LITERATURE REVIEW

IPR—General

Managing intellectual property plays a crucial role in a collaborative innovation environment by providing legal protection, especially when supporting factual protection strategies that enable profits from temporary monopolies. However, legal protection strategies are a novelty in emerging business fields, such as the knowledge-intensive industry sector, as innovation and value creation are shifting towards service innovations that are difficult to tackle by legal protection instruments. The ways in which intellectual property can be managed in such an environment is, therefore, the subject of this research that follows a multiple-case design. Four dominant patterns get identified, discussed and summarized with respect to the collaborative knowledge-intensive industry environment: (1) multiplicator, (2) leverager, (3) absorber, (4) filtrator.


The task of harmonization in the IP framework is currently at risk. This conclusion is shown by the way EU Member States have recently enacted Directive 2001/29 on the harmonization of certain aspects of copyright and related rights on the information society. Particularly, no Member State seems to have considered the interpretation of the three-step test given in 2000 by the WTO panel, notwithstanding its importance. Moreover, three recent opinions of the French Cour de Cassation, the French Conseil Constitutionnel, and the German Federal Court of Justice appear not to have endorsed the WTO's interpretation of the three-step test. This scenario confirms the impression that the international framework is devoid of any degree of harmonization. Although, the aims of certainty and predictability in the international trading system are among its main tasks, the World Trade Organization has not yet tackled the plight of harmonization, preferring a political approach to smooth conflicts and disputes. Yet, the WTO has recently taken important steps that seem to herald a new attitude. In United States, Sections 301-310 of the Trade Act of 1974, the WTO dismissed the traditional deference towards national legislations. In addition, at international and national levels, the Allegheny Ludlum and Softwood Lumber cases aligned their interpretations to that of the WTO. WTO decisions are not considered to be binding and both US courts and the ECJ have denied that WTO Agreements have any direct effect on national legislation. In light of this, the author explores, for example, whether lawyers, patent, and trademark attorneys should bother to delve into the WTO's precedents and whether WTO precedents should have any bearing on legislators in the path to harmonization. This paper analyses the current international framework in order to provide some reasonable answers to these questions.


This article explores the licensing strategies pursued by firms whose business model is based on developing and licensing out their intellectual property. These ‘intellectual property vendors’ are not traditional suppliers, since they do not engage in production or commercialization, but specialize solely in the generation of IP. Considerable anecdotal evidence exists about these creative and enterprising firms. However, there has been no systematic investigation of how they use licensing to capture value from their IP. The research indicates that their licensing strategies can be differentiated along two main dimensions. The first concerns the nature of the contractual relationship: whether the license stands alone or whether it is part of a larger package including other R&D collaborative agreements. The second concerns whether the technologies concerned are of high or low cumulativeness. These dimensions yield a typology outlining four different strategies IP vendors can use.

MMORPGs (Massively-Multiplayer Online Role Playing Games), including titles such as Lineage I and II, Mabinogi, and World of Warcraft (WoW), have recently become the subject of social and legal controversies of an unprecedented level. Trade involving in-game MMORPG items for real money has raised thorny issues regarding ownership status of these virtual objects. South Korea, a frontrunner in the development of online games of this genre and their chief exporter, is at the centre of this phenomenon. However, the situation in South Korea is unlike that of the USA, which has to date predominantly looked to IP laws for a remedy. This article examines how South Korea has tackled trading in in-game MMORPG items for real money, demonstrating how South Korea has dealt with the issue without excessive reliance on IP law, as has been the case in the USA. The article concludes that there is no need to rely directly on IP law for a remedy. In the USA and elsewhere, discussions on the legal status of in-game MMORPG items and RMT have so far been confined to the academic community and are still at a maturing stage. In South Korea, however, numerous court judgments and administrative rulings in similar situations already exist, providing a sizeable pool of precedents. While much of the world is unaware of the legal significance of MMORPGs (Massively Multiplayer Online Role Play Games), South Korea is a leading market both in terms of their creation and in their use. Tensions between developers and publishers of MMORPGs and their licensed players have resulted in substantial litigation in South Korea, as well as investigations into the fairness of standard licence terms. This article explains the South Korean response to IP-related problems arising from the creation and sale of in-game items, demonstrating how their solution need not involve reform of IP law but rather a more indirect approach.


There are complex unresolved ethical, legal and social issues related to the use of human tissues obtained in the course of research or diagnostic procedures and retained for further use in research. The question of intellectual property rights over commercially viable products or procedures that are derived from these samples and the suitability or otherwise of participants relinquishing their rights to the samples needs urgent attention. The complexity of these matters lies in the fact that the relationship between intellectual property rights and ownership or rights pertaining to the samples on which the intellectual property right is based may either be overlooked or taken for granted. What equally makes the matter complex is that samples may be obtained from participants in developing countries and exported to developed countries for analysis and research. It is important for research ethics committees to tread carefully when reviewing research protocols that raise such issues for purposes of ensuring that appropriate benefit sharing agreements, particularly with developing countries, are in place. This paper attempts to analyse the key questions related to ownership and intellectual property rights in commercially viable products derived from human tissue samples. Patent law is used as a point of reference as opposed to other forms of intellectual property rights such as industrial designs because it is the right that most inventors apply for in respect of human tissue-related inventions. The key questions are formulated following a systematic analysis of peer reviewed journal articles that have reported original investigations into relevant issues in this field. Most of the cases and reported studies that are referred to in this paper do not directly deal with HIV/AIDS research but the underlying principles are helpful in HIV/AIDS research as well. Pertinent questions, which members of ethics review committees should focus on in this regard, are discussed and suggestions on appropriate approaches to the issues are proposed in the form of specific questions that an ethics review committee should consider. Specific recommendations regarding areas for further research and action are equally proposed.


