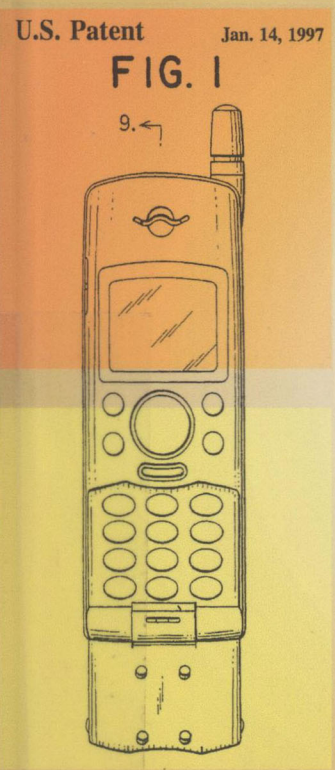
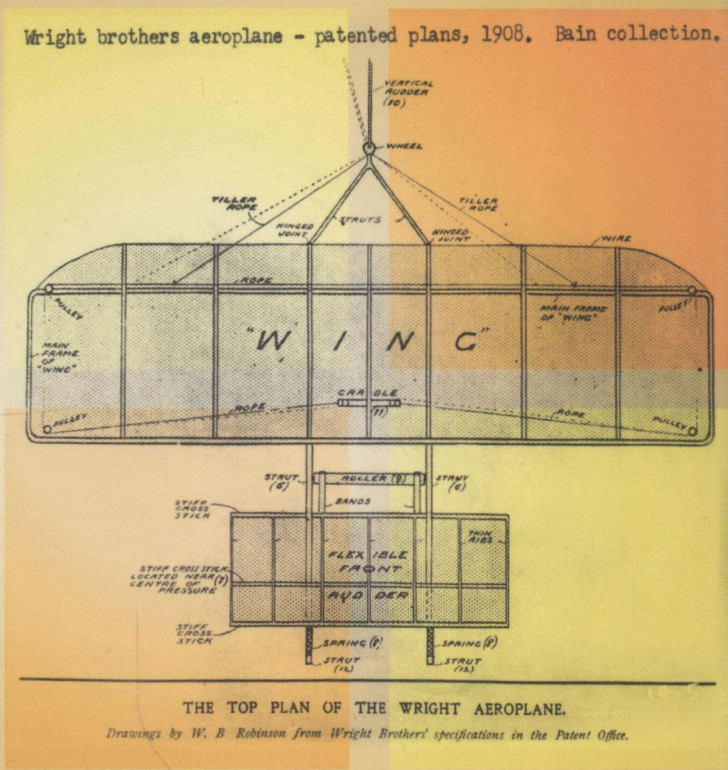
The Changing Face of US Patent Law and its Impact on Business Strategy

Edited by Daniel R. Cahoy Lynda J. Oswald





NEW HORIZONS IN INTERNATIONAL BUSINESS

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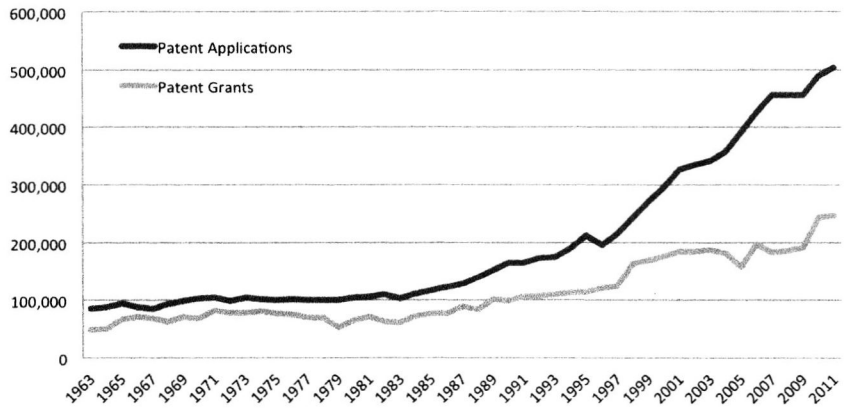
Contents

Introduction

As one of the world's most important markets, the United States is a critical space for developing new products and services. Firms that innovate require legal protection to ensure that they capture a return on their investment. In the context of new and useful articles and methods, that protection is largely provided by the US patent system. Intuitively, one may conclude that having a well-functioning patent system in America is essential for a prosperous business environment in the US. In fact, the system has been cited as an important tool for economic growth and jobs creation (Rai, Graham & Doms, 2010). The substantial patenting activity by non-US companies means that the US patent system benefits the global economy as well.

