INTRODUCTION:
INTELLECTUAL PROPERTY AND THE CREATIVE AND INNOVATIVE ECONOMY

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TRADEMARKS, BRAND IDENTITY, AND COMMERCIAL MEANING

Trademark Source Identification

The concept of trademark protection in the marketplace for goods and services and in the marketplace for social and political discourse is vigorously contested in legal scholarship. "The informative job of trade symbols is conventionally considered to be identification of source; and it is this capacity which courts traditionally have protected" (Brown 1948:1185). From this perspective, the limited purpose of the trademark is source-identification and, thus, that trademark law should prevent confusion in the marketplace regarding the source of goods—nothing more, nothing less (Litman, 1999). "[T]he costs of artificial brand differentiation in terms of power over price are quite clear. …[P]ropertizing trademarks comes at a rather significant cost to society" (Lemley, 1999:1692; 1696). Consumers should be protected against source confusion, or uncertainty. Trademark "infringement" means, as a matter of law and enforcement, that a "passing-off" of goods is taking place in the marketplace and that should not be permitted. The "confusion" perspective conceptualizes trademarks narrowly as source identifiers that should not be considered intellectual property rights like patents and copyrights.

Trademark Brand Commercial Meaning

However, an alternative perspective was articulated: "For hundred years ago a trademark indicated either the origin or ownership of the goods to which it was affixed. To what extent does the trademark of today really function as either? Actually not in the least! …[T]he source of origin of the goods bearing a well known trademark is seldom known to the consumer." The alternative trademark perspective could not be more starkly different in doctrinal conceptualization: "The true functions of the trademark are, then, to identify a product as satisfactory and thereby to stimulate further purchases by the consuming public. …Today the trademark is… the most effective agent for the creation of good will…. The mark actually *sells* the goods. And, self-evidently, the more distinctive the mark, the more effective is its selling power" (Schecter, 1927:818). From this perspective, "confusion" is too limited as policy rationale: A trademark is a property right because it provides incentives to producers to invest in quality and establish goodwill in the marketplace: "If the law does not prevent it, free riding will eventually destroy the information capital embodied in a trademark, and the prospect of free riding may therefore eliminate the incentive to develop a valuable trademark in the first place" (Landes and Posner, 1987:270). Trademark holders enforce their trademark rights at substantial cost (Bone, 2004) so that trademark "infringement" is a property misappropriation not a mere confusion (Bone, 2006).

A semiotic analysis of trademark law supplements the economic analysis emphasis on investment in quality and goodwill by arguing that the primary goal of trademark holders is the

sign-value of “distinctiveness” of their mark in the marketplace (Beebe, 2003-2004) and the “differential distinctiveness” of the mark establishes its “strength” when trademark disputes arise in the marketplace (Beebe, 2005). Trademark strength owes to the inherent distinctiveness of fanciful marks or the secondary meanings—the identities of the marks and association with particular goods and services--achieved with suggestive or descriptive marks and to usage in the marketplace--“the rights in mark flow from it use” (Carter, 1990:767). But, the semiotic analysis leads other legal scholars to argue that symbols such as trademarks receive meaning through social discourse, a process of democratic dialogue that demands that trademark holders accept that they do not necessarily control that meaning or all communication uses of the mark (Coombe, 1990-1991)—once you put it out there in the marketplace, it is no longer “yours alone.”

Management studies embrace conceptualization of trademarks as providers of information for marketplace efficiency and as providers of commercial meaning (Ramello and Silva, 2006), very much so when brand equity is to be measured (Aaker, 1996). Marketing studies conceptualize brands as symbols with both functional and expressive purposes (Bhat and Reddy, 1998). Brand management is largely about building brand identity (Upshaw, 1995) and is an exercise in applied consumer psychology: It is all about what the customer thinks (or believes) about the brand. The concepts and analytic frameworks of management and marketing studies with respect to brand align better with the commercial meaning or distinctive property perspective than with the source or confusion identity perspective within legal studies.

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PATENTS AND TECHNOLOGY INNOVATION

Patent Incentives

A founder of institutional economics, Douglass North (1981:8, 10) argues that "the profitability of investing in new knowledge and developing new techniques requires some degree of property rights over ideas and innovation. In their absence the new technology may not be forthcoming." Patent rights, according to this theory of how laws and economic interact, provide incentives to innovators to invest their know-how, time, and money into the creation of inventions under circumstances of the knowledge appropriability problem associated with intangible assets (Dam, 1994). Without marketplace intervention by the government through patent law, the investment into knowledge-based innovation may be unjustifiable because the risk is great that a competitor will appropriate the invention with less risky investment.

