

European Policy for Intellectual Property

12th Annual Conference

Claims on Area: The Geography-IP Interface

September 4-6, 2017

University of Bordeaux, Pôle juridique et judiciaire

info@epip2017.org
<http://epip2017.org/>



© Annalisa FEOLA



EPIP 12th Annual Conference

*Claims on Area:
The Geography-IP Interface*

Bordeaux - September 4-6, 2017

*Pôle Juridique et Judiciaire, Université de
Bordeaux*



The European Policy for Intellectual Property (EPIP) is an international, independent, interdisciplinary, non-profit association of researchers that grew out of a network financed by the European Commission from 2003 to 2005.

Its central concern are the various challenges and policy issues that are raised by the evolution of the IP institutions in the context of the new knowledge-based economy, an area of great policy concern for the future of European economic competitiveness and social cohesion. The objectives of the Association are:

- to be a leading European platform for the analysis and discussion of IP systems and intangible assets;
- to encourage research regarding economic, legal, social, political and historical aspects of IP rights at national, European and international levels;
- to contribute ideas, concepts and discussions that will promote innovation, productivity and growth in Europe and beyond;
- to inform and encourage policy-oriented discussion involving political and administrative bodies and stakeholders in Europe;

EPIP cooperates with other associations with similar objectives. Its ongoing activities include the organization of one major annual conference, occasional workshops, and collaborative work among members of the association.

GREThA (Groupe de Recherche en Économie Théorique et Appliquée) is the largest research unit in economics of the University of Bordeaux. It hosts both university faculty and CNRS researchers.



Its activities are organised along three axis, one of which includes the Economics of Innovation along with Industrial Economics, Regional Economics, and the Economics of Science.

GREThA also hosts VIA-Inno, a technology intelligence unit that provides patent data analysis services to business companies and policy-makers as well as two Chairs that mark the importance of research on innovation: the Chair of Economics of Innovation, funded by the Regional Council of Aquitaine; and the Chair of Technological Intelligence, which works in close cooperation with VialInno.

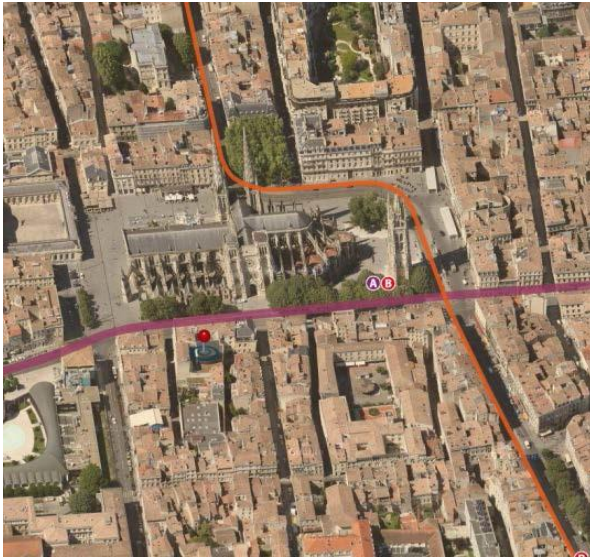
Contents

Practical Information	1
Conference Programme	7
Plenaries.....	8
Programme Overview	9
Parallel Sessions.....	11
<i>Presentation guidelines and timing</i>	11
<i>Parallel Sessions 1</i>	11
<i>Parallel Sessions 2</i>	14
<i>Parallel Sessions 3</i>	17
<i>Parallel Sessions 4</i>	19
Keynote Speakers	23
Bronwyn H. Hall	24
Graham Dutfield	25
Stefan Bechtold.....	26
Walter W. Powell	27
Roundtables	29
Patent Geography: Global Applications & Regional Protection.....	30
IP and access to medicines.....	33
The Changing Geography of Geographical Indications	36
PhD Workshop.....	39
Abstracts	43
Organising Committee & Local Support.....	137
EPIP Board	138

Practical Information

1. Conference Venue

The conference takes place in the Pôle Juridique et Judiciaire (PJJ) of the University of Bordeaux (35, place **Pey-Berland**), at the heart of the city, next to the Saint André Cathedral and the City Hall.



You can reach it on foot from all city-centre hotels or by **tramway lines A** (purple) and **B** (red), *Hôtel de Ville* stop.

2. Public Transport (to the conference venue)

From St Jean train station: Take tramway line C (direction Bordeaux - Parc des Expositions) then change at *Porte de Bourgogne*. Take line A (direction Pin Galant or Le Haillan Rostand) and stop at *Hôtel de Ville*.

From the airport: At *Aéroport Terminus* bus stop, take the bus Liane 1 direction Gare Saint Jean (40 minutes, standard fare). Stop at *Palais de Justice*. Walk 7 minutes down rue des Frères Bonie to the Place Pey Berland.

- Liane 1 provides also connecting services to Tramway Line A at *Mérignac Centre*.
- Taxi from/to the center costs about 45€.

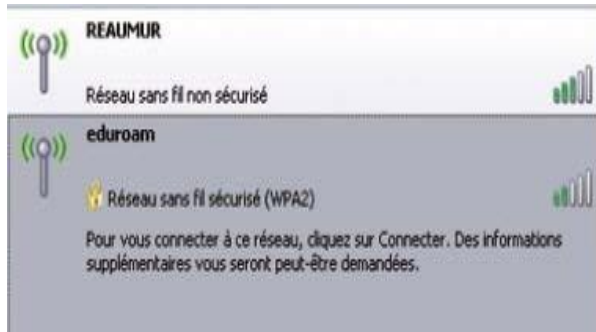
3. Registration

On Monday, September 4, the registration desk will be open from 14:30 in the main hall of the Pôle Juridique et Judiciaire.

At the registration you will receive an information package including this booklet, a 3-days pass for local public transport, which includes unlimited access to all Trams and Buses as well as the Batcub (city boat). The package will also include maps and tourist information leaflets.

4. WLAN and Internet

Free wi-fi access is provided with a single user name and password on the REAUMUR Network.



- Choose the 'REAUMUR' network
- Start your browser and try accessing any web site
- Allow pop-up and cookies
- Select "Conferences/Invités" in the Home Establishment menu
- Enter login and password
User Name (login): EPIP-n-1
Password: vEnDGK%

You can also use your EDUROAM account, provided by your university.

5. Lunches & Coffee Breaks

On Monday 4, lunch and coffee breaks will be offered to the PhD workshop participants in room RG, ground floor.

On Tuesday 5 and Wednesday 6 lunch and coffee breaks will be offered to all participants in rooms RG & RE, ground floor.

6. Social Programme

Monday, September 4, 19pm: **Welcome wine tasting**

Antoine, former sommelier in London and Dubai, now wine seller (www.lacavedantoine.eu), will introduce you to the subtleties of Bordeaux wines, accompanied by foie gras and other appetizers – on the conference venue, rooms RG & RE, ground floor.

Tuesday, September 5, 8pm: **Gala Dinner**

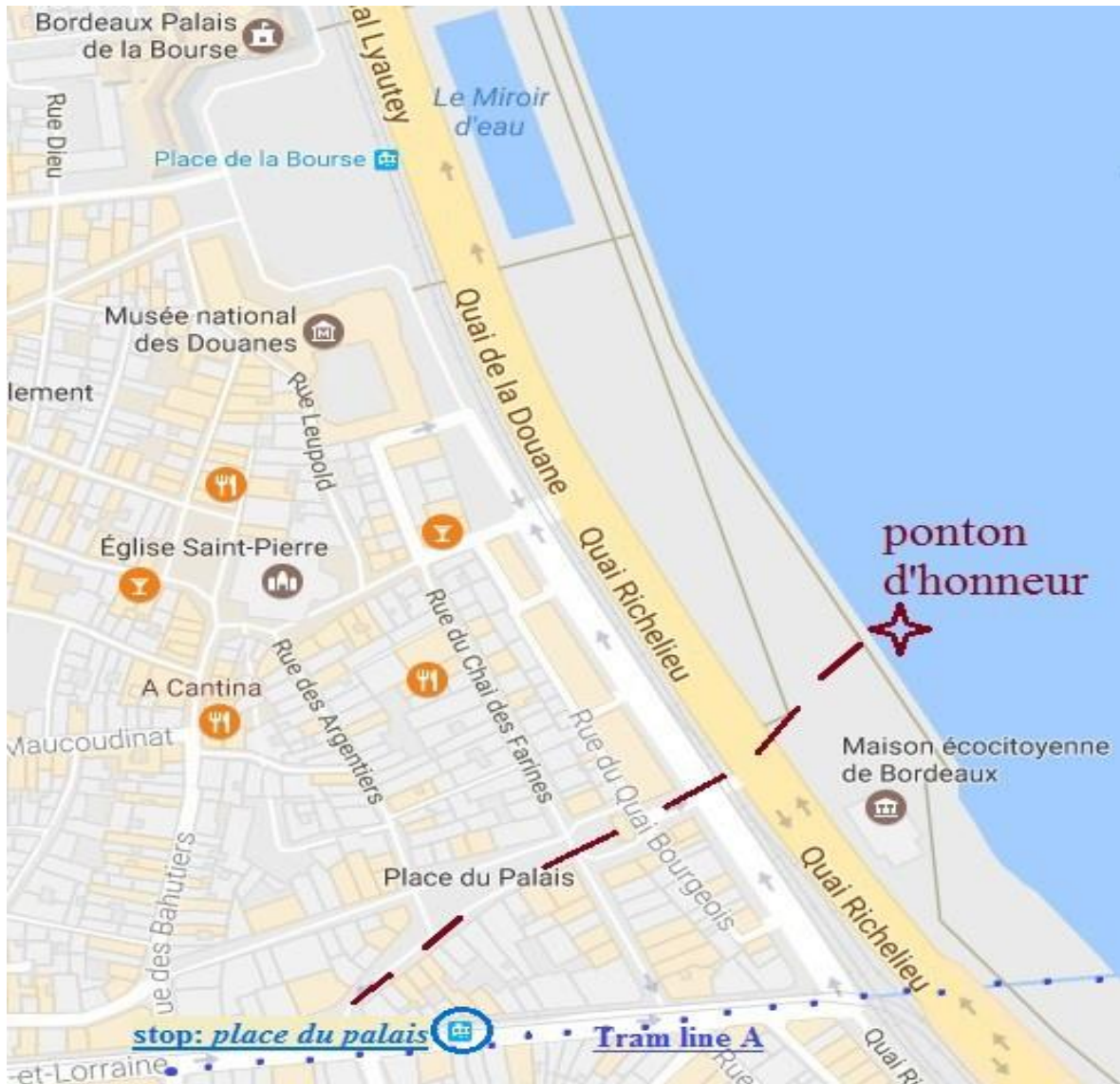


The Gala Dinner will take place on a **River Cruise** aboard the *Sicambre*: a standing dinner while cruising the Garonne River and admire views of the UNESCO heritage façades of historic Bordeaux.

Departure/Arrival: 8:30pm-10.30pm

Rendezvous at 8pm at the *Ponton d'Honneur* on *Quai Richelieu*

Gala Dinner Meeting Point: From the conference venue, you can take the tramway line A from 'Hotel de ville' stop (direction 'La Gardette/ Floirac/ Cenon') to 'Place du Palais' stop, then walk 5 mn to the Ponton.



7. Tourist Information:

You can find more detailed tourist information on the website:
www.bordeaux-tourism.co.uk/

See also:

- Office du Tourisme de Bordeaux: http://www.bordeaux-tourisme.com/index_uk.html
- Comité Régional du Tourisme en Aquitaine: <http://www.tourisme-aquitaine.fr/en/>
- Comité Départemental du Tourisme de la Gironde: <http://www.visitbordeauxgironde.co.uk/>

8. Contacts and social media

Scientific Committee: francesco.lissoni@epip2017.org

Submissions: submission@epip2017.org

Practical & Accomodation: info@epip2017.org

Webmaster: website@epip2017.org

 [@EPIP2017](#) [#EPIP2017](#)

Conference Programme

Plenaries

Keynotes

Bronwyn H. HALL, UC Berkeley (USA)

IP in developing countries

Graham DUTFIELD, University of Leeds (UK)

Geographical indications and traditional knowledge

Stefan BECHTOLD, ETH Zurich, (Switzerland)

IP, Cyberspace and Boundaries

Walter W. POWELL, Stanford University (USA)

Inventing tradition: creating class and crûs in Bordeaux wine

Roundtables

1. Patent Geography: Global Applications & Regional Protection

Stuart GRAHAM, Scheller College of Business, Georgia Inst. of Technology, USA

Mark POWELL, US Patent and Trademark Office, USA

Laurence JOLY, Institut national de la propriété industrielle, France

Bruno VAN POTTELSBERGHE, Solvay Business School, Belgium

Yoshiaki KODACHI, Japan Patent Office, Japan

Gerard OWENS, European Patent Office

2. IP and access to medicines

Chirantan CHATTERJEE, Indian School of Business, India

Margaret KYLE, Mines ParisTech, France

Ellen 'T HOEN, University of Groningen, Netherlands

3. The Changing Geography of Geographical Indications

Irene CALBOLI, Chair, Singapore Management University, Singapore

Felix ADDOR, Swiss Federal Institute of Intellectual Property, Switzerland

Alexandra GRAZIOLI, World Intellectual Property Organization

Justin HUGHES, Loyola Law School, USA

Programme Overview

Monday 4th September

Main Hall	8.30-9.00	Registration & Coffee (for PhD workshop participants)
Amphi Ellul	9.00-13.30	PHD Workshop with coffee break & lunch for participants
Info on website	10.00-12.00	WALKING TOUR
Salle RG	14.30-16.45	Registration
Amphi DUGUIT	16.45-19.00	PLENARY SESSION WELCOME SPEECHES (Chair: F.Lissoni) ROUNDTABLE <i>“Patent Geography: Global Applications, Regional Protection”</i> (Chair: S.Graham)
Main Hall	to follow	Welcome cocktail

Tuesday 5th September

Amphi DUGUIT	9.00-9.40	PLENARY SESSION KEYNOTE - B. H. Hall <i>“IP in Developing Countries”</i> (Chair: G.de Rassenfosse)
	9.40-11.00	ROUNDTABLE <i>“IP and Access to Medicines”</i> (Chair: C.Chatterjee)
Main Hall	11.00-11.20	Coffee break
	11.20-12.40	PARALLEL SESSIONS 1
Main Hall	12.40-13.40	Lunch

Tuesday 5th September (cont.)

	13.40-15.20	PARALLEL SESSIONS 2
Main Hall -	15.20-15.40	Coffee break
	15.40-17.00	PARALLEL SESSIONS 3
Main Hall -	17.00-17.20	Coffee break
	17.20-18.00	PLENARY SESSION KEYNOTE - W.Powell: <i>"Inventing Tradition: Creating Class and Crûs in Bordeaux Wine"</i> (Chair: C.Martinez)
See pp 3-4	20.00-22.30	GALA DINNER

Wednesday 6th September

Amphi DUGUIT	9.00-10.00	PLENARY SESSION EPIP General Assembly & Presentation of EPIP 2018 (Chair: E.Webster) KEYNOTE - S.Bechtold: <i>"IP, Cyberspace and Boundaries"</i> (Chair: A.Chander)
Main Hall	10.00-10.20	Coffee break
Amphi DUGUIT	10.20-12.00	PARALLEL SESSIONS 4
Main Hall	12.00-13.00	Lunch
Amphi DUGUIT	13.00-15.20	PLENARY SESSION KEYNOTE - G.Dutfield: <i>"Geographical Indications & Traditional Knowledge"</i> (Chair: E.Migueluez) Roundtable "The changing geography of geographical indications" (Chair: I.Calboli) Farewell Speeches

Parallel Sessions

Presentation guidelines and timing

All conference rooms will be equipped with notebooks and projectors. Please make sure to bring your slides on a USB pen and to upload them before the beginning of your session.

ORDINARY SESSIONS: If not otherwise specified, you will have 25 minutes for your presentation, including Q&As. Please foresee a maximum of 20 minutes for your presentation and at least 5 minutes for discussion. The session chair will ensure that the schedule is respected.

SPECIAL SESSIONS: The Session organizers will contact you with specific instructions.

