



Intellectual Property Protection, Patent Reform, and the DMCA

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Introduction

Protecting intellectual property (hereinafter referred to as IP) has become an enormous issue with the continued growth and progress of the Digital Age. IP protection serves as both a deterrent to infringement by those who would seek to capitalize on the hard work an organization has put into developing, manufacturing, and marketing a device, and as way of protecting an organization against counterfeit products which could lead to negative marketplace perception. Actively protecting IP also serves as notice to those within the organization and outside of the organization that attempts to infringe upon or circumvent the protections you have put in place clearly demonstrates willful violation, and consequently sets a legal ground for potential damage recovery.

The Problem

The global economy we currently live in has created seemingly endless opportunities for anyone with an entrepreneurial spirit. We live in a world where borders pose little to no limitation when it comes to dissemination of information of any kind, and knowledge has become a commodity as lucrative as the most precious stone or metal found anywhere in the universe. Anyone with access to a computer, an internet connection, and some information to sell has the ability to reach millions of buyers within record time. This has led to an entirely new breed of threats to IP, not the least of which is highly scalable hacks. The information age has also created an environment where collaborative efforts of hackers are easily disseminated, often in a very organized manner.

The global economy has also created an environment where ill begotten IP can be

quickly converted into tangible assets through the many low cost manufacturing operations located throughout the world. In some cases, the manufacturing of devices with the stolen IP is done through operatives who are associated with employees of the very same manufacturer the legitimate copyright owners have subcontracted to produce their products. It then becomes obvious how, under these circumstances, financial losses quickly build at an almost exponential rate, and the negative impact to an organization's bottom line is significant.

Previous Options

Previous options for IP protection have traditionally relied heavily on patents and patent attorneys as a means of prosecution and enforcement. This has proven effective for literally hundreds of years, as patent holders have found favor within the legal system, and, in many instances, been awarded handsomely for their diligent efforts in both protecting the IP through patents and copyrights and effectively pursuing remedies the patent system has bestowed upon IP owners.

The globalization of world economies has created a situation where prosecution of those who would infringe on IP rights has introduced innumerable challenges. Courts, governments, legal representatives, to mention a few,

must all cooperate in order to ensure success in remediation. This can take a long time. Nonetheless, a cottage industry of sorts has developed around IP violation prosecution. The Patent Reform Act of 2007, however, has now introduced an entirely new group of challenges to IP protection. Under the Patent Reform Act of 2007 provisions, much of the "teeth" of patent prosecution, and subsequent remediation, has been knocked out. Among some of the provisions of The Act are:

- Decreasing the period of back damages from 6 years to 2 years.
- Inability to claim development costs as part of the remediation package.
- A "good faith" provision which would give an infringing party a potential out if he claimed that he did not know he was violation IP rights.

These reasons alone are perhaps enough fodder for fueling any organization to perform further due diligence in its quest to protect its IP. I assure you there is even more cause for concern. Suffice it to say, we need a solution which serves to, at the very least, mitigate these risks, and hopefully work towards eliminating them altogether.

GraniteKey Solution

At GraniteKey we believe protecting IP should be approached proactively. Modern IP, while it is greatly enhanced by the marvels of the digital age, suffers from the many perils of technology as well. GraniteKey believes that the first step to protecting IP in the digital age is not to focus on technology, but to begin at a much higher level. We believe that security is

journey, not a destination, and choose to concentrate on business processes and objectives. Security, as we have discovered, is much more of a management issue than it is a technology issue. Once we have clearly defined the objectives we determine the correct approach through threat modeling and risk analysis. We believe it is important for our customers to fully understand the security challenges they face, and it is through this mutual understanding that the secure solution naturally comes about.

Various technological methods are available to GraniteKey in our quest to secure your devices. We are, however, quite agnostic to the technology. What is most important is making sure the technological implementation is the correct one for the stated objectives.

Benefit 1: Understanding

Security is a mystery to most organizations. You know you are supposed to have it, and not having it can cause problems, but how to implement it is often unclear. Moreover, the effectiveness of a secure implementation is often impossible to determine. By working with GraniteKey your organization has the benefit of gaining a clear understanding of how and why the pathway to security is achieved.

Benefit 2: Additional Legal Protections

Patent Reform, as mentioned earlier, is destined to diminish much of the remediation device manufacturers have come to rely on. Securing your IP through the use of hardware and software locks creates an environment whereby remediation exists for theft of and subsequent cloning of IP through reverse engineering under provisions of the Digital Millennium Copyright Act (The DMCA) of 2006. Under provisions of this act, a device manufacturer may be able to recoup some, if not all of its financial losses due to infringement of IP. Violation of the DMCA is also a criminal act, which allows for remediation through criminal courts as well as civil court. This is above and beyond what may be claimed in a patent dispute case.

Benefit 3: Investor Confidence

When approaching investors, gaining their confidence is the single most important obstacle you face. No matter how amazing your technology may be, investors are only concerned with not losing their investment. Through taking a proactive approach at securing the IP of your devices, you demonstrate a level of responsibility indicative of a thought process well aligned with that of your potential (and current) investors.

Implementation

The first step in implementing hardware based IP protection solutions is to fully understand the business objectives of the client and the business process as it relates to the IP. It is important to have a thorough understanding of the threat model and to do

a thorough risk analysis in order to ensure a level of security that sufficiently protects the IP without leading to a point of diminishing returns on the investment in security. Once this has been determined, the focus is on eliminating scalable threats through the application of our Threat Taxonomy, followed by a thorough peer review. GraniteKey then works with our partners to design and implement the secure modules required to protect the IP. GraniteKey has developed a template based framework for determining the proper method to implement security in devices. We also work with the manufacturers of the final products, as required, to insure that the implementation is both complete and performs as expected.

Summary

GraniteKey solutions offer value added services to companies that specialize in helping bring products to the marketplace. As the global marketplace continues to grow, we are constantly looking at new and creative ways to protect the assets of our customers, and your customers as well. The constantly changing technological and legal environment requires organization to stay a step ahead of challenges to growth and profitability, and our solutions can help you and your customers maximize profit while minimizing risk. Give us a call and let us help you.



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