

2019 I3PM Meets Academia Conference

Strategic Management of Intellectual Property in Business Organizations: Value, Use and Risks

Sponsored by Zacco

Supported by the European Policy for Intellectual Property Association (EPIP) and the Center for European Studies (CefES), University of Milano-Bicocca

University of Milano-Bicocca, Italy

19th November 2019

This conference aims at providing a forum where academics interested in the economics and management of innovation and IP managers can discuss topics that are of critical importance for research as well as business practice.

Although IP protection is crucially important for firm's competitive advantage, especially in technology sectors, many firms do not invest in the protection of their intellectual property and even firms that spend money in legal protection (e.g. patents) show a limited capacity to create and extract value from their investment. This problem is due to a limited attention and effort to integrate IP management with competitive strategy and often results in IP functions of a company being considered by top management as cost centers rather than value adding functions. To increase the firms' awareness and attention to the strategic potential of IP scholars and business practitioners have to demonstrate the value added of legal protection of intellectual property and the conditions that affect such value.

Investment in legal protection like patents can improve the negotiation power of a company vs. other IP owners in potential infringement situations to get access to third party IP under reasonable terms, thus improving the company's freedom to operate. At the same time, patenting does not eliminate the risk of infringement and litigation, which contributes to explain the reluctance of some firms to patent. Understanding the nature and sources of risks associated with patenting as a basis for finding solutions to mitigate such risks is a topic addressed by this conference.

Preliminary Conference Schedule (November 19, 2019)

9.00 -9.30 Registration

9.30 -10.00 **Welcome addresses**

Peter Bittner, I3PM

Bent Lundsager, Zacco, Copenhagen, I3PM

Salvatore Torrisi, University of Milano-Bicocca

10.00 -10.30 - First Keynote Lecture

Dietmar Harhoff, Max Planck Institute and University of Munich

Topic: "Science Quality and the Value of Inventions"

Abstract: Despite decades of research, the relationship between the quality of science and the value of

inventions has remained unclear. We present the result of a large-scale matching exercise between 4.8 million patent families and 43 million publication records. We find a strong positive relationship between quality of scientific contributions referenced in patents and the value of the respective inventions. We rank patents by the quality of the science they are linked to. Strikingly, high-rank patents are twice as valuable as low-rank patents, which in turn are about as valuable as patents without direct science link. We show this core result for various science quality and patent value measures. The effect of science quality on patent value remains relevant even when science is linked indirectly through other patents. Our findings imply that what is considered "excellent" within the science sector also leads to outstanding outcomes in the technological or commercial realm.

Bio: Dietmar Harhoff is Director at the Max Planck Institute for Innovation and Competition and Professor for Entrepreneurship and Innovation at the Ludwig-Maximilians-Universität (LMU) Munich. His research focuses on innovation, entrepreneurship, intellectual property, and industrial economics.

He graduated with a Diploma degree in mechanical engineering from the Technical University of Dortmund. As a McCloy Scholar he obtained a Master's degree in Public Administration at Harvard University. His doctoral training at the MIT Sloan School of Management focused on economics and management of innovation.

Before assuming his current position, he was Full Professor and Director of the Institute for Innovation Research, Technology Management and Entrepreneurship at LMU Munich (1998–2013) and Associate Director of the Centre for European Economic Research (ZEW) (1995–1998).

His research results have been published in a large number of articles in leading journals as well as in numerous books. Many of his contributions have focused on intellectual property, the design of IP institutions and the determinants and outcomes of innovation processes. Dietmar Harhoff is an elected member of the German Academy of Science and Engineering (acatech), the German National Academy of Sciences Leopoldina, and the Bavarian Academy of Sciences and Humanities (BAW).

He has served in advisory functions to private and public organizations at various times. From 2007 to 2019, he was the Chairman of the Commission of Experts for Research and Innovation (EFI) of the German Federal Government. Since March 2019, he has been chair of the Commission for the establishment of the new German Agency for Disruptive Innovation (SprinD).