Parallel Sessions 1

Tuesday 5th September, 11h20-12h40

Session 1.1

Disclosure & Trade Secrets (Amphi Duguit)

Chair: Julien Penin

David T. Angenendt: "Patent Count or Patent Breadth? A Second Look at the Effect of Trade Secret Law on Patenting Strategy" (p. 45)

Gabriele Pellegrino, Gaétan de Rassenfosse, Emilio Raiteri: "Does the disclosure requirement of the patent system encourage knowledge diffusion?" (p. 101)

Nathan Wajzman: "Protecting innovation through trade secrets and patents: determinants for EU firms" (p. 128)

Alexandra Zaby, Diana Heger: "Limited patent disclosure" (p. 134)

Session 1.2

European harmonization (Room 1J)

Chair: Christophe Geiger

Marcella Favale, Martin Kretschmer, Paul Torremans: Governments at the EU Court: "Will there be a BREXIT effect?" (p. 70)

Christophe Geiger, Elena Izyumenko: "The Geography of Fair Use: Towards a European Open-Ended Copyright Limitation Grounded in Fundamental Rights" (p. 75)

Esther van Zimmeren, Jens Schovsb: "The Future Role of the Court of Justice of the EU (CJEU) in the European Patent System: Opportunities for Creating Patent Expertise at the CJEU" (p. 69)

Asako Wechs Hatanaka: "Optimising mediation for intellectual property law - Perspectives from EU, French and UK law" (p. 130)

Session 1.3

Global patents vs. national patent systems (Room 1L)

Chair: Stuart Graham

Federica Baldan: Judicial Coherence in Specialised Intellectual Property Courts: "A Comparative Analysis of Japan and Europe" (p. 49)

Rudi Bekkers, Gaétan de Rassenfosse, Emilio Raiteri: "Discrimination against foreigners in the patent system: Evidence from standard-essential patents" (p. 51)

Alexandra George: Transcending Geography: "Trends Towards the Globalization of Intellectual Property Enforcement" (p. 76)

Tetsuo Wada: "Measuring divergent reasons for patent refusals in technological space: a study on the trilateral patent offices" (p. 127)

Session 1.4

Knowledge diffusion and cumulative innovation (Room 2B)

Chair: Ingrid Schneider

Andrew F. Christie, Chris Dent: "Follow-on Innovation relating to Blockbuster Drugs - Innovators, Timing and Private Value" (p. 60)

Fabian Gaessler, Dietmar Harhoff, Stefan Sorg: "Patents and Cumulative Innovation – Evidence from Post-Grant Patent Oppositions" (p. 73)

Sergio Petralia: "Unravelling the Trail of a GPT: The Case of Electrical & Electronic Technologies from 1860 to 1930" (p. 103)

Tatiana Kiseleva, Ali Palali, Bas Straathof: "Do national borders slow down knowledge diffusion within new technological fields? The case of big data in Europe" (p. 85)

Session 1.5

Science and innovation (Room 3B)

Chair: Nicolas Carayol

Paul-Emmanuel Anckaert, Hanne Peeters: “This Is What You Came For? University-Industry Collaborations & Follow-On Inventions by the Firm” (p. 44)

John Liddicoat, Mateo Aboy, Kathleen Liddell, Cristina Crespo, Matthew Jordan: “The Practical Effect of Myriad on Patent Claims” (p. 87)

Hanne Peeters: “The Contribution of Academic Expertise in Corporate Technology Development Endeavours” (p. 100)

Beth Webster, Paul Jensen, Alfons Palangkaraya, Russell Thomson: “The effect of collaborative research grant programs on business patents and sales” (p. 129)

Parallel Sessions 2

Tuesday 5th September, 13h40-15h20

Session 2.1

Markets for technologies (Amphi Duguit)

Chair: Valerio Sterzi

Pere Arqué-Castells, Daniel F. Spulber: “Firm Matching in the Market for Technology” (p. 46)

Laurie Ciaramella: “Patent Boxes and the Relocation of Intellectual Property” (p. 61)

Christoph Grimpe, Katrin Hussinger, Wolfgang Sofka: “Buying the Straw Man? Firm Acquisitions and the Access to Localized Knowledge” (p. 77)

Maarten Rabijns, Bart Leten, Stijn Kelchtermans, Massimo Riccaboni: “Do licensors learn from out-licensing? Empirical evidence from the pharmaceutical industry” (p. 108)

Session 2.2

Open access and data access (Room 1F)

Chair: Geertrui van Overwalle

Carys Craig: “Gender and the Copyleft Agenda: Open Access, Attribution and the Academy” (p. 63)

Thomas Eger, Marc Scheufen, Daniel Meierrieks: “Copyright law and open access in academia: international survey results” (p. 67)

Ingrid Schneider: “Data as Economic Goods: Conceptualising and discussing the Pros and Cons of Ownership, Property and Intellectual Property Rights on Data in the Digital Economy” (p. 81)

Fabian Gaessler, Stefan Wagner: “Patents, Data Exclusivity, and the Development of New Drugs” (p. 115)

Session 2.3

Geography of innovation: patent & inventor data (Room 1J)

Chair: Grégoire Croidieu

Pierre-Alexandre Balland, David Rigby, Sergio Petralia, Mathieu Steijn: “The Geography of Innovation in the United States: 1836 – 2010” (p. 106)

Federico Caviggioli, Paul Jensen, Giuseppe Scellato: “High skilled migration and technological diversification” (p. 57)

Claudia Temgoua: “Highly Skilled Migration and the Internationalization of Knowledge” (p. 98)

Julio Raffo, Gema Lax Martínez, Kaori Saito: “What drives gender participation in the IP system? Technology, country and institutional effects on women inventors” (p. 109)

Session 2.4

Social justice and IP (Room 1L)

Chair: Haochen Sun

Irene Calboli: “Intellectual Property, Free Movement of Goods, and Regional Market Integration: The Geographical Diversity of the EU/EEA, NAFTA, and ASEAN Approaches” (p. 55)

William W. Fisher III: “The Puzzle of Traditional Knowledge” (p. 71)

Peter Lee: “Toward a Distributive Agenda for U.S. Patent law” (p. 86)

Haochen Sun: “Recognizing the Authenticity of Wisdom in the Age of Intellectual Property” (p. 118)

Madhavi Sunder, Anupam Chander: “From TPP to RCEP: The Battle to Define Asia’s Intellectual Property Law” (p. 119)

Peter K. Yu: “A Spatial Critique of Intellectual Property Law and Policy” (p. 133)

Session 2.5

Rethinking copyright (Room 2B)

Chair: Martin Kretschmer

Stefan Bechtold: “Deconstructing Copyright” (p. 50)

P. Bernt Hugenholtz, João Pedro Quintais: “Towards a universal right of remuneration: legalizing the non-commercial online use of works” (p. 80)

Ansgar Ohly: “A Fairness-Based Approach to Economic Rights” (p. 99)

Joost Poort: “Borderline exploitation of copyrighted works” (p. 107)

Ole-Andreas Rognstad, Joost Poort: “The Right to a Reasonable Exploitation Concretized - An Incentive Based Approach” (p. 111)

Alain Strowel: “Reconstructing the Communication to the Public and the Reproduction Rights: How To Align Copyright With Its Fundamentals” (p. 117)

Session 2.6

IP and international trade (Room 3B)

Chair: Catalina Martinez

Keith Maskus: “Intellectual Property-Related Preferential Trade Agreements and the Composition of Trade” (p. 91)

Benjamin Mitra-Kahn: “Geographical Indications - a big data approach with a new database and implications for trade policies” (p. 94)

Anke Moerland: “Governance of geographical indications: proper oversight over how a GI’s reputation is linked to the region” (p. 95)

Hazel Moir: “Understanding EU trade policy on geographical indications” (p. 96)

Parallel Sessions 3

Tuesday 5th September, 15h40-17h00

Session 3.1

Two-tiered and sui generis IP (Amphi Duguit)

Chair: Stefan Wagner

Michael Verba, Jussi Heikkilä: “Do two-tiered patent systems induce sorting” (p. 124)

Tohru Yoshioka-Kobayashi, Tsuyoshi Fujimoto, Atsushi Akiike: “Design awards and global industrial design protections: Do industrial design registrations correspond to design award-winning products and complement other non-awarded products?” (p. 132)

Maryam Zehtabchi, Carsten Fink, Intan Hamdan-Livramento: “Understanding the use of industrial designs in Southeast Asian countries – case of Thailand, Indonesia and Philippines” (p. 135)

Session 3.2

Patenting & Publishing (Room 1F)

Chair: Cornelia Lawson

Laurent Bergé, Thorsten Doherr, Katrin Hussinger: “The Effects of Intellectual Property Rights on Publications of University Scientists” (p. 52)

Fabio Montobbio, Francesco Lissoni, Lorenzo Zirulia: “Don’t leave me this way: misallocation of scientific credit in patent-publication pairs” (p. 136)

Elena Romito, Arianna Martinelli: “When authors become inventors: an empirical analysis on patent-paper-pairs in medical research” (p. 112)

Session 3.3

Patent opposition and litigation (Room 1J)

Chair: Benjamin Mitra-Kahn

Jonathan Ashtor: “Do Valid Patents Promote Progress?” (p. 47)

Rahul Kapoor, Nicolas van Zeebroeck: “On determinants of patent disputes in European chemical and drug industries” (p. 84)

Liu Xia: “Challenge or negotiate? An analysis of the strategic use of opposition” (p. 131)

Session 3.4

IP intermediaries (Room 1L)

Chair: Massimiliano Granieri

Olena Ivus, Edwin L.-C. Lai: "Patent exhaustion policy and international production sharing: Winners and losers?" (p. 82)

Lutz Maicher, Kazimir Menzel: "The Intermediating Function of Patent Attorneys" (p. 88)

Valerio Sterzi, Gianluca Orsatti: "Non-practicing entities in Europe: evidence using patent data" (p. 116)

Session 3.5

Science and innovation policy evaluation (Room 2B)

Chair: Christoph Grimpe

Nicolas Carayol, Elodie Carpentier, Pascale Roux: "Does Competitive Public Funding of Science Affect Academic Invention?" (p. 56)

Curdin Pfister, Miriam Rinawi, Dietmar Harhoff, Uschi Backes-Gellner: "Regional effects of applied research universities of applied sciences and innovation" (p. 104)

Emilio Raiteri, Francesco Decarolis, Gaetan de Rassenfosse, Leonardo Giuffrida, Elisabetta Iossa, Vincenzo Mollisi, Giancarlo Spagnolo: "Buyer Competence and Innovation Procurement" (p. 110)

Session 3.6

IP and pricing (Room 3B)

Chair: Joost Poort

Kristofer Erickson, Jesus Rodriguez-Perez, Swagatam Sinha: "Region Free or Region Locked: How much do consumers value interoperability in media devices?" (p. 68)

Florine Livat, Jean-Marie Cardebat, Julian Alston: "Appellations of Origin as Substitutes: a Cointegration Approach Applied to Bordeaux Wines Prices" (p. 72)

Nicola Searle: "An Empirical Analysis of Copyright, Business Models and the Creative Industries in UK Policy" (p. 114)

Parallel Sessions 4

Wednesday 6th September, 10h20-12h00

Session 4.1

Technology intelligence (Amphi Duguit)

Chair: Marie Coris

Cécile Ayerbe, Liliana Mitkova, Katia Angue: “Patents: a tool for identifying technological partners? Application to R&D cooperative agreement in the biotechnology sector” (p. 48)

Andrea Bonaccorsi, Filippo Chiarello, Gualtiero Fantoni, Laura D’Amico: “Mapping users in patents. Towards a new methodology and the definition of a research agenda” (p. 53)

Elona Marku, Maria Chiara Di Guardo, Emanuele Castriotta, Kathryn Rudie Harrigan: “Visualizing the knowledge profile of the U.S communications industry: a patent co-classification analysis” (p. 64)

Sylvain Mbongui Kialo: “Absorption Capacity and patent information: bringing technology and innovation into the organization” (p. 92)

Maidier Saint Jean, Nabila Arfaoui, Eric Brouillat: “Technology transition to renewable energy: Lessons from patent network analysis in the case of ocean energy technology trajectories” (p. 113)

Session 4.2

Patent policy evaluation (Room 1F)

Chair: Beth Webster

Chirantan Chatterjee, Sourav Bhattacharya, Pavel Chakraborty: “IPR and Organization of Knowledge: New Evidence from India” (p. 59)

Catalina Martínez, Valerio Sterzi: “IP regime changes and the quality of university patents in Europe” (p. 90)

Elie Sung: “Evaluation of a policy change weakening patents and its effect on firm strategy” (p. 120)

Federico Tamagni, Rudi Bekkers, Arianna Martinelli: “The causal effect of including standards-related documentation into patent prior art: evidence from a recent EPO policy change” (p. 121)

Session 4.3

Trademark data (Room 1J)

Chair: Andrew Toole

Davidson Heath, Christopher Mace: “What's a Brand Worth? Trademark Protection, Profits and Product Quality” (p. 78)

Meindert Flikkema, Carolina Castaldi, Ard-Pieter de Man, Marcel Seip: “Trademark Scope and Similarity as Predictors of the Trademark-Innovation Linkage” (p. 93)

Amanda Myers, Emin M. Dinlersoz, Nathan Goldschlag, Nikolas Zolas: “An Anatomy of Trademarking by Firms” (p. 97)

Andrew Toole, Dirk Crass, Dirk Czarnitzki: “The Dynamic Relationship between Investments in Brand Equity and Firm Profitability: Evidence using Trademark Registrations” (p. 123)

Session 4.4

New legal territories in Gis (Room 1L)

Chair: Bernard O'Connor

Patricia Covarrubia: “Geographical Indications of traditional handicrafts: a cultural element in a predominantly economic activity” (p. 62)

Henrik Egelyng: “Geographical indications and sustainable development: a transdisciplinary perspective” (p. 66)

Ana Penteadó: “The best offer: Aboriginal art and geographical indications, a fair price to pay” (p. 102)

Barbara Pick: “Collective action in the establishment of selected GI initiatives in France and Vietnam” (p. 105)

Erik Thévenod-Mottet, Delphine Marie-Vivien: “Think globally, act bilaterally: the international stakes of the protection of geographical indications” (p. 122)

Session 4.5

Cyber/Space (Room 2B)

Chair: Anupam Chander

Mira Burri: “The Rise of Extraterritoriality in Cyberspace: Exploring the Extraterritorial Effects of the EU General Data Protection Regulation” (p. 54)

Anupam Chander: “Intermediary Liability and the Geography of Cyberspace” (p. 58)

Henry Gao: “Alternate Reality: The Development of the Internet in China and Implications under Trade Law” (p. 74)

Cedric Manara: Cyberspace and Geography: “The Point of View of an Internet Intermediary” (p. 89)

Session 4.6

Patents as indicators: methodological perspectives (Room 3B)

Chair: Ernest Miguelez

Dennis Verhoeven: “Potluck or Chef de Cuisine? Knowledge Diversity and Award-Winning Inventor Teams” (p. 125)

Matthias Dorner, Dietmar Harhoff: “A Novel Technology-Industry Concordance Table Based on Linked Inventor-Establishment Data” (p. 65)

Martin Kalthaus: “Flexibility in the Selection of Patent Counts: Implications for Policy Recommendations and p-Hacking” (p. 83)

Hélène Dernis, Mariagrazia Squicciarini, Antonio Vezzani, : “Is there a bias in understanding global technological knowledge development? Evidence from IP5 offices” (p. 126)

Keynote Speakers

Bronwyn H. Hall

IP IN DEVELOPING COUNTRIES

Bronwyn H. Hall is Professor of Economics Emerita at the University of California at Berkeley, a Research Associate of the National Bureau of Economic Research and the Institute for Fiscal Studies, London, and a Visiting Fellow at the National Institute of Economics and Social Research, London. She was Professor of Economics of Technology and Innovation at the University of Maastricht, Netherlands 2005-2015. For 30 years, she was the founding partner of TSP International, an econometric software firm. She received a B.A. in physics from Wellesley College in 1966 and a Ph.D. in economics from Stanford University in 1988.

Professor Hall has published articles on the economics and econometrics of technical change and innovation in journals such as *Econometrica*, the *American Economic Review*, the *Rand Journal of Economics*, and *Research Policy*. She is also the editor with the late Nathan Rosenberg of the *Handbook of the Economics of Innovation*, in the Elsevier series. Her current research includes comparative analysis of the U.S. and European patent systems, the use of patent citation data for the valuation of intangible (knowledge) assets, comparative firm-level investment and innovation studies, measuring the returns to R&D and innovation at the firm level, analysis of technology policies such as R&D subsidies and tax incentives, and of recent changes in patenting behavior in the semiconductor and computer industries. She has made substantial contributions to applied economic research via the creation of software for econometric estimation and of firm-level datasets for the study of innovation, including the widely used NBER dataset for U.S. patents.

Graham Dutfield

GEOGRAPHICAL INDICATIONS AND TRADITIONAL KNOWLEDGE

Graham Dutfield is founding director of the LLM in Intellectual Property Law, and of the Research Group on Emerging Technologies in Law and Society, both at the University of Leeds, UK. He is Visiting Professor at Queen Mary Intellectual Property Research Institute, University of London. He is also a member of the Expert Advisory Group for the Australian Centre for Intellectual Property in Agriculture (ACIPA), and a Research Affiliate of the Intellectual Property Law and Technology Programme at Osgoode Hall Law School, York University, Toronto. From 2010-14 he was Scientific Advisory Board member of a Canadian synthetic biology project: PhytoMetaSyn. Previously he worked at Queen Mary University of London and at International Centre for Trade and Sustainable Development where he was Academic Director of a project with UNCTAD on TRIPS and development. He has published numerous articles and several books including Global Intellectual Property Law (with U Suthersanen), and Intellectual Property Rights and the Life Science Industries: Past, Present and Future. He has a DPhil from the University of Oxford.

Stefan Bechtold

IP, CYBERSPACE AND BOUNDARIES

Stefan Bechtold is professor of intellectual property at ETH Zurich, Switzerland. He is a graduate of the University of Tübingen School of Law, Germany, and of Stanford Law School (JSM 2002). He was a Visiting Professor at New York University School of Law and the University of Haifa, a Senior Research Fellow at the Max Planck Institute for Research on Collective Goods, and a Visiting Scholar at the University of Amsterdam, the University of California at Berkeley, and the University of Munich. Stefan Bechtold is a member of the foundation board of the Study Center Gerzensee (a foundation of the Swiss National Bank), where he is involved in the organization of law & economics courses for doctoral students. He is also a member of the Academic Advisory Board of the German Federal Ministry of Economics and Technology, advising the ministry on all issues of economic policy.

Stefan Bechtold's research interests include intellectual property, law and technology, telecommunications law, and antitrust law, as well as law & economics. He has published in journals such as the American Journal of Comparative Law, the Communications of the ACM, HotNets Proceedings, the Journal of Empirical Legal Studies, the Journal of Behavioral Decision Making, the Indiana Law Journal, the Journal of Law, Economics & Organization, and various European law journals. In his youth, Mr. Bechtold composed numerous orchestral and chamber music works which have been awarded several composition prizes and have been repeatedly performed and broadcast.

