Electronic Engineering Times

May 1-15, 2006

Defending your company against patent bullies and trolls

In the world of patents and patent litigation, not fully understanding the licensing landscape can cost your company money, and plenty of it. Developing a strategy for your patent portfolio and understanding the players in the patent community can pay off if you need to defend against patent trolls or bullies. In the microelectronics industry, patents and licenses that are involved in any product will number in the thousands or even in the hundreds of thousands. It is simply not possible to design a modern semiconductor chip or develop a microelectronics-based product without using a vast amount of as yet unlicensed patented technology. To function successfully within this patent thicket, semiconductor and microelectronics licensors need to be increasingly aware of the potential of their patent assets. An effective patent strategy that includes a defensive component is an essential piece of any successful and sustainable company's strategic plan.

Recently, there has been a perceived increase in activity in both patent licensing and patent lawsuits. The number of patent lawsuits filed in the United States between 1990 and 2004 more than doubled. In fact, the growth in lawsuits merely tracks the growth in patent applications and grants, which have also doubled in this period. We believe that the overall awareness of the value of intellectual property (IP) has increased with a corresponding increase in patent filing, patent licensing and patent lawsuits.

In response to the increasing perceived value of IP and patents, two distinct types of patent predators have emerged: patent trolls and patent bullies. They both each have unique objectives that require you to plan distinct defensive tactics.

Identify a patent troll

"A patent troll is somebody who tries to make a lot of money from a patent that they are not practicing and have no intention of practicing and in most cases never practiced." (Peter Detkin, former assistant general counsel at Intel, quoted in Trolling for Dollars, The Recorder, July 30, 2001).

Patent trolls acquire patents for the sole purpose of collecting licensing fees. Usually, patent troll companies produce no actual products. Ironically, those who denigrate patent trolls often practice this same patent monetization strategy with their own patents that cover technology, from discontinued businesses or acquired businesses, which their company no longer practices.

It's debatable whether patent trolls are now more prevalent or simply evolving. These trolls date back more than a hundred years. The Selden patent (US549,160), with an invention date of 1877 and an issue date of 1895, covered a few of the basic concepts of the automobile. The inventor of record, George Selden, was a patent lawyer. No Selden automobile was ever built. Selden's patent-holding company collected royalties of between 2.5 percent and 5 percent from almost all U.S. car manufacturers until 1911 when the patent was ruled invalid.

Today's economic and legal conditions, as well as technology, have combined to make the patent troll strategy effective and profitable in the microelectronics industry.

Trolls typical behavior

Patent troll licensing strategies are usually quite simple—generate the maximum money in the shortest time at the least expense. Troll organizations purchase or acquire control of patents from single inventors, small corporations or bankrupt companies. Desirable patents are ones that cover an invention that is used in a large market with many players. Many trolls start with a shotgun approach such as distributing unsubstantiated claims in assertion letters to numerous manufacturers. The license fees may be set initially at a low level to induce companies to settle without performing sufficient due diligence—as the due diligence may be more costly than the settlement. However, if a troll can present a stronger argument that is supported by claim charts, then the license fee is set higher, at the threshold of pain for a target organization. This maximizes the troll's return while causing the potential licensee to consider whether it will be cheaper to take an early license that may cost much less than the legal fees required for a defense. Once the troll organization establishes a litigation fund, it can up the ante by filing lawsuits listing large numbers of defendants or targeting one or two highly profitable market leaders.

Traditional licensing organizations often vilify trolls as unprofessional. It's true that nuisance negotiations and lawsuits by trolls can cost a company's IP lawyers inordinate amounts of time and money. However, defendant organizations that ignore these claims can risk missing out on an early and inexpensive settlement if the claim later proves to have merit.

Defend against trolls

Defending your company against trolls requires different strategies. Patent trolls, since they produce nothing, are not subject to patent infringement counter-claims. Patent trolls typically have legal services on contingency, so legal expenses are less of a concern. Since patent trolls have no product, there is no pressure from customers, suppliers, shareholders or employees

continued on page 2 ▶

BIOGRAPHY

"We have a passion for excellence and a commitment to our clients"

Terry Ludlow
Founder and CEO
Chipworks

From the basement of his family's home to an international presence, Terry Ludlow has driven the Chipworks odyssey. Although Chipworks is not in any way a one-man show—he's had a lot of help along the way—it is Terry who has provided the strategy, vision, and driving force for the company.

Terry first caught the reverse-engineering obsession when he worked

continued on page 3 ▶

Defending your company against patent bullies and trolls

▶ continued from page 1

to settle. All the stakeholders are aligned in their desire to collect a license fee from your company.

