won't Enforce Patent Rights for Widely Used Computer Feature (Nov. 2, 1995), available at <http://www.ftc.gov/opa/1995/9511/dell.htm> (hereinafter *Dell Press Release*).

70 *See Dell Complaint*, *supra* note 69, ¶ 6.

71 *See Dell Complaint*, *supra* note 69, ¶ 6.

72 *See id.* at ¶ 8.

73 *See Dell Press Release*, *supra* note 69.

74 *Id.*

75 *Id.*

76 *See id.*

77 *See* 1996 WL 350997 (Azcuega dissent). *See also* David M. Schneck, *Setting the Standard: Problems Presented to Patent Holders Participating in the Creation of Industry Uniformity Standards*, 20 HASTINGS COMM/ENT L.J. 641, 655-57 (Spring 1998) (concluding that the *Dell* consent order “harshly applies the protections of competition. . . . there was no proof that Dell intentionally misled competitors. . . . because technological standards are adopted quickly, an extensive duty to search may either decrease the ability to rapidly set standards in dynamic high-tech industries or chill participation in setting standards.”).

78 *See* Amend. Compl. for Plaintiff, Hyundai Elec. Indust. Co. et al. v. Rambus, Inc., No. C-00-20905 RMW (N.D. Cal. filed Oct. 17, 2000) (hereinafter *Hyundai Complaint*), available at <http://www.rambusite.com/HyundaiVsRambus/Docket10.htm>; Compl. for Plaintiff, Micron Tech., Inc. v. Rambus, Inc., No. 00-CV-792-RRM (D. Del. filed Aug. 28, 2000) (hereinafter *Micron Complaint*), available at <http://www.rambusite.com/MicronVsRambus/Docket09192000.htm>.

79 *See Hyundai Complaint*, *supra* note 78, at ¶ 16; *Micron Complaint*, *supra* note 78, at ¶¶ 8-11.

80 *See Hyundai Complaint*, *supra* note 78, at ¶ 12.

81 *See Hyundai Complaint*, *supra* note 78, at ¶¶ 88-99; *Micron Complaint*, *supra* note 78, at ¶¶ 20-116.

82 *See* Hyundai Elec. Indus. Co. et al. v. Rambus Inc., C-00-20905 RMW (Order) (N.D. Cal. Jan. 22, 2001) (hereinafter *Hyundai Order*), available at <http://www.rambusite.com/HyundaiVsRambus/Docket65.htm>.

83 *Id.* (emphasis added).

84 *See* Micron Tech., Inc. v. Rambus Inc., 00-CV-792 RRM (D. Del. Jan. 2, 2001) (Order). The Micron court did not describe the reasons for its decision.

85 Rambus argued, relying on the Federal Circuit’s decision in *In re Independent Service Organizations Antitrust Litigation* (“*Xerox*”), 203 F.3d 1322 (Fed. Cir. 2000), *petition for cert. filed*, 69 USLW 3089 (July 11, 2000), that withholding such information from the standard setting organization could not be a basis for antitrust liability. “[I]n the absence of any indication of illegal tying, fraud in the Patent and Trademark Office, or sham

litigation, the patent holder may enforce the statutory right to exclude others from making, using, or selling the claimed invention free from liability under the antitrust laws.” Rambus Reply Brief at 4, available at <http://www.rambusite.com/HyundaiVsRambus/Docket49.htm> (quoting *Xerox*, 203 F.3d at 1325).

Xerox, still on appeal, may be distinguished on its facts. *Xerox* did not consider whether a patent holder’s manipulation of the standard setting process constitutes a basis for antitrust liability. Cf. *C.R. Bond v. M3 Sys. Inc.*, 157 F.3d 1340, 1368 (Fed. Cir. 1998). It is generally accepted that a patent holder does not violate the antitrust laws by refusing to license its patents, see *Antitrust Guidelines for the Licensing of Intellectual Property*, § 2.2 (Report from the Federal Trade Commission and the United States Department of Justice, Apr. 1995), available at <http://www.usdoj.gov/atr/public/guidelines/ipguide.htm>. The conduct alleged against Dell and Rambus, however, raises the very “process” issues that the Supreme Court warned are so essential in standard setting. Cf. *Allied Tube*, 486 U.S. at 507; see also *Townsend v. Rockwell Int’l Corp.*, 55 U.S.P.Q.2d 1011 (N.D. Cal. 2000) (suggesting that an antitrust claim could be predicated on a *Dell*-type argument).

Note that the FTC alleged that *Dell* withheld *patents* from the standard setting organization in the Rambus litigation the parties allege only that Rambus withheld *patent applications*. Neither court apparently found this fact material in denying Rambus’ motions to dismiss the Section 2 claims.

⁸⁶ See Jack Robertson, *Rambus Targeted by FTC Probe*, TECHWEB (Feb. 5, 2001), available at <http://www.techweb.com/wire/story/TWB20010205S0004>.

⁸⁷ No discussion of standards can entirely ignore the ongoing government case against Microsoft; that case, of course, revolves heavily around the *de facto* standards Microsoft has established in its Windows operating system and alleged predatory conduct by Microsoft to maintain its Windows monopoly. As the Court of Appeals considers liability and remedy issues, at least some commentators are suggesting that a better alternative to breaking the company up is to mandate open standards for Microsoft’s Windows platform:

Open, consensus-based standardization may be a more useful mechanism for the US government to address the problems caused by information monopolies. . . . Defining open standards for the interfaces between Microsoft applications and operating systems eliminates the onerous requirement for Microsoft to provide to its competition the complete details of its software products. . . . With such open standards, users would have the ability to purchase everything from Microsoft if they wished, and competitors would have the ability to connect their products as needed to Microsoft software for competitive advantage. And users that desired the features and function available from Microsoft’s competitors could take advantage of software from multiple software companies.

Ken Krechmer and Elaine Baskin, *Microsoft Anti-Trust Litigation—The Case for Standards*, available at <http://www.csrstds.com/WSD2000.html>; see also Carey R. Ramos and Aidian Synnott, *Antitrust Issues in the Licensing of Intellectual Property*, 519 PLI/PAT 7, 30-31 (May 1998) (discussing the *Microsoft* standards setting issues).

⁸⁸ Just as this article was to go to press, the Working Group posted on its website proposed changes and more specifics about its structure. Intel, moreover, proposed that it hold the position of Steering Committee Chair for the next three years, after which time open elections will be held. Intel also proposed that it head the Technical Architecture Committee, which apparently will be the committee where P2P protocols are developed. Each member of the Working Group, however, will have equal voting power. See PtPWG Structure Proposal, available at http://www.peer-to-peerwg.org/members/collateral/working_group_proposal.pdf.