



IP Literature Watch

CRA Charles River
Associates

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This newsletter contains an overview of recent publications concerning intellectual property issues. The abstracts included below are as written by the author(s) and are unedited.

IP & Antitrust

Symbiotic Competition and Intellectual Property

Rafael R. Guthmann (Universidad Alberto Hurtado)

David M. Rahman (University of Minnesota - Twin Cities)

Working Paper

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4320418

According to Nordhaus, the optimal life of a patent T^* reconciles a trade-off between the “embarrassment” of monopoly and incentives to innovate, given that imitators would otherwise freely copy innovations and, in competing with innovators, reduce their profit hence their incentive to innovate. To test this argument, we develop an endogenous growth model with knowledge spillovers and elastic labor supply. Innovators invent new varieties and earn monopolistically competitive rents during the life of a patent, but create deadweight losses in the labor market. When the patent expires, imitators copy innovators and competition ensues. Over time, firms continuously make follow-on “process” innovations and learn from each other, resulting in faster productivity growth relative to monopoly. Enough such innovations reverse the logic of patents: higher spillovers can imply a shorter T^* because, despite a diminution in product innovation, growth from process innovations may matter more. Our calibration to the US economy suggests a T^* between 4 and 8 years, in contrast with the current global standard of 20. A counterfactual without spillovers yields $T^* \approx 18$, which suggests that lost opportunities for productivity growth from competition matter for the optimal life of a patent. We also find that optimal patent policy depends crucially on the distribution of spillovers across industries. As such, we argue for a macroeconomic approach to patent policy instead of restricting attention to individual industry estimates.

Opposing Firm Level Responses to the China Shock: Output Competition versus Input Supply

Philippe Aghion (College de France and London School of Economics and Political Science, Fellow; Centre for Economic Policy Research (CEPR); National Bureau of Economic Research (NBER))

Antonin Bergeaud (Banque de France)

Matthieu Lequien (Banque de France; National Institute of Statistics and Economic Studies (INSEE))

Marc Melitz (Harvard University; National Bureau of Economic Research (NBER))

Thomas Zuber (Collège de France)

Banque de France Working Paper No. 899

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4312100

We decompose the “China shock” into two components that induce different adjustments for firms exposed to Chinese exports: an output shock affecting firms selling goods that compete with similar imported Chinese goods, and an input supply shock affecting firms using inputs similar to the imported Chinese

goods. Combining French accounting, customs, and patent information at the firm-level, we show that the output shock is detrimental to firms' sales, employment, and innovation. Moreover, this negative impact is concentrated on low-productivity firms. By contrast, we find a positive effect - although often not significant - of the input supply shock on firms' sales, employment and innovation

IP & Licensing

A Research Agenda For Standards-Essential Patents

Jorge L. Contreras (University of Utah - S.J. Quinney College of Law)

Forthcoming in A Research Agenda for Patent Law (Enrico Bonadio & Noam Shemtov, eds., Edward Elgar, 2024)

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4318208

This Chapter discusses the current state of legal, economic and policy research on standards-essential patents (SEPs) and fair, reasonable and nondiscriminatory (FRAND) licensing of SEPs, and recommends additional research directions for the future. Areas for future research include the investigation of market adoption of standardized products subject to FRAND licensing and available on a royalty-free basis, measurement of various characteristics of SEPs including disclosure, validity, essentiality and transfer, the evolution of SDO and consortia patent policies, SEP licensing behavior, both by SEP holders and product manufacturers, SEP and FRAND disputes and litigation, including arbitration, competition among patent pools for standards, and the political economy of SEP policy making.

Linguistic metrics for patent disclosure: Evidence from university versus corporate patents

Nancy Kong (Queensland University of Technology, The University of Sydney and IZA)

Uwe Dulleck (Centre of Behavioural Economics, Society and Technology (BEST), Queensland University of Technology, Crawford School of Public Policy, Australian National University, and CESifo, LMU Munich)

Adam B. Jaffe (Brandeis University, Motu Research, and Queensland University of Technology)

Sowmya Vajjalae (National Research Council)

Research Policy Volume 52, Issue 2, March 2023, 104670

<https://www.sciencedirect.com/science/article/pii/S0048733322001913>

Encouraging disclosure is important for the patent system, yet the technical information in patent applications is often inadequate. We use algorithms from computational linguistics to quantify the effectiveness of disclosure in patent applications. Relying on the expectation that universities have more ability and incentive to disclose their inventions than corporations, we analyze 64 linguistic measures of patent applications, and show that university patents are more readable by 0.4 SD of a synthetic measure of readability. Results are robust to controlling for non-disclosure-related invention heterogeneity. The linguistic metrics are evaluated by a panel of “expert” student engineers and further examined by USPTO 112(a) – lack of disclosure – rejection. The ability to quantify disclosure opens new research paths and potentially facilitates improvement of disclosure.