Walter W. Powell

INVENTING TRADITION: CREATING CLASS AND CRÛS IN BORDEAUX WINE

Walter W. Powell is professor of education and sociology, organizational behavior, management science and engineering, public policy, and communication at Stanford. He works in the areas of organization theory, economic sociology, and the sociology of science. His interests focus on the processes through which knowledge is transferred across organizations, and the roles of networks in facilitating or hindering innovation and of institutions in codifying ideas. He is the author or editor of Books: The Culture and Commerce of Publishing, with Lewis Coser and Charles Kadushin (Basic Books, 1982); Getting into Print: The Decision-Making Process in Scholarly Publishing (University of Chicago Press, 1985); The New Institutionalism in Organizational Analysis, with Paul DiMaggio (University of Chicago Press, 1991); Private Action and the Public Good, with Elisabeth Clemens (Yale University Press, 1997); and The Nonprofit Sector, with Richard Steinberg (Yale University Press, 2006). His most recent book, with John Padgett, is The Emergence of Organizations and Markets (Princeton University Press, 2012). He received his PhD in sociology from Stony Brook University and previously taught at Yale, MIT, and the University of Arizona. He holds honorary degrees from Uppsala University, Copenhagen Business School, and the Helsinki School of Economics and is a foreign member of the Swedish Royal Academy of Science.

Roundtables

Patent Geography: Global Applications & Regional Protection

Total world patent filings topped 2.88 million in 2015 – a 7.8% increase over 2014 (1). This explosive growth, coupled with increased complexity and geographically distributed R&D, invention, and innovation, continues to pose challenges for the patent offices responsible for managing the system, as well as to patentees and their competitors.

To explore these issues, this panel brings together senior international-policy executives from four patent offices (EPO, JPO, USPTO, and INPI) and academic representatives to discuss policy responses aimed at lowering costs and reducing uncertainty in this increasingly complex system. Panelists will discuss challenges, such as the transaction costs imposed on patentees operating in global markets, and possible solutions. These include, among others, the Global Dossier Initiative, a set of business services being developed by the IP5 Offices (USPTO, EPO, JPO, KIPO, and SIPO) to modernize application procedures for applicants using the international patent system. The continuous expansion of PCT and the increasing efforts of European integration will also be discussed in the same perspective. The moderator will end the panel by leading an active and informed discussion among the assembled panelists, and the audience at large.

(1) World Intellectual Property Organization (2016). *WIPO IP Facts and Figures 2016*, Geneva

SPEAKERS

Stuart Graham is Associate Professor of Strategic Management at the Scheller College of Business, Georgia Institute of Technology (Atlanta, Georgia, USA). Professor Graham teaches and conducts research on business strategy and competition, the economics and policy of patent systems, intellectual property (IP) strategy, and technology entrepreneurship. His scholarship has appeared in the journal *Science*, the *MIT Sloan Management Review*, *Management Science*, the *Journal of Economic Perspectives*, and the *Stanford Technology Law Review*, among other venues. During 2010-2013, Dr. Graham was appointed as the (first ever) Chief Economist of the US Patent & Trademark Office (USPTO), where he created and managed a team of professional economists to study the US innovation system and steer economic policy. He has served as an expert to the European Commission, the European Patent Office, the World IP Organization (WIPO), and the Organization for Economic Cooperation and Development (OECD), and is a member of the *Board of*

Co-Editors of the Journal of Economics and Management Strategy. Dr. Graham received his PhD from the University of California, Berkeley, and holds other advanced degrees in Law (JD), Business (MBA), and Information Systems (MA). He is a licensed attorney in New York State (USA). Dr. Graham is honored to continue serving as a *Senior Advisor* to the USPTO and the US Department of Commerce.

Laurence Joly joined the French Industrial Property Office (INPI) as an economist in 2001. Since 2010, she is the chief economist and head of the Observatory for Intellectual Property, which is part of the French Industrial Property Office's Directorate of Innovation, Marketing and Communication (DIMC). The Observatory is a centre of expertise, analysis and reflection for all economic and strategic issues relating to intellectual property. Its task is to analyse the INPI's legal, economic and strategic environment and provide useful insight into intellectual property issues for both the INPI and economic and political decision-makers.

Yoshiaki Kodachi is director of the Examination Policy Planning Office of the Japan Patent Office (JPO). He received a Master's degree in Engineering from Tokyo Institute of Technology in 1999 and a Master's degree in Business Administration from the University of Tsukuba in 2005. Since joining the JPO in 1999, he has served as a patent examiner and a patent administrative judge in the field of electronic commerce technology. From 2010 to 2012, he was responsible for international cooperation in the area of information technology including IP5 IT related projects such as the Global Dossier and the Priority Document Exchange program as Deputy Director of the Information Technology Policy Planning Office. In 2013, he was appointed as Deputy Director of the Examination Policy Planning Office and engaged in international cooperation in the area of patent examination including the Patent Prosecution Highway (PPH) and the Examiners Exchange Program

Gerard Owens is Coordinator for the "IP5 Cooperation" and "Patents and Standards" programmes at the European Patent Office, Munich. For the "IP5 Cooperation" he works with the patent offices of China, Japan, Korea and the US, as well as WIPO in Geneva. He is responsible for coordinating EPO initiatives relating to IP5 Working Group 2, "IT related initiatives", including the Global Dossier and the Global Dossier Task Force. He also coordinates EPO activities relating to the interactions between the global patent system and international standards development. He liaises with standards development organisations, with the European Commission, and with other stakeholders in this area.

Mr. Owens has been working at the European Patent Office (EPO) in Munich for over 25 years. Holding degrees in Biochemical Engineering, then Human-Computer Interaction, he worked as a patent examiner, then for many years on managing business and user-related aspects of computer projects. He has also coordinated bilateral activities between EPO and WIPO, and Public Policy Issues, including the interactions of the global patent system with initiatives in climate change, standards, and life sciences.

Mark Powell is the Deputy Commissioner for International Patent Cooperation for the United States Patent and Trademark Office (USPTO). Deputy Commissioner Powell's responsibilities include leading international cooperative efforts to improve the international patent system in terms of efficiency, certainty and cost reduction for stakeholders; advancing international work sharing in examination and administration among offices; improving the PCT system; and other international harmonization matters. Trained as an electrical engineer, he entered the USPTO in 1986 as a patent examiner for high-energy physics, and was next promoted to senior examiner in high-definition television technology. In 1994 Mr. Powell was named a Supervisory Patent Examiner in the main IT examination division, overseeing the user-interface, artificial intelligence, source-code management, and computer graphics units. He served as a Technology Center Director from 2003-2011 in the telecommunications area, managing some 1,200 patent examiners, all while participating in international patent matters on behalf of the agency. Mr. Powell holds a B.S.E.E from Clemson University and a Certificate in Advanced Public Administration from the Maxwell School of Citizenship and Public Affairs at Syracuse University.

Bruno van Pottelsberghe has been Dean of the Solvay Brussels School of Economics and Management (SBS-EM), at Université libre de Bruxelles (ULB) since April 2011. He 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*. His research is essentially applied and has 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 and companies focusing on analytical techniques applied to economics and business.

IP and access to medicines

The debate over the role of IP in access to medicines and incentives for innovation continues, particularly as payers confront the introduction of new treatments with very high list prices. At the same time, the industry can point to therapeutic breakthroughs in cancer and Hepatitis C as well as increasing R&D costs as evidence that strong IP is essential and effective. In recent years, the tension between access and innovation has concerned not only developing countries, which have historically resisted the introduction of stronger IP rights as conditions for trade agreements, but high income countries as well. This panel will discuss and debate the questions below:

- a) Is the use of differential pricing and/or voluntary licensing sufficiently widespread to achieve access to patented medicines in the developing world?
- b) How should rich and poor economies incentivize innovation in product markets such as antibiotics, vaccines, and new treatments for pandemics, where patents plus market incentives are insufficient?
- c) Should policies differ for large molecule or biotech drugs?
- d) How do NGOs see the involved between access and innovation in global market for medicines?
- e) How important are parallel imports in helping or hindering access? What does this imply about national policies on IP exhaustion?
- f) How important are counterfeit or substandard products in global drug markets, and what effect does enforcement of IP have?

SPEAKERS

Chirantan Chatterjee is assistant professor in economics and public policy at the Indian School of Business. He is also affiliated as a Max Research Fellow in Healthcare and Bharti Research Fellow in Public Policy at ISB's Mohali campus. He earned a Ph.D. & an M.Phil. in public policy and management from the Carnegie Mellon University, and a B.Tech. in civil engineering from the Indian Institute of Technology, Roorkee, and a MBA from the Indian Institute of Management, Calcutta.

Prof. Chatterjee's research work has been published, among others, in the RAND Journal of Economics, Journal of Health Economics, The Journal of Law & Economics, and Research Policy. Current research includes exploration of the incentives for innovation in the Indian vaccine markets, the market impact of pharmaceutical relabeling in the US, and the entrepreneurship impact of regulatory interventions

such as the Orphan Drug Act. He has also consulted for the World Bank (on Universal Healthcare Coverage in India) and the Competition Commission of the Government of India (on Indian pharmaceutical markets). Prof. Chatterjee is actively involved in executive education with healthcare executives and leaders and has in the past conducted programs as faculty director with Johnson & Johnson (on Indian hospital markets), with Novartis (on women healthcare leaders in India), with Novo Nordisk (on Indian pharmaceutical industry & health economics) and with Wockhardt, Jubilant, & Micro-Labs on (growth strategies and managerial economics). In 2015, Chatterjee conceptualized and chaired the 1st India Conference on Innovation, Intellectual Property & Competition, a first of its kind international innovation policy conference in India supported by Qualcomm Inc. & Tata Trusts. His deep passion about Indian healthcare markets and for democratizing education has also resulted in the first ever MOOC on healthcare markets in India in 2016 available through edX.

Margaret Kyle (PhD, MIT Economics) studies innovation, productivity and competition. She has a number of papers examining R&D productivity in the pharmaceutical industry, specifically the role of geographic and academic spillovers; the firm-specific and policy determinants of the diffusion of new products; generic competition; and the use of markets for technology. Recent work examines the effect of trade and IP policies on the level, location and direction of R&D investment and competition. She also works on issues of innovation and access to therapies in developing countries. Her papers have been published in various journals of economics, strategy, and health policy, including the RAND Journal of Economics, Review of Economics and Statistics, Journal of Law and Economics, Strategic Management Journal, Health Services Research, and Health Affairs. Margaret currently holds the Chair in Markets for Technology and Intellectual Property at MINES ParisTech. She is an associate editor at the International Journal of Industrial Organization and a Research Fellow at the Centre for Economic Policy. She previously held positions at Carnegie Mellon University, Duke University, London Business School and the Toulouse School of Economics. She has also been a visiting scholar at the University of Hong Kong and Northwestern University.

Ellen 't Hoen, LL.M. is a lawyer and public health advocate with over 30 years of experience working on pharmaceutical and intellectual property policies. From 1999 until 2009 she was the director of policy for Médecins sans Frontières' Campaign for Access to Essential Medicines. In 2009 she joined UNITAID in Geneva to set up the Medicines Patent Pool (MPP), an initiative that negotiates patent licenses with pharmaceutical companies to ensure access to affordable generic medicines for the treatment of HIV. She was the MPP's first executive director until 2012. Ellen has published widely and is the author of several books. Her latest book "Private Patents

and Public Health: Changing intellectual property rules for public health.” was published July 2016. She is a member of the WHO Expert Advisory Panel on Drug Policies and Management, the Lancet Commission on Essential Medicines, the Advisory Board of Universities Allied for Essential Medicines (UAEM) and the Editorial Board of the Journal of Public Health Policy. In 2005, 2006, 2010 and 2011 she was listed as one of the 50 most influential people in intellectual property by the journal *Managing Intellectual Property*. Ellen 't Hoen is currently an independent consultant in medicines law and policy to a number of international organisations and governments and a researcher at the Global Health Unit of the University Medical Centre at the University of Groningen, The Netherlands.

The Changing Geography of Geographical Indications

Current international agreements contain a two-tier protection system for Geographical Indications (GIs), with GIs playing a role mainly in the wines and spirits trade of a number of European countries.

The system looks increasingly under pressure, as several forces push for extending GIs in several directions:

- Geographical, with many countries outside Europe now interested in adopting GIs and discussing harmonization along with trade agreements.
- Substantive, with GI-protection increasingly reclaimed in almost any product category (agro-alimentary, textiles, handicrafts, carpets, ceramics, watches, etc.)
- Legal, with national legislations now providing or planning to provide sui generis protection also to non-agricultural products

This intense dynamics is reflected by the extension of WIPO's Lisbon Agreement in 2015 (Geneva Act) and the multiplication of debates in multilateral fora such as WIPO or the WTO, as well as in academic journals.

The roundtable will discuss the foreseeable impact of GI extension on international trade and economic growth, via ongoing institutional and legal changes at the national level, and their reception by international treaties. This could be of particular relevance for developing countries, to the extent that GIs can be seen as a tool to facilitate both access to market and the activation of cooperation projects. But it is also relevant for emerging and advanced economies, where the potential benefits of GI protection have also to be discussed in light of their interplay with more established IP rights.

SPEAKERS

Irene Calboli is Lee Kong Chian Fellow, Visiting Professor and Deputy Director of the Applied Research Centre for Intellectual Assets and the Law in Asia, Singapore Management University, School of Law. She is also Professor of Law at Texas A&M University School of Law, and Transatlantic Technology Law Fellow at Stanford University. She has taught and held full-time and visiting positions in Italy, France, Spain, Germany, the U.K., Hong Kong, and Australia. From 2012 until 2015 she was a full-time Visiting Professor at the National University of Singapore. Her recent

research focuses on trademark law, geographical indications of origin, and the exhaustion of intellectual property rights. She is an elected member of the American Law Institute, an associate member of the Singapore Academy of Law, and is currently serving, inter alia, in the Executive Committee of the Intellectual Property Section of the Association of American Law Schools, the Board of the European Policy for Intellectual Property Law Association, and the Legislation and Regulation Committee of the International Trademark Association.

Felix Addor serves as the Deputy Director General, General Counsel and Director of the Legal and International Affairs Division at the Swiss Federal Institute of Intellectual Property (Swiss Ministry of Justice), the federal agency in charge of all intellectual property matters in Switzerland (www.ige.ch). He has been responsible for legal and policy matters regarding all fields of intellectual property at the national and international level since 1999. He leads Swiss negotiating delegations to the relevant international fora, such as the World Trade Organization and the World Intellectual Property Organization, and to bi- and plurilateral negotiations. Since 2008, Prof. Addor has been a Professor at the Faculty of Law, University of Bern, too. He lectures on intellectual property law, international negotiations and global governance at the University of Bern, the World Trade Institute, and the Graduate Institute Geneva, among others.

Alexandra Grazioli is currently Director of the Lisbon Registry in the Brands and Designs Sector of the World Intellectual Property Organization (WIPO). Her area of supervision involves legal questions relating to the management and the development of the Lisbon System, as well as the management of the International Register of Appellations of Origin and the promotion of the system. Since taking up her duties with the World Intellectual Property Organization in 2014, she has been working as Senior Counselor and then as Director in the Office of the Director General. Before joining WIPO, she has been working at the Swiss Federal Institute of Intellectual Property first as trademark examiner in the Trademark Division, then as Senior Legal Advisor in the Division of Law & International Affairs where she has been responsible for the coordination of WIPO issues and negotiations on geographical indications. Finally, she has been working as Counselor in charge of intellectual property issues at the Permanent Mission of Switzerland to the United Nations Office and to the Other Organizations in Geneva. As representative and head of the Delegation of Switzerland, she has attended several meetings and negotiations in all fields of intellectual property and on issues relating to governance and budgetary issues at WIPO, WTO (TRIPS and Doha Round negotiations). She has a law degree and master (LL.M) of the University of Lausanne (Switzerland)). She has been a frequent speaker on topics relating to geographical indication and trademark law, WIPO and WTO/TRIPS negotiations, and is the author of several publications on those subjects.

Justin Hughes is the Hon. William Matthew Byrne Professor of Law at Loyola Law School in Los Angeles, where he teaches international trade and intellectual property courses. From 2002 until 2013, he taught at Cardozo Law School in New York. From 2009 until 2013, Professor Hughes also served as Senior Advisor to the Undersecretary of Commerce for Intellectual Property. In that capacity, he was chief negotiator for the US at the Diplomatic Conferences that completed the Beijing Treaty on Audiovisual Performances (2012) and the Marrakesh Treaty to Facilitate Access to Printed Works for the Blind (2013). Educated at Oberlin and Harvard, Professor Hughes practiced international arbitration in Paris and, as a Henry Luce Scholar, clerked for the Lord President of the Supreme Court of Malaysia. From 2006-2009, he was Chair of the Technicolor/Thomson Foundation for Film and Television Heritage. At Cardozo, he founded the school's Indie Film Clinic. Professor Hughes has also done democracy development work in Albania, Bosnia, El Salvador, Haiti, and Mali.

PhD Workshop

The Law & Economics of Patent Processing

CONTENTS

Patent processing is an extensive and complex set of activities performed by national and international offices. It both filters out a large number of patent applications and aims at delimiting the claims of ultimately granted patents, with the ultimate aim of lowering transaction and litigation costs. Both price mechanisms (such as fees) and regulation (such as examination rules) enter patent processing, as they affect the applicants' behavior as well as the efficiency and effectiveness of the patent offices and the patent system at large. Besides, patent processing is in constant evolution, as it is called to meet the challenges of the globalization of inventive activities and the economic actors' increasing demand for legal certainty and transparency of patent rights. Recent instances of this evolution are the cooperation among patent offices by means of the Global Dossier initiative and the adaptation of EPO's procedures in the wake of the introduction of the EU Unitary Patent.

