



Literature listing

1. Books

1.1. Recent reports and other monographs

A Legal and Empirical Study of 3D Printing Online Platforms and an Analysis of User Behaviour: Study 1.

Mendis D., Secchi D., 2015, UK IPO, CIPPM Bournemouth University, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/421221/A_Legal_and_Empirical_Study_of_3D_Printing_Online_Platforms_and_an_Analysis_of_User_Behaviour_-_Study_I.pdf.

The Current Status and Impact of 3D Printing within the Industrial Sector: Study 2.

Reeves P., Mendis D., 2015, UK IPO, CIPPM Bournemouth University, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/413673/The_Current_Status_and_Impact_of_3D_Printing_Within_the_Industrial_Sector_-_Study_II.pdf.

Commercial and Intellectual Property Law and Practice.

Embley J., Bamford K., Hancock N., 2015, College of Law Publishing, Guildford, ISBN 9781910019801.

First to File: Patents for Today's Scientist and Engineer.

Heines M.H., 2014, Wiley-AIChE, ISBN 9781118839652.

Global Innovation Index 2014 – The Human Factor in Innovation.

WIPO, Johnson Cornell University, INSEAD, 2014, http://www.wipo.int/edocs/pubdocs/en/economics/gii/gii_2014.pdf.

International Intellectual Property: A Handbook of Contemporary Research.

Gervais D.J., 2015, Edward Elgar, Cheltenham, ISBN 9781782544791.

Report of the Expert Group on Patent Aggregation.

Giuri P., Hirsch D., Szepanowska-Kozlowska K., Selhofer H., Lang J.T., Thumm N., 2015, European Commission, http://ec.europa.eu/research/innovation-union/pdf/expert-groups/report_of_the_expert_group_on_patent_aggregation_-_2015.pdf#view=fit&pagemode=none.

Research Handbook on Human Rights and Intellectual Property.

Geiger C., 2015, Edward Elgar, Cheltenham, ISBN 9781783472413.

2. Journals

The listing in this issue includes entries found using SciVerse Scopus™, Elsevier's abstract and indexing database which gives access to over 20000 peer-reviewed titles from more than 5000 international publishers.

2.1. Search techniques, databases and analysis: classification: searcher certification

2.1.1. Search techniques, databases

A standard TMF modeling for Arabic patents.

Ammar C., Haddar K., Romary L., 2014, 11th International Conference on Terminology and Knowledge Engineering: Ontology, Terminology and Text Mining, TKE 2014, 157–166.

A survey of automated hierarchical classification of patents.

Gomez J.C., Moens M.-F., 2014, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 8830, 215–249.

A TRIZ-based trimming method for patent design around.

Li M., Ming X., He L., Zheng M., Xu Z., 2014, CAD Computer Aided Design, 62, 20–30.

A two-level parser for patent claim parsing.

Wang J., Lu W.F., Loh H.T., 2015, Advanced Engineering Informatics, <http://dx.doi.org/10.1016/j.aei.2015.01.013>.

A two-step agglomerative hierarchical clustering method for patent time-dependent data.

Chen H., Zhang G., Lu J., Zhu D., 2014, Advances in Intelligent Systems and Computing, 213, 111–121.

Adaption of the TRIZ method to the development of electric energy storage systems.

Albers A., Wagner D., Kern L., Hofler T., 2014, Procedia CIRP, 21, 509–514.

Application of the TRIZ methodology in the innovation of the FRIC-TORQ test equipment.

Carneiro R., Silva L.F., Seabra E., Alves A., Lima M., 2014, ASME International Mechanical Engineering Congress and Exposition, Proceedings (IMECE), 14.

