IP & Licensing

Does Patent Monetization Promote SSO Participation?
Timothy Simcoe (Boston University - Questrom School of Business; NBER)
Qing Zhang (Charles River Associates (CRA))
Working Paper

We study the impact of Standard Setting Organization (SSO) intellectual property rights (IPR) policies on standardization and innovation. Specifically, we conduct a pair of event studies for two well-known IPR policy revisions: a switch from Fair Reasonable and Non-Discriminatory (FRAND) to Royalty-Free licensing at the World Wide Web Consortium in 2003, and an update of the Institute of Electrical and Electronic Engineers (IEEE) Standards Association’s IPR policy in 2015. Overall, we find little evidence that these policy changes caused a decline in participation by patent licensors or reduced innovation in patent-intensive parts of either SSO. This pattern holds for both W3C and IEEE, across numerous measures of participation and innovation, and for a variety of different treatment and control group comparisons. We interpret these findings as evidence that any link between IPR policies, innovation, and SSO participation is much weaker than purely theoretical arguments to the contrary often suggest.

Anti-suit Injunctions and Geopolitics in Transnational SEPs Litigation
Giuseppe Colangelo (University of Basilicata, Department of Mathematics, Computer Science and Economics; Stanford Law School; LUISS Guido Carli, Department of Business and Management)
Valerio Torti (European University Institute)
Working Paper

Anti-suit injunctions (ASIs) have recently emerged as a phenomenon significantly affecting the dynamics of standard essential patent (SEP) litigation. The enhanced role played by these patents in the Internet of Things scenario and the willingness of national courts to set themselves up as global licensing tribunals have spurred a race to the courthouse, incentivizing forum shopping and the adoption of countermeasures such as anti-anti suit injunctions (AASIs) and anti-anti-anti suit injunctions (AAASIs). The implications of these litigation strategies have become a matter of geopolitics, as countries fear that the intellectual property rights of their companies may be undervalued by foreign courts to promote domestic economic interests. Against this backdrop, this paper aims to provide a comparative overview of European, U.S., and Chinese SEP disputes in which these injunctions have been issued or claimed and to identify some policy recommendations to curb the frictions affecting SEP licensing.
Delays in Patent Licensing under Asymmetric Information
Taiki Hara
Ryo Kawasaki (Tokyo Institute of Technology - Department of Industrial Engineering and Economics)
Working Paper

In this paper, we explain delays in patent licensing, and propose a solution to eliminate the delays. Licensing promotes technology transfer, but some empirical studies point out that delay in a license agreement exists, and this delay then pushes back the release of new products with patented technologies. There are many theoretical papers in the literature on licensing, but they mainly focus on a cost-reducing patent and the optimal licensing structure. To analyze the delay, we consider a two-period model with information asymmetry between a potential licensee and a patentee who has a patent for a new product. It is shown that under certain conditions the patentee proposes a gambling fee in the first period, and the gambling fee can be rejected depending on the market scale, leading to delays in licensing. Moreover, to eliminate the delays, we evaluate the effectiveness of utilizing the average of past license fees, through simulation experiments.

The Heterogeneous Effects of Patent Scope on Licensing Propensity
Honggi Lee (University of New Hampshire - Peter T. Paul College of Business and Economics)
Working Paper

How does patent scope affect licensing propensity? While broader protection can increase the value of an invention, it can also increase the value of self-commercialization by raising the inventor's market power. Accordingly, theoretical predictions around the effect of patent scope on licensing are ambiguous, and empirical results have been mixed. Also, while some studies have examined certain moderating factors that affect the patent scope-licensing relationship, a systematic investigation of the heterogeneous effects of patent scope on licensing has not been undertaken. This study uses a sample that includes multiple technology areas and a novel methodology that exploits an exogenous variation in patent scope to present causal evidence on the relationship between patent scope and licensing. Additionally, it explores key inventor and invention characteristics that could affect the patent scope-licensing relationship. The results show that narrowed patent scope leads to a substantial decline in licensing propensity and that the effect is stronger for high-quality, science-based, and novel inventions as well as for inventions generated by small inventors.