Any modern firm seeking a competitive advantage must therefore understand the nature and functioning of the patent system. First and foremost, patents provide a period of exclusivity for maximizing profits. Additionally, patents can confer a myriad of ancillary advantages for a firm, such as acting as a signaling device or providing a vehicle for accessing competitor technology through licensing. For competitors and society, patents serve as a key conduit of information that fuels broader innovation by disclosing a fully enabled invention even before it is in the public domain. When firms fall on hard times, investors often rest their hopes on patents—often as an important source of remaining value (Mattioli, Spector & Jones, 2012).

Evidence of just how much patents can shape an industry is readily available in the news. For example, on any given day in 2011 or 2012, one was likely to encounter a story about litigation in the mobile communications sector. Nearly all of the major players—including Apple, Google, Microsoft, Samsung and HTC—have been involved in one case or another in a variety of venues across the US. They have played the role of both plaintiff and defendant in cases involving a dizzying array of technologies from touchscreen inputs to software for enhancing messaging. The litigations are high stakes to say the least. In the battle between Apple and Samsung involving cell phones and tablet computing devices, Apple scored a decisive victory in August 2012 when it received a jury verdict of infringement in the amount of nearly $1.5 billion (*Apple Inc. v. Samsung*



Source: US Patent & Trademark Office, 2012.

Figure 0.1 US Patent Applications and Grants, 1963–2011

Electronic Co., 2012; Wingfield, 2012). The consequences may be a "tax" added onto the price of mobile computing devices that compete with Apple's (Ante, 2012). One might be tempted to view the mobile communications sector as an outlier; however, just weeks earlier Monsanto won a $1 billion verdict over Du Pont in the completely unrelated field of genetically modified seed patents (*Monsanto Co. v. E.I. Dupont De Nemours & Co.*, 2012). Clearly, patent rights have a great impact on business.

There is reason to believe that the US patent system will play an even greater role for businesses in the future. After leveling off slightly in the first part of the 21st century, the number of issued patents has exploded, rising to 247,713 in 2011.

As more and more patents issue, firms are increasingly compelled to integrate patent strategy into their business plans. Moreover, patents have extended into industries that are not necessarily perceived as high technology, such as food production and clothing manufacture. It is no longer optional for the business community to care about the patent environment; understanding patents is a baseline requirement.

However, as important as the US patent system is to the global business community, it is not without problems. Concerns have arisen over the years that there is a substantial misalignment between the interests of society and the actual impact of the system. Some believe that patents are too easy to obtain or that the quality of issued patents is poor, clogging the marketplace with blocking property rights and stunting competition (Jaffe & Lerner, 2004; Heller, 2008). Others have argued that patents can limit

follow-on innovation by preventing the sharing of technology necessary to serve as a foundation for others (Murray & Stern, 2007). The rules are often archaic and poorly suited for emerging industries, particularly those related to the Internet. Even when there is a theoretical advantage to the system, the costs of ownership and enforcement may prevent many patent owners from seeing a benefit to pursuing rights. In fact, it has been suggested that patents may not be cost-effective for any industry outside of pharmaceuticals and biotechnology (Bessen & Meurer, 2008).

To address the problems in the patent system, there have been many proposals for change from academics, business leaders and policymakers. While it is not always easy to agree on the specific reforms necessary—divisions exist between industry sectors like pharmaceuticals and electronic communications that experience the system differently—most agree that the system should be improved.

And indeed, much change has come to patent law over the years. The courts in particular have been very active in reinterpreting of the Patent Act of 1952 and articulating common law rules that fill in the spaces. Some of most important changes have come from the US Supreme Court, which until recently appeared to cede most patent issues to the specialized US Court of Appeals for the Federal Circuit. For example, in *eBay Inc. v. MercExchange, LLC* (2006), the Supreme Court curtailed the use of injunctions in patent cases, which weakened the negotiating power of patentees. In *KSR International Co. v. Teleflex Inc.* (2007), the Supreme Court broadened the test of obviousness, retroactively calling into question the enforceability of many issued patents. More recently, in *Mayo Collaborative Services v. Prometheus Laboratories Inc.* (2012), the Supreme Court addressed the scope of patentable subject matter by further defining what activity transformed a method from a law of nature to a protectable invention.