10.30-12.00 – First Panel Session – Managing the strategic value of IP protection

This panel will follow on the issues raised by the first keynote speaker and will concentrate the debate on the conceptualization of IP value and use in different types of organizations and sectors (e.g., complex product industries vs. discrete product industries). A key question for discussion will be about methods (and challenges) for calculating the monetary value of IP (for internal use or for calculation of damages). Even more important for both management scholars and business practitioners is to understand the strategic value of IP. From a practical perspective, this session will address the question how the value added of IP management is perceived within a company and how much it contributes to the top management decision making. The relevance of IP management in many companies is often downgraded by the top management and moved into the legal department rather than being integrated with the corporate or business unit strategy. From this perspective, the discussion should also address the issue where is the proper place for the IP decision making to add value to the firm strategy and how this value can be demonstrated.

Moderator: **Salvatore Torrisi**, University of Milano-Bicocca

Stuart Graham, Scheller College of Business, Georgia Institute of Technology, Atlanta

Topic: "Competitive strategy and IP strategy: Managing through the tensions"

Abstract: Firms often have difficulty effectively managing IP strategy and competitive strategy. While commonly organizational issues are a factor, there are also fundamental conflicts between the disciplines of economics, law, and science that contribute. This firm-strategy conundrum is exacerbated by the fast-changing nature of technology, and evolving innovation and competitive conditions – particularly the tension between creating and capturing value in today’s marketplace. Professor Graham’s talk will focus on these challenges, concentrating on how research in economics and management, including his own recent work, provide insights and solutions to practitioners of firm strategy.

Bio: Dr. Stuart Graham is Associate Professor of Strategy & Innovation at the Scheller College of Business, Georgia Institute of Technology (Atlanta, Georgia, USA). He teaches and conducts research on business strategy and competition, the economics of patent systems, intellectual property strategy, and technology entrepreneurship. He received his PhD from the University of California, Berkeley, and holds other advanced degrees in Law (JD), Business (MBA), and Information Systems (MA). His scholarship has been published in the journal Science, the MIT Sloan Management Review, the Journal of Economic Perspectives, Management Science, and the Stanford Technology Law Review, among other venues. During 2010-2013, Dr. Graham served as the (first ever) Chief Economist of the US Patent & Trademark Office (USPTO), where he assembled and managed a team of professional economists to study the US innovation system and inform economic policy. He has testified on patent-system economics to the US Congress and the US Federal Trade Commission, and served as an economic expert to the World Economic Forum, the European Commission, the Japan Fair Trade Commission, the European Patent Office, Industry Canada, and the Organization for Economic Cooperation and Development (OECD). Professor Graham is also an attorney admitted to practice in New York State (US).

Tetsuo Wada, Gakushuin University, Tokyo

Topic: “R&D and IP evaluation in family firms: the experience of Japanese pharmaceutical firms”

Abstract: Top management wants to take full control of the whole process of creating, reinforcing, leveraging and disposing intellectual property rights. Numerous obstacles exist, including the lack of IPR valuation tools, technological and business uncertainties combined with the choice of complementary assets, and in some cases, long time lag between R&D and its outcome as IPRs. However, reductionism to individual IPRs is not the only approach to learn from actual firm strategies. Tetsuo Wada will introduce his recent research findings on the patterns of R&D by Japanese pharmaceutical family firms, and will discuss its implications for innovativeness and appropriability strategy, viewed from top management.

Bio: Tetsuo Wada is a professor at the Faculty of Economics, Gakushuin University. He has research interests in the process of creating and trading intellectual property rights. He obtained Ph.D. in Business Administration from the University of California, Berkeley, and LL.B. from the University of Tokyo. His latest journal publication focuses on “contact-hitting R&D strategy” of Japanese family firms in pharmaceutical industry. Assuming that the value of pharmaceutical patents can be approximated by the number of forward citations, the article argues that some types of family firms avoid trying to develop blockbusters (radical and high-value innovations) but focus on developing incremental innovations.

Stephanie van Wermeskerken, Head of IP - Precision Diagnosis, Philips

Topic: “IP strategies in a broad-scope multi-national company”

Abstract: In the recent years the focus of Philips has been shifted fully to being a health technology leader. Although this may sound as a single focus, ‘HealthTech’ still encompassed a variety of businesses with different characteristics and inherently different IP value models. In this presentation Stephanie will address how Philips Intellectual Property and Standards is dealing with IP strategy, IP value models and other means to assess what value IP brings to a company.

