



**POLITECNICO**  
MILANO 1863

## **CEPIUG 10<sup>th</sup> Year Anniversary Conference**

**Milano, 9-11 September**

**Presentations abstracts**

### **Session 1b**

**Users & Providers joint case studies - Chemistry/Biotech [organised by BPIP]**



**Chairman:** Paula Juckes, BPIP



Richard Aarnoudse, Royal DSM NV with Anna Maria Villa, PatentSight GmbH

### **Biotechnology in Human Nutrition and Animal Nutrition**

*Richard Aarnoudse holds a Master's degree in Bioinorganic Chemistry from Leiden University. During his studies he spent a year at Rotterdam Erasmus University studying Business Administration.*

*He joined Royal DSM NV in 2006 as a Patent Information Professional. His working areas include food specialty ingredients, as well as nutritional ingredients for animal feed and food.*

#### **Abstract**

In this presentation Richard Aarnoudse (Royal DSM NV) and Anna Maria Villa (PatentSight) will jointly present the outcome of a comparative analysis on biotech filings in the fields of Human Nutrition and Animal Nutrition.

DSM is active in nutritional ingredients for animal feed and food, as well as in food specialty ingredients, serving the global feed, food & beverage, pharmaceutical, infant nutrition, dietary supplements and personal care industries.

The PatentSight Business Intelligence Platform provides unique, reliable and relevant insights into the patent landscape for decision makers and patent experts.



Klaus Walden, Clariant Produkte (Deutschland) GmbH with Paul Peters, ACS International (CAS)

## Precise searching for vaguely defined chemical compounds – what every searcher should know.

*After his degree as a Chemical engineer from the University of Applied Science Muenster Mr. Klaus Walden started his career in IP (Intellectual Property) in 2001 as a Patent searcher until 2002. After that he worked for 5 years at a IP consulting firm on patent valuation and IP strategy projects. From 2007 to 2010 he managed the IP portfolio of a label printing company. Since 2010 he is working in the chemical industry at the Sued-Chemie AG and after a takeover in 2012 as a Senior Information Professional at the Clariant Produkte (Deutschland) GmbH in Munich.*

### Abstract

Chemistry disclosures in patents can be quite challenging for the patent information professional. Despite all the millions of unique CAS Registry numbers which allow for very precise searching, especially in combination with the CAS Roles, patents often include a higher level of ambiguity in the exact substance definition. The indexing of these general derivatives or classes of compounds present larger challenges to include in a Freedom to Operate search. The presentation shows use cases where the patent information professional needs to expand on a structure or even Markush search and the value-added CAS and Derwent Indexing to include all potentially relevant answers. There will also be some suggestions how to present these results to the patent attorney or business unit to get an overview of the variety of disclosure and applications.



Bart van den Hazel, CoBra-IP with Eric Sergheraert, Darts-IP

## Added value of the Darts-IP litigation database for analysing the freedom-to-operate situation for a new drug

*Bart van den Hazel (MSc in Biology, PhD in Biochemistry) is a European Patent Attorney and Certified Danish Patent Agent. He has over 25 years of experience as a biotech professional of which the last 16 years in patents. He has been Director IP Rights at Genmab and was Patents Site Head at GSK in Belgium. He currently has his own private practice firm in Brussels. Bart is a member of the Belgian Intellectual Property Council and is a tutor at the European patent law training of CEIPI Strasbourg (Copenhagen branch).*

## Abstract

The presentation will illustrate the value of a comprehensive IP litigation database for Freedom-to-Operate analysis for a new drug product.

Darts-IP systemically collects patent litigation information from courts and patent offices in a large number of jurisdictions in an easily searchable database. Every day Darts-ip collects cases from 3 508 courts in 65 countries around the world and has assembled the largest and most up-to-date intellectual property cases database with 3 323 276 cases (as of 8 May 2018).

Using an example of a new biotech molecule in a highly competitive field, the speakers will explain how searching the Darts-IP database in addition to searches in patent databases will provide the most complete and up-to-date information regarding the status and strength of patents that have been identified to be relevant for Freedom-to-Operate. Examples will be shown of how litigation information, such as information on revocation/invalidity actions, infringement actions, declarations of non-infringement and actions regarding inventorship or entitlement, will impact conclusions regarding Freedom-to-Operate and thus the recommendation to a company or client.



