

PATENTS AS PART OF THE BUSINESS STRATEGY

Patent It. License It. Enforce It: Three Studies On How Technology Companies Are Using Patents To Help Their Bottom Line

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The role patents play is evolving as creative minds focus on new ways to secure and extract value from technology based assets. To patent or not; to license or not; and the degree of enforcement activity are key decisions faced by technology company executives. Here, three case studies illustrate the fact-specific nature of patent procurement, licensing, and litigation strategies being adopted in today's business environment.

I. PATENTING TRENDS

Every media outlet reports that the economy is slowing down. Nevertheless, even as companies are tightening their corporate budgets, the focus on obtaining and enforcing valuable patents has not waned. In fact, in a financial environment where it is difficult to show profits, intellectual property may be a solution to increasing balance sheet value or creating additional streams of revenue through licensing or litigation. Budgetary considerations do, however, dictate the allocation of resources to the patenting process -- heightening the level of accountability for results. The recent trend for most companies, therefore, appears to reject the shotgun approach of patenting everything in hopes of capturing what later may be important in an overall field of marginal patents. What we see instead is a targeted approach, intense in management oversight, geared toward obtaining thoroughly crafted patents that seek to best predict the course of competition.

CASE STUDY #1: TiVo, INC.

For example, TiVo, Inc. ("TiVo"), a mid-sized company in California, has adopted a well planned, yet somewhat conservative, approach to its patent strategy. TiVo was formed in August, 1997, and over the course of about two years, TiVo conducted research and development to create their product -- a digital recorder that permits the pausing, rewinding, and recording of live television being broadcast to a user's television.¹ TiVo began selling its product on March 31, 1999.

A. TiVo's Patents

By July 22, 1999, TiVo had filed nine (9) patent applications and an additional six (6) provisional patent applications.² According to TiVo's chief financial officer, "We are filing patents frequently based on

¹ See Exhibit A. See also, S-1 filed by TiVo with Securities Exchange Commission, July 22, 1999, available at <http://www.sec.gov/Archives/edgar/data/1088825/0001012870-99-002461.txt> (August 29, 2001).

² A "provisional" patent application is a lower cost first patent filing that, without all of the formalities of a regular patent application, establishes an early effective filing date. It has a pendency lasting 12 months and must be

our work, and we are keeping very close tabs on anyone claiming to provide competitive services.” To that end, TiVo hired two in-house attorneys, with one of the attorneys focusing on patent and trademark matters.³

The first patents to issue were design patents covering the TiVo remote control. These patents appear to have had little on effect TiVo’s stock price, its position in the market, nor have these patents created any additional sources of revenue. However, on May 15, 2001, TiVo was issued a patent on a “Multimedia Time Warping System” with sixty-one (61) allowed claims.⁴ This patent covers the core technology that TiVo had been developing since its formation. In the days following the issuance of the patent, TiVo’s stock went from \$4.94 a share to \$11.21 (an increase of 226%).⁵

B. TiVo’s Strategy

With this patent protecting its core technology, TiVo successfully jumpstarted its stock price and validated its position in the marketplace. At the same time TiVo potentially opened a new avenue for generating revenues beyond its traditional subscriber base. Of course, the method for generating those revenues remains to be seen. However, Rebecca Baer, a TiVo spokesperson, said that chasing after other companies with infringement claims “is not part of our business strategy.”⁶

A potential rationale for this non-confrontational attitude is that the “other companies” that Ms. Baer mentioned includes Microsoft Corporation.⁷ Bringing an infringement action against Microsoft could incur a substantial amount of legal costs,⁸ and TiVo concedes that it probably does not have enough cash reserves to challenge Microsoft.⁹ In addition, another chief rival, ReplayTV, possesses a number of relevant patents in the digital recorder industry, and has threatened that it will “slap back” if TiVo intends to enforce its patents against ReplayTV.¹⁰

That being said, TiVo expects revenue of \$20-24 million with an operating loss of \$145-155 million in 2001, but expects that revenue from licensing of the core patent would become a significant

superceded by the filing of a corresponding non-provisional application within that time in order to benefit from the earlier filing date of the provisional application. 35 U.S.C. § 111(b) (1995).