IP & Litigation

Financial Market Reactions to Patent Litigation: An Event Study of Litigation in Korea

Junbyoung Oh (Inha University)

Zhen Sun (Tsinghua University)

Kineung Choo (Academy of Naval Army)

The Korean Economic Review Volume 39, Number 1, Winter 2023, 175-203

<https://ideas.repec.org/a/kea/keappr/ker-20230101-39-1-06.html>

This paper investigates patent litigation in Korea to examine how the stock market responds to a patent litigation announcement and determine whether the response is consistent with the final litigation outcome.

Employing an event study methodology, we investigate cumulative abnormal returns (CARs) based on various litigant characteristics and find a strong and negative stock market response to a litigation announcement, especially towards patent owners and small firms. The final outcome of litigation for a small innovator is negatively correlated with a stock market response, even when the patent is found valid and the owner wins the case. This implies that small innovators are more likely to experience a negative response from the stock market, and they are much more vulnerable to patent litigation, paying additional fringe costs to protect their intellectual properties. The study suggests a policy implication in which the litigation process needs to consider such disadvantages to small innovators as a means of improving procedural fairness in patent litigation.

Moving from the Brown Economy to the Green Economy: The Battle over International Intellectual Property

Ji MA (Yale University - Law School; Peking University School of Transnational Law; University of Oxford)
23 *The Journal of World Investment and Trade* 942
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4307804

The article analyses potential intellectual-property-related disputes amid transfer of technology in the green economy within the international investment legal regime. Intellectual property rights (IPRs) protect human innovation and intellectual efforts. Tech transfer, IPRs in particular, has an important role to play in the move towards the green economy. In reality, it is the ‘private-sector-driven’ approach – foreign investment, licensing, and export – that plays the dominant role in tech transfer. Previously, private investors had brought disputes over intellectual property (IP) in the international investment legal regime. Towards the green economy, this article argues that tech transfer in the green economy can still meet more complicated challenges in the international investment legal regime due to the nature of IPRs, the sources of green tech, and the characteristics of the climate crisis.

Survey & Legal Analysis of Select Global Trademark Anti-Counterfeiting Statutes & Evidence of Prosecutions

Kari Kammel (A-CAPP Center; MSU College of Law)
Marquette Intellectual Property Law Review, Forthcoming
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4323087

Analysis of criminal trademark counterfeiting-related legislation and evidence of prosecutions in 24 countries and the European Union. The initial goal was to understand, describe and evaluate the effectiveness of criminal punishment for trademark counterfeiting in this comparative study, while also exploring the feasibility of further studies of global governmental criminalization and prosecution of trademark counterfeiting.

IP & Innovation

Papers and patents are becoming less disruptive over time

Michael Park (Carlson School of Management, University of Minnesota)
Erin Leahey (School of Sociology, University of Arizona)
Russell J. Funk (Carlson School of Management, University of Minnesota)
Nature volume 613, pages 138–144 (2023)
<https://www.nature.com/articles/s41586-022-05543-x>

Theories of scientific and technological change view discovery and invention as endogenous processes, wherein previous accumulated knowledge enables future progress by allowing researchers to, in Newton’s words, ‘stand on the shoulders of giants’. Recent decades have witnessed exponential growth in the volume of new scientific and technological knowledge, thereby creating conditions that should be ripe for major advances. Yet contrary to this view, studies suggest that progress is slowing in several major fields. Here, we analyze these claims at scale across six decades, using data on 45 million papers and 3.9 million

patents from six large-scale datasets, together with a new quantitative metric—the CD index—that characterizes how papers and patents change networks of citations in science and technology. We find that papers and patents are increasingly less likely to break with the past in ways that push science and technology in new directions. This pattern holds universally across fields and is robust across multiple different citation- and text-based metrics. Subsequently, we link this decline in disruptiveness to a narrowing in the use of previous knowledge, allowing us to reconcile the patterns we observe with the ‘shoulders of giants’ view. We find that the observed declines are unlikely to be driven by changes in the quality of published science, citation practices or field-specific factors. Overall, our results suggest that slowing rates of disruption may reflect a fundamental shift in the nature of science and technology.