- Applications and challenges of text mining with patents.
- Aras H., Hackl-Sommer R., Schwantner M., Sofean M., 2014, CEUR Workshop Proceedings, 1292.
- Automatic term recognition using hybrid method based on rewriting and statistic.
- Xiong W., 2014, Advanced Materials Research, 1049–1050, 1544–1549.
- Boosting cross-language retrieval by learning bilingual phrase associations from relevance rankings.
- Sokolov A., Jehl L., Hieber F., Riezler S., 2013, [EMNLP2013] - 2013 Conference on Empirical Methods in Natural Language Processing, Proceedings of the Conference, 1688–1699.
- Classifying the TRIZ contradiction problem of the patents based on engineering parameters.
- Tseng C.-K., Chung C.-H., Dai B.-R., 2014, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 8916, 344–353.
- Constructing a weighted keyword-based patent network approach to identify technological trends and evolution in a field of green energy: a case of biofuels.
- Wu C.-C., 2014, Quality and Quantity, <http://dx.doi.org/10.1007/s11135-014-0145-1>.
- Design-by-analogy: experimental evaluation of a functional analogy search methodology for concept generation improvement.
- Fu K., Murphy J., Yang M., Otto K., Jensen D., Wood K., 2014, Research in Engineering Design, 26, 77–95.
- Detecting the eureka effect in complex search.
- Yang H., Luo J., Wing C., 2015, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 9022, 734–740.
- Developing semantic search for the patent domain.
- Eisinger D., Monnich J., Schroeder M., 2014, CEUR Workshop Proceedings, 1292.
- Development and tuning of an original search engine for patent libraries in medicinal chemistry.
- Pasche E., Gobeil J., Kreim O., Oezdemir-Zaech F., Vachon T., Lovis C., Ruch P., 2014, BMC Bioinformatics, 15, 1–9.
- Directions of external knowledge search: Investigating their different impact on firm performance in high-technology industries.
- Cruz-Gonzalez J., Lopez-Saez P., Navas-Lopez J.E., Delgado-Verde M., 2014, Journal of Knowledge Management, 18 (5), 847–866.
- Enhancing patent search with content-based image retrieval.
- Vrochidis S., Mountzidou A., Kompatiari I., 2014, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 8830, 250–273.
- Evaluating bias in retrieval systems for recall oriented documents retrieval.
- Noor S., Bashir S., 2015, International Arab Journal of Information Technology, 12 (1), 53–59.
- Exploiting co-occurrence of low frequent terms in patents.
- Khattak A.S., Heyer G., 2014, Advances in Intelligent Systems and Computing, 242, 459–466.
- Exploratory patent search with faceted search and configurable entity mining.
- Fafalios P., Salampasis M., Tzitzikas Y., 2013, CEUR Workshop Proceedings, 968, 39–47.
- Exploratory professional search through semantic post-analysis of search results.
- Fafalios P., Tzitzikas Y., 2014, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 8830, 166–192.
- Exploring the possibilities and limitations of a Nanomaterials Genome.
- Qian C., Siler T., Ozin G.A., 2015, Small, 11, (1), 64–69.
- Extracting hyponymy of ontology concepts from patent documents.
- Li J., Lv X., Liu K., 2015, Proceedings - 2014 10th International Conference on Computational Intelligence and Security, [CIS2014], 7016901, 283–287.
- Extracting semantic information from patent claims using phrasal structure annotations.
- De Carvalho D.S., Franca F.M.G., Lima P.M.V., 2014, Proceedings - 2014 Brazilian Conference on Intelligent Systems, [BRACIS2014], 6984803, 31–36.
- Ezdl: An interactive IR framework, search tool, and evaluation system.
- Beckers T., Dungs S., Fuhr N., Jordan M., Kriewel S., Kontokotsios G., Paraskeuopoulos Y., Salampasis M., 2014, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 8830, 118–146.
- Facilitating design-by-analogy: Development of a complete functional vocabulary and functional vector approach to analogical search.
- Murphy J., Fu K., Otto K., Yang M., Jensen D., Wood K., 2014, Proceedings of the ASME Design Engineering Technical Conference, 2A, Paper No. DETC2014-34491, V02AT03A010.
- Free sources for patent searching: A review.
- Rainey M.M., 2014, Business Information Review, 31 (4), 216–225.
- Full-text patent searching on free websites: Tools, tips and tricks.
- Marley M., 2014, Business Information Review, 31 (4), 226–236.
- Identifying verb-preposition multi-category words in Chinese-English patent machine translation.
- Li H., Zhu Y., Jin Y., 2015, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 8955, 409–421.
- Improvement of terminology extraction method for specific patent search.
- Yanagihori K., Tanaka K., Tsuda K., 2014, Procedia Computer Science, 35 (C), 879–885.