Mainstream theory, which has informed the belief systems regarding the operation as well as the predicted social and economic effects of IPR systems,
cannot explain why the IPR system generates different performance results and varying potential for growth across the firms, sectors and nations participating in the IPR system. This paper sketches a theory of the 'productive potential of intellectual property rights' which is able to do just that. Focusing on the 'rules of the game' embedded in the institutional IPR environment and the 'play of the game' within the alternative institutions of IPR governance, the paper emphasizes the importance of the nature or quality of the relationships among IPR stakeholders and the contribution of such relationships to the processes of financial and non-financial value creation and distribution from IPRs. The central role of cooperation, asymmetric relationships, and the effective resolution of conflicting interests amongst stakeholders is addressed. It is suggested that the proposed framework provides a better starting point for the design of IPR policy and management.


This article provides the first comprehensive analysis of the intellectual property case law of the European Court of Human Rights (ECHR). Within the last three years, the ECHR has issued a trio of intellectual property rulings interpreting the right of property protected by the European Convention on Human Rights. These decisions, which view intellectual property through the lens of fundamental rights, have important consequences for the region's innovation and creativity policies. The cases are also emblematic of a growing number of controversies in domestic and international law over the intersection of human rights, property rights, and intellectual property. The article analyses this trend and uses it to develop three distinct paradigms to identify the proper place of intellectual property issues in the European human rights system. It concludes that the ECHR should find a violation of the right of property in intellectual property disputes only in cases of arbitrary government conduct.


The authors develop an equilibrium model of product innovation to study the implications of independent invention for the design of intellectual property rights. In the model agents choose whether to be innovators seeking new ideas or imitators absorbing spillovers, and multiple innovators can find the same idea. It turns out that the optimal intellectual property right is typically strong but non-exclusive, involving fragmentation of the right among different innovators. The optimal number of property right holders is inversely related to the cost of innovation and obsolescence rate. Exclusive patent protection can be approximately optimal only if innovation is costly and the obsolescence rate is high.


There is a complex relationship and interplay between TRIPS and CBD, two multilateral agreements adopted to attain inherently distinctive objectives. The CBD/TRIPS issue has been discussed in the WTO since 1996 in the Committee on Trade and Environment, and has been on the agenda of the TRIPS Council since 1999. At the WTO Doha Ministerial Meeting in 2001, a Trade Minister made reference to the issue in paragraphs 12 and 19, instructing the Council for TRIPS to look into the relations between TRIPS and CBD. The discussion in the TRIPS Council has gone into considerable detail with a number of ideas and various proposals have been mooted to deal with the same. This paper attempts to discuss and analyse the areas of possible conflict and reasons for such conflicts. It also seeks to gain an insight into the thought-process of the various stakeholders, then discusses alternative courses of action, and attempts to chart the way forward. Although issues such as NAMA dominated the 2005 WTO Ministerial Conference, TRIPS and CBD were also under the spotlight. This article discusses the complex interplay between TRIPS and CBD, two multilateral agreements adopted to attain inherently different objectives. The author analyses the areas of possible conflict and reasons for them and seeks to gain an insight into the thought-processes of the various stakeholders, discussing the options for future action.


Expropriable disclosures of knowledge to prospective buyers may be necessary to facilitate the sale of intellectual property. In principle,
confidentiality agreements can protect disclosures by granting the seller rights to sue for unauthorized use. In practice, sellers often waive confidentiality rights. One provides an incomplete information explanation for the waiver of confidentiality rights that are valuable in complete information settings. Waiving sacrifices the protective value of confidentiality to gain greater buyer participation. Buyer skepticism, which reduces participation, arises endogenously from three elements: asymmetric information regarding seller IP, rent dissipation from competition for IP, and ex post costs from expropriation lawsuits.


Knowledge is considered to be an economic driver in today's economy. It has become a commodity, a resource that can be packed and transferred. The objective of this paper is to provide a comprehensive review of the scope, trends and major actors (firms, organizations, government, consultants, academia, etc.) in the development and use of methods to manage innovation in a knowledge-driven economy. The paper identifies the main innovation management techniques (IMTs) aiming at the improvement of firm competitiveness by means of knowledge management. It will specifically focus on those IMTs for which knowledge is a relevant part of the innovation process. The research study, based on a survey at the European level, concludes that a knowledge-driven economy affects the innovation process and approach. The traditional idea that innovation is based on research (technology-push theory) and interaction between firms and other actors has been replaced by the current social network theory of innovation, where knowledge plays a crucial role in fostering innovation. Simultaneously, organizations in both public and private sectors have launched initiatives to develop methodologies and tools to support business innovation management. Higher education establishments, business schools and consulting companies are developing innovative and adequate methodologies and tools, while public authorities are designing and setting up education and training schemes aimed at disseminating best practices among all kinds of businesses.