Strategic management scholars take great interest in patent laws. Firm managers make their investment and business strategy decisions within particular knowledge appropriability regimes governed in large measure by intellectual property laws and their relative enforcement (Teece, 1987). The knowledge appropriability regime ranges from "tight" or "strong" to "loose" or "weak" with implications for firm decisions about how to manage their intellectual capital: "[Intangible] assets can be the source of competitive advantage only if they are supported by a regime of strong appropriability or are non-tradeable or 'sticky'" (Teece, 2000:20). That is, either the strong appropriability regime protects the firm's intellectual capital or the firm figures out some business strategy of protection, such as a software program customized to the needs of a particular customer.

Technology Markets

The economics of technological innovation are a lot like gambling or a lottery because most inventions are of modest value or even worthless—and that applies to many patents--and that economic reality has some big implications for innovators and policy-makers (Scherer and Harhoff, 2001). Ideally, some success, even great success, emerges from technology R&D. However, prospective technology entrepreneurs and their policymakers must accept the fact that technology R&D is fraught with the risk of failure. Successful technology commercialization entails product/service R&D, production, and marketing. A useful invention prototype should be the product of an R&D process, but it must also be manufactured at a quality level and cost appropriate to the marketplace and must be marketed and distributed to customers and against competitors. The technological innovator, however, need not possess all these capabilities--complementary assets—within the organization. Some of the essential questions of strategic management of technology concern which capabilities to possess, which to acquire, or which to build inside the organization and which capabilities to leave to a partner. When these capabilities can be gained through partnership, then strategic management studies explain that efficient technology markets play vital facilitating roles (Arora, Fosfuri, and Gambardella, 2001).

Sufficiently strong appropriability regimes establish the institutional conditions for technology markets (Arora, 1995, 1996, 1997). From a managerial perspective, technology leakage should be minimized. Technology holders should be able to share technology with a partner or partners with the expectation that the appropriability regime encourages the partner to protect the technology from third parties. That is, sufficiently strong appropriability regimes facilitate licensing and cross-licensing business partnerships. The parties to a licensing or cross-licensing of technology relationship look to patent rights so that the nature of the knowledge to be transferred and the terms of its use can be specified through contract (Grindley and Teece, 1997). A weak appropriability regime means that the technology holder would attempt to negotiate with a trade secret and that much information asymmetry typically is not conducive to finding a partner. Thus, a weak appropriability regime means weak technology markets and that means that in practice technology innovators have either to possess, acquire, or build the complementary assets themselves—or fail in the marketplace with the new technology. The transactional rationale for the law of patents and intellectual property rights supplements the knowledge appropriability problem rationale and has become ever more conceptually important to the analysis of contemporary technology innovation and competition (Merges, 2005).

Study of contemporary industrial R&D finds that stronger patent rights matter more to smaller enterprises than to bigger enterprises, a finding the authors describe as "sensible, even obvious" but unexplored empirically (Arora, Ceccagnoli, and Cohen, 2007:392). Economic historians find that nineteenth century U.S. technology innovation was characterized by the presence of technology markets involving lone inventors who licensed their patents to enterprises that would then manufacture it or integrate it into their systems (Lamoreaux and Sokoloff, 1999). There is some evidence, then, that if it is true that "the most successful economies are those that have a mix of innovative entrepreneurs and larger, more established firms… that refine and mass produce the innovations that entrepreneurs… bring to market" (Baumol, Litan, and Schramm, 2007:4), then patent rights may be especially important for the efficient technology markets that enable entrepreneurship.

Patent Critiques

There is a school of thought, however, that says that, while the logic of patents as incentives is basically sound (though arguments in support of the superiority of cash reward systems are made (Shavell and Van Ypersele, 2001), the present global, especially U.S., patent system has established a bio-medical anti-commons with too many patents in general and excessively broad patents with respect to research tools in particular (Heller and Eisenberg, 1998). However, Heller and Eisenberg did not offer an empirical study or any real examples of the phenomena they imagine.

The anti-commons thesis has encouraged a good deal of theoretical and empirical debate. Patent litigation negatively impacts firm R&D investment decisions (Lerner, 1995), especially in pharmaceuticals, biotechnology, and the life sciences because the economic stakes are high (Lanjouw and Schankerman, 2001), and small firms are especially at risk (Lanjouw and Schankerman, 2004). Patent litigation has in recent years "exploded" so that the costs to litigants outweigh the benefits of their patent rights (Bessen and Meurer, 2005) and threaten the global

technology innovation system (Jaffe and Lerner, 2004; Bessen and Meurer, 2008). Nevertheless, some in law and economics (Epstein and Kuhlik, 2004) dismiss the Heller and Eisenberg thesis as inconsistent with both economic theory and marketplace experience: Contesting pharmaceutical patent holders "work through" their technology business problems through licensing, cross-licensing, and other business strategies (Walsh, Aurora, and Cohen, 2003). A survey of university and industry bio-medical technology managers finds that pharmaceutical R&D projects stop 62% of the time because of lack of funding, 60% of the time because of lack of time, 29% of the time because of competition concerns, and 1% of the time because of patent litigation threats (Walsh, Cohen, and Cho, 2007). Thus, there is a good deal of accumulating empirical research from the U.S. experience that contradicts the anti-commons thesis.