- Innovation through pertinent patents research based on physical phenomena involved.
- Valverde U., Nadeau J.P., Scaravetti D., Leon J.F., 2014, Procedia CIRP, 21, 515–520.
- Insight to hyponymy lexical relation extraction in the patent genre versus other text genres.
- Andersson L., Lupu M., Pallotti J., Piroi F., Hanbury A., Rauber A., 2014, CEUR Workshop Proceedings, 1292.
- Key IPC codes extraction using classification and regression tree structure.
- Lee S.-J., Jun S., 2014, Advances in Intelligent Systems and Computing, 271, 101–109.
- Knowledge based dimensionality reduction for technical text mining.
- Shalaby W., Zadrozny W., Gallagher S., 2015, Proceedings - 2014 IEEE International Conference on Big Data, IEEE Big Data 2014, 7004466, 39–44.
- Linked open data system for scientific data sets.
- Baumer F.S., Gim J., Jeong D.-H., Geierhos M., Jung H., 2014, CEUR Workshop Proceedings, 1292.
- Multilayer collection selection and search of topically organized patents.
- Salampasis M., Giachanou A., Paltoglou G., 2013, CEUR Workshop Proceedings, 968, 48–56.
- Multilingual semantic resources and parallel corpora in the biomedical domain: The CLEF-ER challenge.
- Rebholz-Schuhmann D., Clematide S., Rinaldi F., Kafkas S., Van Mullegen E.M., Bui C., Hellrich J., Lewin I., Milward D., Poprat M., Jimeno-Yepes A., Hahn U., Kors J.A., 2013, CEUR Workshop Proceedings, 1179.
- Noise removal using TF-IDF criterion for extracting patent keyword.
- Kim J., Choe D., Kim G., Park S., Jang D., 2014, Advances in Intelligent Systems and Computing, 271 (1), 61–69.
- Noise-aware character alignment for bootstrapping statistical machine transliteration from bilingual corpora.
- Sudoh K., Mori S., Nagata M., 2013, [EMNLP2013] - 2013 Conference on Empirical Methods in Natural Language Processing, Proceedings of the Conference, 204–209.
- On classification and extraction of deep knowledge in patents based on TRIZ Theory.
- Gongchang R., Qi L., Fenghai Y., 2014, Proceedings - 2014 5th International Conference on Intelligent Systems Design and Engineering Applications, [ISDEA2014], 6977686, 666–670.
- Passage retrieval starting from patent claims: A CLEF-IP2013 task overview.
- Piroi F., Lupu M., Hanbury A., 2013, CEUR Workshop Proceedings, 1179.
- Patent databases for innovation studies: A comparative analysis of USPTO, EPO, JPO and KIPO.
- Kim J., Lee S., 2015, Technological Forecasting & Social Change, 92, 332–345.
- PatNet: A lexical database for the patent domain.
- Tannebaum W., Rauber A., 2015, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 9022, 550–555.
- Protein-ligand interaction databases: Advanced tools to mine activity data and interactions on a structural level.
- Inhester T., Rarey M., Wiley Interdisciplinary Reviews: Computational Molecular Science, 4 (6), 562–575.
- Query formulation for prior art search - Georgetown University at CLEF-IP 2013.
- Luo J., Yang H., 2013, CEUR Workshop Proceedings, 1179.
- Recognizing and reordering the translation units in a long NP for Chinese-English patent machine translation.
- Liu X., Zhu Y., Jin Y., 2014, Communications in Computer and Information Science, 493, 33–48.
- Recommending missing citations for newly granted patents.
- Oh S., Lei Z., Lee W.-C., Yen J., 2014, [DSAA2014] - Proceedings of the 2014 IEEE International Conference on Data Science and Advanced Analytics, 7058110, 442–448.
- Reducing noises for recall-oriented patent retrieval.
- Lee W., Leung C.K.-S., Song J.J., 2015, Proceedings - 4th IEEE International Conference on Big Data and Cloud Computing, [BDCloud2014] with the 7th IEEE International Conference on Social Computing and Networking, [SocialCom2014] and the 4th International Conference on Sustainable Computing and Communications, [SustainCom2014], 7034845, 579–586.
- Report on the CLEF-IP2013 experiments: Multilayer collection selection on topically organized patents.
- Giachanou A., Salampasis M., Satratzemi M., Samaras N., 2013, CEUR Workshop Proceedings, 1179.
- Research of Semantic Role Labeling and Application in Patent Knowledge Extraction.
- Meng L., He Y., Li Y., 2014, CEUR Workshop Proceedings, 1292.
- Research on bilingual corpus based machine translation.
- Wang S., 2014, Applied Mechanics and Materials, 687–691, 1683–1686.
- Science and technology resources on the internet: Patent searching for stem researchers.
- Meier J.J., 2015, Issues in Science and Technology Librarianship (79).
- Search Ontology, a new approach towards Semantic Search.
- Uciteli A., Goller C., Burek P., Siemoleit S., Faria B., Galanzina H., Weiland T., Drechsler-Hake D., Bartussek W., Herre H., 2014, Lecture Notes in Informatics (LNI), Proceedings - Series of the Gesellschaft fur Informatik (GI), P-232, 667–672.
- Shift-reduce word reordering for machine translation.