The welfare implications of intellectual property for private sector (IPP) agricultural research are analysed, focusing on the realistic cases where countries provide different IPP levels, technology spills over across countries, and the public sector is involved in research. A model is developed to determine who benefits from, and who should pay for, the associated research. The article contains some interesting results on the implications of a harmonization of IPP policies through multilateral agreements or via technology that allows research firms to prevent the copying of plants and animals that express traits that have emerged from their research.


The purpose of this paper is to investigate intangible disclosure quality (IDQ) in an international sample of 29 stock-quotted telecommunications network operators (TNOs). IDQ is captured separately for annual reports and websites of TNOs using a set of seven intangible asset categories. The article also explores associations between annual report and website IDQ on the one hand and variables interpreted either as IDQ antecedents (e.g. firm size) or as IDQ performance consequences (e.g. market-to-book ratio) on the other. TNOs' 2003 or 2003/2004 annual reports and TNOs' websites (as of May 2005) were subjected to content analytical procedures in order to quantify sample firms' disclosure quality levels for seven categories of intangible assets derived from a framework suggested by the Deutsche Schmalenbach Gesellschaft für Betriebswirtschaft eV. Both annual report and website IDQ levels of TNOs were relatively low. Intangible disclosures were often limited to small pieces of qualitative information. Annual report and website IDQ are significantly positively interrelated. IDQ varies significantly by the home region of the TNO, with European TNOs displaying higher quality levels than their American counterparts. IDQ measures were not significantly related to TNOs' financial performance criteria. Research limitations result from the study's single
industry focus, small sample size and the limited range of variables investigated as potential IDQ antecedents/consequences. TNOs get insights on IDQ within their industry. Regulators/standard setting accounting institutions are encouraged to encounter industry-specific intangible characteristics by industry-focused intangible measurement rules in addition to an overall intangible reporting framework. This study is the first investigation that simultaneously analyses IDQ both in a firm's annual report and on its website. Further, it is unique in its use of uni- and multivariate analytical techniques exploring IDQ antecedents/consequences and in its single industry/TNO focus.


Empirical research on the determinants of firms' boundaries has flourished over the past 25 years. This article discusses the progress that has been made to date, emphasizing the intellectual advances made by researchers in this literature during this period. The author emphasizes on empirical researchers’ important role in operationalizing theoretical concepts and relates how success on this dimension brings these concepts to bear on real-life, make-or-buy decisions. The author also discusses shortcomings in the current literature – in particular the paucity of research on how variation in firms' boundaries can affect economic outcomes – and point to how and where such shortcomings might be overcome.


From 1948 to 1994, the agricultural sector was afforded special treatment in the GATT. The authors analyse the extent to which this agricultural exceptionalism was curbed as a result of the GATT Uruguay Round Agreement on Agriculture, discuss why it was curbed and finally explore the implication of this for EU policy making. They argue that, in particular, two major changes in GATT institutions brought about restrictions on agricultural exceptionalism. First, the Uruguay Round was a ‘single undertaking’ in which progress on other dossiers was contingent upon an outcome on agriculture. The EU had keenly supported this new decision rule in the GATT. Within the EU this led to the MacSharry reforms of the Common Agricultural Policy (CAP) in 1992, paving the way for a trade agreement on agriculture within the GATT. Second, under the new quasi-judicial dispute settlement procedure, countries are expected to bring their policies into conformity with WTO rules or face retaliatory trade sanctions. This has brought about a greater willingness on the part of the EU to submit its farm policy to WTO disciplines.


This paper reviews and compares patent pools, intellectual property clearinghouses, and copyright collectives as systems for promoting efficient access to licensable IP in a ‘market for technology’. These systems promote downstream use of innovations by economizing on search and transaction costs in licensing, as well as potentially mitigating the conditions that lead to the ‘tragedy of the anti-commons’ and other coordination problems in multilateral licensing. The authors compare and classify different systems in terms of their features, review some existing systems, and discuss their economic characteristics.


Although pharmaceutical counterfeiting incidents can be traced back thousands of years, it has been downplayed and even dismissed by pharmaceutical manufacturers in the past. That has changed. Pharmaceutical firms are newly dedicated to eradicate counterfeits globally and spending more money on anticounterfeiting efforts than ever before. The confluence of three factors seems to have drastically changed the existing paradigm for the pharmaceutical industry: increasing globalization, advancing technology, and the controversies surrounding the WTO TRIPS Agreement and access to medicines. Given that counterfeit pharmaceuticals slip into the supply chain at every link, multinational pharmaceutical firms are searching for global solutions through increased interfirm cooperation along the supply chain. This research presents a
theoretical model for characterizing the implications of these interventions on the motivations driving counterfeiters. The interventions are shown to increase the share of real pharmaceuticals and decrease the welfare losses attributable to counterfeiting. In practice, it is too early to evaluate the success of these new measures, but this research reflects on the extent of cooperation both across the supply chain and national boundaries and examines the likely long-run implications of these measures.