Let's say a patent troll sends a letter to your office claiming patent infringement in one of your company's products. You—as a lawyer in your company's IP division—have been given the letter to provide an appropriate response. If there is no claim chart included with the allegations, then there is no way to understand how the claims are being interpreted or what your potential exposure is. You must determine the following:

1. Is this patent valid?
2. Could the patent apply to any of your products?

If the answers to both these questions are 'yes,' then you and your company experts must determine the next best step:

- Would it be less costly to settle early with the patent troll claimant?
- Should your company take the patent troll to court to fight the patent claim?
- Are there significant 'warts' on the patent? How broadly does the troll interpret the claim? Are there opportunities to reduce the scope?
- Are there prosecution problems? (In 2004 the compliance rate measured by the USPTO was 82 percent—this means one in five patents have prosecution problems.)
- Is there a good probability that prior art exists that could limit the interpretation of the patent to uses outside of your product's use, or even to completely invalidate the patent?
- Would a declaratory judgment action in a venue more favorable to your company pressure the troll to drop the suit or agree to a favorable settlement?
- Are there strategic issues in the troll's program that create an exploitable weakness? For example, would aggressively pursuing your company impact the troll's chances of a big win with another target?
- Is a technical design-around feasible and affordable? Can your company's R&D staff find a new solution?

To assess these questions correctly, you must have a view of your product sector history for prior art and understand the technology incorporated in your products.

Spot a patent bully

Patent bullies are corporations with large IP holdings that seek strict enforcement of their patents in the marketplace. These companies create assertive licensing campaigns to enforce their patent rights by using intimidation and their size as leverage. Their strategic objectives may simply be revenue generation, but they more often employ strategies to protect a market they dominate or to raise a competitor's cost base. This activity is a legitimate means for large corporations with huge R&D investments in technology to obtain a return on their investment and establish an even playing field.

The world of patents and patent royalties involves increasingly large sums of money for patent bullies. "In America alone, technology licensing revenue accounts for an estimated $45 billion annually; worldwide, the figure is around $100 billion and growing fast." (The Economist, A survey of patents and technology, Oct. 22, 2005)

Defend against bullies

Defending your company against patent bullies can be complex and costly. A patent bully will usually present a sample number of patents, which are allegedly being used in your products. Typically, the bully will include claim charts that document the alleged infringement.

The common response from many companies is extensive research into prior art to attempt to invalidate the patents as presented. After spending vast amounts of time and money, if you are 100 percent successful in eliminating all the patents in a negotiation or a lawsuit, a well-endowed patent bully will then merely provide a new batch of patents from their large portfolio. They rely on your own FUD (fear, uncertainty and doubt) to compel you to reach a quick settlement favorable to the patent bully.

The most effective response to a patent bully claiming infringement is to pursue a cross-licensing agreement. Your time and resources are much more effectively deployed generating evidence of infringement of your own technology by the patent bully. Once it can be established that you are both using each other's patented technology and a cross-license is required, the issue then simply becomes an accounting discussion. If the revenues you gain from their technology are less than the revenues that the bully generates using your technology, assuming a similar royalty rate, the patent bully pays you. In fact, this result, while not unknown, is still extremely rare. FUD factors within the target company's management, directors, shareholders, customers, suppliers and even employees usually motivate the target company to accept the bully's demands and settle for a highly unfavorable result.

Patent strategy

Ensuring that your company has a solid patent strategy that includes a defensive component and knowing the players—will pay off when it is time to defend your business from patent predators.

In all cases the foundation of your defense is derived from the range and depth of your technical knowledge as it applies to both your own and your attacker's patented technology.

When defending against infringement allegations, you need to be able to separate the serious threats of patents with valid claims from fishing expeditions. Insist on a documented claim chart. You must create effective counter-strategies based on the attacker's motivation and profile.

If claiming infringement to support a cross-license, establish your credibility to get the attention of the company you are making the claim against. You must be able to show objective proof—such as a claim chart. You must be able to state 'This is my patent, this is your product, here is a claim chart that proves you are using my technology in your product. I think we should sit down and negotiate.'

Semiconductor and microelectronics companies that take patent defense strategies seriously at an early stage and prepare for the day that they become an attractive patent licensing target won't need a crystal ball. They'll be solidly positioned to successfully defend—or assert—their patent assets.