Understanding patent processing, and how to track it through data, is therefore increasingly necessary for all researchers in the law, economics and strategic management of patents. It also offers highly original research questions for young scholars.

9.00-9.15

Introduction

Andrew Toole (Workshop Chair, USPTO)

9.15-10.00

Procedural perspectives

Liesbet Paemen (De Clerq & Partners, Belgium)

10.00-10.45

The use of patenting fees as an economic mechanism for improving the patent system

Gaétan de Rassenfosse (EPFL, Switzerland)

10.45-11.15

Coffee break

11.15-12.00

Obstacle to prior art searching by the trilateral patent offices

Tetsuo Wada (Gakushuin University, Japan)

12.00-13.00

Making sense of the foreign bias in patent processing

Yann Ménière (EPO Chief Economist)

SPEAKERS

Andrew Toole is the Deputy Chief Economist at the U.S. Patent and Trademark Office (USPTO) and a Research Associate at the Centre for European Economic Research (ZEW). Andrew Toole joined the USPTO with experience in the private sector, academia, and government. While completing his PhD in economics at Michigan State University, Dr. Toole was a Senior Economist for Laurits R. Christensen Associates where he conducted studies on total factor productivity, cost and price analysis, and competitive strategy. In 1998, Dr. Toole went to Stanford University as a postdoctoral student before becoming a faculty member at Illinois State University and Rutgers University in New Jersey. As an academic researcher, Andrew Toole was asked to advise on science and technology policy issues for institutions such as the U.S. National Academies of Science, U.S. National Institutes of Health, and the U.S. Department of Agriculture (USDA). In 2010, he joined the Science Policy Branch of USDA's Economic Research Service. His research focuses on the economics of innovation, intellectual property, and related science and technology policies. Dr. Toole has published in the Journal of Law and Economics, the Review of Economics and Statistics, Research Policy, Management Science, and many other peer-reviewed journals.

Liesbet Paemen did her PhD in Animal Biology at the University of Leuven, Belgium. She has conducted post-doctoral research both at the Department of Neuroimmunology at SUNY and at the Department of Molecular Immunology of the REGA Institute (University of Leuven, Belgium). She is now a partner at the leading Belgian patent firm De Clercq & partners and heads the Leuven office. Liesbet provides advice on general patenting strategies and portfolio management. She is also still involved both in drafting, filing and prosecution of national, European, international patent applications, oppositions and appeal proceedings before the EPO. She also represents clients in opposition and appeal proceedings and provides opinions regarding freedom-to-operate, infringement and validity of intellectual property rights. She has acted as an expert for the Belgian courts in descriptive seizure proceedings and litigation proceedings in general. Liesbet often lectures on several IP related topics. She is a visiting professor at the Catholic University of Leuven, and a lecturer at the CEIPI training course in patent law.

Gaétan de Rassenfosse is Assistant Professor Tenure Track in Science & Technology Policy at EPFL (Lausanne, Switzerland). He joined the Institute of Technology and Public Policy at the College of Management of Technology in late 2014. Prior to that, he was a research fellow then a senior research fellow at the University of Melbourne (Australia) from 2010 to 2014. He was affiliated with the

Melbourne Institute of Applied Economic and Social Research at the Faculty of Business and Economics. He obtained a PhD in Economics from the Université libre de Bruxelles (Belgium), Solvay Brussels School of Economics and Management in 2010. Gaétan's research provides the policy environment that best addresses the needs of the knowledge economy. This objective is met by providing sound empirical evidence on research questions related, e.g., to the patent system, to the measurement of intangible capital, and to the benchmarking of higher education systems to name but a few topics of interest. He has received research funding as a principal investigator from the U.S. NSF, the Swiss Network for International Studies, the Swiss National Science Foundation, among others.

Tetsuo Wada is Professor of International Business at the Faculty of Economics, Gakushuin University, Tokyo, Japan. He obtained Ph.D. in Business Administration from the University of California, Berkeley, and LL.B. from the University of Tokyo. His research interest has been interdisciplinary since his dissertation by which US-Japan knowledge transfer was analyzed through transaction cost lens in relation to cross-licensing and joint venture activities. His recent focus has been placed on developing a novel large-scale data set of examiner citations used directly for rejections (X/Y-equivalent) out of the PAIR database of the USPTO in order to compare them with X/Y citations at the EPO and the JPO. This project has been conducted collaboratively with the Japan Patent Office, and also financially supported by the Research Institute of Science and Technology for Society (RISTEX), the Japan Science and Technology Agency.

Yann Ménière joined the European Patent Office as Chief Economist in February 2016. He was previously a professor of economics at MINES ParisTech, where he was leading the Chair on "IP and Markets for Technology". His research and expertise relate to the economics of innovation, competition and intellectual property. In recent years, he has been focusing more specifically on IP and standards, markets for technology, and IP issues in climate negotiations. Besides his academic publications, he has prepared a number of policy studies related to patents for the European Commission and other public organisations. He has been teaching the economics of IP at Imperial College, Université Catholique de Louvain and CEIPI.

Abstracts

THIS IS WHAT YOU CAME FOR? UNIVERSITY-INDUSTRY COLLABORATIONS & FOLLOW-ON INVENTIONS BY THE FIRM

Paul-Emmanuel Anckaert, KU Leuven
Hanne Peeters, KU Leuven

Firms can engage in collaborations with universities for a multitude of reasons. This study aims to analyze under which circumstances the outcomes of the collaborative agreements between firms and universities spur further follow-on technology development by the firm. By examining the technology trajectories of a sample of 9,102 USPTO co-patents, we quantify how both collaborative partners actually contribute to the co-development of a new technology by means of the exploitation of own prior developed technologies and the involvement of their corresponding inventors. The preliminary findings of this study suggest that collaborative agreements between firms and universities trigger the development of firm follow-on inventions most intensively when prior technologies from both collaborative partners serve as building blocks in the development of the focal technology. However, this positive effect will depend on the technological similarity between both sources of prior art: neither too few, nor too much technological overlap between the exploited technologies of both parties is found to be beneficial. Additionally, we find that these collaborations can trigger the advancement of exploratory technology trajectories within the firm, when the collaborating university contributes by providing technology-specific experience that is not present within the boundaries of the firm. Finally, in the development of science-driven technologies, our results provide evidence that any positive effect related to exploiting prior technologies will only hold in case the corresponding inventors are involved in the university-industry collaboration.

PATENT COUNT OR PATENT BREADTH? A SECOND LOOK AT THE EFFECT OF TRADE SECRET LAW ON PATENTING STRATEGY

David T. Angenendt, University of Bologna

This study argues that in complex product industries, the number of claims is a choice variable for patentees that determines the extent of an invention to be protected. It estimates the effect of strengthened trade secret law on the number of patents and claims. The evidence suggests a negative effect on claims in complex-product industries which is considerably more robust than the effect on patents and furthermore does not run in parallel. This implies that the number of claims is a strategic variable that needs to be considered to capture the amount of patented knowledge.

FIRM MATCHING IN THE MARKET FOR TECHNOLOGY

Pere Arqué-Castells, Northwestern University

Daniel F. Spulber, Northwestern University

To portray the market for technology, we create a dataset that tracks interactions in the market for technology between publicly held companies in North America with at least one patent. The dataset offers a broad coverage over time (1990-2013) and across sectors, technologies and contractual forms of exchange (i.e. patent trades, licensing, cross-licensing and R&D alliances). Using the dataset, we study firm matching in the market for technology as a function of three metrics that have been widely documented as important catalysts of technology adoption and knowledge spillovers: market, technological and geographical proximity. We predict that proximity (in any of these three dimensions) will have a positive effect on the probability of a match in the market (but not necessarily on adoption through infringement) based on a model of technology transfer between a provider and an adopter. The three proximity metrics are found to have a positive and significant effect on the probability of a match when exploiting between adopter-provider variation. Only technological proximity remains positive and significant when adopter-provider variation is exploited. The results have implications that may be useful in characterizing results in the spillovers literature.

DO VALID PATENTS PROMOTE PROGRESS?

Jonathan H. Ashtor, Skadden, Arps LLP; George Mason University School of Law

Patents are said to represent a “tradeoff” between the benefits of technical disclosure and the burdens of private exclusivity. We study the patent “tradeoff” empirically, demonstrating that the private and social benefits of patents can work together, not in opposition. By analyzing over 1500 U.S. patents adjudicated in courts, we show that valid patents give rise to more future inventions than invalid patents over the full patent term. Moreover, this corresponds to the quantity and quality of the patent disclosure. Patents that lack novelty have the weakest impact on future development, whereas patents with greater disclosure promote more technological progress.

PATENTS: A TOOL FOR IDENTIFYING TECHNOLOGICAL PARTNERS ?APPLICATION TO R&D COOPERATIVE AGREEMENT IN THE BIOTECHNOLOGY SECTOR

Cécile Ayerbe, Université Côte d'Azur - UNS-GREDEG

Liliana Mitkova, LITEM-Université d'Evry

Katia Angue, CEMOI-Université de la Réunion

This paper analyses how patent data can be used as a strategic tool to identify a research and development partner in order to conclude cooperative R&D agreements (CRDA). It begins with the state of the art on the role of patents in CRDAs centred on the pertinence of comparing patent portfolios to identify a suitable partner. Then a method for analyzing the profiles of different potential partners is described before giving an example of its application. This example is based on an analysis of the patent portfolios of 14 French listed biotechnology companies and those of their main R&D partners. It includes 5,603 patents filed and outlines how the approach can be used to identify technologically compatible partners.

JUDICIAL COHERENCE IN SPECIALISED INTELLECTUAL PROPERTY COURTS: A COMPARATIVE ANALYSIS OF JAPAN AND EUROPE

Federica Baldan, PhD Candidate, University of Antwerp, Government & Law

The establishment of specialised IP courts aims to foster the creation of a coherent body of patent jurisprudence. However, it also entails risks in terms of judicial coherence, such as the isolation of patent law from other branches of law, the development of a bias and the inconsistency of decisions reached by the different actors of the patent system. This paper aims to explore and analyse the Japanese patent system and to compare it with the European patent system in an attempt to predict the development of similar dynamics as well as to identify mechanisms to enhance judicial coherence

DECONSTRUCTING COPYRIGHT

Stefan Bechtold, ETH Zurich

In copyright law, the traditional system of economic exploitation rights has come under attack. New technological developments have challenged the basic incentive-based justification for copyright protection. Online mass-market contracting has enabled copyright owners to easily create and rearrange rights. This paper explores how a copyright system could flourish in such an environment, and point to limits which law, economics and the real world put towards the deconstruction of copyright. By pointing to similar discussions in antitrust law, the paper points to procedural solutions that should complement substantive reforms to make copyright protection more flexible.

DISCRIMINATION AGAINST FOREIGNERS IN THE PATENT SYSTEM: EVIDENCE FROM STANDARD-ESSENTIAL PATENTS

Rudi Bekkers, Eindhoven University of Technology
Gaétan de Rassenfosse, Ecole polytechnique fédérale de Lausanne
Emilio Raiteri, Ecole polytechnique fédérale de Lausanne

This paper tests for traces of discrimination against foreign firms in the patent prosecution process. It focuses on the case of China and looks specifically at patent applications declared as essential to a technological standard. The choice of standard-essential patents (SEPs) is particularly suited because of the 'strategic' importance of such patents for China's indigenous innovation programme. We exploit information on the timing of disclosure as SEP (before or after the patent application enters examination) to infer the likely presence of discrimination. We find that patent applications by foreign firms are treated unfavorably when examiners know that they are declared as standard essential. We interpret this result as a case of technology protectionism.

THE EFFECTS OF INTELLECTUAL PROPERTY RIGHTS ON PUBLICATIONS OF UNIVERSITY SCIENTISTS

Laurent Bergé, Université du Luxembourg, Luxembourg

Thorsten Doherr, Centre for European Economic Research (ZEW), Mannheim

Katrin Hussinger, University of Luxembourg, Luxembourg

We investigate the impact of the introduction of software patents on the publication volume and quality of university researchers in the US. A difference-in-difference approach that compares US scientists to a benchmark group of European peers reveals that the introduction of software patents in the US led to a smaller quantity of higher quality publications. Our estimates suggest that US publication counts of software scientists dropped by 17% albeit compensated by an increase in quality-weighted publications by 13%. Based on these results we can reject the concern that the introduction of patent rights had a negative impact on university science.

MAPPING USERS IN PATENTS. TOWARDS A NEW METHODOLOGY AND THE DEFINITION OF A RESEARCH AGENDA

Andrea Bonaccorsi, University of Pisa
Filippo Chiarello, University of Pisa
Gualtiero Fantoni, University of Pisa
Laura D'Amico, University of Pisa

We apply advanced Natural Language Processing tools to examine a neglected part of the content of patents- namely, the users of inventions. After a formal definition of users we develop a complex methodology, based on supervised algorithms, to identify and clean the occurrences in which the description of the inventions include a reference to actual or potential users. A total number of 76.857 users was used as the knowledge base.

Preliminary applications of the methodology deliver extremely rich information, but also exhibit noise from generic description of users. Further classification work has been done in order to discriminate between generic and specific descriptions of users and deliver highly informative sets of occurrences.

After a review of the literature on the role of users for technological innovation the paper will discuss the potential of the methodology to address some of the open issues.

THE RISE OF EXTRATERRITORIALITY IN CYBERSPACE: EXPLORING THE EXTRATERRITORIAL EFFECTS OF THE EU GENERAL DATA PROTECTION REGULATION

Mira Burri, University of Lucerne

Sovereignty and the application of national laws within the boundaries of the state are fundamentals of the international legal system. This system has however over the years become much more complex and permitted due to a variety of reasons extraterritorial application of legal rules. The advent and widespread of digital technologies and the so triggered creation of an almost entirely new space – cyberspace – whose links to national jurisdiction were often contested, only exacerbated the extraterritoriality conundrum. Many domestic rules had extraterritorial effects on the Internet, albeit they were created to address local legal problems and situations. Increasingly, state actors started to expressly make use of this affordability and target other jurisdictions. The paper explores this phenomenon by focusing in more detail to the EU General Data Protection Regulation (GDPR), which will enter into force in May 2018. We will contemplate the effects of the GDPR on global data flows and think of ways in which the clashes between human rights, in this case the protection of personal data, and economic rationales, as reflected in international trade law, can be reconciled

INTELLECTUAL PROPERTY, FREE MOVEMENT OF GOODS, AND REGIONAL MARKET INTEGRATION: THE GEOGRAPHICAL DIVERSITY OF THE EU/EEA, NAFTA, AND ASEAN APPROACHES

Irene Calboli, Singapore Management University and Texas A&M University

This paper explores the relationship between national rules on the exhaustion of intellectual property right and the free movement of goods in free trade areas, custom unions, and common markets. More specifically, this paper supports that the national enforcement of intellectual property rights can represent an invisible barrier to the free movement of goods absent consistent national rules permitting parallel imports within these regional markets. While some authors may argue that such controlled trade may facilitate price discrimination and lower prices in developing countries economies, this paper support that no evidence has been presented in this respect by economists, and the benefit of free trade for consumers and competition in most national markets seem to outweigh the possible pitfalls of free trade. In particular, this paper compare the experiences of three different regional blocks of countries: the EU, NAFTA, and ASEAN

DOES COMPETITIVE PUBLIC FUNDING OF SCIENCE AFFECT ACADEMIC INVENTION?

Nicolas Carayol, University of Bordeaux
Elodie Carpentier, University of Bordeaux
Pascale Roux, University of Bordeaux

While prior research has documented the impact of patenting and more broadly of connections with industry on academic research, the effects of the public funding of science on academic invention at the micro level have not yet been explored. In this paper, we provide new evidence on the relationships between competitive funding of professors and researchers in France and patenting. We aim at disentangling and understanding the different mechanisms that could lead to stimulating academic invention, either by the “treatment” effect or by the selection/self-selection.

HIGH SKILLED MIGRATION AND TECHNOLOGICAL DIVERSIFICATION

Federico Caviggioli, Politecnico di Torino, DIGEP

Paul Jensen, University of Melbourne

Giuseppe Scellato, Politecnico di Torino, DIGEP and BRICK, Collegio Carlo Alberto

We investigate the impact of high skilled migrants on the regional technological portfolio of European regions at the NUTS2 level. Previous studies focused on the relationship between migration and innovative performance in terms of quantitative output finding a positive connection. The effects on the technological diversification of the innovation output have been neglected in extant literature. We relied on the WIPO PCT and the OECD REGPAT data to identify respectively the nationalities and the residence addresses of the inventors of patents filed between 1978 and 2012. We position each region/country in the technological space as a means of a vector based on the IPC codes. We compare the composition of the technological portfolios of local inventors with respect to migrants searching for correlations between the inflow of foreigners and a change in the regional technological specialization.

INTERMEDIARY LIABILITY AND THE GEOGRAPHY OF CYBERSPACE

Anupam Chander, UC Davis

The Internet was supposed to end geography. Anyone, anywhere could now run a newspaper, a search engine, a game service, and the world could access them. After millennia of geography dictating destiny, the world was now flat, and opportunity evenly distributed everywhere. Yet, a quick glance at the world's leading Internet companies, from Facebook to Zillow, leads one remarkably often to the United States. At the time of this writing, Facebook's market capitalization is \$197 billion, while Zillow's is \$6 billion. In this essay, I will argue that law played a crucial role in creating the geography of cyberspace—specifically, that flexible intellectual property rules which permitted Internet entrepreneurship in the United States proved a key ingredient in American commercial success on the Internet.