The 1992 Convention on Biological Conservation and the International Treaty on Plant Genetic Resources for Food and Agriculture (1996) reflect the growing importance of biodiversity for environmental conservation and as a way of maintaining the genetic variety needed for plant breeding and providing new sources of medicines. More recently, agrobiodiversity has been seen as vital for food security in developing countries. This article considers the need to understand decision-making for biodiversity at the grassroots. To achieve this, gender roles, as influenced by gender divisions of labour in food production and the gendered use of different environmental spaces, have to be considered. Women's roles in seed selection and seed saving and use of wild plants for food and medicines play a major role in biodiversity conservation, but these roles are not unchanging and are increasingly influenced by global trade networks and geographical context.


The ongoing dispute between Nokia and Qualcomm exemplifies the complex issues that arise when the licensor–licensee relationship breaks down. It illustrates that any means by which a licensee can secure rights to use licensed IP after termination of a licence agreement can be of great commercial importance, not to mention significant economic value. If a licensee can continue to use licensed IP notwithstanding that its agreement has been terminated, a licensor's ability to control and derive maximum economic benefit from its IP may be fundamentally compromised. The means available to licensees to secure such rights vary depending on the kind of IP right licensed, but there are several common themes, which draw on a diverse range of legal rules and concepts, including specific IP concepts and laws (including the rules relating to assignment and licensing, the exhaustion of rights, revocation and invalidation, and defences to infringement claims), contract law and competition law. This article discusses practical implications to be considered when drafting IP licence agreements. From a licensee's perspective, the termination of its licence agreement is not necessarily the end of the road. Licensees should be aware of these post-termination rights when expecting to face difficult renegotiations with a licensor. From both parties' perspectives, but particularly that of licensor, this article should demonstrate the importance of drafting to avoid any uncertainty that may arise on the termination of a licence agreement. Although it is possible for an IP licence to run forever, the vast majority of such licences are expected to end, whether through expiry, breach, or some other cause. It is often difficult to foresee what problems may be faced by licensor and licensee post-termination, and too little attention is often devoted to the making of proper, express provision for the protection of the legitimate interests of each party. This article provides a sharply focused review of post-termination issues and offers advice as to how these issues may be prudently approached.


Rising opportunity costs for continuing to grow and conserve traditional plant varieties has led to an erosion of agrobiodiversity. This study compares two institutions of collective biodiversity management in Kerala, India. The traditional mechanisms of a scheduled tribe, the Kurichyas, are contrasted with the new institution of the People's Biodiversity Register (PBR) under the local form of governance, the panchayat. Collective action is analysed for the core variables of reputation, trust and reciprocity. In the tribal institutions, traditional seed exchange rests on reputation and gender complementarities, which are eroded by a diminishing degree of trust and dissolving property rights for women and weakened by failing
norms of reciprocity. The new institution of PBR threatens tribal women's reputations and their knowledge by reducing it to a bureaucratic register, the disembodiment of knowledge into information reduces trust and unpredictable returns diminish reciprocity. A massive public investment in strengthening women's capabilities for a transformation from conservers and users to advocates, managers and decision-makers regarding biodiversity might halt the loss.


The purpose of this paper is to examine the nature and implications of the actual techniques used in the measuring and reporting of intellectual capital. The paper takes the form of a literature review. The paper demonstrates that the commodification of intellectual capital, rather than solving the contradictions accompanying market value maximization, simply shifts these contradictions to a new location. The wide range of intellectual capital definitions, frameworks, and indices allow firms to choose intellectual capital reporting which will justify maximizing their market value, resulting in the construction of data in intellectual capital reporting that hides the reality of the commodification of labour. Commodification of labour through intellectual capital practices is useful to regulators in policy making and accounting standard setting.


This study summarizes Armenian legislation in intellectual property rights and deals with its practical aspects (enforcement); the study was conducted in March 2007 through interviews with different governmental and non-governmental bodies. Intellectual property plays an important role in an increasingly broad range of areas, ranging from the internet to healthcare to nearly all aspects of science, technology, literature and the arts. Intellectual property surrounds us in nearly everything we do: at home, at school, at work, at rest and at play. No matter what people do, they are surrounded by the fruits of human creativity and invention. Countries generally have laws to protect intellectual property for two main reasons: one is to give statutory expression to the moral and economic rights of creators in their creations and to the interests of the public in accessing those creations; the second is to promote creativity and the dissemination and application of its results, and to encourage fair trade, which would contribute to economic and social development.

**Patents**


Intellectual property rights are an important driver of innovation and productivity in the knowledge-based economy. In particular, intellectual property rights in the form of patents may also be a valuable source of technical and scientific information and ideas on how to address environmental and health and safety concerns associated with industrial activity. In the network age, many small- and medium-sized enterprises in the resource sector, researchers, and government agencies concerned with resource development, have not taken full advantage of this unique and valuable source of information.