- Hayashi K., Sudoh K., Tsukada H., Suzuki J., Nagata M., 2013, [EMNLP2013] - 2013 Conference on Empirical Methods in Natural Language Processing, Proceedings of the Conference, 1382–1386.
- Technology structural implications from the extension of a patent search method.
- Benson C.L., Magee C.L., 2015, *Scientometrics*, 102 (3), 1965–1985.
- Technology-driven roadmaps for identifying new product/market opportunities: Use of text mining and quality function deployment.
- Jin G., Jeong Y., Yoon B., 2014, *Advanced Engineering Informatics*, 29 (1), 126–138.
- The application and study on intelligent real-time machine translation technology.
- He Y., Wang S.J., 2014, *Applied Mechanics and Materials*, 687–691, 1695–1699.
- The simpler the better - Retrieval Model comparison for Prior-Art Search in Patents @ CLEF-IP2013.
- Eiselt A., Oberreuter G., 2013, *CEUR Workshop Proceedings*, 1179.
- The use of patents documentation information in teaching, academic research and development of engineering projects.
- Nunes J., Batalha M., 2014, ASME International Mechanical Engineering Congress and Exposition, Proceedings (IMECE), Paper No. IMECE2014-38516, pp. V005T05A041.
- Tracking the internationalization of multinational corporate inventive activity: National and sectoral characteristics.
- Alkemade F., Heimeriks G., Schoen A., Villard L., Laurens P., 2015, *Research Policy*, <http://dx.doi.org/10.1016/j.resp.2015.01.007>.
- Unsupervised bilingual terminology extraction algorithm for Chinese-English parallel patents.
- Sun M., Li L., Liu Z., 2014, *Qinghua Daxue Xuebao/Journal of Tsinghua University*, 54 (10), 1339–1343.
- Using the evolutionary pattern to generate ideas in new product development.
- Labouriau F.C., Naveiro R.M., 2014, *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 37 (1), 231–242.
- ### 2.1.2. Analysis and statistics
- A causal and effect model for knowledge flow analysis among firms.
- Dereli T., Altuntas S., 2014, [CIE2014] - 44th International Conference on Computers and Industrial Engineering and [IMSS2014] - 9th International Symposium on Intelligent Manufacturing and Service Systems, Joint International Symposium on "The Social Impacts of Developments in Information, Manufacturing and Service Systems" - Proceedings, 1874–1882.
- A latent-citation-network based patent value evaluation method.
- Feng L., Peng Z., Liu B., Che D., 2015, *Jisuanji Yanjiu yu Fazhan/Computer Research and Development*, 52 (3), 649–660.