Pieter Muntendam, G3 Pharmaceuticals with Bob Stenbridge, Clarivate Analytics

## Patent Searches for Early Stage Biopharmaceutical Companies – Case Study of Pharmaceuticals Targeting Galectin-3

### Abstract

Venture capital provides the lifeblood for the life sciences industry. Having some IP protection on the innovative product is usually a sine qua non for access to the required capital. Additionally the early stage company is expected to understand the IP landscape relevant to their innovation and be able to give potential investors comfort pertaining to freedom to operate. The modus operandi is that the prospective investors engages a specialized law firm to investigate the company's IP at the expense of the early-stage company. The results of these investigations for which the company often pays more than \$100k are not shared with the company. The cycle repeats itself with any subsequent round of investors led by a new investor.

G3 Pharmaceuticals is a company pursuing novel therapeutics to inhibit galectin-3, an unusual protein that plays an important role in many conditions, including cardiac, renal and pulmonary disease and cancer. G3 Pharmaceuticals decided to engage Clarivate Analytics to conduct a comprehensive review of the relevant IP landscape. Galectin-3 is an intriguing protein with the potential to provide transformative therapeutics for many conditions. As a consequence the patent landscape includes numerous and very diverse filings and issued patents.

## Session 1c

### Users & Providers joint case studies - Engineering [organised by BEPIUG]



**Chairman:** Sander De Vrieze, BEPIUG



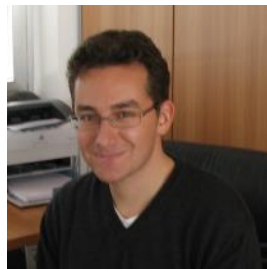
Manuela Popescu, ASML The Netherlands with Linus Wretblåd, IPScreener

### Automated searches; threat or opportunity?

*People know me as an upbeat and enthusiastic person with a big bunch of curly hair. I completed a combined study of math and physics in Romania where I was a teacher for about a year. It was a scholarship that brought me to the Netherlands 15 years ago. Here I found the guys so handsome I decided to marry one and decided to stay. I began working at the Netherlands Institute for Space Research where I helped develop sensors for the space telescope SPICA. After a number of years with my head in the galaxy I decided to come back down to earth and became in 2011 a patent searcher. First for a patent attorney office and in the last two years for ASML and hopefully for quite a few more years to come.*

#### Abstract

The buzzword is lately all about AI and intelligent search algorithms. Hence, every data provider is including and boosting semantic and automated features to explore the prior art situation. However, how good is this approach in reality? Do these algorithms contribute to a more efficient daily work for the information professional? And what would a comparison and evaluation show in terms of quality? This presentation reveals from a large scale manual and automated tests both the performance of the semantics search as such as well as how it performs compared to a real searcher...



Massimo Barbieri & Filippo Silipigni, Politecnico di Milano with Audrey Dayon, Questel

### CO2 capture and storage technologies: an overview based on patent literature

*Massimo Barbieri since September 1st, 2003 has been a Patent analyst at the Technology Transfer Office, Politecnico di Milano. His job deals mainly with the evaluation of the inventions' proposals, state-of-the-art searches and patent licensing.*

*In 1993 he received a master's degree in chemistry, University of Pavia, and in 2003 a post-graduate degree in Industrial Property Management. He followed several courses at the EPO in the field of patent searching and classification. He has authored or co-authored some publications in journals.*

*Filippo Silipigni took his Master Degree in Mechanical Engineering in 2004 at University of Florence and his PhD in Design and Methods for Product Development in 2011 at Politecnico di Milano.*

*Currently is collaborating in Fondazione Politecnico di Milano. He is the Program Manager of the Italian Center of Competence for Systematic Innovation [www.innovazione sistematica.it](http://www.innovazione sistematica.it) . The Center aims to promote and diffuse techniques and tools able to methodologically support product development and technological innovation activities according to a structured approach*

*Filippo Silipigni is enrolled to AIDB since 2013 and is one member of the CEPIUG-Working group Training and Education.*

### **Abstract**

The increased concentration of carbon dioxide (CO<sub>2</sub>) in the atmosphere is deemed to be one of the main causes of global warming. For that reason, the reduction of CO<sub>2</sub> emission levels through capture or separation and storage or re-utilization technologies has become one of the major industry research projects over the last two decades. CO<sub>2</sub> can be captured by means of pre- and post-combustion technologies, using solvents, solid sorbents and membranes. Upon capture, CO<sub>2</sub> can be stored underground or converted into useful and high-value-added compounds such as propylene, methanol, styrene and amines.