In addition, Congress has been active in patent reform. Typically, the legislative branch is the slowest to change due to the consequences of altering such an important system, not to mention the complexity of the rules and differing interests. However, in 2011 Congress pushed through some of the most significant reforms in decades when it enacted legislation known as the America Invents Act (AIA). The most prominent and controversial of the AIA's changes is shifting the US from a first-to-invent to a first-to-file system, meaning that rights will normally be determined by the first inventor to file an application at the US Patent and Trademark Office (PTO). Other changes include expanding prior user rights, eliminating the best mode requirement and making it nearly impossible to claim a patent on a tax strategy. For businesses, an important but less discussed revision was the elimination of private *qui tam* actions for false patent

marking, which had previously led to significant liability for manufacturers that neglected to remove expired patent numbers.

The PTO has also been very busy in changing the way it operates in response to demands from the business community. The office has dramatically increased the number of examiners to deal with the deluge of patents, created accelerated exam procedures to account for important technology, drafted guidelines for examination of inventions in areas of tenuous patentability, and increased its outreach to the business community. When the PTO's efforts are combined with its collaboration with other patent offices across the globe, it is fair to say that the amount of information available to the business community has never been greater.

Still, many believe that much more is required for the system to function properly so that it optimally encourages innovation while preserving competition. One of the United States' most widely respected scholars and jurists, Judge Richard Posner, issued a strong critique of the patent system after sitting as a trial judge in a case between Apple and Motorola (Posner, 2012). According to Judge Posner, most industries do not benefit from patent rights.

> In most [industries], the cost of invention is low; or just being first confers a durable competitive advantage because consumers associate the inventing company's brand name with the product itself; or just being first gives the first company in the market a head start in reducing its costs as it becomes more experienced at producing and marketing the product; or the product will be superseded soon anyway, so there's no point to a patent monopoly that will last 20 years; or some or all of these factors are present. Most industries could get along fine without patent protection.

The problems caused by factors such as patent trolls, defensive patenting and search costs can render the system a burden on industry rather than a catalyst for innovation. Judge Posner suggests that a variety of reforms, such as reduced patent terms and widespread compulsory licenses, are necessary.

The business community is therefore faced with an extremely important patent rights system that can also create barriers and is in a constant state of flux. This book is intended to highlight some of the most important changes in US patent law in recent years and describe their impact on domestic and global businesses. The changing face of US patent law can be broadly categorized in terms of: (1) the forces that impact patent policy; (2) modifications to the patent application process; (3) issues and reform related to patent oppositions and litigation; and (4) rights regimes that supplement protection in industries where patents are less effective.

Individual chapters within this book provide detailed consideration of various issues within these categories.

FORCES THAT INFLUENCE PATENT POLICY

Because the overall functioning of the US system is complex, lawmakers and the courts must keep in mind policies to guide decision-making and provide a measuring stick for success. General principles of course include the creation of incentives for increased invention as well as follow-on innovation. But many other policies could be integrated into the patent system, such as support for green technology, assistance for independent inventors, preference for domestic patent applicants or high standards for the examination of gene sequences. Unfortunately, a well-functioning patent system cannot be all things to all interest groups, so choices must be made. How is this done in the context of a system that has the potential to so dramatically influence the business community? The answer can be found in an understanding of the forces that influence patent policy.

In Chapter 1, Robert Thomas and Cassandra Aceves confront this topic head-on by considering the formation of interest coalitions to effectuate intellectual policy revision. The chapter contrasts the experiences of copyright interest groups with those of patent interest groups in recent years, and assesses how each has fostered change. It considers why some groups appear to be more successful than others in influencing the debate, building on interest-group politics theory and other descriptions in the literature (e.g., Thomas, 2006). The chapter provides a model that identifies variables motivating intellectual property political action and the coalitions that are likely to form based on these factors. It then applies the model to explain the influences on international treaties such as the Trade-Related Aspects of Intellectual Property Agreement (TRIPS, 1994) as well as domestic legislation such as the AIA. The chapter concludes that successful influence occurs when efforts are drawn narrowly and suggests that future coalitions are likely to follow a conservative model. It argues that such a model facilitated passage of the AIA and the lack of such an approach in controversial efforts to expand copyright met with predictable failure.

In Chapter 2, David Orozco considers a narrower venue for influence: the PTO. The chapter explains the underappreciated significance of the PTO in making patent policy in industries such as software, biotechnology and clean technology. It focuses on the PTO's rulemaking authority and argues that, despite court-imposed limitations, the agency engages in substantive policymaking. The chapter refers to such power