³ Ian Fried, *TiVo Plans To Start Defending Its Intellectual Property*, News.com, at <http://news.cnet.com/news/0-1006-200-3154293.html?tag=bplst> (October 10, 2000).

⁴ United States Patent No. 6,233,389 (See Exhibit A).

⁵ Richard Shim, *Industry Ponders Impact Of TiVo Patent*, News.com, at <http://news.cnet.com/news/0-1006-200-6047620.html?tag=mainstry> (May 25, 2001).

⁶ SiliconValley.com, *TiVo Gets Patents On Its TV Recorders*, at <http://www.siliconvalley.com/docs/news/tech/010405.htm> (May 24, 2001).

⁷ Microsoft sells the competing product titled UltimateTV.

⁸ Shim, *supra* note 6, at <http://news.cnet.com/news/0-1006-200-6047620.html?tag=mainstry> (May 25, 2001).

⁹ *Id.*

¹⁰ *Id.*

source of non-subscriber revenue.¹¹ A recent report reveals that TiVo came in ahead of analysts' predictions by \$0.12 per share for the second quarter of 2001.¹²

C. Comments

By obtaining a patent on its core technology, TiVo has positioned itself in its industry and appears to have crafted a meaningful barrier to entry that its competitors must ultimately contend with. While electing, for the time being, to not enforce its patent against its current competitors, TiVo is instead focusing on solidifying its current market position and potentially obtaining royalty revenues from new players entering the industry.

II. LICENSING STRATEGIES

As evidenced by TiVo, a patent or patent portfolio can be a source of value for a company, even without obtaining licenses from competitors or entering into costly litigation. Nevertheless, companies often desire to license patents to generate another revenue stream, and there are a number of ways that a company can go about licensing its patents.

A. "Stick" Licensing

"Stick" licensing is a commonly understood name for an enforcement strategy. In "stick" licensing, the patent holder uses the pressure of litigation (or threatened litigation) to coerce potential licensees into entering into a licensing arrangement. Of course, while this strategy in theory should only be effective where a strong patent position exists, in reality the threat of enforcement creates a "terrorism of uncertainty" for decision makers who must ultimately answer to company shareholders. Thus the strength of the threat itself can often exceed the strength of the patent. The idea that one company's patent might result in an injunction that throttles another company's entire product line is of such concern that, as one assistant general counsel put it, "I'm so afraid of [the injunction], I'm almost forced to the settlement table."¹³

B. Cross-licensing

A cross-licensing strategy is where one patent holder licenses the patent to another patent holder in exchange for a license to that other patent holder's patent. The key to cross-licensing is to make sure that the value of the outgoing license is equivalent to the value of the incoming license. Cross-licenses are often used in litigation settlements, but are also important in patent-heavy industries to establish a level playing field, whereby the balance of power through patents results in the design freedom to make and sell products products in which other companies hold patents on key portions of the technology. In most industries, technology leaders generate substantial value in terms of market position and revenue through patents, well in excess of their R&D and legal expenditures.

C. Patent Pools

¹¹ Richard Shim, *TiVo Turns On Revenue, Subscriber Growth*, News.com, at <http://news.cnet.com/news/0-1006-200-6540293.html> (July 10, 2001).

¹² *TiVo Narrows Its Losses*, News.com, at <http://news.cnet.com/news/0-1006-200-7018192.html> (August 30, 2001).