Bio: Stephanie van Wermeskerken is Head of IP, Precision Diagnosis at Philips. In that role she is

responsible for all IP related matters within Precision Diagnosis, including defining an IP strategy, IP portfolio management, counseling the business on IP matters in transactions with third parties, IP aspects of M&A transactions, conducting IP risk assessments, handling third party IP assertions, capturing value from the IP portfolio, licensing-in etc. Outside of Philips, Stephanie holds several board member functions, both in private company and in non-profit organization.

Stephanie obtained her MSc in Chemistry at Leiden University. She started her career in 1992 as a trainee patent attorney in private practice and qualified for the Dutch and European patent examination. In December 1999 she joined Philips Intellectual Property and Standards, where she had several roles in advising the business and research on IP matters, among which public-private partnerships, before she took on her present role.

12.00-13.00 - Lunch

13.00 - 14.30 - Second Panel Session – Managing the Risk of IP litigation

This panel session will focus on the risk of IP litigation in different organizations and sectors (e.g., complex product vs. discrete product industries). This session will also discuss on problems in monitoring/landscaping of third party IP, classifying main IP players into risk categories and then defining for each risk category and crafting risk policies to work through the ever increasing patent thickets.

Moderator: **Donal O'Connell**, Chawton Innovation Services and Imperial College Business School

Georg von Graevenitz, School of Business and Management, Queen Mary University of London

Topic: "Patents, trademark and litigation"

Abstract: Georg von Graevenitz has worked extensively on patent thickets, opposition to patent applications and patenting strategies in Europe. In other work he has analysed trademark filing, opposition to trademark applications and cluttered trademark registers. His presentation will focus on the choice of countries for which firms active in digital industries and pharmaceuticals obtain and maintain granted patents and on preferred venues for litigation of patents by firms in these industries. He will then discuss opposition and litigation of trademarks by presenting recent evidence on the degree to which trademark registers are cluttered and the risk of opposition in cluttered trademark fields. In this context he will comment on current cases before the CJEU that affect how trademarks may be protected and used in Europe.

Bio: Georg von Graevenitz is Senior Lecturer in Quantitative Methods in the School of Business and Management at Queen Mary University of London. He is Director of a new MSc in Business Analytics. His research focuses on intellectual property rights, innovation and entrepreneurship. In the field of IP he researches both the patent and trademark systems. He researches patent thickets and trademark cluttering. Other current topics are the concentration of patenting after the Global Financial Crisis of 2008 and measuring innovation and diffusion of innovation with data from trademark registrations. Advisory experience includes advising competition and regulatory authorities and international organizations (including European Commission, WIPO, EPO, IPO UK). His work spans a range of industries including social networking, the semiconductor and telecommunications industries, the pharmaceuticals industry, sports rights, trade fairs and the package tour industry with advice covering mergers, market investigations and the effects of patent and trade mark protection in Europe. Outside of Queen Mary he is affiliated to the Centre for Competition Policy (CCP) at University of East Anglia, CREATE at the UNiversity of Glasgow and the Oxford Intellectual Property Research Centre.

Bruno van Pottelsberghe, Solvay Brussels School of Economics and Management, Université Libre de Bruxelles

Topic: “From theory to practice: an insight from academia on patent examination processes and litigation mechanisms?”

Abstract: The contribution first starts by the sharing of patenting and litigation experiences at university level, whereby patent applications are examined in different offices, and litigation take place mainly in Belgium. Then a presentation of recent research results on globalisation of patent systems and comparative examination processes analysis.

Bio: Bruno van Pottelsberghe is Full Professor and, as holder of the Solvay S.A. Chair of Innovation, he teaches courses on the economics and management of innovation and intellectual property. His research, which focuses on patent systems, the valuation of patents, and science and technology policies, has been published in several international scientific journals, including Research Policy, the Journal of Public Economics, the Review of Economics and Statistics, and Industrial and Corporate Change.

The research projects he works on are essentially applied and have the particularity of being frequently inspired by his professional experience. Papers on academic patenting and technology transfer offices were inspired by his position as chair of the ULB’s Technology Transfer Committee since 2004. The papers on patent systems were stirred by his experience as Chief Economist of the European Patent Office in Munich, from 2005 to 2007. The papers on the effectiveness of science and technology policies were triggered by his professional experience at the OECD Directorate for Science, Technology and Industry (DSTI) in Paris, from 1997 to 1999. His work on international and interindustry R&D spillovers was ignited by his visiting research position at the Research Institute of the Ministry of External Trade and Industry Research Institute (METI/RI) in Tokyo in 1995.