The analysis of the patent literature gives the opportunity to know more about the technical improvements in this field.

Starting from a recent scientific paper, authors aim to identify possible gaps and overlaps between IPC and CPC classification codes related to CO<sub>2</sub> capture and storage technologies. As reported in the latest publications, CPC classification codes related to such technologies are very detailed and sharp, while the IPC classification seem more vague. Authors want to define a search strategy integrating CPC codes (Y02C 10/10, B01D 53/00 and related subgroups) with IPC classification codes, other than keywords, related to CO<sub>2</sub> capture and storage technologies. Authors used a specific database, Orbit provided by Questel. The aim of the work is to identify a pool of documents as consistent as possible with the object of the search.

Most of the patent activity is directed to absorption and adsorption chemical processes. The main priority countries are the USA, Japan, China and South Korea.

The expected more consistent and exhaustive pool of patents is used for further activities. First of all, a comparison with the results and the statistics coming from the only-CPC patent search will be performed and then a preliminary assessment of the maturity level of such technologies through logistic regression analysis will be executed.



Dirk Rattat, Umicore with Jochen Lennhof, Minesoft

## **Implementing an effective IP Knowledge Management Solution**

*Dirk Rattat holds a PhD in Chemistry from the University of Zurich, Switzerland. He worked in several research institutes In Switzerland (Paul-Scherrer Institute), Germany (University Hospital Ulm) and Belgium (Catholic University of Leuven),*

*before he joined Umicore as head of the information department in 2008. He looks back on 10 years of experience as senior information scientist and, more recently, started his formation as European Patent Attorney.*

### **Abstract**

IP Knowledge Management systems are a great resource for companies – whatever the size – looking for a powerful competitive intelligence tool whilst also acting as a place to centralise the in-house special expertise in their own technology sector. In this case, the company utilises IP Knowledge Management systems to facilitate knowledge sharing within multiple business units across borders. Monitoring new documents and information, adding additional information internally (where necessary) and then indexing, classifying and distributing information directly to interested parties within the organisation. By incorporating these internal company workflows and custom taxonomies, it is able to effectively manage patent knowledge globally throughout the organisation.

The presentation will examine the issues and challenges of implementing a knowledge management/archive solution for a globally operating company, enabling patent professionals to visualise the influx of new patent applications from around the world.

A key objective when employing its IP Knowledge Management system was to increase IP awareness within its several business units, each with varying levels of IP expertise, with access to a shared platform. The system was used not only to capture, archive and disseminate valuable IP data but also as a training tool. In the presentation, Dr Dirk Rattat – Patent Engineer & Senior Information Scientist at Umicore – will highlight some of the milestones and additional benefits of such a solution.



Alexander Giesen, Varidian GmbH with Manish Sinha, Gridlogics

### **Beyond Features - Effective and Efficient Patent Search with PatSeer**

*Alexander is the CEO of varidian GmbH, a fine patent search firm located in Germany with a team of ten IP professionals. He gathered more than ten years of experience in patent searching, patent database programming and workflow design. His work is focused on the development of approaches for efficient processing of simple searches as well as managing complex search projects requiring hundreds of man hours and analysing tens of thousands of patent families. Alexander earned a PhD from the University Aachen (Germany) and an MBA from Henley (UK).*

### **Abstract**

Effective patent searching produces relevant results while efficient searching does this within a reasonable time frame. Although most patent databases allow effective searching by providing a correct dataset and reliable search tools, well-structured workflows are required for efficient searches. Workflow related questions may not be a critical factor for the casual researcher working on simple novelty searches. For complex projects like FTO searches or portfolio and technology analysis, a well thought through workflow may mean the difference between a successful high quality patent search project or an outcome of inferior quality.

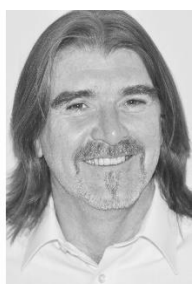
The same reasoning applies for complex patent analytics like the structuring of patent portfolios or the analysis of technologies based on patent data (IP Landscapes). While numerous tools are available for broad pictures, detailed analysis requires tools with advanced analytical features to categorise, analyse and visualise large patent datasets.