The first development is the rise of hold-up as a primary component of patent litigation and patent licensing. The second development in the last three decades is the massive surge in university patenting. At the confluence of these developments is a growing frustration on the part of industry with the role of universities as patent owners. Time and again, when talking to people in a variety of industries, their view is that universities are the new patent trolls. In this article, the author argues that universities should take a broader view of their role in technology transfer.


Part I begins with the surprisingly difficult task of defining a ‘business methods’ patent. It goes on to provide context by briefly describing the significant decisions that established the patentability of business
methods: Judge Pauline Newman’s dissent in Schrader, and the State Street Bank and AT&T-Excel decisions. Finally, it considers the economic effects of USPTO policies regarding examination and litigation: what level of investigation should be conducted and what level of validity should be presumed for issued patents. Part II examines events following the demise of the ‘business methods exception,’ including the responses to State Street Bank by the public, Congress, the USPTO, and the courts, and notes the results of the Congressional and USPTO actions. It outlines criticisms of business methods patents and the immediate responses: the First Inventor Defense Act, the recently established inter partes reexamination procedure, and the USPTO Business Method Patent Quality Improvement Initiative. It also describes a new USPTO initiative directed at business methods patents, the Community Patent Review (or Patent Peer Review) project, considering the likely effects of that initiative. It goes on to examine several recent relevant decisions by the Board of Patent Appeals and Interferences and by the Court of Appeals for the Federal Circuit. Part III draws some conclusions about the current boundaries of business method patent claims based on recent case law.


Many people employ an accountant or tax attorney to assist them with the paying of their taxes. Tax practitioners may utilize various tax strategies in determining how a taxpayer should allocate his money. These tax strategies fall into the category of business methods. It was widely held that patents could not be granted for methods of doing business; however, this changed in 1998 when the Court of Appeals for the Federal Circuit upheld the patentability of an investment structure in State Street Bank & Trust Company v Signature Financial Group Inc. More recently, in Wealth Transfer Group v Rowe, the scenario of being sued for using a patented tax strategy was illustrated. The current state of patent law makes no mention of tax strategies; however, after analysing the characteristics of tax strategies with the elements required for patentability, it is determined that tax strategies should not be patentable subject matter. This proposal suggests that the patent laws be amended, as they have been in the past, to remove tax strategies from being patent-eligible subject matter, a solution which lies in Congress’ hands.


Does strengthening intellectual property rights in terms of a longer patent life induce more patents? This article investigates the responses of high-technology firms to Taiwan’s 1994 patent reform. Empirical analyses reveal that firms’ patenting propensity rose gradually before patent reform and showed an increase after patent reform, tending to support the viewpoint that stronger IPR can induce more patents. However, this cannot lead to lasting effect. Furthermore, patenting capability can serve as the access ticket for potential entrants to a science park under the circumstance of stronger IPR protections. These new entrants are found to have a better post-entry performance in patenting relative to the incumbents in the short run.


Few empirical studies have addressed the impact of the patent system on industry structure. Using firm-level patent data for firms in plant biotechnology, authors develop a measure of patent enforceability. Duration models show that patent statistics are useful predictors of the timing of consolidation and that patent enforceability is an important factor influencing the likelihood of consolidation. Acquisitions in plant biotechnology may be motivated by the enforcement of patent rights when firms have overlapping technologies; some merger activity may be explained by attempts to avoid mutually blocking technology, as exemplified by the case of Roundup Ready corn.


This article contributes to the empirical understanding of ideas production in transition and developing economies from an international knowledge spillover perspective. Based on an extended form of the ideas production function of a nonscale endogenous growth model, the article estimates the shape of the Chinese ideas production function using a time-series pattern of Chinese patenting. While the empirical results corroborate
recent findings on the shape of the ideas production function for organization for economic cooperation and development economies, the estimate also captures the positive evidence of foreign knowledge spillovers in the domestic production of new-to-China ideas. This evidence is important since it has empirically proved the possibility for the technological latecomer to grow depending on spillovers of the pioneer research and development. It also implies that Chinese R&D productivity growth depends on the simultaneous expansion of the domestic R&D-producing sector as well as the foreign knowledge stock in the Chinese market.


With the rapid change in markets and technologies, it is becoming essential for firms to develop new products constantly. This can most successfully be achieved by using technology roadmaps (TRMs), which are effective tools for connecting product and technology planning. However, TRMs generally tend to overstate the qualitative and expert-dependent knowledge rather than incorporating quantitative and objective information. This paper proposes a new approach where patent data are used in a quantitative methodology to support reliable decision-making in roadmapping processes. In this study, text-mining techniques were utilized to extract the relevant information on which portfolio, co-word, and network analyses were carried out. The results were three types of product-technology maps that can be applied to specific roadmapping steps. The suggested approach is expected to yield useful information about roadmapping, and help improve the overall effectiveness and quality of the technique.