IP & Litigation

Do Lawyers Matter? Evidence from Patents
Dimitris Andriosopoulos (Strathclyde Business School)
Pawel Czarnowski (Strathclyde Business School)
Andrew P. Marshall (University of Strathclyde - Strathclyde Business School)
Working Paper

Patent attorneys draft patent applications and negotiate the grant of patent rights on behalf of their clients. We investigate the role of patent attorney experience in determining the economic and technological value of patents. First, we establish a positive correlation between attorneys’ substantive experience (success rate in obtaining patents) and the economic and technological value for patents. Also, we find no evidence that attorneys’ process experience (number of patent applications filed) matters for patents. Then we identify the causal effect of patent attorneys by using two alternative approaches: changing to a more experienced attorney and the new United States Patent and Trademark Office (USPTO) ethics code in 2013. Overall, we find that successful patent attorneys matter.
as they increase both the economic and technological value of patents. Therefore, innovative firms that employ patent attorneys should closely monitor their success track record.

**Specialized IP Judiciary: What Are the Key Elements to Consider when Establishing or Reforming an Effective IP Court?**
Olga Gurgula (Brunel University London - Brunel Law School)
Maciej Padamczyk (Queen Mary University of London; Warsaw University)
Noam Shemtov (Queen Mary University of London, Centre for Commercial Law Studies)
*Forthcoming in GRUR International - Journal of European and International IP Law*
*Queen Mary Law Research Paper No. 371/2021*

Intellectual property (‘IP’) is one of the key instruments for fostering innovation and promoting the growth of national economies. Given both the economic significance and the legal complexities associated with IP rights due to constant technological development, the benefits of having a specialized IP judiciary are being increasingly recognized across the globe. Many countries have either established or have been considering the introduction of various forms of such a specialized judiciary. This paper examines this trend and explores some key considerations in relation to the efficacy of an IP judiciary. It draws on some of the findings of a recently completed project funded by the UK government on the creation and functioning of a new IP court in Ukraine. While there is no ‘one size fits all’ model when creating a specialized IP judiciary, the discussion in this article sheds light on a number of key factors that should be taken into account and carefully assessed when establishing or reforming such a judiciary. This includes specific considerations related to the structure of an IP judiciary, its location, the specialization of IP judges, exclusive jurisdiction and other procedural issues. We believe that the guidance provided in this article will assist policy makers in their choices regarding the most suitable design of an IP judiciary for a particular jurisdiction, leading to the enhancement of its operation for the benefit of all the stakeholders in the IP enforcement system.

**IP & Innovation**

**Can natural disasters affect innovation? Evidence from Hurricane Katrina**
Luis Ballesteros (George Washington University)
*Working Paper*

Studies of the geography of innovation have focused on how spatial proximity to human and material resources and institutions affect collaboration, knowledge flows, the demand and competition for invention, and the economic value of invention. I study a different source of the geographical determinants of innovation: exposure to large shocks. I conduct an inductive assessment, theoretically grounded on recent evidence that large exogenous shocks produce enduring fluctuations in risk aversion, to explain why Hurricane Katrina in the U.S. could have changed innovation outcomes. The difference-in-difference estimates show that, after an immediate fall, affected counties exhibit substantial increases in the growth rate of patenting and the quality of innovation compared to counterfactual counties. This correlation persists 10 years after the shock and is robust to measures of agglomeration and urbanization, firm resources, wealth, actual and expected income, education, external assistance, public policy, business cycles, and other county- and state-level factors. To account for the confounds of selective migration and network affiliation, I use narrowly georeferenced information to construct histories of inventors between 1999 and 2015 that allow me to follow the “Katrina effect” across geographies. The estimates imply that shock-affected individuals not only were more likely to patent, but became more skewed toward high-technology sectors.
Human capital plays a crucial role in today’s knowledge-based economy and is vital to economic growth and technological innovation. While studies of human capital are abundant in economics and management research, legal studies tend to neglect the impact of legal institutions on the preservation and development of human capital. This article contributes to the existing literature by linking legal developments with the human capital and management literature using the concept of “firm-specific human capital” to understand the various legal mechanisms developed in legal practice. By exploring how major legal institutions—property, contract, and organization—help firms secure key human capital, this article provides a new lens through which to understand the legal means that facilitate the development of firm-specific human capital in the knowledge economy.