The presentation addresses these questions by case studies based on complex search projects and compares the different approaches utilised by leading patent databases.

## **Panel: The International Standards Board for Qualified Patent Information Professionals (ISBQPIP)**



**Chairman:** Bettina de Jong, ISBQPIP Supervisory Council Chair



### **Panelists:**

- Bernd Wolter, PDG
- Susanne Hantos, PIUG
- Bart van Wezenbeek, WON/CEPIUG

### **Abstract**

By the time of this conference, the International Standards Board for Qualified Patent Information Professionals (ISBQPIP) has probably been officially established. In the mean time, work has already been started regarding the Prior Experience Recognition procedure for patent information professionals in Europe and in the US. Furthermore, the first steps have been taken for the examination of candidates who want to become Qualified Patent Information Professional (QPIP).

After a short introduction of the Supervisory Council (the board of the ISBQPIP) and an overview of the history of this project, the procedure for Prior Experience Recognition will be explained and details of the QPIP exams and the requirements will be discussed. This will be followed by an interactive session to answer any questions from the audience.

## Session 3b

**Training & Education: is it time to have a full path to the pros?** *[organised by the CEPIUG*

*Training & Education WG]*

### Panel: Higher Education, current opportunities and future needs



**Chairman:** Gaetano Cascini, Full Professor at Politecnico di Milano, School of Industrial and Information Engineering



#### Panelists:

- Daniel Shalloe, Head of Department - Events, Training, Publications at European Patent Office
- Alt van de Kuilen, Trainer at GO opleidingen Institute
- Antoine Dintrich, General Director at IEEPI - Institut Européen Entreprise et Propriété Intellectuelle

#### Abstract

In addition to a scientific background, usually an academic degree in technical subjects like Engineering or Chemistry, a patent information professional must have a good knowledge of a broad range of subjects such as IP laws and patenting procedures, database features, free and fee based tools, information retrieval, main languages used in patents including the "patentese", to be able to carry out a good patent search, and make a reliable report for attorneys and other stakeholders.

To get all these skills, which are required to get the QPIP certification but more in general to provide a professional service, a long training is needed, preferably combining the assistance of a tutor and a comprehensive course of study. The purpose of the panel is to start a discussion on what is available today and what can be done in the future.





**Chairman:** Frederic Baudour, CFIB



Susanne Hantos, Davies Collison Cave

## Who's responsible for inaccurate search results? Is it the source, the searcher, or the stakeholder?

*Susanne Hantos is a Senior Associate and the Manager of the Patent Intelligence Services division of Davies Collison Cave, an Australian intellectual property law firm. Susanne is a registered Australian and New Zealand patent attorney and a Canadian patent agent who specializes in searching and analysing patent and other technical information in order to provide intellectual property advice. She holds a Master of Science degree in chemistry, a Master of Library and Information Science degree and a Master of Industrial Property degree. From 2014-2016, Susanne served as the Co-Editor-in-Chief of World Patent Information and has been a member of the editorial advisory board for the journal since 2016. She is also a former President of the Patent Information Users Group (PIUG). Since 2008, Susanne has volunteered as a co-ordinator of the international certification initiative for Qualified Patent Information Professionals (QPIP).*

### Abstract

Liability in the provision of information can be an unclear and sometimes uncomfortable question that quietly resides in the back of the mind until trouble strikes. Information providers can lull themselves into believing that the finger can be pointed elsewhere when things go wrong. But can they? How effective are disclaimers? This presentation will review litigation, commentary and anecdotes about where liability sits when a search goes off the tracks.



Jane List, Extract Information Ltd / Philippe Bodart, Total / Frederic Baudour, Allnex

## Outsourcing in patent information from user & provider perspectives: threat or opportunity?

Jane List founded Extract Information Limited in 2013. Based in the UK Extract Information provides consultancy, IP management for SMEs, search services, and training, all with a focus on commercial uses of patent information. Jane is Editor in Chief of World Patent Information, an Elsevier journal, and she is an active member of the patent information professional community. Jane chaired the patent landscaping education working group for the CEPIUG QPIP initiative throughout 2016. Jane also co-founded the Cambridge Information and IP Meeting (CIIPM) in 2015 to host an annual meeting and provide training in IP, information and commercialisation matters. Prior to founding Extract Information Jane held product development roles at Lighthouse IP, ProQuest, and DataStar. She has worked in industry in IP/Information analyst roles at The Technology Partnership, Xaar and the European Molecular Biology Laboratory. Jane has qualifications in Chemistry, Information Science, and IP Law.