IPR AND ORGANIZATION OF KNOWLEDGE: NEW EVIDENCE FROM INDIA

Chirantan Chatterjee, Indian School of Business
Sourav Bhattacharya, Royal Holloway University of London
Pavel Chakraborty, Jawaharlal Nehru University

Production requires knowledge. And, patent rights may induce a firm to use more knowledge in production. Stronger intellectual property rights (IPR) can induce a priori high-tech firms to re-organize their production more towards knowledge-intensive tasks as compared to low-tech firms; this in turn would create demand for knowledge-providers or problem-solvers or managers. We use the setting by Garicano (2000) to connect organizational economics and economics of technological change and to analyse how organizational knowledge, process and structure, changes because of stronger IPR. Using a novel dataset for Indian manufacturing firms, which reports detailed data on managerial compensation (by different management levels) and utilizing a quasi-natural experiment in terms of the imposition of an IPR reform, we show that firms which are high-tech, before patent policy, employ more managers relative to non-managers to reorganize their production tasks. In other words, the firms which are closer to technological frontier, reorganize their production towards more knowledge-intensive tasks relative to routine tasks after the IPR reform. Our results also reveal that this reorganization happens through an incentive-based approach rather than a fixed wage component. Finally, stronger IPR expands a firm vertically, i.e., it adds hierarchical layers within a firm.

FOLLOW-ON INNOVATION RELATING TO BLOCKBUSTER DRUGS - INNOVATORS, TIMING AND PRIVATE VALUE

Andrew F. Christie, Melbourne Law School, University of Melbourne
Chris Dent, School of Law, Murdoch University.

Almost all patents relating blockbuster drugs are secondary patents, and are for “follow-on” innovation. For 20 top-selling drugs in Australia, we ascertain who owns these patents, when applications for them are filed, and for how long they last. Our findings suggest: (i) being the originator of a high-cost drug enables follow-on innovation of greater private value; (ii) but holding a patent over the drug does not preclude follow-on innovation by competitors; (iii) that competitors undertake follow-on innovation only once there is a market for the drug; (iv) and so expediting the grant of regulatory approval for the drug will speed competitors’ follow-on innovation.

PATENT BOXES AND THE RELOCATION OF INTELLECTUAL PROPERTY

Laurie Ciaramella, Mines ParisTech - CERNA

Firms can make use of the discretionary aspect of the location of patent ownership to avoid taxation and maximise their profits. This paper investigates patent transfers with regard to patent box regimes, and study how firms' incentives to relocate patents vary with the heterogeneity of the features of such regimes. Using a comprehensive dataset on international patent transfers, I find that patent box countries significantly attract more patent relocations, and that incoming flows increase in the tax rebate. The fiscal incentives are stronger in countries with a high R&D level, suggesting multiple dimensions in firms' decisions of patent relocation. This is all the more true for more valuable patents. I distinguish between intra-group relocation and patent trade. The results indicate that policy makers could tweak the designs of patent box regimes and the stringency of the rules governing patent transfers to deter relocation driven solely by fiscal optimization motives. Finally, I propose a novel instrument to address the potential endogeneity of R&D expenditures.

GEOGRAPHICAL INDICATIONS OF TRADITIONAL HANDICRAFTS: A CULTURAL ELEMENT IN A PREDOMINANTLY ECONOMIC ACTIVITY

Patricia Covarrubia, The University of Buckingham

The effect of globalization has seen the cross-cultural exchange on cultural forms and cultural diversity. This demands to seek the most effective, comprehensive, and appropriate mechanisms to safeguard and protect traditional knowledge. Established international treaties and regional/national conventions appear to cover the international trade of products but to what degree they discriminate among products is to be tested

Moreover, the debate over the relationship between cultural heritage and intellectual property is still discussed but: is this discussion still relevant? This paper argues the topic of geographical indications as a tool to not only protect but safeguard and preserve handicraft. By examining local frameworks and the importance of international harmony, the study will show that the protection of handicraft goes beyond trade and investment

.

GENDER AND THE COPYLEFT AGENDA: OPEN ACCESS, ATTRIBUTION AND THE ACADEMY

Carys Craig, Osgoode Hall Law School, York University

In an earlier essay with Rosemary Coombe and Joseph Turcotte, I explored what it is about the open access endeavour that resonates with a feminist theory of law and society, asking “what’s ‘feminist’ about open access?” Recent developments in the open access landscape, particularly in the context of academic publishing, have unearthed new tensions, reinforcing the need for a nuanced and dynamic understanding of the connections between feminist theory, gender politics, and the access-to-knowledge agenda. This paper will review the arguments that support and resist new open publishing practices in the academy from a feminist perspective.

VISUALIZING THE KNOWLEDGE PROFILE OF THE U.S. COMMUNICATIONS INDUSTRY: A PATENT CO-CLASSIFICATION ANALYSIS

Maria Chiara Di Guardo, University of Cagliari
Elona Marku, University of Cagliari
Emanuele Castriotta, University of Cagliari
Kathryn Rudie Harrigan, Columbia University

In an increasingly knowledge-based economy, firms continually face the dilemma of whether investing in core technologies vs. diversifying their portfolio with novel although risky ones (Christensen, 1997; 2013; Tushman & O'Reilly, 1996). In order to take the most suitable decision, firms should have a detailed overview of the sector's knowledge network and structure, and attempt to identify potential future technology trends. Based on patent co-classification analysis, this paper introduces a new approach for mapping and visualizing the sector's profile by focusing on fine-grained patent data.

A NOVEL TECHNOLOGY-INDUSTRY CONCORDANCE TABLE BASED ON LINKED INVENTOR-ESTABLISHMENT DATA

Matthias Dorner, Max Planck Institute for Innovation and Competition
Dietmar Harhoff, Max Planck Institute for Innovation and Competition

We propose a novel concordance table between technologies and industries based on linked inventor-employee patent data for Germany, comprised of 235,933 patents filed 1999-2011 at the EPO. Employment records comprised in this database originate in social security registers and include detailed industry codes of the inventors' establishments. These linked data allow us to describe the precise industry of origin of inventions and generate concordance tables. In an empirical application of the concordance we document positive elasticities of industry level patent output for 86 industries in Germany with respect to science and engineering workers as well as R&D expenditures.

GEOGRAPHICAL INDICATIONS AND SUSTAINABLE DEVELOPMENT: A TRANSDISCIPLINARY PERSPECTIVE.

Henrik Egelyng, University of Copenhagen

This paper identifies researchable knowledge gaps with respect to geographical indications (GI) as a sustainable development (SD) policy instrument. This concern, inter alia, institutional as well as technological conditions under which (GI) can serve culturally, economically and environmentally SD. In particular, the paper aim to add a transdisciplinary dimension to state of art understandings of the development implications of promoting African GI's. It pursues new insights of relevance to development agencies employing GI's in their pursuit of SD, including a possible need to combine institutional and technical innovation to facilitate an evolution of GI regimes to become and remain competitive SD policy instruments.

COPYRIGHT LAW AND OPEN ACCESS IN ACADEMIA: INTERNATIONAL SURVEY RESULTS -FIRST PRELIMINARY DRAFT

Thomas Eger, University of Hamburg

Marc Scheufen, Ruhr-University Bochum

Daniel Meierrieks, Albert Ludwigs University Freiburg

Several initiatives in academia advocate the OA model, with proposals reaching from a stronger financial support of OA to changes in the copyright for academic works, such as the establishment of an inalienable authors' right to secondary publications. Some scholars even altogether question the role of copyright protection in academic publishing. We discuss the results of a world survey, covering more than 10,000 researchers from all disciplines in 25 countries, including e.g. Germany, Spain, Brazil, India and the US. We show that there are significant differences between the scientific disciplines with respect to researcher's awareness of and experience with both open access (OA) journals and self-archiving. As a consequence, the paper emphasizes that a "one-size-fits-all" approach as promoted by most recent policy approaches is little promising for providing an effective framework for shaping the future of copyright law in scholarly publishing. We conclude by presenting a policy agenda on the international level, considering also features of the digital divide between the developed and developing world.

REGION FREE OR REGION LOCKED: HOW MUCH DO CONSUMERS VALUE INTEROPERABILITY IN MEDIA DEVICES?

Kristofer Erickson, CREATE, University of Glasgow

Jesus Rodriguez-Perez, Department of Computer Science, University of Glasgow

Swagatam Sinha, Adam Smith Business School, University of Glasgow

We explore the relationship between regional interoperability features and consumer willingness to pay, using an original dataset on consumer media players. Using a quasi-experimental setup, we apply an Average Treatment Effect (ATE) estimator to evaluate the effect of interoperability features in new and used DVD players obtained from Amazon product listings in several territories. Nearest-neighbour matching is used to control for features such as manufacturer, technical specifications and condition of players. Based on analysis of the price and sales performance of DVD players, we find that interoperability has a significant impact on price in the forwards direction. Players capable of playing new file formats such as Xvid command an average price which is \$19.86 USD higher than the non-treated group. We find limited support for the impact of backwards compatibility on price, for new or used players. The ability to play DVDs from multiple regions shows a moderately significant positive effect on price in our sample.

THE FUTURE ROLE OF THE COURT OF JUSTICE OF THE EU (CJEU) IN THE EUROPEAN PATENT SYSTEM: OPPORTUNITIES FOR CREATING PATENT EXPERTISE AT THE CJEU

Esther van Zimmeren, University of Antwerp
Jens Schovsb, University of Copenhagen

The institutional design of the European patent system will change significantly once the Patent Package adopted in 2012 will finally (fully) enter into force. The “generalist” Court of Justice of the EU (CJEU) is by most legal scholars regarded as a key actor within the new European patent system to counterbalance the powers of the “specialist” UPC. However, the role of the CJEU was significantly curtailed in response to concerns within the patent community about its lack of expertise for dealing with patent law and the risk of delays due to the CJEU’s backlog. Nonetheless, even with its mandate limited to responding to preliminary questions from the UPC, it would be desirable if over time the CJEU would be able to develop its expertise in patent law. In this way the reputation of the CJEU within the patent community might improve and the community’s trust in the CJEU as an important player in the European patent system will grow. Therefore, a thorough analysis of different mechanisms for mobilizing both “external expertise” and “internal expertise” may contribute to the “good judicial governance” of the new European patent system.

The objectives of the current paper are (1) to systematically examine how the CJEU has been dealing with other specialized fields of the law (e.g. copyright law, competition law) and to what extent and how it has been able to develop the required expertise in those fields; (2) to examine mechanisms used by generalist Supreme and lower courts in other jurisdictions for ensuring expertise in the area of intellectual property law, in particular in patent law; (3) to propose different solutions for building (patent) expertise within the institutional context of the CJEU.

GOVERNMENTS AT THE EU COURT: WILL THERE BE A BREXIT EFFECT?

Marcella Favale, Bournemouth University
Martin Kretschmer, University of Glasgow
Paul Torremans, University of Nottingham

The Court of Justice of the European Union (CJEU) interprets the meaning of EU legislation. Larger numbers of preliminary references to the Court on the same legal concepts suggest either a normative void, or greater attention from political forces, or both.

Taking copyright as a case-study, the paper examines all preliminary references to the CJEU registered between 1998 and 2015 regarding at least one of the directives of the copyright *acquis*. 170 case documents were examined with a mixed research methodology including doctrinal, content (text), qualitative (interviews), and statistical analysis, in order to measure empirically the impact of third party submissions on the legal interpretation of copyright concepts in the European Court.

We find that France is the most influential country, both because of the number of interventions (an 'investment' in policy) and because France's arguments are often adopted by the Court. France is closely followed by Finland, which argues equally pro copyright rightholders and copyright users. Other countries appear to have more specific interests, and may be influential despite lower participation. One of the most successful governments in arguing for copyright users is the United Kingdom. Our preliminary evidence suggests that the departure of the UK from EU copyright litigation has the potential to disturb the delicate balance of European copyright jurisprudence.

THE PUZZLE OF TRADITIONAL KNOWLEDGE

William W. Fisher III, Wilmer-Hale Professor of Intellectual Property Law, Harvard Law School

What legal norms should govern two forms of traditional knowledge: cultural expressions developed and practiced by indigenous groups; and knowledge, also developed by indigenous groups, concerning therapeutic uses of biological materials? Answering that question in a way that would be both just and practicable has proven difficult. The countries that have confronted the issue have responded in radically different ways, and the scholars who have addressed it disagree sharply. This paper contends that a cultural theory of intellectual property could provide a potential path out of the analytical and political brambles and then identifies two alternative reforms of the existing legal system, either of which could help reconcile the competing legitimate considerations.

APPELLATIONS OF ORIGIN AS SUBSTITUTES: A COINTEGRATION APPROACH APPLIED TO BORDEAUX WINES PRICES

Florine Livat, KEDGE Business School

Jean-Marie Cardebat, Larefi, Bordeaux University

Julian Alston, University of California Davis

This paper assesses how wine consumers use the information conveyed by Appellations of Origin (AOs). This is done by using an exhaustive and unique database of Bordeaux wine prices, obtained from the CIVB (Conseil Interprofessionnel du Vin de Bordeaux), to identify which wines are conceived as substitutes and on what basis. There are 16 grand vineyard areas in France, with 357 AOs for French wines, including 57 just in the Bordeaux region. Our hypothesis is such a large number of AOs represents too much information for the typical consumer and that AOs, as quality signals, are too complex and difficult for most consumers to process. If so, consumers will use characteristics other than AOs to distinguish between wines and hence will treat some wines coming from different appellations as (quasi) perfect substitutes. To test this conjecture we investigate the cointegrating vectors among a set of 11 price series for Bordeaux red wines. We test three alternative hypotheses about which information on the labels consumers use to compare and choose between wines, including (i) terroir, (ii) prices, or (iii) semantics (appellations and names).

Our results suggest that consumers substitute among Bordeaux appellations according to semantic elements (i.e. similar names as carriers of reputation). As such, substitution exists and there is a kind of competition among Bordeaux wines but the tradeoffs are driven by names, more than terroir or price. This result confirms that the current AOs are too complex to address the broader informational issue in wine markets. Therefore the findings suggest consumers and producers would benefit from a simplification of the 'Protected Designation of Origin' (PDO) system in the Bordeaux region. This finding might extend to wine produced in other places or to other agricultural products that are highly differentiated, and for which quality is hard to judge.

PATENTS AND CUMULATIVE INNOVATION – EVIDENCE FROM POST-GRANT PATENT OPPOSITIONS

Fabian Gaessler, Max Planck Institute for Innovation and Competition
Dietmar Harhoff, Max Planck Institute for Innovation and Competition
Stefan Sorg, Max Planck Institute for Innovation and Competition

Using large-scale data on opposition to patents at the European Patent Office (EPO), we investigate the causal effect of a patent's invalidation on follow-on inventions. We introduce a new instrumental variable exploiting the participation or absence of the patent examiner in the opposition proceeding. According to our baseline model, patent invalidation leads to a highly significant and sizeable increase of forward citations. While this is in line with previous studies, disentangling the effect leads us to results that stand in stark contrast to some of the literature. We find that the effects are most pronounced for patents in discrete technology areas, for areas where patent thickets are absent and for patents which are not protected by "patent fences". Moreover, the effect is particularly strong for relatively small patent holders facing comparatively small follow-on innovators. We confirm these results using technology-specific samples of opposition cases, and citation measures based on either EPO or US Patent and Trademark Office citation data.

ALTERNATE REALITY: THE DEVELOPMENT OF THE INTERNET IN CHINA AND IMPLICATIONS UNDER TRADE LAW

Henry Gao, Singapore Management University

The past three decades witnessed the remarkable growth of the internet in China. While the internet barely existed three decades ago, now China is home to the largest number of netizens and one of the largest e-commerce markets. Moreover, such rapid development is achieved notwithstanding heavy governmental intervention in the forms of censorship and even outright blocking of certain websites. While this seems paradoxical, this paper argues that the various internet restrictions actually help to develop the internet and e-commerce in China, which exist as alternate reality to their Western counterparts. The paper then discusses the legality of such restrictions, especially whether they could be challenged in the WTO. The paper concludes with some observations on how the internet in China might develop in the future.

THE GEOGRAPHY OF FAIR USE: TOWARDS A EUROPEAN OPEN-ENDED COPYRIGHT LIMITATION GROUNDED IN FUNDAMENTAL RIGHTS

Christophe Geiger, CEIPI, University of Strasbourg
Elena Izyumenko, CEIPI, University of Strasbourg

This article explores how fundamental rights such as freedom of expression and information and freedom to create in the EU and some civil law countries have led to the opening of copyright limitations and exceptions through the test of proportionality, effectively making open-ended limitations already a reality in civil law systems. It is argued that European judicial practice on fundamental rights application provides for a sufficient list of fairness factors analogous to what the courts in the US use when applying their famous fair use doctrine. This article examines and attempts to systematize these factors.

TRANSCENDING GEOGRAPHY: TRENDS TOWARDS THE GLOBALIZATION OF INTELLECTUAL PROPERTY ENFORCEMENT

Alexandra George, UNSW Australia

Delineated by territorial boundaries and sourced from national laws of sovereign states, intellectual property laws have traditionally been constrained by geography. While interconnectedness in cyberspace presents challenges to intellectual property's territorially underpinnings, so too does interconnectedness in international commerce.

Under the international law "principle of territoriality", national intellectual property laws give rise to intellectual property rights that are enforceable within the nation's territorial boundaries. However, it can be complicated, expensive and inefficient to register the same intellectual property interests in many jurisdictions, to fight the same dispute in multiple jurisdictions, and to fight intellectual property disputes with cross-border dimensions.

Emerging trends in cross-border intellectual property protection and enforcement suggest practical solutions are being found to circumvent the limitations imposed on rights-holders by traditional geographically based intellectual property jurisdiction. This paper considers contemporary trends in trans-border intellectual property enforcement. It looks for patterns in these trends and draws conclusions about the future of international intellectual property enforcement.