¹³ Brenda Sandburg, *Battling the Patent Trolls*, Law.com, <http://www.law.com/cgi-bin/gx.cgi/AppLogic+FTContentServer?pagename=law/View&c=Article&cid=ZZZ4DX7MSPC&live=true&cst=1&pc=0&pa=0>

What happens, though, when one company (say, TiVo) holds patents on technology, but other companies in the industry (such as ReplayTV or Microsoft) also hold patents on other commercially important portions of the digital recorder technology? Such a situation could result in a technology stalemate where no one company is able to produce any viable product because of the patent portfolios of its competitors. Cross-licensing is a possibility, but often no revenue is generated as a result of the cross-license, and the cross-license does not solve the problems faced by newcomers to the industry (third party product providers, i.e. potential licensees of the technology), who can't possibly negotiate with every patent holder. One possible solution that grants market leaders some licensing revenue, while expanding the market for everyone's benefit, is to form a patent pool.

A patent pool is where companies that each possess a patent on an important component of the technology form a separate entity to handle the licensing of all of the important patents. This entity is then granted a license and the right to sublicense third parties all of the relevant patents owned by the original companies. The licensing entity grants "packages" of sublicenses to prospective licensees whereby prospective licensees are (theoretically) obtaining the necessary bundle of rights to make products without having to obtain multiple licenses from multiple patent holders.

However, when forming a patent pool, companies need to be aware of certain issues when forming the licensing entity. One issue is the complexity of forming the licensing entity in terms of the initial corporate and management structure of the patent pool. Given that multiple entities will be involved in the formation of the pool and that each entity will have one or more patents of varying importance, there can be disputes as to what stake in the entity each patent-holder should have. Each party's stake will also then directly correlate to how much of the proceeds of the pool belong to that respective party. In turn, each company's stake can also affect who the management will be, and the strategic direction that management should take. Invariably, inefficiencies and inequalities exist in directing dollars equitably to the patent holders. Nonetheless, the benefits of the pool often outweigh these concerns for those participating.

Another issue involved with the formation of a patent pool is the potential antitrust implications. In a patent pool, multiple vendors come together to pool products and set a specific price (e.g., the license fee). Such group activity generally sets off alarms, bells, and whistles in the Department of Justice's office, which can lead to antitrust review and legal action. The basic analysis used by the Department of Justice for whether a patent pool will withstand antitrust scrutiny is that the patent pool must not unduly restrict competition among intellectual property rights within the pool or among downstream products incorporating the pooled patents. In addition, the patent pool cannot unduly restrict innovation among parties to the pool.¹⁴

CASE STUDY #2: MPEG LA, LLC

One example of a patent pool is MPEG LA, which licenses the patents that allow products to be made using the MPEG standard. MPEG (or Moving Pictures Experts Group) is the name of a family of standards used for coding audio-visual information (e.g., movies, video, music) in a digital compressed format.¹⁵ Some key uses of the MPEG technology are DVDs and digital satellite television (such as DirecTV).

A. MPEG LA's Formation

¹⁴ Letter from Joel I. Klein, Acting Assistant Attorney General, Department of Justice, to Gerrard R. Beene, Sullivan & Cromwell (June 26, 1997) (See Exhibit B).

¹⁵ MPEG.org, at <http://www.mpeg.org> (August 13, 2001).

Many companies developed and own patents that claim portions of the MPEG standards; however, no single company owns a patent or portfolio of patents that would enable a prospective licensee to manufacture a product that conforms to the MPEG standard. Desiring to stimulate the widespread adoption of the MPEG standard in the industry, a group of companies employed an independent patent expert to conduct a search and review of what turned out to be over 6000 patent abstracts and 800 United States patents in order to determine which were the “essential” patents to the MPEG standard.¹⁶ The patents that were determined to be essential to the MPEG standard were owned by nine companies.¹⁷ These companies, except for Lucent Technologies, formed MPEG LA, a Delaware limited liability company, in 1996.¹⁸

Each of the patent holders granted a license to MPEG LA that allowed MPEG LA to grant further sublicenses according to a standard license agreement. Each of the patent holders agreed that the license agreement would be the same for all licensees, even if the licensee were a member of MPEG LA. In terms of distributing the royalties, the member companies agreed on a pro-rata allocation based on each member company’s proportionate share of the total number of patents in the pool in the countries in which a particular royalty-bearing product is made and sold.¹⁹