- A longitudinal study of MNE innovation: The case of Goodyear.
- Scalera V.G., Mukherjee D., Perri A., Mudambi R., 2014, *Multinational Business Review*, 22 (3), 270–293.
- A methodology for investigating opportunities for service technologies.
- Kim C., Kim M.-S., 2014, *Advanced Science Letters*, 20 (10-Dec), 2125–2128.
- A novel method for technology forecasting based on patent documents.
- Lee J., Kim G., Jang D., Park S., 2014, *Advances in Intelligent Systems and Computing*, 271, 81–90.
- A novel three-dimension perspective to explore technology evolution.
- Li M., 2015, *Scientometrics*, <http://dx.doi.org/10.1007/s11192-015-1591-9>.
- A simple approach to describe a company's innovative activities and their technological breadth.
- Hu X., Rousseau R., 2014, *Scientometrics*, 102 (2), 1401–1411.
- A simple interpretation of the growth of scientific/technological research impact leading to hype-type evolution curves.
- Campani M., Vaglio R., 2015, *Scientometrics*, 103 (1), 75–83.
- A small world network for technological relationship in patent analysis.
- Jun S., Lee S.-J., 2014, *Advances in Intelligent Systems and Computing*, 271, 91–99.
- A study on evaluation model for traditional knowledge using patent portfolio analysis.
- Park H., Ryu T.-K., Yoon J., Koh S., Seo W., 2015, *ICIC Express Letters*, 9 (4), 1063–1068.
- A study on knowledge flows of dye-sensitized solar cells' patent.
- Chen J.K., Pham V.K., 2014, *Foresight*, 16 (3), 229–249.
- A supervised requirement-oriented patent classification scheme based on the combination of metadata and citation information.
- Zhu F., Wang X., Zhu D., Liu Y., 2015, *International Journal of Computational Intelligence Systems*, 8 (3), 502–516.
- A systematic approach of partner selection for open innovation.
- Yoon B., Song B., 2014, *Industrial Management and Data Systems*, 114 (7), 1068–1093.
- An analysis of national R&D collaborators network based on the NTIS data.
- Yang M.-S., Kang N.-K., Kim T.-H., Joo W.-K., Park M.-W., Choi K.-N., 2014, *International Journal of Software Engineering and its Applications*, 8 (11), 11–24.
- An analysis of Russia's patent activity in the carbon nanostructures.
- Terekhov A.I., 2015, *Nanotechnology Law and Business*, 12 (1), 68–79.
- An empirical investigation into the accumulative antecedents of R&D productivity.
- Edwards T.V., 2014, 2014 International Annual Conference of the American Society for Engineering Management - Entrepreneurship Engineering: Harnessing Innovation, [ASEM2014], paper ID 158.