Bruno van Pottelsberghe held Visiting Professor/Researcher positions at Columbia University (NYC, 1996), Stellenbosch University (Cape Town, 2003), Hitotsubashi University (Tokyo, 2003). As Dean of the SBS-EM he initiated and chairs the QTEM Master network (Quantitative Techniques for Economics and Management), a global network of universities focusing on analytical techniques applied to economics and business. He has been Dean of the Solvay Brussels School of Economics and Management (SBS-EM), at Université libre de Bruxelles (ULB) from April 2011 to September 2017.

Nicola Searle, Goldsmiths, University of London (TBC)

Topic: “IP and cybersecurity strategies”

Abstract: In an increasingly digital world, intellectual assets are simultaneously becoming more valuable and more vulnerable. Trade Secrets, in particular, continue to play an increasingly key role to IP strategies, yet face a growing threat from industrial and economic espionage and cybercrime. These threats are both internal and external to the firm, and governments are now paying attention. Looking at trends in the US, Dr. Searle will discuss the risks posed to trade secrets and how they factor into business decision making in both IP and cybersecurity strategies.

Bio: Dr. Nicola Searle is an EPSRC Digital Economy Fellow and Senior Lecturer at the Institute for Creative and Cultural Entrepreneurship, Goldsmiths, University of London. An economist who specialises in the economics of intellectual property, trade secrets and the creative industries, Nicola joined Goldsmiths in 2015. Dr. Searle is a member of the RCUK Digital Economy Programme Advisory Board, a member of the UK Intellectual Property Office’s (IPO) Research Experts Advisory Group and an Honorary Research Fellow at the School of Management, University of St Andrews. She previously held positions at the Universities of Abertay and St Andrews, the UK Intellectual Property Office and Goldman Sachs. Dr. Searle earned her BS at the School of Foreign Service, Georgetown University, and her MSc and PhD at the School of Economics and Finance, University of St Andrews.

Alexandra Cordes, former Head of Strategic IP Initiatives, Global Vice President, SAP SE

Topic: “IP Risk Management in an international company”

Abstract: Dr. Cordes will give insights into how an effective IP risk management program can be set up in an international acting company. She will identify the major threats a company is dealing with and how to mitigate IP risks.

Bio: Dr. Alexandra Cordes has just founded her own business and was Global Vice President and Head of Strategic IP Initiatives at SAP until July 2019. At SAP, she was responsible for developing and implementing the overall IP strategy within the SAP group worldwide. This included patent licensing and monetization initiatives, pre-litigation settlements and developing a companywide strategy for copyright and trade secret protection. In dealing with the threat of patent assertion entities her team initiated that SAP next to Google, Canon and Dropbox became a founding member of the License on Transfer Network (www.lotnet.com). Dr. Cordes has over 18 years of experience in IP law, licensing and IP risk management, including design and implementation of companywide programs at SAP. She holds a doctor of law degree from the University of Münster, Germany.

14.30 -15.00 - Coffee Break

15.00 – 15.30 – Second Keynote Lecture

Dr. Torsten Pfeifer, Director Patent Unit Continental Europe, Ericsson

Topic: Challenges with telecom portfolios in view of industry 4.0 and IoT

Abstract: The presentation will focus on the creation of a valuable telecom patent portfolio and use in licensing in the IoT and Industry 4.0 area and will also deal with the challenges and how to cope with them.

Bio: Torsten Pfeifer is European and German Patent Attorney. He studied physics at the RWTH Aachen and has a PhD in Electrical Engineering, also from RWTH Aachen. After finishing university, he worked for 4 years in Daimler-Benz Aerospace (later European Aeronautic Defence and Space Company, EADS) in Ulm as an R&D engineer and project manager and then joined Ericsson's IPR department in Herzogenrath, Germany in 2001. Since then he worked in various role as an Ericsson inhouse patent attorney, portfolio manager, and in European litigations and is responsible for Ericsson's first and further filing and prosecution strategies. Since 2012 he is heading the Patent Unit Continental Europe with more than 20 patent professionals in Germany, The Netherlands, Spain, and Hungary. His team is responsible for providing IPR support to Ericsson's R&D centers on the continent of Europe and is engaged in all kind of patent-related activities ranging from invention stimulation, filing and prosecution, patent valuation, portfolio management, to licensing and litigation support in Europe.