Did the COVID-19 Pandemic Propel Usage of AI in Pharmaceutical Innovation? New Evidence from Patenting Data

Sawan Rathi (Indian Institute of Management Ahmedabad)

Adrija Majumdar (Indian Institute of Management, Ahmedabad - Information Systems Area)

Chirantan Chatterjee (SPRU-Sussex, U-Sussex Business School; Hoover Institution, Stanford University; Indian Institute of Management, Ahmedabad)

Working Paper

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4311540

It is now much discussed that Artificial Intelligence (AI) as a General Purpose Technology (GPT) can resolve the efficiency problems of industries, including in pharmaceutical markets where productivity challenges continue in costs and time for new drug discovery. But did the COVID-19 pandemic inadvertently accelerate the pace of AI adoption in pharmaceutical innovation? We answer this question using novel data on pharmaceutical patents. We use two different databases to analyze abstracts of pharmaceutical patents applied in the USA. Topic modeling was used to identify patents with technical artifacts and classify them as treated group AI adopting patents. An AI dictionary is used to match AI-related keywords in the patent abstracts. Subsequently, using a difference-in-differences research design we observe that both presence and intensity of AI in pharmaceutical patents have increased with pandemic. An increase in AI is also related to reduced time taken from application to publication of a patent suggesting innovation efficiencies in the industry. Finally, we find that results are driven by firms that have already built AI capability in the past. Our results remain consistent with various robustness checks, and we conclude by discussing managerial and policy implications of our findings.

Information Transparency and Investment in Follow-on Innovation

Jeff Zeyun Chen (Texas Christian University)

Yongtae Kim (Santa Clara University - Leavey School of Business)

Joseph Zhang (University of Memphis)

Liu Yang (Southeast Missouri State University)

Contemporary Accounting Research, Forthcoming

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4306275

This study examines the role of information transparency in facilitating peer firms’ investment in follow-on innovation. We capture information transparency with both textual and numerical information disclosed in 10-Ks. Using patent citations to proxy for investment in follow-on innovation, we predict and find a positive association between transparency at the knowledge source and follow-on innovation. We further show that the effect of information transparency varies with the degree of uncertainty around technological innovation. Thus, the evidence suggests that information transparency facilitates investment in follow-on innovation by resolving uncertainty associated with investment in technological innovation. An analysis using the cited firms’ going private decision as a negative shock to information transparency confirms the significant effect of a cited firm’s disclosure on a citing firm’s decision to invest in follow-on innovation. Our study contributes to the literature on the positive externalities of peer-firm disclosures and highlights the important role of information transparency in shaping innovation investment decisions.

IP Law & Policy

Accelerating Patent Examination for Fourth Industrial Revolution Technologies

Chungeun Yoon (KDI School of Public Policy and Management)

Working Paper

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4320183

This study examines the effects of accelerated patent examination for fourth industrial revolution (4IR) technologies. I analyze the impact of accelerated examination of 4IR patents on the patent examination period and the patent grant rate in South Korea. I discovered that 4IR patent applications eligible for accelerated examination were under consideration for less time than other patent applications and were more likely to be granted. The results are driven by small domestic firms, suggesting that these firms benefited from the accelerated examination intended to support the fourth industrial revolution. The accelerated examination process also increased patent applications related to 4IR technologies. I discuss how these findings can help us create policy responses to this new era in technology.

Analyzing the Role of Governmental Organizations in Artificial Intelligence Innovation: A Patent-Based Perspective

Jaehyuk Park (KDI School of Public Policy and Management)

Working Paper

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4313729

Artificial intelligence (AI) has rapidly emerged as a transformative technology with the potential to revolutionize numerous industries and applications. While government organizations actively support the AI innovation ecosystem through funding and policy making, their active and direct participation through patenting has not been well studied. Here, we analyze the patenting activity of government employees and compares it to that of non-governmental organizations, focusing on the field of AI. Applying various natural language processing (NLP) techniques to the AI patents, we found that governmental organizations more focus on public benefit and national-level interests, rather than commercialization, which is a main focus of non-governmental organizations. Also, our results reveal that governmental organizations have focused on specific fields related to national security and fundamental inventions. Our findings contribute to the literature on the role of government in fostering innovation in the field of AI and have implications for policy makers and stakeholders involved in AI R&D funding and commercialization.