Philippe Bodart received his PhD in Chemistry (Namur University Belgium) in 1985. He worked at various positions in R&D in Labofina SA (now Total Research & Technology Feluy), then joined the IP department as Information Documentation Manager in 2001. Author of 1 book and >30 papers in the fields of chemistry and information. (Co-)inventor of more than 20 patent families.

Frederic Baudour earned his Bachelor's degree in Chemistry from University of Mons Hainaut (Belgium) and a degree in Applied Economics – Management from Facultés Universitaires Catholiques de Mons – FUCAM (Belgium). He began working as an Information Scientist for UCB Chemicals in 1996 and became Information Manager when UCB created the Surface Specialties division from the acquisition of the Coatings, Adhesives & Additives business of Solutia. He later moved into the role of Senior Information Analyst following the purchase of Surface Specialties by Cytec Industries and then the divestiture of the Coatings business to Allnex.

Frederic currently works in ALLNEX's Knowledge Management Office, is President of CFIB (French Patent Information Association), former vice-president at CEPIUG (Confederacy of the EU-user groups), and former ALLNEX representative at the PDG (Patent Documentation Group).

### **Abstract**

Outsourcing is often viewed by Information Professionals as a threat, and by some managers as a way to get rid of this expensive search service.

We will discuss outsourcing issues based on requirements and experiences, with viewpoints of user and of outsourcing company. We will show how information professionals' experience and skills are key parameters to get the best from outsourcing, and how this can be a new opportunity for developing new capabilities and sometimes identify new opportunities.



Bodil Hasling, Danish Patent Office

### **Communication between client and searcher: a pivotal part of the process to produce a quality search**

I hold a Master's degree in Food Science and Technology from Copenhagen University and works as a senior examiner at the Danish Patent Office/the Nordic Patent Institute within the chemical area. Previously I have worked as a patent information specialist at a medico company, where the search areas were medical technology, polymers, sensors and measuring methods within the life science area. Before this I worked as a patent attorney in the chemical department of a patent agency.

### **Abstract**

Patent professionals often have all their focus on the technical skills, the search skills and the quality of the tools used. The work done before starting the search, however, is the key to obtain crucial information on the purpose of the

search, expectations to the document analysis and clarification of certain technical matter. The session will mainly focus on the use of different manners in which to complete a client interview and the behavior during the processes involved before a search is performed. This include how to frame the communication depending on whether it is a patent attorney, a RD-person or a patent manager who are the accessible person. Moreover, it discusses the use of guidelines and schemes in order to improve the result of the communication. The session will draw on real life cases.



Colin McCarney, Chem-Bridge Consulting

### **Life after death: Establishing a successful Information Research Consultancy**

*Following a Ph.D. and post-doctoral research in organic chemistry (Swansea, Cambridge), Colin joined Monsanto, carrying out product and process development on polymers, rubber chemicals and detergent chemicals. In the mid '90s he moved "to the other side", by heading up the European Information Research Dept.*

*In 1999 he moved to Procter & Gamble as Principal Scientist where he supported the Fabric & Home Care business unit and the IP Dept. until his retirement in 2015.*

*Following retirement he has continued to support companies with their IP needs, through his consultancy Chem-Bridge Consulting.*

*He is a Chartered Chemist, and a Fellow of the Royal Society of Chemistry.*

#### **Abstract**

Following a long career at Monsanto and Procter & Gamble, Colin retired 3 years ago and chose to continue working as a consultant supporting companies with their information research needs.

The success of this venture will be discussed, and the strengths and possible pitfalls of taking this step will be highlighted.

Although presented from a post-career perspective, many of the aspects covered will apply to anybody in mid-career who is considering leaving the corporate world and striking out on their own.

### **Roundtable: Patent Information Professionals' carrier: Genetics, evolution and mutation.**

#### **Abstract**

Roundtable discussion about the genetics of a career (initial education), experience sharing, evolution and mutation of our job. What can be the future of our job?

The aim of this discussion is to open members awareness about successful careers from different job activities. It can also build confidence on our jobs opportunities in the IP domain in the future.