- An event study of home and host country patent generation in Chinese MNEs undertaking strategic asset acquisitions in developed markets.
- Anderson J., Sutherland D., Severe S., 2015, International Business Review, <http://dx.doi.org/10.1016/j.ibusrev.2015.01.007>.
- An investigation of the relation between cooperation intensity and the innovative success of German regions.
- Broekel T., Brenner T., Buerger M., 2015, Spatial Economic Analysis, 10 (1), 52–78.
- Analysis of essential patent portfolios via bibliometric mapping: an illustration of leading firms in the 4G era.
- Han Y.-J., 2015, Technology Analysis & Strategic Management, <http://dx.doi.org/10.1080/09537325.2015.1019850>.
- Analysis of waveguide technologies and extremely high frequencies devices based on the dielectric structures with the use of patent content knowledge.
- Koldaev A.V., Vzyatyshev V.F., 2014, [CriMiCo2014] - 2014 24th International Crimean Conference Microwave and Telecommunication Technology, Conference Proceedings, 6959551, 611–612.
- Analyzing offshore wind power patent portfolios by using data clustering.
- Chang S.-H., Fan C.-Y., 2014, Industrial Engineering & Management Systems, 13 (1), 107–115.
- Assessment of current trends in R&D of chitin-based technologies in agricultural production-consumption systems using patent analytics.
- Kalpana Sastry R., Srivastava A., Venkateshwarlu G., 2015, Journal of Intellectual Property Rights, 20 (1), 19–38.
- Assessments of technology transfer activities of US universities and associated impact of Bayh–Dole Act.
- Tseng A.A., Raudensky M., 2014, Scientometrics, 101 (3), 1851–1869.
- Characteristics of domestic and foreign patent portfolio in the field of fiber and yarn.
- Chen W.-T., Liu J., Feng Y.-W., 2015, Wool Textile Journal, 43 (1), 66–69.
- Charting the evolution of biohydrogen production technology through a patent analysis.
- Hsu C.-W., Chang P.-L., Hsiung C.-M., Wu C.-C., 2015, Biomass and Bioenergy, 76, 1–10.
- Chemical adhesion of silicone elastomers on primed metal surfaces: A comprehensive survey of open and patent literatures.
- Picard L., Phalip P., Fleury E., Ganachaud F., 2015, Progress in Organic Coatings, 80, 120–141.
- Chinese innovative patent technologies for the reactor pressure vessel.
- Shi Q., Zhang T., Fang X., Peng W., 2014, International Conference on Nuclear Engineering, Proceedings, ICONE, 1.
- Chinese university patents: quantity, quality, and the role of subsidy programs.
- Fisch C.O., Block J.H., Sandner P.G., 2014, Journal of Technology Transfer, <http://dx.doi.org/10.1007/s10961-014-9383-6>.
- Community-based endogamy as an influence indicator.
- Silva T.H.P., Moro M.M., Silva A.P.C., Meira W., Laender A.H.F., 2014, Proceedings of the ACM/IEEE Joint Conference on Digital Libraries, 6970152, 67–76.
- Comparison of Chinese and Korean companies in ICT global standardization: Essential patent analysis.
- Kang B., Huo D., Motohashi K., 2014, Telecommunications Policy, 38 (10), 902–913.
- Comparison of examiners' forward citations in the United States and Japan with pairs of equivalent patent applications.
- Yasukawa S., Kano S., 2014, Scientometrics, 102 (2), 1189–1205.
- Construction of the publication and patent clusters produced by the arbitrary terms with the use of the specialized Google tools.
- Moskovkin V.M., Chernyshev S.I., Moskovkina M.V., Lesovik R.V., Logachev K.I., Shaptala V.V., 2014, International Journal of Applied Engineering Research, 9 (22), 16657–16676.
- Co-patenting patterns in nanotechnology: A comparison of South Korea and Germany.
- Notten A., Ramani S.V., 2013, in Nanotechnology and Development: What's in it for Emerging Countries? Chapter 4, 93–120.
- Corporate innovations and mergers and acquisitions.
- Bena J., Li K., 2014, Journal of Finance, 69 (5), 1923–1960.
- Creative destruction in Wall Street's technological arms race: Evidence from patent data.
- Essendorfer S., Diaz-Rainey I., Falta M., 2015, Technological Forecasting & Social Change, <http://dx.doi.org/10.1016/j.techfore.2014.11.012>.
- De-Bottlenecking Open Innovation: Turning Patent-Based Technology Network Analysis into Value.
- Stadlbauer M., Drexler G., 2014, Open Innovation: New Product Development Essentials from the PDMA, 3–26.
- Design of technology value analysis system based on patent big data.
- Lee Y., Lee U., 2014, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 8863, 48–58.
- Determinants of patent citations in biotechnology: An analysis of patent influence across the industrial and organizational boundaries.
- Messeni Petruzzelli A., Rotolo D., Albino V., 2015, Technological Forecasting & Social Change, 91, 208–221.
- Developing a rework process for underfilled electronics components via integration of TRIZ and cluster analysis.
- Huang C.-Y., Lin Y.-H., Tsai P.-F., 2015, IEEE Transactions on Components, Packaging and Manufacturing Technology, 5 (3), 7038160, 422–438.
- Developing technological innovations on the bases of the world patent information.