Copyright Law

AI-Generated Content is Taking over the World. But Who Owns it?

Simon Chesterman (National University of Singapore (NUS) - Faculty of Law)

NUS Law Working Paper No. 2023/002

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4321596

When artificial intelligence (AI) produces artwork and text indistinguishable from human creations, are the economic foundations of creativity under threat? This paper considers the rise of tools such as Stable Diffusion and ChatGPT and their impact on the knowledge economy. “Knowledge workers” was the term introduced in 1959 by management consultant Peter Drucker for non-routine problem solvers. People who “think for a living” earn through their ability to analyse and write — something that ChatGPT can replicate in almost no time and at almost no cost. The paper argues in particular that there needs to be a clearer position on (i) who owns the content produced by generative AI; and (ii) requirements that that such content be identifiable as produced by AI rather than a human.

Can Artificial Intelligence Infringe Copyright? Some Reflections

Enrico Bonadio (City University London - The City Law School)

Plamen Dinev (Goldsmiths, University of London)

Luke McDonagh (LSE Law; London School of Economics and Political Science)

Bonadio, Enrico; Dinev, Plamen and McDonagh, Luke. 2022. "Can Artificial Intelligence Infringe Copyright? Some Reflections", in Ryan Abbott, ed. Research Handbook on Intellectual Property and Artificial Intelligence. Cheltenham: Edward Elgar. ISBN 9781800881891

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4315222

Creative machines consume. They often devour huge amounts of data as part of learning processes including books, photographs, images, articles, social media feeds, videos, and other kinds of content – data are the building blocks of algorithmic creativity. Programs that generate music, for example, are fed with huge quantities of source material, from hits at the top of the chart to lesser-known pieces, which they assess with a view to finding patterns. This inevitably raises risks of copyright infringement—both in relation to the inputs and outputs of the AI system—as a substantial amount of the data used may be subject to protection. Are there any exceptions to infringement in these circumstances? Should we avoid a binary regime whereby algorithmic creativity is given a more generous treatment? Who should be liable for infringement? In this contribution, we explore the above questions with a focus on key jurisdictions including the UK, EU and the United States.

Architects, Artists, Photographers, Property Owners, the Public and Their Rights: Reconciling VARA, the AWCPA, and Copyright Fundamentals

David E. Shipley (University of Georgia School of Law)

University of Georgia School of Law Legal Studies Research Paper No. 02, 2023

AIPLA Quarterly Journal, Forthcoming

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4319483

Murals, sculpture, and other works of visual art have been parts of buildings, monuments and other structures for centuries, but copyright infringement litigation in the federal courts between artists, architects, photographers, and building owners is a relatively recent phenomenon. The outcome of these lawsuits has an impact on the public seeing works of visual art; experiencing works of visual art on buildings, monuments, and structures; and, looking at photographs of visual art on or in those architectural works. This article focuses on how the Copyright Act's protection of artists' rights in their works of visual art on buildings under the Visual Artists Rights Act (VARA) relates to the Copyright Act's protection of architectural works under the Architectural Works Copyright Protection Act (AWCPA). VARA and the AWCPA were enacted in 1990 as amendments to the Copyright Act. There are several questions about the relationship between VARA, the AWCPA, and the rest of the Copyright Act. One concerns a visual artist's rights against unauthorized photographs or other pictorial representations of a building that incorporates the artist's work, such as a mural or sculptural work, when the artist's work is visible in the photograph or pictorial representation. Another question concerns the visual artist's rights in a work incorporated in a building when the owner of the building wants to remodel or demolish the building. Relatively recent litigation involving photographs of murals on buildings and sketches of floor plans, both posted on websites, and the whitewashing of highly acclaimed street art sprayed on a dilapidated warehouse, has required federal courts to interpret and apply provisions in VARA, the AWCPA, and the Copyright Act. This article recommends a way to interpret several provisions in these statutes in order to accommodate the rights and interests of artists, architects, photographers, building owners, and the public. It encourages courts to interpret and apply the pictorial representations exception in section 120(a) of the AWCPA to reach only works of visual art that are integral to the design of the architectural work, and not to pictorial, graphic, or sculptural elements that are conceptually separable from the architectural work, or are not visible from a public place. Section 120(b) of the AWCPA, dealing with a building owner's right to alter or tear down a building embodying a copyrightable architectural work, should be interpreted the same way. This accommodates the rights of visual artists under VARA and the Copyright Act with the rights of building owners, architects, photographers and the public under the AWCPA and the Copyright Act.