**Facilitator:** Samuel Hutsebaut, Chemical Engineer, IP and Documentation Specialist at SNF Holding Company

**Panelists:**



- Gerard Van der Ligt, Head of IP Analysis at Philips Intellectual Property & Standards
- Colin McCarney, Independent consultant at Chembridge Consulting
- To be announced



**Chairman:** Bettina de Jong, WON



Alberto Ciaramella, IntelliSemantic

## Linked patent data: opportunities and challenges for patent professional searchers

*Alberto Ciaramella received his M.S. degree in Electronics and Computer Science in 1969 and he was a researcher and research supervisor in speech and language technologies at CSELT, the research branch of the Telecom Italia group, where he published over 40 papers and was the author or coauthor of four patents.*

*In 2005 he founded IntelliSemantic, for enriching patent applications with new technologies, as text mining, semantics and linked data. His present interests include patent search and analytic solutions, and, more generally, text analytics and semantic solutions in different verticals.*

*The list of most relevant contributions is <https://scholar.google.it/citations?user=Uvd1fg0AAAAJ&hl=it>*

### Abstract

Linked data is a technique for publishing databases in such a way to facilitate their integration.

For example, Linked data in patents will simplify the integration of patent data provided by different patent offices and with different scopes (biblio, legal) and will facilitate to relate patent data with scientific and business-oriented databases originated by different publishers.

The unifying concept in Linked data is to represent any concept as a triple (subject/predicate/object): e.g. the company X (subject) is the applicant (predicate) of the patent Y (object). A data set (e.g. patent biblio of a specific patent office) is represented by interconnected triples.

By following specific publication guidelines, data sets of different origins can be easily integrated. The original proposal of Linked data concept was made by Tim Berners-Lee (2006). After that, substantial standardization efforts were carried out by the World Wide Web Consortium (W3C), as the query language for linked data. i.e. SPARQL.

With the maturity of standards and technologies, information available in the form of Linked data is significantly increasing in different domains: today the Linking Open Data cloud diagram <http://lod-cloud.net/> identifies 1163 linked data sets available, in different domains.

More specifically in patents, patent data sets are now (2018) provided by EPO, USPTO, KIPO, APO and others will join. Linked data can positively impact the patent professions in two ways:

- a) to technical empower searchers. In fact Linked data provided by different patent offices can be queried with a standard and powerful query language (SPARQL), facilitating also the development of custom specific tasks;
- b) to extend the strategic role of patent searchers, by using new integrated solutions delivered by application providers, which could integrate patent data, scientific data and business data.

The final presentation will include some examples of a) and b).



Burkhard Schlechter, Austrian Patent Office

## AI in the quest for an easier search

*After his Master's Degree in Engineering (TU Graz), Burkhard acquired advanced skills in patent engineering in Siemens' patent information department in Munich. In 1991 he joined the Austrian Patent Office as a patent examiner. During his years at the office he was assigned responsibility for quality control on search products and he further specialised as an expert and trainer for inhouse (EPOQUE) and free of charge databases (Espacenet, Depatisnet). He has many years of experience with effective search strategies and different patent classification schemes. He has extensive expertise in presenting IP at universities and dedicated IP events.*

### Abstract

The results of patent searches performed using a number of different commercial semantic search engines were benchmarked against results from corresponding human, intellectually performed searches.

The individual strengths and weaknesses of each semantic search engine and the variations in search results associated with different technical fields and key words are compared.

This presentation gives the results on, and conclusions about the different semantic platforms.

Input requirements for optimizing the results are also discussed.



Simon Dewulf, Imperial College, London

## BIG Patent DATA driven Innovation Logic: a research methodology for fast-tracking and automating innovation engineering.

*Simon Dewulf is based in Australia and Belgium, and develop innovation logic, a systematic method to innovate any product or process, and PatentInspiration, a BIG Patent DATA analysis tool with its unique angle to innovation research for technology driven companies. Simon is a PhD candidate at Imperial College on the topic of Innovation Logic and BIG Patent DATA. His method and software was awarded the INSEAD innogator prize 2010. Currently, Simon is building AULIVIA, an innovation avatar that reasons with innovation logic fuelled with patent data input.*

### Abstract

Patents are claiming a variation in properties, which result in new or improved functions. One unlocking key to patent analysis is that often, properties are expressed textually in adjectives, and functions are often expressed in verbs. The beauty of property-function pairs is that they are independent of context; for example a hollow (adjective; property porosity) article can drift or contain or insulate (verbs; functions). By distilling property function pairs out of domain, and importing them into new contexts, new IP can be generated.