The main theories of European economic integration argue that private economic interests provide the impetus and pressures for integration to move forward. Public policy analysis of the European Union's legislative process, however, show that intense lobbying by such interests can prevent legislative proposals from being adopted, even if economic interests were initially in favour of supranational legislation. How do we explain this apparent contradiction? The answer is that economic interests initially face great uncertainty as to the precise costs and benefits of integrating a particular policy area; only once the ‘fog of integration’ lifts—as a result of concrete legislative proposals being tabled by the Commission—are economic interests able to calculate these costs and benefits and, consequently, decide whether to lobby for or against the proposal. To provide a first-run validation of the argument, the article examines the cases of the software patent and takeover directives.


In an era of rapidly expanding digital content, the number of e-documents and the amount of knowledge frequently overwhelm the R&D teams and often impede intellectual property management. The purpose of this paper is to develop an automatic patent summarization method for accurate knowledge abstraction and effective R&D knowledge management. This paper develops an integrated approach for automatic patent summary generation combining the concepts of key phrase recognition and significant information density. Significant information density is defined based on the domain-specific key concepts/phrases, relevant phrases, title phrases, indicator phrases and topic sentences of a given patent document. The document compression ratio and the knowledge retention ratio are used to measure both quantitative and qualitative outcomes of the new summarization methodology. Both measurements indicate the significant benefits and superior results of the method. In order to implement the methodology with practical success, the accurate and efficient pre-processing of identifying key concepts and relevant phrases of patent documents is required. The approach relies on a powerful text-mining engine as the pre-process module for key phrase extraction. The methodology helps R&D companies consistently and automatically process, extract and summarize the core knowledge of related patent documents. This enabling technology is critical to R&D companies when they are competing to create new technologies and products for short life cycle
marketplaces. This research addresses a new perspective in R&D knowledge management, particularly in solving the knowledge-overloading issue. The methodology helps R&D collaborative teams consistently to summarize the core knowledge of patent documents with efficiency. Efficient R&D knowledge management helps the firm to take advantage of IP positioning while avoiding patent conflict and infringement.


Explanations of productivity differences between men and women in science tend to focus on the academic sector and the individual level. This article examines how variation in organizational logic affects sex differences in scientists' commercial productivity, as measured by patenting. Using detailed data from a sample of academic and industrial life scientists working in the United States, the authors present multivariate regression models of scientific patenting. The data show that controlling for education- and career-history variables, women are less likely to patent than men. However, in biotechnology firms, industrial settings characterized by flatter, more flexible, network-based organizational structures, women scientists are more likely to become patent-holding inventors than in more hierarchically arranged organizational settings in industry or academia. The authors discuss how the organization of scientists' work settings may influence enduring disparities between men and women in science and the implications of these findings for future work.

Predicting key example compounds in competitors' patent applications using structural information alone, Kazunari Hattori, Hiroaki Wakabayashi and Kenta Tamaki, Chemical Information Model, 48 (1) (2008) 135-142.

In drug discovery programs, predicting key example compounds in competitors' patent applications is important work for scientists working in the same or in related research areas. In general, medicinal chemists are responsible for this work, and they attempt to guess the identity of key compounds based on information provided in patent applications, such as biological data, scale of reaction, and/or optimization of the salt form for a particular compound. However, this is sometimes made difficult by the lack of such information. This paper describes a method for predicting key compounds in competitors' patent applications by using only structural information of example compounds. Based on the assumption that medicinal chemists usually carry out extensive structure-activity relationship (SAR) studies around key compounds, the method identifies compounds located at the centers of densely populated regions in the patent examples' chemical space, as represented by Extended Connectivity Fingerprints (ECFPs). For the validation of the method, a total of 30 patents containing structures of launched drugs were selected to test whether or not the method is able to predict key compounds (the launched drugs). In 17 out of the 30 patents (57%), the method was able to successfully predict the key compounds. The result indicates that our method could provide an alternative approach to predicting key compounds in cases where the conventional medicinal chemist's approach does not work well. This method could also be used as a complement to the traditional medicinal chemist's approach.

Copyright and Trademarks


The development of the Internet as a means of communication has facilitated widespread access to a vast array of digitized works in a variety of electronic formats. Increased access to such digitized works has heightened the need for robust systems that can identify and index online resources in order to allow users to locate and access the new wealth of digitized materials in what amounts to a global virtual library. Cataloging and indexing has always been critical to library functions, but never more so than in the decentralized, emergent library that constitutes the Internet. Consequently, search engines such as the Google database have developed into key tools for facilitating access to online resources; if the resource is not indexed via such a database, it effectively ceases to exist.

In this article, the author analyses the copyright status of this project, using it as a vehicle to develop certain themes that are emerging as fundamental issues in the copyright of digitized texts. He begins by describing the Google Book Search project, touching briefly upon the legal rationale relied upon by Google for scanning copyrighted works into its database.
without permission of the copyright holders. Then he moves to the issue that has received less attention: the copyright status of the metadata relational database that is core of the project. This database, he argues, is emblematic of the broader issues facing copyright in an age of digitization, and discusses several cases that bear upon the legal status of such a meta-database. He concludes by sketching the challenges that copyright law will need to encompass as works of authorship move from fixation as atoms to recordation as bits.