References:

- Danielle Williams, Steven Gardner, Basic frame work for effective responses to patent trolls, in IP Links, North Carolina Bar Association's Intellectual Property Law Section, Volume 17, No. 3, April 2006.
- Bruce Berman, No more name-calling, please, Intellectual Asset Management, IP Investor Column, February/March 2005.
- Jeffrey D. Sullivan, Baker Botts, Vanquishing the Patent Trolls, News Exchange, Licensing Executives Society, Britain and Ireland, April/May, 2005.
- Duncan Bucknell, Strategic responses to 'patent trolls', www.duncanbucknell.com, April 2006.
- In Silicon Valley, a Man Without a Patent, New York Times, April 19, 2006.
- Brenda Sandburg, You may not have a choice. Trolling for Dollars, The Recorder, July 30, 2001.
- Maggie Shields, Technology industry hits out at 'patent trolls', BBC News, June 2, 2004.
- Declan McCullagh, Patent crisis is a myth, says ex-Microsoft exec, CNET News.com, August 24, 2005.
- James Bessen & Michael J. Meurer, The Patent Litigation Explosion, Boston University School of Law, Working Paper Series, Law and Economics, Working Paper No. 05-18, August, 2005.
- The Economist, A Survey of Patents and Technology, October 22, 2005. ☐

BIOGRAPHY

▶ continued from page 1

at Mosaid Technologies. Hands-on analysis of a broad array of memory chips quickly taught Terry about IC design and the value of reverse engineering.

After a few years of running the reverse-engineering group for Mosaid, the success of the progenitor of the Patent Intelligence business was perceived as a conflict with Mosaid's Design and Tester business units. Mosaid decided to shut the reverse-engineering business down. Responding to customer demand and his need for a job, Terry started Semiconductor Insights with funding from a client and initial support from Mosaid. As well as the technical competitive analysis at SI, Terry expanded the intellectual property (IP) side of the business. Reverse engineering was an established concept for technical intelligence, but Terry was among the first to see its value for patent lawyers and the industry's IP groups.

Both sides of the business took off under Terry's leadership, but after a few years, his vision and strategy no longer matched that of the company's client ownership.

The only answer—the way to put his vision into practice—was to start his own company, and so, in 1992, the stage was set for Chipworks. At this point, the stage was only the basement and spare bedroom of his house, but you have to start somewhere.

The company began with Terry, and after a few months, a few engineers on contract. After about a year and a half, full-time employees were added including an administrator. The headcount quickly reached 15 as the demand for reverse engineering increased. Later, 15 people proved too many for Terry's house, so the business moved to its first premises in central Ottawa.

In the early years, Terry concentrated on Asia, a huge market for reverse-engineering services. Here, Terry's capabilities and values, imaginative commitment to customers, and focus on excellence immediately spelled sucess.

"We have a passion for excellence and a commitment to our clients, and our customers could see this from the early days," says Terry. "They know we've always worked for them, and they use us as an extension of their own company." Now the company has offices in North America, Japan, Poland, Korea and Taiwan, representation worldwide, and clients around the globe.

With a restructuring in 2005, Chipworks has about 100 employees spread over three divisions: Technical Intelligence, Patent Intelligence, and Core Capabilities, which manages the infrastructure. It's never been hard to attract people to Chipworks. For one thing, Terry isn't the only techno-maniac out there—most of the Chipworks employees are crazy about microelectronics. The other major factor is the company's philosophy. There have been changes over time, but the basic values remain constant: team work and sharing knowledge in a supportive environment. It's also vital to reward people for their work. For example, it had an early profit-sharing scheme developed into a bonus system, then more recently into shares in the company.

Open communication between employees and management has always been a key part of Terry's management style. This practice was easier to maintain with a company of 15 individuals, but it's still the most important management objective at Chipworks—it just takes more thought and care.

As the company has grown, so has the semiconductor industry. One of Terry's tasks is to keep track of trends.

"Scaling challenges and mobile personal devices are driving the industry in an environment more competitive than ever," he says. "Penalties are severe for companies that get it wrong."

As Terry explains, "The outsourcing trend is good for us. Most companies can't do competitive analysis for themselves any longer. A decade ago, you could do reverse engineering with a $40,000 microscope. Now you need $10 million worth of equipment and specialized research."

On the patent intelligence side, the picture for Chipworks is equally rosy. Terry says, "The value of intellectual property is constantly rising, so the market demand for Chipworks services is always there. In the information age, it's good to be an information provider. Our information helps our clients improve their products and their licensing positions, so we're always in demand."

Most of all, this role allows Terry to concentrate on his favourite aspects of the business: strategy, vision, and the drive to the future.