- Kameneva N.A., 2015, Journal of Engineering Science and Technology, 10 (4), 434–441.
- Development of a novel fingerprint for chemical reactions and its application to large-scale reaction classification and similarity.
- Schneider N., Lowe D.M., Sayle R.A., Landrum G.A., 2015, Journal of Chemical Information and Modeling, 55 (1), 39–53.
- Distant recombination and the creation of basic inventions: An analysis of the diffusion of public and private sector nanotechnology patents in Canada.
- Barirani A., Beaudry C., Agard B., 2015, Technovation, 36, 39–52.
- Diversity measurement of fuel cell field using patent information.
- Jeong D.-H., Kwon Y.-I., 2014, Advanced Materials Research, 1025–1026, 1049–1054.
- Do KIBS make manufacturing more innovative? An empirical investigation of four European countries.
- Ciriaci D., Montresor S., Palma D., 2015, Technological Forecasting & Social Change, <http://dx.doi.org/10.1016/j.techfore.2015.02.008>.
- Early stage identification of breakthroughs at the interface of science and technology: lessons drawn from a landmark publication.
- Winnink J.J., Tijssen R.J.W., 2015, Scientometrics, 102 (1), 113–134.
- Eigenvector centrality measurement using patent information of wind power energy.
- Kwon Y.-I., Jeong D.-H., 2014, Advanced Materials Research, 1025–1026, 944–949.
- Essential intellectual property rights and inventors' involvement in standardization.
- Kang B., Motohashi K., 2015, Research Policy, 44 (2), 483–492.
- Evaluating and comparing the university performance in knowledge utilization for patented inventions.
- Hung W.-C., Ding C.G., Wang H.-J., Lee M.-C., Lin C.-P., 2014, Scientometrics, 102 (2), 1269–1286.
- Evaluation of the industrial and social impacts of science and technology using patents and news articles.
- Iinuma S., Fukuda S., Nanba H., Takezawa T., 2014, Proceedings - 2014 IIAI 3rd International Conference on Advanced Applied Informatics, [IIAI-AAI2014], 6913273, 91–96.
- Evolution of patent citation networks.
- Valverde S., 2014, 2014 Workshop on Complexity in Engineering, [COMPENG2014], 6994688.
- Exploring technological trends for patent evaluation.
- Wang S., Lee W.-C., Lei Z., Zhang X., Kuo Y.-H., 2014, [DSAA2014] - Proceedings of the 2014 IEEE International Conference on Data Science and Advanced Analytics, 7058085, 277–283.
- Exploring the effect of structural patent indicators in forward patent citation networks on patent price from firm market value.
- Suh J.H., 2015, Technology Analysis & Strategic Management, 27 (5), 485–502.
- Flexible display patent landscape and implications from the America Invents Act.
- Featherstone D.J., Werner R.J., Camarce C.A., Cullen S.E., 2014, Nanotechnology Law and Business, 11 (3), 181–194.
- Folded zoom lenses - A review of patent literature.
- Reiley D.J., 2014, Proceedings of SPIE - The International Society for Optical Engineering, 9293, 92931O.
- Forecasting promising technology using analysis of patent information: Focused on next generation mobile communications.
- Choi S.-W., You Y.-Y., Na K.-S., 2014, Journal of Central South University, 21 (11), 4303–4310.
- Forecasting technology success based on patent data.
- Altuntas S., Dereli T., Kusiak A., 2015, Technological Forecasting & Social Change, <http://dx.doi.org/10.1016/j.techfore.2015.03.011>.
- Hedge funds and corporate innovation.
- Wang Y., Zhao J., 2015, Financial Management, <http://dx.doi.org/10.1111/fima.12059>.
- How do the foreign-born perform in inventive activity? Evidence from Sweden.
- Zheng Y., Ejermo O., 2015, Journal of Population Economics, 28 (3), 659–695.
- How important are local inventive milieus: The role of birthplace, high school and university education.
- Ejermo O., Hansen H.K., 2014, Geoforum, <http://dx.doi.org/10.1016/j.geoforum.2014.12.002>.
- How innovation and R&D happen in the upstream oil & gas industry: Insights from a global survey.
- Perrons R.K., 2014, Journal of Petroleum Science and Engineering, 124, 301–312.
- Identification and management of opportunities for technology-based services: a patent-based portfolio approach.
- Kim C., Jeon J.-H., Kim M.-S., 2015, Innovation: Management, Policy and Practice, <http://dx.doi.org/10.1080/14479338.2015.1015671>.
- Identification of hotspot technologies in the field of radiation diagnosis based on bibliometric analysis of global patents.
- Ouyang Z.-L., Fan Y.-B., Zhou P., Chen W., Du R.-R., Chi H., 2014, Proceedings - 2014 International Conference on Information Science, Electronics and Electrical Engineering, [ISEEE2014], 1, 6948073, 84–88.
- Identifying author-inventors from Spain: methods and a first insight into results.
- Maraut S., Martinez C., 2014, Scientometrics, 101 (1), 445–476.
- Identifying trends in battery technologies with regard to electric mobility: Evidence from patenting activities along and across the battery value chain.
- Golembiewski B., Vom Stein N., Sick N., Wiemhofer H.-D., 2015, Journal of Cleaner Production, 87 (1), 800–810.