This article attempts to provide a more systematic and rational basis for the moral justification of copyright. First, the article offers an analytical account of conceivable justification models. Rather than simply restating popular arguments, the author focuses on the implicit assumptions underlying these moral arguments. After elaborating two basic models of copyright justification, each of which can be subdivided into three subtypes, the article demonstrates that these models inevitably result in an irreconcilable divide between authors and society. Secondly, the article therefore develops an alternative justification model that avoids this conflict. This model stems from the idea that the one-dimensional ground upon which usual arguments stand can be left by returning to the transcendental condition of their possibility, that is, human language. Consequently, the article explains how intellectual works can be understood from the perspective of speech act theory. On this view, intellectual works can be conceived of as complex speech acts. The author elucidates how both a right of attribution of authorship as well as exploitation rights can be morally rooted in this finding. The article concludes by highlighting the ontological and moral paradigm shift that occurs when the moral justification of copyright is conceived of in terms of communicative actions and their implied rules.


The concept of ‘copying’ has long been involved with various aspects of intellectual property law, particularly in regard to patents and trademarks. In the absence of legally determined exclusive rights, ‘copying’ is permitted, and is in fact, encouraged. However, because the term ‘copying’ carries an undercurrent of disapproval and unfavorable practices, it is a favorite of patentees looking to portray an accused infringer in the most negative light, especially before a jury. Hence, the curse of ‘copying.’ This article reviews the current state of ‘copying’ by addressing the substantive precedent in areas where ‘copying’ has traditionally had a substantive effect—willfulness of any accused infringing conduct and obviousness of the patented invention. With respect to ‘copying’ and willful infringement, this article outlines two important considerations that the precedent is weak upon—“copying what?” and “copying when?” Lifting the curse requires care and some courage at trial, in view of a precedential framework that is less than favorable to the accused infringer and the pejorative impact the term ‘copying’ will likely have on the jury and the court. These issues are discussed and suggestions are advanced throughout as to how one might lift the curse once it is pronounced.


Recent years have seen resurgence in the practice of cybersquatting, and in particular cybersquatting that monetizes domain names through pay-per-click advertisements. Existing statutory and administrative anti-cybersquatting tools were not designed to cope with the advertising-based model of cybersquatting. As a result, brand owners lack effective tools to combat modern cybersquatting. Where cybersquatters originally monetized their domain name portfolios by ransoming small numbers of domain names to brand owners, they now use pay-per-click advertisements spread over massive portfolios. Technological advances in the domain name system will continue to increase the opportunities for cybersquatters to expand these portfolios. Existing statutory and administrative anti-cybersquatting tools are out-dated and ineffective. The Uniform Domain Name Dispute Resolution Process is procedurally incapable of coping with large portfolios of infringing domain names and substantively out of sync with national IP laws. Traditional litigation is too expensive and
inefficient to offer a workable solution for brand owners. Both administrative and legal remedies for cybersquatting have inherent flaws that cannot practically be remedied. A new anti-cybersquatting regime must therefore allow them to work together. The UDRP should be procedurally updated to allow limited discovery and facilitate large-scale cases, and an optional choice of law clause should be introduced to bring UDRP panel decisions more in line with national IP laws. Likewise, those laws should be revised to give explicit deference to UDRP decisions in litigation arising from the same facts as the UDRP action. Cybersquatting can injure a mark’s distinctiveness and online recognition, and contextual advertisements can divert customers from the targeted brand's website. If anti-cybersquatting tools do not keep pace with cybersquatters' strategies, these problems will make it increasingly difficult for brand owners and customers to connect in the domain name system. The proposed revisions to the anti-cybersquatting regime will enable brand owners to protect their domain names more efficiently and to deter cybersquatters.


The recognition and protection of well-known marks in Indonesia has improved over the last few years for a variety of reasons. First, the Asian Crisis resulted in the creation of a Commercial Court, which is a clear improvement over the previously responsible District Courts. Secondly, the increasingly frequent publication of court decisions has improved transparency and consistency of those decisions. Well-known marks are now clearly protected against use for similar goods/services. Protection is extended to dissimilar goods/services by applying Article 16(3) TRIPS directly or by arguing that registration occurred in bad faith. Nevertheless, decisions thus far concern almost exclusively revocation and invalidity of registrations. Civil remedies such as damages and interim injunctions are hardly used, because the outdated civil procedural law has not familiarized judges with such legal instruments. Clearing the register of infringing registrations is another matter of concern. Cancellation for non-use for three consecutive years can be difficult, because the plaintiff is required to provide evidence of the last use in the production of the goods/services rather than in the course of trade more generally. While it has become much easier to protect well-known marks in Indonesia, much work remains to be done regarding the procedural framework of civil infringement proceedings and regarding the clearing of the register. Faced with a colonial jurisprudential inheritance, substantial economic and political pressures, and an enterprising, commercial sector, Indonesia was always likely to face problems when seeking to provide relief in a narrow, technical area of law such as the protection of well-known foreign trademarks. The difficulties faced in protecting well-known marks required attention being paid not merely to substantive issues of law but also to local procedural issues. This article demonstrates the sensitivity with which Indonesia has sought to strike a balance between the interests of internationally established


The invention of the medium of photography and its commercialization as a cheap multiple during the 1850s and 1860s led to challenges to extant copyright laws in France and Great Britain. This paper traces the ways that debates over photographic copyright confronted current understandings of originality and mechanization and repeated arguments that had already been raised by laws governing prints and casts. The British Fine Arts Copyright Act of 1862, which extended statutory protection to all photographs, is contrasted with French cases, which struggled to accommodate photographs within the fine arts as defined by the copyright law of 1793.
foreign traders and the needs of local industry, drawing particularly on that country's increasingly accessible case law.