B. MPEG LA’s Antitrust Review

Concerned about the potential antitrust problems, the patent holders requested a business review of MPEG LA from the Department of Justice. The Department of Justice reviewed the MPEG LA proposal and, while not legally conclusive, approved the MPEG LA proposal because (i) the proposal provided an efficient way for the essential intellectual property to be disseminated, (ii) the parties involved used an independent expert to determine which were the essential patents, (iii) patents are available for license directly from the patent holders without obtaining a license from MPEG LA, (iv) an independent expert is used in the event of a dispute as to whether a patent is essential and belongs in the pool, and (v) the licensing terms for all licensees, even if the licensee is a member of the pool, are the same.²⁰

C. MPEG LA’s Licensing

MPEG LA appears to be a success in terms of the number of licenses granted. Over 300 companies have entered into a license agreement with MPEG LA.²¹ Moreover, according to the company’s website, there are now seventeen companies that are members of the pool, and these companies own 300 essential patents encompassing twenty-seven countries.²²

¹⁶ See Letter from Joel I. Klein to Gerrard R. Beeney, *supra* note 15.

¹⁷ Columbia University, Fujitsu Limited, General Instrument Corp., Lucent Technologies, Matsushita Electric Industrial Co., Ltd., Mitsubishi Electric Corp., Philips Electronics N.V., Scientific-Atlanta, Inc. and Sony Corp.

¹⁸ See Letter from Joel I. Klein to Gerrard R. Beeney, *supra* note 15.

¹⁹ See Letter from Joel I. Klein to Gerrard R. Beeney, *supra* note 15.

²⁰ See Letter from Joel I. Klein to Gerrard R. Beeney, *supra* note 15.

²¹ *Id.*

²² MPEG LA, at <http://www.mpegla.com> (August 28, 2000).

It is important to note that MPEG LA does not require anyone to take out a license,²³ and will not attempt to enforce any of the patents against potential infringers. Instead, the individual patent holders must enforce their own patents.²⁴ One such example is the litigation brought by several of the patent holders against Compaq Computer Corporation. In an interesting twist, and despite the Department of Justice's business review, Compaq filed counterclaims alleging antitrust violations based on conspiracy to restrain trade and monopolization and attempted monopolization under the Sherman Act.

D. Comments

By forming a patent pool, the patent holders for the disparate components of the MPEG technology have leveraged their patent portfolios in a way that, in all likelihood, would not have been possible if the company had stood alone among its competitors. The tradeoff may be that, for some, the revenue generated is less than could have been obtained by unilateral licensing initiatives. This is balanced for most licensors, however, by the fact that transaction costs with manufacturers and providers of MPEG products are lower, thus allowing the maximization of the royalty revenues generated by the patent pool.

However, as the infringement claim brought by MPEG LA licensors against Compaq Computer Corporation shows, even a successful (and theoretically optimal) licensing strategy does not mean that a company will not have to enforce its patents through litigation.

III. ENFORCEMENT STRATEGIES

You've patented the idea. You've tried to license the idea. But that other company refuses to see eye-to-eye with you. What do you do when you believe that other companies are utilizing the technology that you have patented? Generally you hope to procure a license without having to go through the costs and expenses of patent infringement litigation. Often the threat of patent litigation and its concomitant costs (patent litigation can easily cost as much as \$2 million per patent²⁵) are enough to obtain at least a small up-front royalty for a license. Unfortunately, that is not always the case.

However, before running to the court house to file the patent infringement lawsuit, a company is best served by stepping back to formulate its litigation *and its licensing* strategies. Is the lawsuit merely an attempt to "encourage" the infringer to take out a license? Or is the litigation aimed at collecting damages and royalties for past infringement? And, of course, there is always the option of enjoining the third party from selling the infringing product altogether. But, without a litigation and licensing strategy, a company may end up injuring business relationships, or even worse, drawing counterclaims and losing its patent rights.

CASE STUDY #3: RAMBUS, INC.

A. Rambus' Strategy

²³ A summary, as provided by MPEG LA, of its licensing agreement is provided in Exhibit B, and is also available at <http://www.mpegla.com>.