Copyright Management Unraveled

Anna Karwowska (University of Warsaw, Faculty of Law and Administration)

Working Paper

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4313590

The subject of this paper is to shed some light on the issue of copyright protection in the information society. In the XXI century, the main question remains the same as in the decades before, namely, who should hold the key to the online content management. The current law regulates access to digital content and the enforcement of rights online in a way that does not respond to the consumer needs and service providers expectations. Changing digital landscape entails enactment of the new regulations and creation of the new businesses.

IP & Trade

Trademark Counterfeiting Enforcement Beyond Borders: The Complexities of Enforcing Trademark Rights Extraterritorially in a Global Marketplace with Territorial-Based Enforcement

Kari Kammel (A-CAPP Center; MSU College of Law)

Matthew Kramer (Solomon Diggins Freer & Steadman, LTD)

Daniel Duquet (Michigan State University - Center for Anti-Counterfeiting and Product Protection)

Lillie Patterson (Michigan State University College of Law)

Fordham Intellectual Property, Media & Entertainment Law Journal, Forthcoming

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4278756

We focus on the enforcement of trademark rights, particularly those used against counterfeiters, or those who use unauthorized trademarks of another. We examine the concept of extraterritorial enforcement of trademark rights — the extending of enforcement across national borders — and reviewing how different countries and jurisdictions view this concept or even allow it.

Pharmaceutical Patent Law and Policy in Africa: A Survey of Selected SADC Member States

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Tolulope Anthony Adekola (City University of Hong Kong)

Chimdessa Fekadu Tsega (CUHK Law)

Mercurio B, Adekola TA, Tsega CF (2023). Pharmaceutical patent law and policy in Africa: a survey of selected SADC member states. *Legal Studies* 1–20. <https://doi.org/10.1017/lst.2022.43>

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4323026

The paper surveys the intellectual property (IP) laws of seven Southern African Development Community countries to better understand the nature, scope, and depth of their patent laws with particular focus on their utilization of TRIPS flexibilities to facilitate pharmaceutical access. The selected countries – Botswana, Malawi, Namibia, South Africa, Tanzania, Zambia, and Zimbabwe – represent a mix of both major and modest economies. While the current literature contains widespread assertions on the impact and effect of TRIPS on access to medicines in these countries and less-developed countries in general, this paper finds that the countries lack explicit and workable provisions implementing key TRIPS flexibilities. Hence, available TRIPS flexibilities have not been well utilized and it is often the complicated and unworkable domestic framework – rather than TRIPS – which becomes the stumbling block to pharmaceutical access. Another major finding is that patents may not be a major impediment in the region given that few patents and even fewer pharmaceutical patents are filed. The paper argues that since the surveyed countries are mainly net IP importers with similar developmental contexts and aspirations, the best approach would be to fully take advantage of existing flexibilities and more aggressively leverage policy space to engender access to cheaper medicines.

Taxation of MNE Profits in an R&D Driven Economy: Beneficial Tax Havens and Minimum Taxes

Malte Lüttmann (University of Münster - Institute of Public Economics)

Working Paper

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4307592

In this paper, I consider optimal minimum taxation and the optimal taxation of intellectual property (IP) income in a setting, in which research and development (R&D) activities of multinational enterprises (MNEs) are suboptimally low due to positive cross-country spillovers resulting from R&D activity by MNEs. The R&D incentives set by an MNE's host country are inefficiently low in equilibrium. Allowing MNEs to access tax havens may help to overcome the resulting inefficiency because it shelters the MNEs' profit from foreign taxation. This forces foreign countries to contribute to the R&D incentive for domestic MNEs. In such settings, effective minimum taxes serve as a tool to fine-tune tax haven access. Regardless of the welfare effect of R&D, a strictly positive minimum tax is optimal for each country. Uncoordinated minimum taxes may be excessively high, if R&D investment has a strong impact on productivity. Under certain circumstances, IP boxes are a welfare-improving substitute for tax havens.