Do Patents Matter for Commercialization?
Elizabeth Webster (Swinburne University of Technology; University of Melbourne - Melbourne Institute: Applied Economic & Social Research)
Paul H. Jensen (University of Melbourne - Melbourne Institute of Applied Economic and Social Research)

This paper estimates the effect of a patent grant on the likelihood that an invention will progress to different commercialization stages using survey data on 3,162 inventions which have been the subject of a patent application. We found that about 40 percent of all inventions advanced to the point of market launch and mass production. Although a patent grant had no effect on the decision to proceed with the commercialization process, being refused a patent lowered the probability of attempting market launch and mass production by about 13 percentage points. Over and above this, having protection from several other complementary patents increased the probability of commercialization by an additional 3 to 5 percentage points.

Green Technologies, Complementarities, and Policy
Nicolò Barbieri (University of Ferrara)
Alberto Marzucchi (Gran Sasso Science Institute (GSSI))
Ugo Rizzo (University of Ferrara)
SWPS 2021-08

The present study explores the technological complementarities between green and nongreen inventions. First, we look at whether inventive activities in climate-friendly domains depend on patenting in related technological domains that are not green. Based on patent data filed over the 1978–2014 period, we estimate a spatial autoregressive model using co-occurrence matrices to capture technological interdependencies. Our first finding highlights that the development of green technologies strongly relies on advances in other green and in particular non-green technological domains, whose relevance for the green economy is usually neglected. Building on this insight, we detect the non-green complementary technologies that co-occur with green ones and assess whether environmental policies affect this particular instantiation of technologies at the country level. The results of the instrumental variable approach confirm that while environmental policies spur green patenting, they do not displace the development of the non-green technological pillars upon which green inventions develop.
IP Law & Policy

Benefits of the Invention and Social Value in Patent Law
Andrew C. Michaels (University of Houston Law Center)
George Mason Law Review, Forthcoming

Traditionally, patent law purports to rely on the market to assess the extent of an invention’s value. The underlying theory is that as long as the basic requirements for the patent are met, the patent is granted and the patentee is given the right to exclude; the value of that right will depend on market valuation of the invention. But in reality, courts do consider the extent to which an invention benefits society in various patent law doctrines, including utility, eligibility, nonobviousness, and damages. This consideration is generally not openly acknowledged, but occurs in the background, the equities of the case so to speak.

This article defends and argues for a more open acknowledgement of the role of benefits of the invention in patent law. Courts do have a role to play in assessing an invention’s value, especially where there is reason to think that there may be a mismatch between the invention’s social value and market value. Patent law should embrace the notion that it is not solely concerned with increasing the rate of innovation agnostically as to the benefits of the technology; rather, patent law also plays a role in shaping the direction of innovation. More open acknowledgement of this role would provide better information to the public and allow the development of more consistent and coherent standards. This development could occur gradually through the common law method, without any drastic break from precedent. To this end, this article also explores various doctrinal possibilities, such as a revival and modification of the pioneer patent doctrine.

Copyright Law

Authoring Prior Art
Joseph Fishman (Vanderbilt University - Law School)
Kristel Garcia (University of Colorado Law School)
Vanderbilt Law Review, 2022 Forthcoming
U of Colorado Law Legal Studies Research Paper No. 21-29

Patent law and copyright law are widely understood to diverge in how they approach prior art, the universe of information that already existed before a particular innovation’s development. For patents, prior art is paramount. An invention can’t be patented unless it is both novel and nonobvious when viewed against the backdrop of all the earlier inventions that paved the way. But for copyrights, prior art is supposed to be virtually irrelevant. Black-letter copyright doctrine doesn’t care if a creative work happens to resemble its predecessors, only that it isn’t actually copied from them. In principle, then, outside of the narrow question of whether someone might have drawn from a preexisting third-party source, copyright infringement disputes would seem to have little doctrinal use for prior art.

But that principle turns out to be missing a big part of what’s actually going on in copyright litigation today. In this Article, we identify a surprising trend: parties in cases involving music are increasingly discussing anticipatory earlier works, and judges are increasingly holding it against them if they don’t. The concept of prior art, once for inventors only, is now for authors, too.

A major cause for this change, we argue, is the influence of a small cadre of expert witnesses. We interviewed several of the most active experts in music copyright disputes, and we analyzed dozens of reports that they have filed over the last two decades. Our data revealed a group that has been focused on authorial prior art since well before the courts were. These experts’ professional self-understanding,
moreover, diverges sharply from the traditionally limited role that experts are supposed to play in evaluating copyright infringement. They view prior art research as a major part of their job. And for many of them, that research is important not just because it can sift between copying and independent creation, but also because it informs their normative view of what expression deserves legal exclusivity in the first place. Because of this expert community, prior art isn’t just for patents anymore.