²⁴ According to a quote from Ken Rubinstein, patent counsel for MPEG LA, *available at* <http://www.mpegla.com> (August 28, 2000).

²⁵ Sandburg, *supra* note 14, at <http://www.law.com/cgi-bin/gx.cgi/AppLogic+FTContentServer?pagename=law/View&c=Article&cid=ZZZ4DX7MSPC&live=true&cst=1&pc=0&pa=0> (July 31, 2001)

Rambus, Inc. ("Rambus") is a developer of RAM memory modules technology in the semiconductor industry. In 1992, Rambus revealed a new, faster type of RAM known as RDRAM. While able to handle data quicker than the other types of RAM chips, SDRAM and DDRAM, RDRAM is also more expensive to manufacture than the other chips.²⁶ Unfortunately, in the semiconductor industry, the margins on RAM chips are razor-thin,²⁷ and only the lowest price survives. Accordingly, Rambus' more advanced (and more expensive) technology has not yet gained widespread acceptance in the industry.²⁸

In such a competitive landscape, Rambus needed to find a way to make its technology more comparable to the lower cost alternatives. Rambus elected to follow a strategy of attempting to enforce its patents against SDRAM and DDR SDRAM manufacturers. By extracting royalty payments from manufacturers of the SDRAM and DDR SDRAM, Rambus hoped to raise the costs of the competing products to be equivalent to the costs of its own superior product.²⁹

While cross-licensing of patents and technology is prevalent in the semiconductor industry,³⁰ Rambus does not participate in such arrangements, because Rambus is not a manufacturer of memory modules.³¹ As such, Rambus has no need to obtain licenses under the patents held by the manufacturers, and therefore has no desire or incentive to enter into a cross-licensing arrangement to obtain rights to manufacturing technology.³² Further, since Rambus is not a manufacturer, its primary source of revenue is royalty payments from its intellectual property.³³ Accordingly, as Rambus began to assert its patents, there were only two options -- the manufacturers needed to pay for a license, and if that did not happen, Rambus had to bring suit.

B. Rambus' Licensing

Originally, Rambus experienced great success in terms of striking licensing deals with the semiconductor manufacturers. Rambus was able to enter into agreements with Hitachi, Toshiba, Oki Electric, NEC Corp., Samsung Electronics Co., Elpida Memory, Matsushita Electric, and Mitsubishi to pay royalties under the patents.³⁴ As court testimony would later reveal, typical Rambus licensing

²⁶ Jack Robertson, *Rambus Uses Patent Clout to Cut Better Deals*, TechWeb, at <http://content.techweb.com/wire/story/TWB20000626S0006> (June 26, 2000).

²⁷ Arik Hesseldahl, *Rambus Patent Army Marches On*, Forbes.com, at <http://www.forbes.com/2000/08/16/mu7.html> (August 16, 2000).

²⁸ Jean Kumagai, *Rambus Friend or Foe*, IEEE Spectrum, May 2001, at 42, 46.

²⁹ Robertson, *supra* note 27, at <http://content.techweb.com/wire/story/TWB20000626S0006> (June 26, 2000).

³⁰ Mark Hachman, *Rambus' DRAM patent deal with Toshiba stuns analysts*, Silicon Strategies, at www.siliconstrategies.com/story/OEG20000619S0031 (June 19, 2000).

³¹ Hesseldahl, *supra* note 28 at <http://www.forbes.com/2000/08/16/mu7.html> (August 16, 2000).

³² Hachman, *supra* note 31, at <http://www.siliconstrategies.com/story/OEG20000619S0031> (June 19, 2000).

³³ Form 10-Q Filed by Rambus with Securities Exchange Commission, May 4, 2001, *available at* <http://www.sec.gov/Archives/edgar/data/917273/000089843001500369/d10q.txt>. (August 29, 2001).