Abstraction is the gateway to out-of-domain knowledge. A cosmetic cream problem expressed as preventing oil separation may start to look like a peanut butter problem, or a mayonnaise problem, solved years ago with solutions for grabs. Mapping all challenges around a given product or technology, a shopping list can be created where BIG Patent DATA can bring a list of other areas that have long time expertise in that specific challenge.

The challenge of tedious time in creating the right filter terms can be tackled by context related AI. The solutions is often in the problem, and here BIG patent DATA can identify all terms that have the same context to e.g. antimicrobial, bringing a listing of antibacterial, biocidal, amongst a 100 suggestions.

BIG Patent DATA is the only source that can bring an automated listing of IP competitors. Competitors of my clients are new targets, competitors of my suppliers are potentially better sources.

BIG Patent DATA research can lead to automated idea generation. By analysing successful inventions across domains, a systematic creativity method becomes apparent. Knowing what exists, and knowing what is possible, algorithms can generate what doesn't exist and would be beneficial to create. In this way BIG Patent DATA with Innovation Logic research allows crowdsourcing worldwide inventors for inventing the new.



Corinne Le Buhan, IPStudies SARL

## On the relevance of deeper patent office register information for reporting to CEOs and investors – Biotech case studies

*Dr. Corinne Le Buhan holds a postgraduate degree in Economics from the University of Strasbourg, specialized in innovation and management of intellectual property (2008), a PhD in communication systems from EPFL in Switzerland (1998) and an MSc in engineering from INSA in France (1994). Prior to founding IPStudies in 2010, Corinne Le Buhan held a number of R&D and IP management positions for 15 years in France and Switzerland. Corinne Le Buhan has setup the IP strategy and developed the patent portfolio for several high-tech companies since 2007 with a strong focus on IP valuation for the US markets. She was appointed as expert for the European Commission on innovation for SMEs from 2013 to 2015. She is a member of the International Licensing Executive Society and currently sits at the board of CHPIUG, the Swiss Patent Information User Group.*

### Abstract

In the past decade, the use of quantitative patent analytics such as patent landscaping for business intelligence has significantly progressed thanks to the combination of online registers data access with the power of professional software mining and visualization tools. However, we are still missing automated tools and shared best practices to better spot significant changes in the office registers that directly impact the practical valuation of individual patent assets along their prosecution lifetime, as well as related FTO & licensing strategies.

Case studies from the revolutionary CRISPR biotechnology field will be presented to highlight the relevance of searching and monitoring this hidden information for C-level executives and investors. Particular attention will be given to:

- the evolution of claim coverage from initial application to grant publications, and the special case of subset inventions from different inventors through the lifetime of a single priority patent application family;
- the differences in search methods, tools and strategies by office examiners as well as disclosure practice by the patent applicants, hence the differences in citation coverage which makes the associated automated metrics impractical for qualitative analytics;
- the emerging use of third party observations in support to competition intelligence and offensive IP strategies.



Frank Verbeke, NV Bekaert SA

### **Patents and Trademarks, a source of business opportunities.**

*Frank Verbeke is a Senior Patent Information Specialist at NV Bekaert SA in Belgium. He has a BSc in Biochemistry, BSc in Fermentation Technology and a BSc in Polymer Science.*

*After working 10 years in R&D within the Material Science Labs, specializing in metallurgy and crystallography, he started in the Bekaert Industrial Property Department in 2006 where he became responsible for all type of searches from prior art to FTO and invalidity searches.*

*He is a founding member of the BEPIUG; member of the WON and PIUG; member of the Training & Education working group of the QPIP an Board member of CEPIUG.*

#### **Abstract**

We, as patent information users, are often confronted with several issues in our profession. Amongst them, there is the question to provide competitive information and/or help in uncovering business opportunities.

Patents and trademarks are just 2 of the intellectual property rights widely used in the world, both often related to the 'real' business world.

The tools to access the information with respect to those two types of rights are getting better, faster, more affordable and accessible. This offers opportunities but also challenges for our profession.

During this presentation, we want to provide you with some approaches that might help in cases where the client is looking for business opportunities or where we as information specialist can give assistance in uncovering the hidden diamonds in plain sight, avoiding or minimizing the issue cost or cost reductions.