"The opportunities are all out there," he says, "we just have to choose the right ones."☐

OVERVIEW

Inside Technology

Through creative investigation and analysis, Chipworks looks 'inside technology' to provide industry professionals with knowledge. Chipworks is an internationally recognized technical services company that analyzes the circuitry and physical composition of semiconductors and electronic systems for a wide range of applications in patent licensing support and competitive study.

Since 1992, Chipworks has successfully helped semiconductor and electronics manufacturers, achieve their goals by supporting research and development efforts in product development and patent portfolio management.

Headquartered in Ottawa, Canada, the company has offices around the world.

Patent Intelligence

Chipworks knows technology and understands technology patents. For internal intellectual property (IP) groups, we enhance the team by providing third-party technical evidence and becoming intimately familiar with the client's patent portfolio. This helps limit their exposure to aggressors and helps to maximize return on patent assets.

For law firms, we work with their deadlines and unique requirements, delivering accurate and impartial third-party technical evidence. We provide litigation support and patent defense, enabling them to build and strengthen their client relationships.

Technical Intelligence

Chipworks delivers detailed technical analysis of microchips and electronic systems to circuit and process designers in semiconductor and electronics companies. They use this information to maximize their knowledge of the latest technology, benchmark their products, maintain their competitive advantage while accelerating their product development process. Chipworks' reports also aid customers in making market-entry or exit decisions.

Executive Team

Terry Ludlow
Founder, Chair & CEO

Julia Elvidge
President

Neal Stansby
VP Core Capabilities

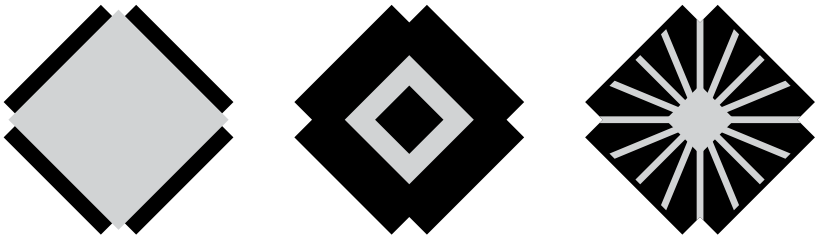
Steven Adam
VP Patent Intelligence

Wendy Burgess
VP Technical Intelligence

Mike Thumm
VP Finance & CFO

Chipworks

3685 Richmond Road,
Suite 500 Ottawa,
Ontario K2H 5B7
Canada
T +1.613-829-0414
F +1.613-829-0515
www.chipworks.com
info@chipworks.com



CORPORATE HEADQUARTERS AND SALES
Canada
3685 Richmond Road, Suite 500
Ottawa, On K2H 5 B7 Canada
Tel: +1 613.829.0414 Fax: +1 613.829.0515
Email: info@chipworks.com

INTERNATIONAL SALES
Japan
Chipworks Kabushiki Kaisha (K.K.)
Ichigaya Tokyu Bldg., Suite 1011, 4-2-1 Kudan Kita, Chiyoda-ku
Tokyo 102-0073, Japan
Tel: +81.3.3511.7750 Fax: +81.3.3511.7751
Website: www.chipworks.co.jp Email: info@chipworks.com

Korea
Jae Ho, Kim
A-1121 DongYang Paragon, 17-2, JeongJa-Dong
BunDang-Gu, SeongNam, GyeongKi-Do, 463-842, Korea
Telefax: +82.31.782.8204 Mobile: +82.11.313.3204
Email: jhkim402@hanmail.net

Taiwan
Taipei International Business Center
Suite 620, 4F, 25, Sec. Tunhua S. Rd., Taipei, Taiwan, R.O.C.
Tel: +886.2.2577.4352 Fax: +886.2.2577.4157
Email: simonliu@chipworks.com

INTERNATIONAL REPRESENTATIVE
Israel
Tal Oren
Managing Director -Micon Lt.
Netcom Building, 8 Hanagar Street, Industrial Zone
Neve Ne'eman B, Hod-Hasharon 45240, Israel
Tel: +972.9.7756867 Fax: +927.9.7442386 Mobile: +927.52.3355497
Website: www.micon.co.il Email: tal@micon.co.il

OPERATIONS
Canada
3685 Richmond Road, Suite 500
Ottawa, On K2H 5 B7 Canada
Tel: +1 613.829.0414 Fax: +1 613.829.0515
Email: info@chipworks.com

Poland
ul. Krolowej Marysienki 90, 02-954 Warszawa Poland
Tel: +48.22.310.1250 or +48.22.310.1251 Fax: 48.22.310.1252