³⁴ Martyn Williams, *Rambus Inks Patent Licensing Deal With Matsushita*, ITworld.com, at http://www.itworld.com/Comp/1946/ITW_3-14-01_rambus (March 14, 2001).

agreements earned a royalty of 0.75%-3.5% per RAM chip manufactured.³⁵ The revenue that these deals generated resulted in Rambus' stock reaching a high of \$127 a share.³⁶

C. Rambus versus Infineon

Unfortunately, the larger manufacturers of semiconductors, Micron Technology and Infineon Technologies rebuffed Rambus and decided not to take out a license. In late August of 2000, as a pre-emptive strike, Micron Technology filed suit asserting that the Rambus patents were invalid and unenforceable. One month later, Rambus responded by filing patent infringement claims against both companies. A third company, Hyundai Electronics (now named Hynix Technologies) had also filed a declaratory action, but has since settled out of court with Rambus and taken out a license.

In the infringement suit against Infineon, Infineon countered with racketeering and fraud claims, which were premised on allegations that Rambus had incorporated the standards for manufacturing RAM into its patent applications, without informing the governing body during the governing body's deliberation of the RAM standards.³⁷

In the *Markman* ruling in the Infineon case, the presiding judge narrowly construed Rambus' patent claims. Rambus' stock price plunged over 30% on judge's ruling.³⁸ Two days after the ruling, the judge determined that, according to this narrow construction of the patent claims, Infineon could not be infringing the Rambus patent. The judge then dismissed all of the patent claims against Infineon.³⁹ Infineon, however, was not content to merely be out of the patent infringement claims and pushed the case to trial on the allegations of fraud. The jury found in favor of Infineon for \$3.5 million in damages. While the judge has since overturned the jury's decision with respect to the fraud damages, he did grant \$7.1 million in attorneys' fees to Infineon.⁴⁰

So, instead of discussions of royalties and license fees, in a case which some had considered the bellwether case for Rambus,⁴¹ the tables were turned. Not only was Rambus required to pay Infineon \$7.1 million in attorneys' fees, but there is now an official, legal construction of Rambus' patent claims that significantly narrow any scope of protection afforded by the patent. Pending appeal, the case against Infineon appears to be a tremendous loss for Rambus. Nevertheless, while this particular case did not result in success for Rambus, Rambus has generated substantial licensing revenue and Rambus still has a dozen cases pending worldwide, including another suit against Infineon in Germany.⁴²

³⁵ John G. Spooner, *Court Decision Favors Rambus*, News.com, at <http://news.cnet.com/news/0-1003-200-6837368.html> (August 10, 2001).

³⁶ See Morningstar, at <http://www.morningstar.com> (August 28, 2001).

³⁷ Jack Robertson, *Judge Sides With Infineon In Rambus Patent Trial*, Silicon Strategies, at <http://www.siliconstrategies.com/story/OEG20010316S0027> (March 16, 2001).

³⁸ *Id.*

³⁹ Ian Fried, *Judge Scraps Rambus Suit Against Infineon*, News.com, at <http://news.cnet.com/news/0-1003-200-5825858.html> (May 4, 2001).

⁴⁰ Spooner, *supra* note 36, at <http://news.cnet.com/news/0-1003-200-6837368.html> (August 10, 2001).

⁴¹ Kumagai, *supra* note 29, at 43.

⁴² Douglas F. Gray, *Rambus Loses SDRAM Patent Court Case*, PCWorld.com, at <http://www.pcworld.com/news/article/0,aid,49266,00.asp> (May 4, 2001).