Navigating the Identity Thicket: Trademark’s Lost Theory of Personality, the Right of Publicity, and Preemption
Jennifer E. Rothman (University of Pennsylvania Law School; Yale Information Society Project, Yale Law School)
U of Penn Law School, Public Law Research Paper No. 21-39

Both trademark and unfair competition laws and state right of publicity laws protect against unauthorized uses of a person’s identity. Increasingly, however, these rights are working at odds with one another, and can point in different directions with regard to who controls a person’s name, likeness, and broader indicia of identity. This creates what I call an “identity thicket” of overlapping and conflicting rights over a person’s identity. Current jurisprudence provides little to no guidance on the most basic questions surrounding this thicket, such as what right to use a person’s identity, if any, flows from the transfer of marks that incorporate indicia of a person’s identity, and whether such transfers can empower a successor company to bar a person from using their own identity and, if so, when.

Part of the challenge for mediating these disputes is that both the right of publicity and trademark laws are commonly thought of as solely concerned with market-based interests. But this is not the case. As I have documented elsewhere, the right of publicity has long been directed at protecting both the economic and noneconomic interests of identity-holders. And, as I demonstrate here, it turns out that the same is true for trademark and unfair competition laws, which have long protected a person’s autonomy and dignity interests as well as their market-based ones.

After documenting and developing this overlooked aspect of trademark law, I suggest a number of broader insights of this more robust account of trademark law both for addressing the identity thicket and for trademark law more generally. First, I suggest that recognizing a personality-based facet of trademark law suggests a basis to limit the alienation of personal marks in some contexts. Second, this understanding shores up trademark’s negatives spaces, especially when truthful information is at issue. Third, recognizing trademark’s personality-based interests provides a partial explanation (and limiting principle) for some of its expansionist impulses.

Finally, and importantly, I contend that recognizing this broader vision of trademark law provides significant guidance as to how to navigate the identity thicket. I employ trademark preemption analysis to mediate disputes between trademark and right of publicity laws. Trademark preemption provides an avenue out of the thicket, but only if trademark law’s robust theory of personality is recognized. A failure to do so risks leaving us with one of two bad options: a right of publicity that acts as a “mutant” trademark law, swallowing up and obstructing legitimate rights to use trademarks, or alternatively with a shallow husk of trademark law (rooted solely in commercial interests) that swallows up publicity claims at the expense of personal autonomy and dignity. Trademark law already provides us with the tools to avoid both of these unsavory paths—if only we reclaim its lost personality.
IP & Trade

The Effect of Patents on Trade
Elizabeth Webster (Swinburne University of Technology; University of Melbourne - Melbourne Institute: Applied Economic & Social Research)
Alfons Palangkaraya (Centre for Transformative Innovation, Faculty of Business and Law, Swinburne University of Technology; Swinburne University of Technology - Centre for Transformative Innovation)
Paul H. Jensen (University of Melbourne - Melbourne Institute of Applied Economic and Social Research)

In contrast with quotas and tariffs, it is theoretically ambiguous whether fewer (or ‘weaker’) rules over intellectual property rights will increase or decrease trade in patentable goods. The prevailing view is that anticipation of imitation reduces exporters’ incentive to export goods to jurisdictions with ‘weak’ patent regimes. This empirical paper uses new measures of how the destination-country patent system can affect trade. In contrast with existing studies which assume would-be exporters can always get a patent in the target foreign market, we construct measures of the bias against foreign patent applicants and patents which may block imported goods. We find evidence that the patent system affects international trade flows primarily by blocking the would-be exporter’s right to lawfully sell their inventive goods but in a smaller way by influencing whether or not rival firms can legitimately imitate the invention.