BUYING THE STRAW MAN? FIRM ACQUISITIONS AND THE ACCESS TO LOCALIZED KNOWLEDGE

Christoph Grimpe, Copenhagen Business School
Katrin Hussinger, University of Luxembourg
Wolfgang Sofka, Copenhagen Business School

Prior literature on corporate acquisitions has shown that acquired technology creates value for acquiring companies, especially when complementary. Here we argue that 'local capital' constitutes another valuable technology factor to be accounted for in merger and acquisition (M&A) decisions. Multivariate regressions for a sample of European M&As confirm a positive relationship between the knowledge stock in the region in which the target firm is located and the acquisition price. The acquisition price increases with the relatedness between the target firm's and the regional knowledge stock. The effect is weaker for regions with dispersed technology ownership, i.e. where the local knowledge is more difficult to absorb. Our research, hence, adds 'localized capital' as a decisive factor for corporate acquisition to the academic discussion.

WHAT'S A BRAND WORTH? TRADEMARK PROTECTION, PROFITS AND PRODUCT QUALITY

Davidson Heath, University of Utah
Christopher Mace, University of Utah

We study the effects of trademark protection on firm profits and strategy through a new dataset of all U.S. trademarks registered since 1870. Exploiting the Federal Trademark Dilution Act (FTDA) of 1996 and its subsequent cancellation, we find that trademark protection is of first-order importance for firm profits and strategy. We estimate that from 1996 to 2002 the FTDA raised treated firms' profits by 1.8% on average and channeled \$729 billion in additional profits to incumbents. Firms responded to the shock by lowering product quality and innovation and extending protected brands into new product markets.

SOCIAL TIES FOR LABOR MARKET ACCESS – LESSONS FROM THE MIGRATION OF EAST GERMAN INVENTORS

Karin Hoisl, Copenhagen Business School (CBS), Copenhagen

Matthias Dorner, Max Planck Institute for Innovation and Competition

Dietmar Harhoff, Max Planck Institute for Innovation and Competition

Tina Hinz, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

Stefan Bender, Deutsche Bundesbank Research Data and Service Centre (RDSC)

We study the impact of social ties on the migration of inventors from East to West Germany, using the fall of the Iron Curtain and German reunification as a natural experiment. We identify East German inventors via their patenting track records prior to 1990 and their social security records in the German labor market after reunification. We argue that outstanding publicly observable track records of inventors should reduce informational asymmetries faced by future employers. Modeling inventor migration to West German regions after 1990, we find that Western regions with stronger historically determined social ties across the former East-West border attracted more inventors after the fall of the Iron Curtain than regions without such ties. However, mobility decisions made by inventors with outstanding patenting track records (star inventors) were not impacted by social ties. We conclude that social ties support labor market access for migrant inventors in the presence of informational asymmetries while dependence on these ties is substantially reduced for star performers.

TOWARDS A UNIVERSAL RIGHT OF REMUNERATION: LEGALIZING THE NON-COMMERCIAL ONLINE USE OF WORKS

P. Bernt Hugenholtz, Institute for Information Law (IViR), University of Amsterdam
João Pedro Quintais, Institute for Information Law (IViR), University of Amsterdam

This paper discusses models of legalizing ‘file sharing’ or streaming of copyright protected works, by persons acting without commercial purpose. Under these models online intermediaries would be obliged to fairly remunerate authors, artists, and other right holders. Two variants are discussed in detail: (1) a statutory license, and (2) mandatory collective rights management.

While the scheme would be difficult to implement within the *acquis*, it would conform to the normative considerations underlying EU copyright law. It would guarantee substantive direct income streams to authors and performers, while keeping the internet open. It would also benefit the general public by avoiding privacy-invasive enforcement.

DATA AS ECONOMIC GOODS: CONCEPTUALISING AND DISCUSSING THE PROS AND CONS OF OWNERSHIP, PROPERTY AND INTELLECTUAL PROPERTY RIGHTS ON DATA IN THE DIGITAL ECONOMY

Ingrid Schneider, University of Hamburg

This paper argues from a political science perspective and is exploratory and conceptual in nature. In order to conceptualise questions of access and disposition rights over data in the digital economy, first various forms of product categories need to be classified, as well as private and collective usage and compensation models. Moreover, distinctions between different categories for economic goods shall also be applied on data. Thus, data may be conceptualised as private goods, as club goods, as common goods and as public goods. Such categories and concepts shall be used to develop a meta-level for the debate on data governance.

PATENT EXHAUSTION POLICY AND INTERNATIONAL PRODUCTION SHARING: WINNERS AND LOSERS?

Olena Ivus, Queen's University

Edwin L.-C. Lai, Hong Kong University of Science and Technology

This paper assesses the welfare implications of patent policy regarding the exhaustion of patent rights in the setting of international production sharing. A simple North-South model is developed to examine how a shift in patent policy from national exhaustion (NE) to international exhaustion (IE) impacts international transactions ex-post and firms' incentives to invest in product quality ex-ante. Northern policy of NE prohibits parallel trade and so allows the firms to price-discriminate internationally, but subjects the firms to the risk of being sued for patent infringement. Northern policy of IE allows the firms to avoid the risk of being sued for patent infringement but also prevents the firms from engaging in international price discrimination. The findings show that being engaged in the international fragmentation of production is neither a necessary nor a sufficient condition for a firm to prefer IE over NE. Nonetheless, it is still true that Northern firms in industries with high cost share of a global component tend to prefer IE, while firms with low cost share of a global component tend to prefer NE. This creates tension between two types of industries. A shift in the US regime from NE to IE would increase fragmentation, lower production costs, and eliminate North-South price discrimination in the final good. Although static efficiency tends to rise as a result, a dynamic analysis reveals that the equilibrium quality of goods would fall if the Northern and Southern markets are very dissimilar in size and in preference for quality.

FLEXIBILITY IN THE SELECTION OF PATENT COUNTS: IMPLICATIONS FOR POLICY RECOMMENDATIONS AND P-HACKING

Martin Kalthaus, Friedrich Schiller University Jena
Stephan B. Bruns, University of Göttingen

Patent counts are frequently used as a measure of inventive activity. However, there is little consensus in the literature how relevant patents can be reliably identified. Patent selection approaches vary especially according to the search strategy and the quality dimension of patents. We use patent selection approaches of solar energy technologies as an example to demonstrate how substantially different patent counts can be obtained and influence policy evaluations, although the same inventive activity is intended to be measured and evaluated. We use the research design of two leading studies in the evaluation of renewable energy policies to demonstrate the variation in econometric estimates that results from flexibility in the selection of patent counts. Our results have several implications, especially concerning the potential for p-hacking and the uncertainty regarding the size and even the sign of several policy variables.

ON DETERMINANTS OF PATENT DISPUTES IN EUROPEAN CHEMICAL AND DRUG INDUSTRIES

Rahul Kapoor, Lappeenranta University of Technology
Nicolas van Zeebroeck, Université libre de Bruxelles

Patent disputes are important events for patentees, their competitors, and society. Using a unique dataset of European patent litigation, we estimate their likelihood and outcome based on the actions of parties. Our hypotheses use classical models of litigation and settlement. The results show that parties use procedural instruments to achieve certainty, and continuously update their beliefs about the strength of their case as new information is revealed. Uncertainty over scope and validity triggers third-party actions to eliminate blocking patents, while patentees use divisionals and amendments to isolate valuable parts of their inventions. Uncertainty over validity appears to impede dispute settlement.

DO NATIONAL BORDERS SLOW DOWN KNOWLEDGE DIFFUSION WITHIN NEW TECHNOLOGICAL FIELDS? THE CASE OF BIG DATA IN EUROPE

Tatiana Kiseleva, The Netherlands Bureau for Economic Policy Analysis
Ali Palali, The Netherlands Bureau for Economic Policy Analysis
Bas Straathof, The Netherlands Bureau for Economic Policy Analysis

Big data technologies enhance the storage, processing, and analysis of large data sets and are applied economy-wide. Despite this potential, only one percent of big data patents come from Europe. This paper investigates the diffusion of big data technologies across national borders by using speed of big data patent citations. Using mixed proportional hazard models we find that big data patents are cited slower compared to other ICT patents. This delay fades as technologies mature. National borders do not affect the diffusion of big data technologies, also for regions which host little big data innovation like Europe.

TOWARD A DISTRIBUTIVE AGENDA FOR U.S. PATENT LAW

Peter Lee, UC Davis School of Law

This Article challenges the prevailing utilitarian conception of the U.S. patent system on both descriptive and normative grounds. First, it explores several mechanisms within U.S. patent law that seek to more widely distribute the fruits of technological innovation as well as opportunities to participate in innovation and its legal protection. Second, it argues at a normative level that such emphasis on distribution is consonant with the overarching aims of the patent system. It contends that widely distributing innovations and innovative opportunities is both consistent with and affirmatively advances the utilitarian objective of promoting technological progress.

THE PRACTICAL EFFECT OF MYRIAD ON PATENT CLAIMS

Johnathon Liddicoat, Faculty of Law, University of Cambridge
Mateo Aboy, Faculty of Law, University of Cambridge
Kathleen Liddell, Faculty of Law, University of Cambridge
Cristina Crespo, Faculty of Law, University of Cambridge
Matthew Jordan, Faculty of Law, University of Cambridge

This paper presents a detailed quantitative study of how the Supreme Court decision *Association for Molecular Pathology v. Myriad Genetics Inc.* has affected patent claims to isolated naturally-occurring genomic DNA. This study focuses on patent applications that were pending when the case was decided and how the applicants have amended their claims to comply with the Court's rationale. A descriptive statistical analysis of how claims have changed post-Myriad will be presented, as well as several case studies demonstrating these changes

THE INTERMEDIATING FUNCTION OF PATENT ATTORNEYS

Lutz Maicher, Jena University
Kazimir Menzel, Jena University

Although patent attorneys are playing an important role for decades within the patent system, their role as intermediaries is poorly investigated. This is in strong contrast to the relationship capital patent attorneys reaching out into the IP market. Their vital mobility between law firms and industry induces a significant transfer of knowledge and relationship capital within the IP market. To date a comprehensive dataset about activities and mobility of patent attorneys is missing. We present a novel dataset of patent attorneys being active as representatives before the EPO. We will present first results on our hypotheses on the intermediating role of patent attorney towards the integration of IP markets.

CYBERSPACE AND GEOGRAPHY: THE POINT OF VIEW OF AN INTERNET INTERMEDIARY

Cédric Manara, Senior Copyright Counsel, Google

Does its representation and understanding of the Cyber/Space affect the legal decision-making of an internet company -- and if yes how? This Google representative will share some thoughts, reflecting on his practice in copyright.

IP REGIME CHANGES AND THE QUALITY OF UNIVERSITY PATENTS IN EUROPE

Catalina Martínez, CSIC Institute of Public Goods and Policies
Valerio Sterzi, University of Bordeaux

Many initiatives to emulate the success of the US model have been taken in Europe in the past decades, and as a result universities have been gradually both pressured into and given the resources of taking a more aggressive attitude towards IP appropriation. In this paper, we exploit the heterogeneity characterizing university IP regimes in European countries to investigate whether the major shifts towards institutional ownership, such as the abolishment of the Professor's privilege, have been effective in encouraging university patenting productivity and to what extent these changes have affected patent quality and originality.

INTELLECTUAL PROPERTY-RELATED PREFERENTIAL TRADE AGREEMENTS AND THE COMPOSITION OF TRADE

Keith Maskus, University of Colorado Boulder

We study how preferential trade agreements (PTAs) with complex chapters covering intellectual property rights (IPRs) affect the composition of trade. Despite the proliferation of PTAs with strong IPRs standards, their effects on the trade of member countries have not been studied. Our identification framework finds that such PTAs, where one partner is a major developed economy or region, have significant impacts. We control for the timing of PTAs relative to compliance with global IPRs rules. The results are broken down by income groups and trade in IP-sensitive sectors. We find that regulatory aspects of trade agreements have important cross-border impacts.

ABSORPTION CAPACITY AND PATENT INFORMATION: BRINGING TECHNOLOGY AND INNOVATION INTO THE ORGANIZATION

Sylvain Mbongui Kialo, Université de Versailles Saint-Quentin-en-Yvelines

While the literature on patent information has importantly expanded our understanding of methods and techniques used to find knowledge about patents, previous studies have largely neglected the capacity of firms to integrate and transform patent information. Former researches show that firms use different methods to find knowledge about patents. They use a great deal of techniques in order to satisfy multiple goals such as problem solving, technology forecasting, classification of patents in categories, network, citations occurrence, trends, etc. Despite the role played by patent information as a valuable source of technical and strategic information for advancing the understanding of a given technological art, we still know little about the way firms integrate patent information within their organization. In this paper, we use a qualitative study to better understand how firms acquire, assimilate, transforms and exploit patent information in order to foster their innovation process.

TRADEMARK SCOPE AND SIMILARITY AS PREDICTORS OF THE TRADEMARK- INNOVATION LINKAGE

Flikkema Meindert, Vrije Universiteit Amsterdam
Carolina Castaldi, Eindhoven University of Technology
Ard-Pieter de Man, VU University Amsterdam
Marcel Seip, VU University Amsterdam

The use of trademark data in innovation studies is in its infancy, but promising. We contribute in two ways to further single out trademarks that do refer to innovation. Firstly, we study similarities between trademarks and test whether these provide clues on the trademark-innovation linkage. Secondly, we test whether indications of trademark's scope also imply a link with innovation. We find that trademark applications filed for brand creation more frequently refer to innovations as opposed to trademarks filed for other branding purposes. We also find that a new trademark's scope is a predictor of a trademark's reference to innovation.

GEOGRAPHICAL INDICATIONS - A BIG DATA APPROACH WITH A NEW DATABASE AND IMPLICATIONS FOR TRADE POLICIES

Benjamin Mitra-Kahn, IP Australia

The aim of protecting the geographical content of product names – from Bordeaux wines to Darjeeling tea – through intellectual property (IP) rights can be a controversial policy space. Domestic legislation differs between countries, and often free trade agreements, such as the recent agreement between the EU and Canada, have special consideration for these geographical indications. Despite the wide-ranging impacts such protection can have, there is no database of geographical information in trade marks, and the literature depends on case studies to examine the impact of this protection. To better understand the impact of geographical indications, this paper includes a new database of Australian trade marks linked to geographical terms and registered geographical indications from around the world, including North America, European, Latin America and Australian locations. This database allows us to analyse who protects what geographical content, by industry, in Australia, and also what terms of geography are used in the marketplace. This paper presents the findings of this first database of geographical terms in trade marks, and shows how it can be used to understand the effects of changes to IP regulations through free trade agreements or domestic legislation, and who stand to gain and lose in the market place. This database will also be launched as part of the conference.

GOVERNANCE OF GEOGRAPHICAL INDICATIONS: PROPER OVERSIGHT OVER HOW A GI'S REPUTATION IS LINKED TO THE REGION

Anke Moerland, Maastricht University

In view of ever more countries concluding agreements which foresee the development of a sui generis GI system, a clear understanding of what reputation, as an element of GIs, means is needed. Equally important is the design of the registration system which must safeguard the “essentially attributable” link between reputation and the region. This paper sets out attributes of GI systems to ensure that the reputational link is verifiable and objective. They are developed on the basis of 1) a discussion of the reputational link, and 2) an analysis of the governance structures of three GI systems (EU, India, Vietnam).

UNDERSTANDING EU TRADE POLICY ON GEOGRAPHICAL INDICATION

Hazel Moir, Australian National University

This paper explores EU policy on GIs as expressed in finalised EU trade treaties. This empirical approach provides a factual basis about the GI deals which are acceptable to the EU. The paper also identifies GI outcomes in recent treaties driven by US negotiating demands. While US-driven treaties prioritise a trademark approach to GIs, they also allow for co-existence with EU-style strong-form GIs. Comparing these two sets of outcomes provides useful insights for future EU trade negotiations, such as the proposed Transatlantic Trade and Investment Partnership with the USA or the proposed Free Trade Agreement with Australia and New Zealand.

AN ANATOMY OF TRADEMARKING BY FIRMS

Amanda Myers, US Patent & Trademark Office

Emin M. Dinlersoz, Center for Economic Studies, U.S. Census Bureau

Nathan Goldschlag, Center for Economic Studies, U.S. Census Bureau

Nikolas Zolas, Center for Economic Studies, U.S. Census Bureau

This paper reports on the construction of a new dataset that combines data on trademarks from the U.S. Patent and Trademark Office with the microdata on firms from the U.S. Census Bureau. The methodology for merging the data and identifying matches between trademarks and firms is described. The resulting dataset allows tracking of various activity related to trademarks over the life-cycle of firms, such as the first application for a trademark, the first use of a trademark, and the renewal, assignment, and abandonment of trademarks. Some facts about firm-level trademarking activity are documented, including the incidence and timing of trademarking activity over the firm life-cycle, the connection between firm characteristics and trademarking, and the relation of trademarks to firm growth. The dataset offers new possibilities for research on how trademarks are related to firm dynamics and performance, firm-level innovative activity and product introductions, and firm strategies aimed at acquiring customers, generating loyalty, building brands and reputation, and signalling quality.