15.30-17.00 - Third Panel Session – In search for IP management best practices and solutions

This session will focus on protection and economic exploitation of IP and the risk of litigation: best practices and solutions in different institutional and technological environments. This session will deal with the difficulty in making IP protection decisions in conditions of high uncertainty, especially at the early stages of IP protection – i.e., at the time when innovators and their IP consultants choose between patenting and other means of IP protection (e.g., trademarks), and when they design their patent portfolios (e.g., choosing the components of complex products that should be patented). Estimating the value added of protection (e.g. the patent premium) early on is challenging but also important to motivate the investment in protection.

Moderator: **Martin Bader**, University of Ingolstadt

Massimiliano Granieri, University of Brescia

Topic: “Building capacity building in IP management through best practices: the case of ProgressTT”

Abstract: The open innovation is premised on the idea of internal and external osmosis among organizations, which also imply the capacity to strategically manage the intellectual property and to create value-enhancing business opportunities. This premise is sometimes missing at academic level and many technology transfer offices still strive to reach an acceptable level of performance. The ProgressTT capacity building pilot action at EU level was aimed at increasing the capacity of TT organizations and VC funds to valorize intellectual property portfolio. One of the recipes for building capacity in IP management has been the collection of best practices among organizations around four critical areas of focus. Such best-practice-centered methodology became a standard at EU level and a landmark for IP management for PRO and SMEs.

Bio: Massimiliano Granieri is professor of Comparative Private Law at the Department of Mechanical and Industrial Engineering of the University of Brescia Health&Wealth and adjunct faculty at LUISS Guido Carli, Department of Management, and at Widener Law School. He was visiting scholar at the George Washington University National Law Center (Washington, D.C.) and at the Jamail Center for Legal Studies of the University of Texas at Austin, School of Law. Massimiliano earned a J.D. (summa cum laude and distinctions) in Comparative Law from the LUISS Guido Carli Law School. He received a Master of Laws (LL.M.) from the University of California at Berkeley, Boalt Hall School of Law; a Ph.D. in Comparative law from the University of Florence and was the Jemolo Fellow at the Nuffield College, Oxford.

In his professional life, Massimiliano has been admitted to practice in Italy as an attorney-at-law (Rome bar). Former Head of the Intellectual Property and Technology Transfer group at the Fondazione Torino Wireless, he has practiced law in Italy and was legal counsel with the Office of Technology Transfer of University of California (Oakland), working in the field of university/industry relations and international technology transfer deals. He is member of the Italian Association of Comparative Law, the Italian Society of Law and Economics, and AIPPI.

Prof. Granieri is the current chairman of MITO Technology, the largest Italian intellectual property licensing company and strategic advisor to Progress Tech Transfer, a technology transfer fund endowed by the EIF and CDP. Prof. Granieri served twice as member of the board of directors of ARTI Puglia (the regional agency for technology and innovation), Fondazione Felice Chirò (the foundation created by heirs of the late Felice Chirò and BancApulia, together with the University of Foggia), and GZ Meditec/Mekna (a biomechanical mechanics manufacturing company). He was board member and vice president of ASTP (the pan-European association of technology transfer professionals) and is now board member of NETVAL (the Italian Network for the Valorization of Research). He acted several times as consultant for the European Patent Office and is member of the scientific board of the Patent Academy at the EPO. He was member of the IPR Expert group of the European Commission (DG Enterprise) for the exploitation of patents. Massimiliano has published extensively in the field of economic analysis of law, antitrust, intellectual property and contract law. He is author of three books and authored and co-authored more than a hundred of book chapters and scientific articles.

Claire F. Danielsson, Copenhagen Economics

Topic: Pragmatic steps to managing IP – when, why, and how to evaluate and value IP

Abstract: IPRs are commonly accepted to “add value” but how that value can and ought to be measured may be less clear. One reason that determining IP value is complex is that it is often dynamic – as a company evolves, and as markets evolve, the value of the underlying IP may also develop. This session will discuss some common inflection points and practical considerations for IP practitioners to ensure optimal use of research and data in IP management, monetization and defense.