Other Topics

The Protection of Cultural Heritage by Trademarks
Mira Burri (University of Lucerne)
Forthcoming in Irini Stamatoudi (ed), Research Handbook on Intellectual Property and Cultural Heritage (Edward Elgar, 2022)

The chapter focuses on the toolbox of trademark law to map the tensions between cultural heritage and intellectual property protection and to explore to what extent trademarks offer useful, albeit imperfect ways, to protect cultural heritage. The chapter then addresses the questions of whether some of the existing mismatches can be rectified in a viable way and whether a stronger linkage between cultural heritage and the intellectual property regime brings about the desired effects. The chapter takes into consideration the international legal framework for trademarks, in particular the TRIPS Agreement, which incorporated the 1883 Paris Convention, and created a set of global minimal standards for IP protection, linking them also to the WTO’s dispute settlement system. The chapter also looks at developments in the national regimes, where relevant and useful for the discussion.

Intellectual Property Institutions and Innovation of Emerging Multinational Companies
Jie Wu (Technovation; University of Aberdeen)
Research Handbook on Knowledge Transfer and International Business 2021

Using a panel data of Chinese firms’ internationalization activities, we assess whether intellectual property (IP) institutions in a host country benefit or impede innovation of emerging multinational companies (EMNCs). We show that IP institutions in a host country enable an EMNC to obtain critical technologies for innovation, and moderate IP institutions are optimal levels for innovation development in this context. Moreover, the efficiency of EMNCs in benefiting from IP institutions for innovation increases when EMNCs develop strong absorptive capacity. Our findings integrate institutional logics,
which views institutional environment as the key factor for innovation, and the resource-based view, which notes that firm-specific capabilities have critical influences on firm performance and competitive advantage. We discuss the implications of these findings on institutional environments and firm innovation research in emerging economies.

**Patents and Small Business Risk: Longitudinal Evidence from the Global Financial Crisis**

Roberto Barontini (Scuola Superiore Sant'Anna di Pisa - Institute of Management)
Jonathan Taglialetela (Scuola Superiore Sant'Anna di Pisa - Institute of Management)

The purpose of this study is to shed light on the relationship between patent applications and long-term risk for small firms across the global financial crisis of 2008. During a crisis, firm risk often skyrockets, and small and medium enterprises face significant dangers to their business continuity. However, managers have a set of strategies that could be implemented to increase a firm’s resilience, sustaining competitive advantages and improving access to financial resources. The authors focused on the investigating the impact of patenting activities on small business risk in a time of crisis. This is a quantitative study based on a sample of Italian firms that applied for a patent in 2005. The changes in corporate credit ratings over a five-year period are related to different proxies of patent activity using multivariate regression analysis. Firms that filed for a patent were more resilient, compared to the control sample, during the financial crisis. Innovative activities resulting in patent application seem to deliver strategic resources useful to tackle the crisis rather than increase riskiness. The moderating effect of patents on risk sensitivity is stronger for small firms and when the number of patents or the patent intensity is larger. Limited evidence is available on how patent applications are related to risks for small firms during an economic crisis. The authors highlight that the innovative efforts resulting in patent applications can support small business resilience. The authors also point out that the implementation of patent information in small firms’ credit score modeling is still an uncommon practice, while it is useful in estimating firm risk in a way more robust to exogenous credit shocks.

**Appropriating the Returns of Patent Statistics: Take-up and Development in the Wake of Zvi Griliches**

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SWPS 2021-07

Three decades after the publication of Zvi Griliches’ (1990) influential survey on “Patent statistics as economic indicators”, the uses and limitations of patent statistics remain a core issue in the field of innovation studies. This paper follows through Griliches’ seminal work to understand how the literature using patents as an empirical resource developed over time. How has this indicator been adopted and how has it been adapted to different research challenges? We address this question by examining the citation tree of nearly 2000 articles published in almost 400 journals found to refer to Griliches’ seminal contribution between 1990 and 2019. We combine bibliometric techniques and qualitative analysis to provide a close-up moving picture of patents as a data resource: growth and variety of usage, impact on disciplines and journals, driving institutions and geographies, major topics, and research issues. We find that five main themes emerge: 1) Economic growth; 2) Geography of innovation; 3) Innovation management/performance; 4) Pat-methods; and 5) Green innovation. Shouldered by these findings, we discuss potential pathways for future patent-based research.
When antitrust and IP issues converge, the interplay between the two areas will significantly impact your liability and damages arguments. In addition to our consulting in competition and intellectual property, experts across the firm frequently advise on IP-related matters, including in auctions and competitive bidding, e-discovery, energy, forensics, life sciences, and transfer pricing. For more information, visit crai.com.