For the past two decades, the fast-developing Asia has emerged as one of the most important economic regions. However, its economic growth is accompanied with severe software piracy. This paper analyses productivity changes of 11 Asian economies and 4 non-Asian industrialized economies by taking into account software piracy using the Malmquist productivity index and its two components, efficiency change and technical change over the period 1994–2002. The results indicate that when software piracy is included, productivity growth in Asian developing economies regresses, while productivity growth in the four non-Asian industrialized economies improves. Interpretation and implications are provided.


Geographical references in trademarks are often used not only to refer to a certain territory of origin for certain goods or services, but also to evoke desirable associations, imaginations, emotions, or ideas. The strict practice of the Swiss Trade Marks Office often requires applicants to limit their list of goods and services to certain countries. This abstract discusses the issues of geographically suggestive trademarks in Switzerland, the strict test used by the Swiss Trade Marks Office often requiring the applicant to limit the list of goods and services to certain countries. The abstract discusses the issues of geographically suggestive trademarks in Switzerland, the strict test used by the Swiss Trade Marks Office often requiring the applicant to limit the list of goods to a specific country, the new stance the former Appeals Board took in this regard, and how it was struck down by the Swiss Supreme Court, confirming the strict test of the Trade Marks Office. Finally, the article gives a solution on how the issue of geographical references in trademarks should be treated in order to match reality. It is important to know that the Swiss Trade Marks Office applies a strict test when it comes to geographical references in trademarks. Usually, the applicant is required to limit the list of goods, although it is questionable whether the trademark really suggests that the goods stem from a certain country. Foreign decisions are not binding for the Swiss Trade Marks Office and in this regard usually disregarded. The Swiss Trade Marks Office follows a strict test concerning trademarks containing geographical indications. The practice often constrains the applicant in restricting the goods and services. This practice is not only at odds with other European jurisprudence, but inconsistent with reality. The author proposes a change of the current practice with a wider acceptance on a case-by-case basis, which was recently brought forward by the Appeals Board, but subsequently rejected by the Supreme Court.


Within the evergreen debate ‘competition law versus intellectual property law’ there is also room for the analysis of new and controversial tools such as Digital Rights Management (DRM) systems as they do seem to affect competition for better or worse. As a matter of fact, the adoption of DRM systems’ has been spreading, and they are currently implemented in an increasing number of sectors. This phenomenon has consequences on competition within traditional markets as well as in the creation of new markets. The question thus arises as to whether the interface between DRM systems and competition enlarges the competition versus intellectual property debate or can be easily explored within those boundaries. In other words, if DRM systems are considered the extension of intellectual property rights, they raise the same problems of ascertaining the IPR impact on competition. This is evident either when DRM systems are considered instruments to protect and distribute (therefore regulate access to) digital contents, or when they are adopted to regulate interoperability between complementary goods. Like IPRs, in both cases they pose the question of analysing the intersection with competition law in order to discover whether new elements to this intersection have been added.


Greek courts and theorists have advanced an interpretation of the legal provisions on famous trademarks, which not only run contrary to the
The jurisprudence of EC courts, but also bear the seeds of its subversion. This article explores famous trademarks and provides a comparative analysis of EC and Greek case law. Through exploration of the political and psychoanalytical foundations of the Greek case law, the author explores the practical implications of apparent differences in approach.


The authors examine the potential benefits of product piracy to entrepreneurial firms. Specifically, they use a resource-based perspective to show that a decrease in the inimitability of an entrepreneurial firm's intellectual property does not necessarily diminish performance when piracy increases the value of this resource, and an information economics perspective to explain why and when imitation can increase the value of an intellectual property resource. This explanation reconciles empirical studies that indicate mixed results. It also expands the resource-based view by suggesting that reducing the value of one resource can directly increase the value of another.


This article focuses on the relationship between trademark rights and other forms of statutory protection. FIFA is the proprietor of a number of trademark registrations in South Africa. The strength of these registrations is discussed and the view taken that a number are open to attack, in terms of both distinctiveness and user requirements. It is then shown that, if statutory protection is given for the same words and phrases, the weaknesses of the trademark registrations will be avoided. The article serves as an illustration of the manner in which international sporting bodies attempt to extend their IP protection beyond the bounds of existing legislation. Section 15 of the South African Merchandise Marks Act 17 of 1941 gives the trademarks of designated international organizations protection that may far exceed what is available in terms of trademark legislation. This article sets out the various statutes that protect FIFA's marks in South Africa and considers whether these marks are entitled to such extended protection.