Other Topics

Diversification as an Adaptive Learning Process: An Empirical Study of General-Purpose and Market-Specific Technological Know-How in New Market Entry

Dominika Kinga Randle

Gary P. Pisano (Harvard Business School)

Harvard Business School Working Paper, No. 23-032

<https://www.hbs.edu/faculty/Pages/item.aspx?num=63312>

An enduring trait of modern corporations is their propensity to diversify into multiple lines of business. Penrosian theories conceptualize diversification as a strategy to exploit a firm's fungible, yet "untradeable," resources and point to redeployment of technological know-how as an important driver thereof. However, less understood are the characteristics of technological assets that underlie firms' diversification decisions, and the impact diversification has on firms' subsequent development of technologies. In this paper, we expand the existing theories in two ways. First, we argue that central to understanding firms' diversification decisions is a distinction between their technological assets that are applicable to many markets and ones that are useful in only a limited number of contexts. To this end, we develop a novel way to characterize technologies along a continuum from highly general-purpose to highly market-specific. Second, we explore empirically the idea that diversification is an adaptive learning process involving both exploitation of existing capabilities and creation of novel ones. Using data on three decades of patenting and diversification histories of 28,376 firms, we find that: (1) a firm's possession of general-purpose technological assets is positively associated with its decision to diversify, (2) firms that enter a new industry through diversification develop technologies that are specialized to the target industry, and (3) the increase in the intensity with which a diversifying firm develops technologies specific to the target industry is positively associated with its longevity in that market. Our findings have implications for understanding firm growth, diversification, and evolution.

Research Articles - Invention Patents Equilibrium; Research Integration, Spatiotemporal Development Strategy, and Circular Economy

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G. K. Broni (University of Western Macedonia)

N. D. Kartalis (University of Western Macedonia)

K. G. Panitsidis (University of Western Macedonia)

WSEAS Transactions on Business and Economics, vol. 20, pp. 273-283, 2022

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4328420

Scientific researchers usually announce their achievements in conferences, magazines, and patent offices. Our study was initiated to improve the ascending ratio of research article publishing versus invention patent filing. World development relies, amongst others, upon two innovation indicators, the volume of

Patent applications and the number of Scientific journal articles. To avoid data inconsistencies for our research, we created a new dataset with e corresponding data from different sources like WIPO, OECD, EU, EPO, and SCIMAGO. All primary external data after our calculations created an externally published dataset. After annual and country data analysis, we found irregularities in specific areas like University commercialization, country-specific drawbacks, possible patent troll pursuit, and unexplained gratification for investments through patenting. These results need further clarification at regional patent offices. Our main target was to raise the applied research country impact through patentability. To achieve it, we propose several specific actions. The homogenization of paper/patent worlds under LATEX; the evolvement of the "claims" patent document into a lawful Artificial Intelligence supplement; and a Patent Stock Exchange as a Circular Economy sustainable asset. Finally, after wandering around the fascinating world of articles and patents, we came to the political correctness of research publishing. We extend the scientist's effort in three steps. First, the initial research is published in a Research Magazine. Simultaneously or after a maturity stage, a WIPO patent application must be filed. Finally, as the third step, an "after-Patent" more mature research again in a research magazine.

On Applicable Paths of Substantial Similarity - Workism and Perceptualism

Jiangfeng Hao (Macau University of Science and Technology, Faculty of Law)

Working Paper

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4311801

Substantial similarity is the core element of intellectual property infringement determination, and the understanding of substantial similarity determines the determination of intellectual property infringement. The general understanding of substantive similarity revolves around the work doctrine of "works". With the emergence of the new generation of legal research, the interdisciplinary cognition of substantive similarity has also been put on the agenda, that is, around the "human cognitive mode" Perceptualism, which studies substantial similarity, has led to the sorting out of the applicable path of substantial similarity and the reconstruction of the standard of substantial similarity.

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The editor would like to acknowledge the contributions of Arun Maganti.

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