D. The Costs of Litigation

What, though, has the cost been for the strategy that resulted in a dozen lawsuits worldwide? Legal fees for Rambus' enforcement strategy for first quarter 2001 were close to \$5 million.⁴³ Legal fees for Rambus' enforcement strategy for second quarter 2001 were \$7.3 million, accounting for 23% of its revenues.⁴⁴ In that six month period, Rambus spent over \$12 million in legal fees on patent infringement and related litigation. As one analyst pointed out, "Rambus has been migrating away from being an IT company to being an IT litigation company."⁴⁵

Another potential fallout of the litigation is Rambus' business relationship with Intel Corporation. Rambus had originally struck a deal with Intel that that only RDRAM would have worked with the Pentium 4 chip, but the rest of the RAM industry did not want to convert over to RDRAM (and pay royalties to Rambus). Intel conceded and designed the Pentium 4 interface to work with other types of RAM other than just RDRAM.⁴⁶ In hindsight, it is easy to speculate that Rambus' luke-warm (and sometimes hostile) relationship with its industry peers may have resulted in the industry pressure that resulted in Intel foregoing the exclusive requirement of RDRAM. Indeed, studies show that Rambus' aggressive stance hurt Rambus' abilities to strike deals with other companies in the industry, slowing the growth of RDRAM.⁴⁷

E. Comments

Initially, the aggressive stance by Rambus in enforcing its patents resulted in positive press, a significant stream of revenue, and additional incentive for companies to enter into licensing agreements, and Rambus continues to push for licensing with its industry peers.⁴⁸ However, the aggressive stance may have resulted in the loss of the business deal with Intel, which could have had enormous implications to Rambus.⁴⁹ In addition, Rambus' tactics also created enormous legal costs and resulted in the narrow construction of its patent, which, in effect, erased the patent rights that Rambus (and many of its licensees) thought it had. Can Rambus be faulted for taking such a stance? Not likely. The company still has numerous lawsuits pending, and, it is speculated that if Rambus succeeds, then it may collect upwards of \$1 billion in royalties per year.⁵⁰

⁴³ Jack Robertson, *Rambus Facing Heavy Legal Expenses, Says CEO*, Silicon Strategies, at <http://www.siliconstrategies.com/story/OEG20010112S0084> (January 12, 2001).

⁴⁴ Tom Jacobs, *Legal Fees Sap Rambus Earnings*, The Motley Fool, at <http://www.fool.com/news/2001/rmbs010412.htm> (April 12, 2001).

⁴⁵ Gray, *supra* note 43, at <http://www.pcworld.com/news/article/0,aid,49266,00.asp> (May 4, 2001).

⁴⁶ Hesseldahl, *supra* note 28, at <http://www.forbes.com/2000/08/16/mu7.html> (August 16, 2000).

⁴⁷ John G. Spooner, *Legal Woes, Stock Drop Mar Rambus' Future*, <http://news.cnet.com/news/0-1003-200-6549631.html> (July 12, 2001).

⁴⁸ See Rambus' Patent Litigation Frequently Asked Questions attached as Exhibit C.

⁴⁹ The Pentium 4 processor, to which the RDRAM was originally to be matched, is estimated to sell 14 to 20 million units in 2001. John G. Spooner, *Pentium 4 Could Face Summer Slump*, <http://news.cnet.com/news/0-1003-200-6134499.html> (May 31, 2001).

⁵⁰ *Infineon Seeks \$105 Million From Rambus*, News.com, at <http://news.cnet.com/news/0-1003-200-5864782.html> (May 8, 2001).

IV. CONCLUSION

TiVo, MPEG LA, and Rambus are three very different companies with three very different strategies that highlight the effects of patenting, licensing and enforcing a company's intellectual property. It is important to remember that patenting, licensing, and enforcing are not individual concepts, but part of a broad intellectual property strategy, and a company's strategy for a particular aspect (be it patenting, licensing, or enforcing) is not made in isolation, but in conjunction with its counterparts and overall business objectives. Effective strategies for utilizing a company's intellectual property are unique to each situation and to each company. With careful planning and creative thought, a company can harness the value of its intellectual property and help its bottom line. But, in order to accomplish this goal, a company must remember that the creativity that resulted in the original idea did not mark the end of creative process; it was only the beginning.

EXHIBIT A

A-1: TiVo Website Marketing Materials

A-2: U.S. Patent No. 6,233,389

EXHIBIT B

B-1: Letter from the U.S. Department of Justice

B-2: MPEG-2 Patent Portfolio License Summary

EXHIBIT C

Rambus Patent Infringement FAQ