HIGHLY SKILLED MIGRATION AND THE INTERNATIONALIZATION OF KNOWLEDGE

Claudia Noumedem Temgoua, University of Bordeaux

This paper investigates the role of Chinese and Indian highly skilled migration in the internationalization of knowledge networks, for a sample of OECD destination countries. We mainly focus on three types of knowledge networks: co-inventorship, co-authorship and R&D cooperation. Based on the DIOC database, we run cross-section PPML regressions on a gravity model for each of our dependent variables. Our results confirm the presence of positive effects of the Chinese and Indian highly skill groups on each of our three proxies for knowledge networks except for the case of the Indian highly skilled impact on R&D cooperation where we do not find any significant result. We extend the analysis to a selected sample of ten highly skilled ethnic groups – which belong to the top sending countries of highly skilled migrants to the group of OECD destination countries of our sample. We find that although Indian and Chinese highly skilled migrants are the most important highly skilled migrant populations in OECD countries in absolute terms, they however seem not to be the most influential groups in terms of their effects on S&T collaboration. There are other important highly skilled ethnic groups such as the Iranian, Pakistanis and Vietnamese ones, whose links yield stronger effects on co-inventorship, co-authorship and R&D cooperation.

A FAIRNESS-BASED APPROACH TO ECONOMIC RIGHTS

Ansgar Ohly, University of Munich

While trade mark law and unfair competition law are market-sensitive and limited by their respective functions, copyright law follows a property paradigm. The law defines broad rights and, at least in the EU context, detailed exceptions. But the economic rights mirror the economic reality of the early 20th century and are out of touch with reality in the digital world. This paper proposes an approach to economic rights which draws inspiration from unfair competition law. A "black list" of clear and well-defined cases of copyright infringement, which can only be justified by exceptions, is to be combined with broader cases of infringement, which are only actionable if a market effect is shown. The CJEU's case law on "communication to the public" displays a similar flexibility, but it lacks a suitable statutory framework and it does not make the underlying considerations explicit. The "fairness-based approach" suggested here will often reach similar results, but on a more convincing and more reliable doctrinal basis.

THE CONTRIBUTION OF ACADEMIC EXPERTISE IN CORPORATE TECHNOLOGY DEVELOPMENT ENDEAVOURS

Hanne Peeters, KU Leuven

This study analyses the contribution of academic inventors to corporate technology development. We analyse firm patents that involve (Flemish) academics (as inventor) and assess the impact of academics' scientific capabilities on follow-on corporate technology development, measured by forward self-citations. Our results suggest that the more academics embody scientific diversity and quality, the more cumulative developments the firm undertakes. At the same time our findings underscore the importance of assimilation and exploitation (besides 'acquisition'): firms benefit more by involving firm inventors in the development process, and to the extent overlap is present between the scientific foundations of the project and the areas of academic expertise. On the level of the firm, our findings signal the – mutually reinforcing - importance of 'scientific' absorptive capacity and the presence of overlapping (scientific) knowledge capabilities. In sum, our findings shed new light on knowledge and value creation dynamics that firms seek when engaging academic expertise in their technological endeavours.

DOES THE DISCLOSURE REQUIREMENT OF THE PATENT SYSTEM ENCOURAGE KNOWLEDGE DIFFUSION?

Gabriele Pellegrino, École Polytechnique Fédérale de Lausanne
Gaétan de Rassenfosse, École Polytechnique Fédérale de Lausanne
Emilio Raiteri, École Polytechnique Fédérale de Lausanne

Given the relevance that governments and public bodies give to the patent system, there is surprisingly little evidence on the actual role played by patent rights in stimulating knowledge diffusion and the generation of follow-on innovations. The main objective of the present paper is to provide new, robust evidence on this research topic. To this aim, we take advantage of a body of United States federal law enacted in 1952 with the objective of preventing disclosure of new inventions that may represent a threat to the national security. Our empirical strategy is based on the estimation of a diff-in-diff specification based on the comparison of a group of 'secret patents' and granted patents similar on observable characteristics. Preliminary results show a negative and statistically significant relationship between the enforcement of a secrecy order and knowledge diffusion, thus supporting the idea that the patent system is conducive to technology diffusion.

THE BEST OFFER: ABORIGINAL ART AND GEOGRAPHICAL INDICATIONS, A FAIR PRICE TO PAY

**Ana Penteadó, Ph.D., LL.M., LL.B., Trademarks Attorney registered at the
TransTasman IP Attorney Board, Australia**

Art can be an economic tool of power reverting wealth and prestige to the actors involved in its commercialization worldwide. Economic appraisal of artworks is performed mainly by auction houses, art galleries and art dealers and curators, during which the evaluation in the primary market will impact subsequent future transactions, especially for the Aboriginal artwork market. Accordingly, profits depend on the provenance of the artwork, which disregards a work of art as a cultural manifestation of unique cultural traditions. These circumstances are to be considered in intellectual property law under geographic indication to protect Aboriginal communities in the art business.

UNRAVELLING THE TRAIL OF A GPT: THE CASE OF ELECTRICAL & ELECTRONIC TECHNOLOGIES FROM 1860 TO 1930

Sergio Petralia, Utrecht University

It has been argued that episodes of acceleration in economic growth can be driven by particular technologies. These revolutionary technologies, often referred to as General Purpose Technologies (GPTs), have the power to change the pace and direction of economic progress. While historical accounts and theoretical models have advanced greatly in providing both, a precise and coherent characterization of GPTs and the economic consequences of its diffusion, empirical evidence is still scattered. This paper contributes to the literature in two ways, first it provides a way of characterizing GPTs using patent data and shows that the most iconic example, electricity, fulfils these criteria. Secondly, it documents the positive impact of the diffusion of electricity-related inventions on income per capita and wages at county level in the United States from 1860 to 1930. Results are in line with previous historical accounts on the subject, and are consistent with theoretical predictions.

REGIONAL EFFECTS OF APPLIED RESEARCH UNIVERSITIES OF APPLIED SCIENCES AND INNOVATION

Curdin Pfister, University of Zurich

Miriam Rinawi, University of Zurich

Dietmar Harhoff, Max Planck Institute for Innovation and Competition

Uschi Backes-Gellner, University of Zurich

This paper analyzes the effect of applied research institutions on regional innovation activity. Exploiting a policy reform creating tertiary education institutions that conduct applied research (the establishment of Universities of Applied Sciences UAS), we apply difference-in-differences estimations to investigate the effect of the reform on innovation quantity and quality. Our findings show an 8.5 to 14 percent increase in regional patenting activity, our quantity measure, and a 2 to 3.6 percent increase in citations per patent, our quality measure. These findings are robust to various model specifications and suggest that applied research taught in UAS boosts regional innovation.

COLLECTIVE ACTION IN THE ESTABLISHMENT OF SELECTED GI INITIATIVES IN FRANCE AND VIETNAM

Barbara Pick, London School of Economics and Political Science

Drawing upon four case studies in France and in Vietnam, this paper analyses the collective dimensions of geographical indications (GI) with a particular focus on the motivations and strategies of the local actors and their role in initiating, shaping and participating in the GI initiatives. Taking into account the contrasting roles of the local stakeholders and State authorities in the French bottom-up process versus the Vietnamese top-down approach to GIs, we will show that the nature and dynamics of the collective action vary greatly depending on the broader legal and institutional environment in which the GI initiatives are established. In turn, collective action contributes to shaping the very (and different) nature(s) of the GI initiatives.

THE GEOGRAPHY OF INNOVATION IN THE UNITED STATES: 1836 - 2010

Pierre-Alexandre Balland, Utrecht University
David Rigby, University of California Los Angeles
Sergio Petralia, Utrecht University
Mathieu Steijn, Utrecht University

Despite the very past-dependent nature of knowledge production - the literature has remained relatively static and has little to say about how the geography of innovation has evolved and shifted in the long-run. In this paper, we provide long-run descriptive evidence of the historical geography of innovation in the US and its evolution by analyzing patenting activity from 1836 to 2010. We characterize fundamental patterns on innovative activities during this period using HistPat (<http://www.nature.com/articles/sdata201674>). Our paper documents, for the first time, the evolution of the geography of American inventions over the past two centuries.

BORDERLINE EXPLOITATION OF COPYRIGHTED WORKS

Joost Poort, Institute for Information Law

This paper starts off with a brief overview of the basic economic analysis of copyright and a few basic trade-offs and insights concerning its scope. Next, it sketches how digitisation affected these trade-offs and insights. From thereon, five cases of 'borderline exploitation' are analysed, which the current copyright acquis can be argued to have problems making sense of. These cases are analysed through the lens of the welfare economic framework to determine how the scope of copyright could be reconstructed to be more in line with the 21st century.

DO LICENSORS LEARN FROM OUT-LICENSING? EMPIRICAL EVIDENCE FROM THE PHARMACEUTICAL INDUSTRY

Maarten Rabijns, KU Leuven

Bart Leten, KU Leuven, Belgium and Universiteit Hasselt

Stijn Kelchtermans, KU Leuven

Massimo Riccaboni, IMT Lucca

While the financial performance effects of licensing to the licensor have been covered extensively in prior literature, little attention has been paid so far to the possible learning effects of out-licensing. This paper aims to fill that gap by looking at whether – subsequent to an out-licensing deal – licensors are more likely to cite work from their licensing partner, which we see as a proxy for learning from the licensing deal. To answer this question, we analyze a licensing dataset in the pharmaceutical industry between 1995 and 2003. Preliminary results show evidence of learning by licensors from licensees, measured by patent citations after the licensing deal. The findings further our understanding of markets for technology and, in particular, attenuate the trade-off faced by licensors.

WHAT DRIVES GENDER PARTICIPATION IN THE IP SYSTEM? TECHNOLOGY, COUNTRY AND INSTITUTIONAL EFFECTS ON WOMEN INVENTORS

Julio Raffo, World Intellectual Property Organization, WIPO

Gema Lax Martínez, University of Lausanne, UNIL

Kaori Saito, World Intellectual Property Organization, WIPO

This paper analyzes the gender of inventors in international patent applications. We compile a worldwide gender-name dictionary, which includes 6.2 million names for 182 different countries to disambiguate the gender of PCT inventors. Our results suggest that there is a gender imbalance in PCT applications, but the proportion of women inventors is improving over time. We also find that the rates of women participation differ substantially across countries, technological fields and sectors. We further investigate these differences by estimating the overall effect of country, technology and institutional type on gender participation. We intend to provide further insights into the potential causes of gender unbalances in the STEM industry.

BUYER COMPETENCE AND INNOVATION PROCUREMENT

Emilio Raiteri, Ecole polytechnique fédérale de Lausanne

Francesco Decarolis, Boston University and EIEF

Gaetan de Rassenfosse, Ecole polytechnique fédérale de Lausanne

Leonardo Giuffrida, University of Rome Tor Vergata

Elisabetta Iossa, University of Rome Tor Vergata, CEPR, IEFE-Bocconi and EIEF

Vincenzo Mollisi, University of Rome Tor Vergata

Giancarlo Spagnolo, SITE-Stockholm School of Economics and EIEF

We empirically explore the relationship between the quality of public buyers involved in the procurement of R&D contracts for the US Federal Agencies and the outcomes of these contracts in terms of patent registrations and citations. Using a generalized propensity score approach, we estimate that the probability for an R&D contract to produce (at least) a patent monotonically increases with all available measures of quality available at the purchasing agency level, which separately measure skills, cooperation and incentives. The effect is negligible at the lowest levels of competence and increases steeply when competence increases. We also find that cooperation and, to a lesser extent, skills are positively associated with the number of both patents per contract and citations per patent.

THE RIGHT TO A REASONABLE EXPLOITATION CONCRETIZED - AN INCENTIVE BASED APPROACH

Ole-Andreas Rognstad, Department of Private Law, University of Oslo
Joost Poort, Institute of Information Law, University of Amsterdam

The article is a 'follow up' on a previous article where a model for a restructuring of the economic rights in copyright was sketched out (see Ole-Andreas Rognstad, Restructuring the Economic Rights in Copyright – Some Reflections on an Alternative Model, 62 J Cop. Soc. USA (2015) 503). The model is based on a 'one stage structure' where the right holder has a right to a 'reasonable exploitation of a work', instead of the current 'six stage structure' (exploitation rights, exceptions to the exploitations rights, secondary liability, safe harbors, protection of technical protection measures (TPMs), exceptions to the protection of TPMs). In the current article, the concept of 'reasonable exploitation' is sought concretized on the basis of the presumption that 'the utilitarian goal of social welfare maximization is a key element in justifying modern copyright rules'. Thus, the content of reasonable exploitation is 'filtered through' the utilitarian goal of social welfare maximization (efficiency). While hard core economists would hold that in theory, the welfare economic framework could include any other norms than equity (or fairness) through their welfare effects, we take in the article a more pragmatic approach by opening up room for other social or legal norms than efficiency to give reason to amend the normative economic stance. Proportionality, public domain, dignity, freedom of expression and market integration are identified as such norms which may give rise to adjust the outcome of a welfare economic analysis of copyright issues to the extent that it does not monetize these norms.

WHEN AUTHORS BECOME INVENTORS: AN EMPIRICAL ANALYSIS ON PATENT- PAPER-PAIRS IN MEDICAL RESEARCH

Elena Romito, Scuola Superiore Sant'anna
Arianna Martinelli, Scuola Superiore Sant'Anna

This paper investigates the effect of patenting on follow-on knowledge in cancer research. Using a difference-in-difference approach on an original dataset of patent publication-pairs we estimate the effect of granting a patent on scientific development in the same domain. Furthermore, we assess whether patent and specific invention characteristics further affect the relation. We build a novel dataset matching patent and publication data. Preliminary results show that patenting reduces the rate of citations of the paired publication indicating a decrease of related scientific activity. Moreover, the closer the invention is to the market, the stronger is the negative effect.

TECHNOLOGY TRANSITION TO RENEWABLE ENERGY: LESSONS FROM PATENT NETWORK ANALYSIS IN THE CASE OF OCEAN ENERGY TECHNOLOGY TRAJECTORIES

Maidier Saint Jean, University of Bordeaux
Nabila Arfaoui, University of Nice Sophia Antipolis
Eric Brouillat, University of Bordeaux

This research investigates the technological knowledge pattern underlying the long-term evolution of ocean energy technology (OET) trajectories. We examine the structure of the knowledge base and the evolution of OETs trajectories by using patent data extracted from the ORBIT database. The various technological options belonging to ocean energy are well identified by CPC codes such that we can build a dataset of patents granted between 1915 and 2015 for those technologies. We analyze the main trends emerging from patent statistics, highlighting how OETs have evolved over time and have relied on different technological areas, countries and organizations. We construct a network of citations among OETs patents and applied to it the Main Path algorithm. We also use CPC technological classes to measure the relational properties of the knowledge base and examine the aggregate level of complementarity and substitutability of its constituent knowledge elements.

AN EMPIRICAL ANALYSIS OF COPYRIGHT, BUSINESS MODELS AND THE CREATIVE INDUSTRIES IN UK POLICY

Nicola Searle, Goldsmiths, University of London

Grounded in the business model literature, this paper examines business models in the Creative Industries (CI), and the role of IP following the UK's 2011 Hargreaves Review of Intellectual Property. It does so via a contextual analysis of lobbying associated with Hargreaves, and a meta-analysis of 20 research projects, including 80 case studies, on business models in the CI, with a focus on digital media. This paper probes the research to identify the interaction of IP, policy and business models. It finds the CI have not adapted their business models and instead lobby for favourable policy outcomes.

PATENTS, DATA EXCLUSIVITY, AND THE DEVELOPMENT OF NEW DRUGS

Fabian Gaessler, Max Planck Institute for Innovation and Competition
Stefan Wagner, ESMT Berlin

Pharmaceutical companies derive market exclusivity from patent rights and data exclusivity. These mechanisms create strong private incentives to invest in the commercialization of drugs. For this study, we link the development histories of pharmaceutical compounds from pre-clinical trials up to market launch with information on the underlying patents. This data allow us to study the interplay of patent rights, data exclusivity and commercialization hazards. Most notably, exploit exogenous variation in the invalidation of patent rights in opposition proceedings in order to identify (a) whether loss of patenting reduces the hazards of commercialization and (b) to what extent these incentives can be reinstalled by patent rights.

NON-PRACTICING ENTITIES IN EUROPE: EVIDENCE USING PATENT DATA

Valerio Sterzi, University of Bordeaux
Gianluca Orsatti, Università degli Studi di Torino

Over the past decade, the US patent system has experienced an explosion of litigations initiated by parties called “Non-practicing Entities” (NPEs). However, conventional wisdom holds that patent monetization is pursued less often in Europe, due to some combination of higher cost of enforcement and smaller damages awards. In this paper we build an unique dataset on patenting activity of NPEs at the EPO and we show that the presence of NPEs is far from being a phenomenon confined to the US. We also add some empirical evidence on the debate on the impact of NPEs on innovation.

RECONSTRUCTING THE COMMUNICATION TO THE PUBLIC AND THE REPRODUCTION RIGHTS: HOW TO ALIGN COPYRIGHT WITH ITS FUNDAMENTALS

Alain Strowel, UCLouvain and Université Saint-Louis

The paper aims to redesign the two main economic rights which determine copyright's exclusivity. A different reconstruction is proposed for the communication to the public and the reproduction rights. The notion of communication to the public, as interpreted by the Court of Justice of the EU, is already relying on economic criteria (such as the profit-making nature of the act or the new public requirement). The reconstruction just aims at making the economic rationale more prominent (double market test). The criteria are then applied to platform aggregation and hyperlinking. The reproduction right creates more issues when applied in the digital context as many intermediate and technical copies are made by the "digital machine". A more fundamental reconstruction exercise is thus needed. The paper proposes an infringement test requiring to use the work 'as a work'. This test helps for instance to keep text and data mining and other intermediate copies outside the scope of copyright.