Bio: Claire Foley Danielsson is a Senior Economist at Copenhagen Economics in Stockholm, Sweden. Claire specializes in IP damages disputes and litigation and IP valuations for strategic and monetization purposes.

She helps clients to answer intellectual property-related economic questions. She advises on valuations of patents, trademarks, trade secrets and standard essential patent portfolios in industries such as telecommunications, pharmaceuticals, consumer products, medical devices, and various complex technical products.

Claire has broad experience with high-stakes IP disputes concerning patent infringement, trade secret misappropriation, and portfolio valuations. In addition to the evaluation of economic damages associated with lost profits, price erosion, and/or reasonable royalties, she has extensive experience with license disputes including over “fair, reasonable and non-discriminatory” (FRAND) terms and conditions and patent portfolio rate-setting. She has also offered expert witness testimony in US and Swedish courts.

Prior to joining Copenhagen Economics in Stockholm, Sweden, Claire worked at an economic consultancy focused on the intersection of IP and antitrust issues near Boston, Massachusetts.

Charles Roger, France Brevets

Topic: “The Patent Factory: helping early-stage start-ups building their IP position”

Abstract: Many early-stage start-up companies have to deal with a complex issue in terms of IP: in order to raise funds, they need to have a relevant IP portfolio that will reassure their potential investors. However, to build such IP position, especially by filing patent and design rights applications, sufficient funds are necessary. The Patent Factory Program is an initiative to help these start-ups solve this issue, by combining IP strategy advise, ideation sessions, and repayable advance of IP fees during one or two years. At such early stage it can be complex to decide which patents should be filed, especially when the objective is to build a portfolio of four or five patent families. By providing brainstorming sessions, we help the management and R&D of our clients thinking the right way to generate the most useful patent portfolio. Emphasis is given to strategic aspects of portfolio construction, such as the need to generate exclusivity around the key customer-relevant features, thinking in terms of arguments and not only in terms of specific technical ideas.

Bio: Charles has a cross-experience mixing technological R&D and Innovation Monetization and Valuation. Doctor in Science by training (Masters Degree from Polytech’Lyon school and Ph.D. in Materials Science from the Commissariat à l’Energie Atomique et aux Energies Alternatives - Grenoble), he initially developed an experience in R&D in large companies (Saudi Basic Industries Corporation – SABIC in the Netherlands) as well as in start-ups in renewable energies (Disasolar). From 2015 he developed a broad IP management and monetization experience as Licensing Manager at CNRS Innovation, the technology transfer office of the CNRS research organization, where he managed and monetized the Materials, Chemistry and Energy patent portfolio, from invention disclosure assessment to licensing out and technology transfer. He successfully monetized CNRS technologies by licensing them to French and US companies.

In 2017 Charles joined France Brevets as Licensing Executive. He is involved in new patent monetization programs, as well as in Patent Factory programs where he helps small and medium-size companies to develop and optimize their IP portfolio. Charles graduated with the Master of IP Law and Management (MIPLM) from CEIPI in 2019.

17.00-17.30. Closing remarks

Organizers

- Department of Economics, Management and Statistics (DEMS). DEMS is one of the top-rated Italian departments in Economics, Management and Statistics and it is the recipient of a big competitive funding granted by the Italian Ministry of Universities, Education and Research (MIUR) under the Italian Departments of Excellence Program. The research and teaching area of the Department includes theoretical and applied economics, marketing and business strategy. DEMS faculty members have published in top-tier general and field journals such as American Economic Review, Economic Journal, Annals of Statistics, Journal of Econometrics, European Economic Review, Industrial and Corporate Change, International Journal of Industrial Organization, International Journal of Central Banking, Journal of International Economics, Journal of Technology Transfer, Management Science, Research Policy, Strategic Management Journal and Strategic Entrepreneurship Journal.
- The International Institute for Intellectual Property Management (I3PM) is an association of IP Managers dedicated to promoting the field of IP Management, and thereby to enhance the emergence of a dynamic IP-driven economy. I3PM gathers managers from diverse international corporations and organisations, forming a unique experience pool in the management and realisation of value from immaterial assets. Via its contacts with the academic world, I3PM actively supports the development and spreading of knowledge and best practice in the area of IP Management.