Thus, there are two views about life sciences patents and litigation and there is evidence to support both views: Litigation is expensive, time-consuming, and debilitating, especially for small technology start-ups, but litigation often results in patent-licensing, cross-licensing, and strategic alliances among competitors. Some critics doubt the true value of patents and intellectual property rights to pharmaceutical innovation. While France, Germany, Switzerland, and the United Kingdom have been major pharmaceutical innovators over the course of the 20th century, a study addressed the incentive role of patents by studying the effect of patent reform in the early 1980s on pharmaceutical R&D and innovation in Italy, a country with no historical record as a pharmaceutical innovator. They found that the effect of patent reform for pharmaceutical innovation had been modest (Scherer and Weisburst, 1995), study findings often cited by patent system critics. But, the investigators cautioned that the Italian government had enforced the most stringent pharmaceutical price controls in Europe during the post-reform era, which may have "overwhelmed the stimulative incentive effects of drug product patent protection" (Scherer and Weisburst, 1995:1023). Institutional economics does not say that patent reforms will necessarily yield specific technology R&D outcomes absent other aspects of the national innovation system.

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COPYRIGHTS AND CULTURAL CREATIVITY

Law and Economics Thesis

Cultural creators will produce new works owing to innate desires of self-expression, but they will create more works when governments intervene with copyright institutions (Plant, 1934). Cultural works possess public good or appropriability problem economics—high costs of creation, low costs of reproduction—and that explains the law and economics of copyright law (Landes and Posner, 1989). Cultural creators share with technology innovators the distinctive economics of the knowledge appropriability problem: Product development is expensive; production and distribution tend to be comparatively inexpensive; potential investors and competitors consider the strategic implications.

Institutional theory explains that government grants intellectual property rights through copyright and patent laws that incent investment into creative expression and technology innovation in order to solve the knowledge appropriability problem confronted by creators and innovators. “In the absence of copyright protection the market price of a book or other expressive work will eventually be bid down to the marginal cost of copying, with the result that the work may not be produced in the first place because the author and publisher may not be able to recover their costs of creating it” (Landes and Posner, 2003:40). “The conventional rationale for granting legal protection to inventions as to expressive works is the difficulty that a producer may encounter in trying to recover his fixed costs of research and development when the product or process that embodies a new invention is readily copiable” (Landes and Posner, 2003:294). An econometric model showed that copyright restrictions promote social surplus by incenting more works (Johnson, 1985).

Law and Culture Thesis

Professor, later Justice, Stephen Breyer (1970) asserted nevertheless that the self-expression desire renders the case for copyright "uneasy." It is worse than that, say some legal scholars: "We are in the midst of an enclosure movement in our information environment. …Expecting information to be owned, and to be controlled by its owner, blinds us to the cost that this property system imposes on our freedom to speak" (Benkler, 1999:354, 356). He argued, "The core difference between the public domain and the enclosed domain is that anyone is privileged to use information in ways that are in the public domain, and absent individualized reasons, government will not prevent these uses. The opposite is true of the enclosed domain" (Benkler, 1999:363). The enclosed domain, he said, should defer to the public domain for a reason fundamental to the U.S. Constitution: "Recognizing property rights in information consists in preventing some people from using or communicating information under certain circumstances. To this extent, all property rights in information conflict with the 'make no law' injunction of the First Amendment" (Benkler, 1999:393.

Jochai Benkler fears, too, that "a world dominated by Disney, News Corporation, and Time Warner appears to be the expected and rational response to excessive enclosure of the public domain" and that "convergence will be towards concentrated commercial production by organizations that vertically integrate new production with inventory management of owned information" (Benkler, 1999:359, 400). Some legal scholars, from the perspective of cultural theory, argue that many potential cultural creators lack social power and that copyright law and its enforcement reinforce their powerlessness the cultural expression marketplace (Aoki, 1996; Chander and Sunder, 2007). Cultural minorities and women especially need protection in the marketplace from the copyright law-sanctioned control of cultural expression by cultural majorities and men. Developing country creators share with cultural minorities and women in the United States a need for broad defenses to ensure social meaning in the cultural product marketplace is not controlled by the haves. Thus, a debate between a law and economics thesis and a law and culture thesis has been taking place among legal scholars regarding cultural product creation and distribution and the ideal appropriability regime.

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