As a bonus, this approach provides an opportunity to promote yourself, your department or our profession towards different stakeholders.



Joakim Isaksson, Philips

### **Practical implications of patent families on patent analytics and competitive intelligence**

*Dr. Joakim Isaksson has a Master of Science in Engineering Biology and a PhD in Organic Electronics from Linköping University in Sweden. He joined Royal Philips in Eindhoven, the Netherlands back in 2007 and has been part of the IP Analysis team within the Intellectual Property & Standards department (IP&S) since 2009.*

*Joakim is currently in the role of Lead IP Analyst and responsible for a cluster of patent information professionals who provide IP&S and Philips' businesses with e.g. patentability searching, product risk assessments and strategic IP intelligence.*



**Abstract**

It is generally accepted that counting inventions in the form of patent families rather than each individual regional publication is the preferred way of working for patent landscapes and competitive patent intelligence. However, conclusions that at a first glance may look relatively straightforward can sometimes be drastically impacted by the choice of patent family for data retrieval as well as analysis. Examples of answers that may be dependent on patent family definition include finding the most active companies in a landscape, comparing portfolio size and position, analysing technology development of selected competitors etc.

The Philips IP Analysis team has extensive experience of how to utilize advanced patent intelligence for various types of strategic questions. In this presentation we would like to illustrate with some practical examples how patent families can influence such analysis and how different business purposes may motivate different approaches.



**Chairman:** Guido Moradei, AIDB



Sakae Nakamura / Jo Sagawa, Asahi Kasei

## **IP landscape that contributes to business strategy through IPL activities in Asahi Kasei**

*Sakae has been the head of the technical information search division under the Corporate IP of Asahi Kasei Group established in 1998.*

*Last year she became the principal expert of Asahi Kasei.*

*Also, she was named the head of IP Strategic Planning Group that was launched under the Corporate IP in April this year. She is responsible for providing IP information analysis to contribute to the business strategy in the Asahi Kasei group.*

*She was the chairperson of the committee of The Patent Search Grand Prix (PSGp) from 2015 to 2017 in Japan.*

*Jo is a senior intellectual property analyst certified by the Association of Intellectual Property Education in Japan. He worked as an IP liaison for 5 years in Corporate IP at Asahi Kasei before moving to Strategic Planning & Development where he performed business planning for 4 years. Since 2014, he has been engaged in research and analysis of technical information in Corporate IP.*

### **Abstract**

The Asahi Kasei Group is a diversified chemicals manufacturer in Japan with net sales of approximately 20 billion US dollars and operating income of approximately 2.0 billion US dollars.

Last year, IP Landscape, or IPL in short, was taken up in the Nikkei, the most prestigious business newspaper in Japan, with the headline, "Intellectual property analysis as the center of corporate management". Its impact was huge, inspiring IP departments of Japanese companies to transform their roles to make a contribution to their business from a more strategic viewpoint by proposing business strategies to corporate management based on patent analysis.

We launched the new group to strategically utilize technology information in April this year, and we are currently working on IPL companywide. As an example of our IPL activity, we will introduce the analysis example of the specific technology, which is one of core technologies of Asahi Kasei.



Stephen Adams, Magister Ltd

## W(h)ither the patent information professional - direction or destruction?

*Stephen Adams is the managing director of Magister Ltd., founded in 1997. Mr. Adams holds a B.Sc. in chemistry from the University of Bristol and an M.Sc. in Information Science from City University, London, and is a Member of both the Royal Society of Chemistry and the Chartered Institute of Library and Information Professionals (CILIP). He is the author of "Information Sources in Patents", published by Walter de Gruyter KG, and serves on the Editorial Advisory Board of "World Patent Information". He received the IPI Award in 2012 for outstanding contribution to patent information.*

### **Abstract**

For as long as the profession of 'information specialist' has existed, some have questioned the need or the value of dedicated individuals to act as gatekeepers or custodians to the mass of scientific and technical literature worldwide. This presentation will track the history of the patent information professional, and consider how the role has changed over the decades, and what part they can – or should – play in 21st century industry and intellectual property. The moves towards certifying the profession have highlighted the need for continual professional education and training, and we will consider how this can be achieved alongside the demands of delivering high quality results on a day-to-day basis.