RECOGNIZING THE AUTHENTICITY OF WISDOM IN THE AGE OF INTELLECTUAL PROPERTY

Haochen Sun, University of Hong Kong

This article proposes a new theoretical approach to assigning rights as well as responsibilities to intellectual property owners. It argues that assigning rights to intellectual property owners should be understood as a means of recognizing the authenticity of wisdom. As cultural artifacts, intellectual property embodies the authenticity of its creator's wisdom. However, the authenticity of wisdom is socially conditioned because it must be recognized by other humans. This recognition process, as the article shows, would require that responsibilities must be assigned to intellectual property owners.

FROM TPP TO RCEP: THE BATTLE TO DEFINE ASIA'S INTELLECTUAL PROPERTY LAW

Madhavi Sunder, University of California Davis
Anupam Chander, University of California Davis

A battle is under way to decide the intellectual property law for half the world's population. A trade agreement that hopes to create a free trade area broader than that created by Genghis Khan will define the intellectual property across much of Asia and the Pacific. The 16 countries negotiating the Regional Comprehensive Economic Partnership ("RCEP") make up the bulk of Asia, including China, India, Japan, and South Korea, and stretch to Australia and New Zealand. With the sudden demise of the Trans Pacific Partnership Agreement (TPP), all eyes are now on the RCEP. A review of a leaked draft reveals a struggle between India on one side and South Korea and Japan on the other over the intellectual property rules that will govern much of the world. The result of this struggle will affect not only rules governing creation and access to information products in the Asia Pacific, but also in Africa and other parts of the world that depend on the exports of generic medicines from India, which has been called "the pharmacy to the developing world." It may come as a surprise that the agreement that includes China as a pillar may result in stricter intellectual property rights than those required by the World Trade Organization's Agreement on Trade Related Aspects of Intellectual Property (TRIPs). This Article appraises how the poor are likely to fare under the intellectual property proposals in RCEP.

EVALUATION OF A POLICY CHANGE WEAKENING PATENTS AND ITS EFFECT ON FIRM STRATEGY

Elie Sung, Georgia Institute of Technology

Patent policy changes continuously happen despite ongoing debate about the effects of patent strength on various firm strategies. This study analyzes a policy weakening patents, in light of the arguments made during the policymaking phase. Using a unique dataset of all French firms over 1995-2010 matched with their patents, I propose a cleaner test compared to previous literature using: a measure closer to the concept of patenting propensity, and a research design controlling for rival hypotheses and policymaking-related endogeneity. Based on a quantitative analysis combined with information in court documents written by the Supreme Court and Amici, I find that policy objectives are partially fulfilled: in complex products industries large firms reduce defensive patenting, however, SMEs are hurt by the weaker protection. Also, some arguments ignored by the Court had empirical validity and reveal side effects.

THE CAUSAL EFFECT OF INCLUDING STANDARDS-RELATED DOCUMENTATION INTO PATENT PRIOR ART: EVIDENCE FROM A RECENT EPO POLICY CHANGE

Federico Tamagni, Scuola Superiore Sant'Anna, Pisa
Rudi Bekkers, Eindhoven University of Technology
Arianna Martinelli, IBIMET-CNR, Florence

This paper investigates the causal effect of a recent attempt undertaken by the EPO to improve the quality of the patent granting process, by including the information revealed during the standardisation-setting process into the official definition of prior art. We build counterfactuals through a twin-patents approach, exploiting the fact that the same invention is filed for patent at both the EPO and at the USPTO, where the policy change did not take place. We find a strongly significant reduction of about 10% in the granting rates, suggesting that the process of patent granting has become more careful and selective after the policy implementation.

THINK GLOBALLY, ACT BILATERALLY: THE INTERNATIONAL STAKES OF THE PROTECTION OF GEOGRAPHICAL INDICATIONS

Erik Thévenod-Mottet, Laboratory of Rural Studies, University of Lyon
Delphine Marie-Vivien, CIRAD

In this paper, we provide a comprehensive analysis of these bilateral or plurilateral deals on GIs, characterized by a high degree of diversity and inventivity in their scope and principles, in order to highlight what their real benefit is, compared to the protection according to each country legislation (TRIPS standard) or according to the protection that is provided through the Lisbon system. Finally, we analyse the bilateral approach in the perspective of a future development of a plurilateral or multilateral GIs register, be it the WTO TRIPS register or the revised Lisbon Agreement.

THE DYNAMIC RELATIONSHIP BETWEEN INVESTMENTS IN BRAND EQUITY AND FIRM PROFITABILITY: EVIDENCE USING TRADEMARK REGISTRATIONS

Andrew A. Toole, US Patent and Trademark Office
Dirk Crass, Centre for European Economic Research (ZEW)
Dirk Czarnitzki, ZEW & KU Leuven

Most marketing practitioners and scholars agree that marketing assets such as brand equity significantly contribute to a firm's financial performance. In this paper, we model brand equity as an unobservable stock that results from up to thirty years of past brand-related investment flows. Using firm-specific trademarks as investment proxies, our results show a significant long-run impact on financial performance. The dynamic profile of brand-related investments has an inverted-U shape that reaches its peak after eleven years. On average, it takes four years before brand related investments show a positive return, and investments older than nineteen years show no significant impact. For the median trademarking firm, brand equity contributes 265,000 Euro to annual profits.

DO TWO-TIERED PATENT SYSTEMS INDUCE SORTING?

Michael Verba, Tilburg University
Jussi Heikkilä, University of Jyväskylä

We analyze sorting induced by two-tiered patent systems in European countries. The results suggest that two-tiered patent systems induce self-selection by based on both invention quality and applicant type. Second tier Second-tier patents are chosen for more marginal inventions and more often by individual applicants in comparison to regular patents. We find the average quality of regular patents to be higher in two-tiered patent systems than in single-tiered patent systems.

POTLUCK OR CHEF DE CUISINE? KNOWLEDGE DIVERSITY AND AWARD-WINNING INVENTOR TEAMS

Dennis Verhoeven, KU Leuven

Is the trend towards specialization by knowledge workers detrimental to the creation of frontier-pushing inventions? The answer to this question is 'yes' under two conditions. First, diverse knowledge is a source of frontier-pushing inventions. Second, teams having a 'chef de cuisine' – an individual with high knowledge diversity – are more effective for frontier-pushing inventions as compared to teams obtaining diversity through a combination of specialized team members – a 'potluck' structure. Using the 'R&D100 Awards' as a measure for frontier-pushing performance, this study shows the importance of knowledge diversity for the creation of frontier-pushing inventions. Moreover, 90% of the variance in team knowledge diversity is accounted for by the most diverse team member, indicating a potluck-structure is rare. Diversity of the most diverse member drives the likelihood of pushing the technological frontier, while the diversity added by the team does not significantly contribute to the effect. These results indicate individual-level diversity cannot be substituted by diversity generated through a combination of specialists. Given a trend towards specialization, these findings raise concerns for policy makers and managers targeting frontier-pushing inventions.

IS THERE A BIAS IN UNDERSTANDING GLOBAL TECHNOLOGICAL KNOWLEDGE DEVELOPMENT? EVIDENCE FROM IP5 OFFICES

Hélène Dernis, Organisation for Economic Co-operation and Development
Mariagrazia Squicciarini, Organisation for Economic Co-operation and Development
Antonio Vezzani, European Commission - Joint Research Centre

In this contribution we analyse international patterns of patenting activities based on the IP5 patent family definition to describe the global development of technological knowledge. Our measurement framework is represented by patent applications over 2000-2013 and compares some basic facts resulting from the analysis of single patent offices with respect to the family definition considered. In particular, the analysis will be performed along three main research dimensions: ① time, ② space, and ③ technology. For each of the dimensions analysed we will discuss the implications, both for academics and policy makers, of the narrow approach characterizing patent analysis in the present literature and highlight avenues for further analyses.

MEASURING DIVERGENT REASONS FOR PATENT REFUSALS IN TECHNOLOGICAL SPACE: A STUDY ON THE TRILATERAL PATENT OFFICES

Tetsuo Wada, Gakushuin University

As a comparative study between the EPO, the USPTO, and the JPO, this paper reports on (1) the discrepancies of X/Y patent citations (blocking patents), (2) overall trend of the discrepancies, measured by patent classification vector, and (3) how the discrepancies of X/Y patent citations relate to longitudinal aspect of office actions. Blocking patents both in EP and US commonly show that the first action lag and the breadth of patent class of patent application are positively correlated with divergent refusal reasons, suggesting that costly examination leads to diversified reasoning for grant/refusal decisions.

PROTECTING INNOVATION THROUGH TRADE SECRETS AND PATENTS: DETERMINANTS FOR EU FIRMS

Nathan Wajzman, European Union Intellectual Property Office

This study examines the determinants and performance impacts of protecting innovation through the use of patents and trade secrets by European firms. Starting from propositions of theoretical models on the interaction between patenting and secrecy, a number of factors that are thought to influence the use of the two protection mechanisms are investigated. Particular emphasis is placed on preferences for either patents or secrecy, and the factors affecting the choice of a protection strategy. While previous analyses have often treated the two as substitutes, this study emphasises the complementary role of the two protection methods.

THE EFFECT OF COLLABORATIVE RESEARCH GRANT PROGRAMS ON BUSINESS PATENTS AND SALES

Beth Webster, Swinburne University

Paul Jensen, University of Melbourne

Alfons Palangkaraya, Swinburne University of Technology

Russell Thomson, Swinburne University of Technology

This study uses a matched difference-in-difference method to estimate the effect of industry-university collaborative research grants have on business revenue and patents. We used a panel data of 1.5 million businesses from 2001-02 to 2013-14 and estimate the effect via a matched sample difference-in-difference method.

OPTIMISING MEDIATION FOR INTELLECTUAL PROPERTY LAW - PERSPECTIVES FROM EU, FRENCH AND UK LAW –

Asako Wechs Hatanaka, Faculty of Law, Ritsumeikan University

A bad compromise is better than a successful lawsuit, says an adage. Would this also apply to intellectual property disputes? Mediation is a dispute resolution method, which is in vogue. It became subject to harmonisation in Europe under the Directive 2008/52/EC of the European Parliament and of the Council of 21 May 2008 on certain aspects of mediation in civil and commercial matters. In this context, the objective of the article is to analyse the functions performed by mediation as well as the limitations to mediation from the viewpoint of civil procedure law, contract law and intellectual property law and to present some proposals to optimise mediation for intellectual property law. A number of legal systems, institutions and dispute resolution providers will be covered with the focus on the European Union, France and the UK.

CHALLENGE OR NEGOTIATE? AN ANALYSIS OF THE STRATEGIC USE OF OPPOSITION

Liu Xia, Zhejiang University

This paper analyzes the relationship between technology ownership fragmentation and the opposition filing in the European Patent Office (EPO). I develop a two stages game in which opposition can be used for technology access bargaining. Opposition is more attractive when compared to an ex-ante negotiation (e.g. licensing) under two conditions: first, when the ownership to external technologies is concentrated, and profit dissipation is over the licensing revenue for the potential licensee; second, when the ownership to external technologies is widely fragmented, yet the transaction cost is too high for the entrance. To empirically test this hypothesis, I use a data set that covers patent opposition cases during the period 1985-2005, and construct application-based “fragmentation index”. Regression results confirm that the likelihood of opposition displays a U-shape relationship with the number of potential technology suppliers. Besides, the effect of ownership patterns is stronger in discrete product industries. This analysis controls for differences in filing, granted rate and other technological observed characteristics. Results are robust to alternative estimation strategies that account for over-dispersion in the patent counts data and industry heterogeneity.

DESIGN AWARDS AND GLOBAL INDUSTRIAL DESIGN PROTECTIONS: DO INDUSTRIAL DESIGN REGISTRATIONS CORRESPOND TO DESIGN AWARD-WINNING PRODUCTS AND COMPLEMENT OTHER NON-AWARDED PRODUCTS?

Tohru Yoshioka-Kobayashi, The University of Tokyo
Tsuyoshi Fujimoto, Associates, Sugimura & Partners
Atsushi Akiike, Tohoku Gakuin University

This study examines consistency between global intellectual property right systems and valuable product designs. We surveyed the protections of 55 global design award-winning products in China, Europe, Japan, and the United States. Our survey reveals that half of award winners did not apply for any industrial design registration at all; however, once used, more than 60% of award-winning products are registered. There are no significant gaps in the utilization of protections among regions. Moreover, one-third of these protected products involve patent application. This result proves the usefulness of industrial design registrations as a proxy for valuable industrial design creation activities.

A SPATIAL CRITIQUE OF INTELLECTUAL PROPERTY LAW AND POLICY

Peter K. Yu, Texas A&M University School of Law

This paper critically examines the linkage between intellectual property and geography. It begins by discussing how the post-war decline of academic geography in the United States may help explain why geographical insights and spatial analysis have not played a bigger role in law and policy debates in the country. The paper then notes that geography has had a longstanding and profound impact on the development of intellectual property law and policy. For illustrative purposes, it discusses the principle of territoriality, the doctrine of exhaustion of rights, the protection of geographical indications, and the establishment of regional intellectual property norms (including those under the recently withdrawn Trans-Pacific Partnership Agreement). The second half of the paper turns to the inadequate use of geographical insights and spatial analysis in the development of intellectual property law and policy. It calls for a more geographically informed analytical approach, which is especially well-suited to addressing the increasing complexities in law and policy in this area. The paper concludes by outlining two approaches that can help improve the use of geographic insights and spatial analysis in developing intellectual property law and policy.

LIMITED PATENT DISCLOSURE

Alexandra Zaby, University of Tuebingen
Diana Heger, IHS Economics

Patent law requires the full, clear, and concise disclosure of an invention in exchange for the protection of the intellectual property. Nevertheless, patent disclosure is limited. This paper presents anecdotal evidence as well as a theoretical approach investigating the strategic motives to limit disclosure via patents. Empirical evidence suggests that firms limit patent disclosure to avoid imitation, and further that limited disclosure increases the probability of patent rejection/prolonged pendency/invalidation in case of litigation. The theoretical model identifies insufficient patent examination quality as crucial for the profitability of limited patent disclosure

UNDERSTANDING THE USE OF INDUSTRIAL DESIGNS IN SOUTHEAST ASIAN COUNTRIES – CASE OF THAILAND, INDONESIA AND PHILIPPINES

Maryam Zehtabchi, World Intellectual Property Organization

Carsten Fink, World Intellectual Property Organization

Intan Hamdan-Livramento, World Intellectual Property Organization

This study is a project on the use of industrial designs in three Southeast Asian countries – Indonesia, the Philippines, and Thailand. At its core, the project foresees the conduct of a large scale survey of ID applicants aimed at better understanding firms' motivations for seeking this form of protection, how industrial designs (ID) rights contribute to the appropriation of investments in design innovation, and what challenges applicants face when using ID rights. To our knowledge, no such survey on ID filing motivations and impacts currently exists.

“DON'T LEAVE ME THIS WAY”: MISALLOCATION OF SCIENTIFIC CREDIT IN PATENT-PUBLICATION PAIRS

Fabio Montobbio, Institute of Economic Policy, Università Cattolica del S. Cuore
Francesco Lissoni, GREThA, University of Bordeaux
Lorenzo Zirulia, Department of Economics, University of Bologna

The scientific community, and the society as a whole, have a clear interest in assigning credit to scientists who deserve it. This paper focuses on credit misallocation arising when the list of authors on a research output (such as a paper or a patent) does not correspond to what should be based on individual contributions. Our empirical analysis relies on an original dataset of “patent-publication pairs” produced by academics in seven European countries from 1997 to 2007.

Organising Committee & Local Support

Organising Committee

Irene CALBOLI, Singapore Management University, Singapore

Anupam CHANDER, UC Davis School of Law, USA

Eric GIRAUD-HERAUD, GREThA-Université de Bordeaux, France

Stuart GRAHAM, Scheller College of Business, Georgia Tech, USA

Francesco LISSONI, GREThA-Université de Bordeaux, France

Catalina MARTINEZ, Instituto de Políticas y Bienes Públicos, CSIC, Spain

Gaétan de Rassenfosse, École Polytechnique Fédérale de Lausanne, Switzerland

Local support (@GREThA)

Anne HORAIN, Administrative and financial manager

Julie VISSAGUET, Event Communication & Organization

Annalisa FEOLA, Website manager

Ernest MIGUÉLEZ, Scientific support & Registration

Diego USECHE, Scientific support & Registration

EPIP Board

Stefan BECHTOLD, ETH Zurich, Switzerland
Irene CALBOLI, Singapore Management University
Séverine DUSOLLIER, Sciences Po, Ecole de Droit, Paris, France
Christophe GEIGER, CEIPI, Strasbourg, France
Stuart GRAHAM, Georgia Institute of Technology, Atlanta, US
Christoph GRIMPE, Copenhagen Business School, Denmark
Dietmar HARHOFF, Max Planck Inst. for Innovation & Competition, Munich, Germany
Karin HOISL, University of Mannheim
Martin KRETSCHMER, School of Law, University of Glasgow
Francesco LISSONI, GREThA, Université de Bordeaux, France
Catalina Martinez, Instituto de Políticas y Bienes Públicos, CSIC, Spain
Joost POORT, IViR, University of Amsterdam, the Netherlands
Ingrid SCHNEIDER, University of Hamburg, Germany
Salvatore TORRISI, University of Bologna, Italy
Geertrui VAN OVERWALLE, University of Leuven, Belgium
Bruno VAN POTTELSBERGHE, Solvay Business School, Belgium
Georg VON GRAEVENITZ, School of Business & Management, Queen Mary Univ., UK
Patrick WAELBROECK, Telecom Paris Tech, France
Elisabeth WEBSTER, Swinburne University of Technology, Australia



Programme financé par l'ANR - n°ANR-10-IDEX-03-02



INSTITUTE OF PUBLIC GOODS AND POLICIES



ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE



VINS DE
BORDEAUX | *B*