- Increasing science and technology linkage in fuel cells: A cross citation analysis of papers and patents.
- Huang M.-H., Yang H.-W., Chen D.-Z., 2015, *Journal of Informetrics*, 9 (2), 237–249.
- Industrial districts, technological innovation and I-district effect: A question of volume or value? [DISTRITOS INDUSTRIALES, INNOVACIÓN TECNOLÓGICA Y EFECTO I-DISTRITO: ¿UNA CUESTIÓN DE VOLUMEN O DE VALOR?].
- Galletto V., Domenech R.B., 2014, *Investigaciones Regionales* (30), 27–51.
- Infinite coauthor topic model (Infinite coAT): A non-parametric generalization for coAT model.
- Zhang H., Xu S., Qiao X., Zhang Z., Han H., 2014, *CEUR Workshop Proceedings*, 1292.
- Influence of clusters on the intensity of innovation outputs.
- Zizka M., Rydvalova P., 2014, *Amfiteatru Economic*, 16 (37), 994–1012.
- Innovation behaviours in technology hardware & equipment industry: An empirical analysis based on patent data.
- Michelino F., Cammarano A., Lamberti E., Caputo M., 2014, *Proceedings of the 24th International Business Information Management Association Conference - Crafting Global Competitive Economies: 2020 Vision Strategic Planning and Smart Implementation*, 419–430.
- Innovation diffusion: An epidemiological perspective.
- Evangelatos N., Carayannis E., 2014, *International Journal of Social Ecology and Sustainable Development*, 5 (1), 22–30.
- Innovation efficiency, global diversification, and firm value.
- Gao W., Chou J., 2015, *Journal of Corporate Finance*, 30, 278–298.
- Integrated silicon photonics: Visualisation of patent datasets for mapping technology.
- Sandal N., Kumar A., 2015, *DESIDOC Journal of Library and Information Technology*, 35 (2), 132–137.
- Inter-country knowledge flows in virtualization technologies: Patent citation network.
- Jeon H., Lee B., 2014, *International Conference on ICT Convergence*, 6983297, 811–812.
- International comparative study on nanofiltration membrane technology based on relevant publications and patents.
- Zhai L., Pan Y., Guo Y., Ma Z., Bi F., 2014, *Scientometrics*, 101 (2), 1361–1374.
- Interrelating products through properties via patent analysis.
- Verhaegen P.-A., D'hondt J., Vertommen J., Dewulf S., Duflou J.R., 2014, *Competitive Design - Proceedings of the 19th CIRP Design Conference*, 252–257.
- Intra- and inter-regional research collaboration across organizational boundaries: Evolving patterns in China.
- Sun Y., Cao C., 2015, *Technological Forecasting & Social Change*, <http://dx.doi.org/10.1016/j.techfore.2015.03.013>.
- Invention in energy technologies: Comparing energy efficiency and renewable energy inventions at the firm level.
- Rexhauser S., Loschel A., 2015, *Energy Policy*, <http://dx.doi.org/10.1016/j.enpol.2015.02.003>.
- Invention profiles and uneven growth in the field of emerging nano-energy.
- Guan J., Liu N., 2015, *Energy Policy*, 76, 146–157.
- Inventor team size as a predictor of the future citation impact of patents.
- Breitzman A., Thomas P., 2015, *Scientometrics*, 103 (2), 631–647.
- Investigating the determinants of patent acquisition in biotechnology: an empirical analysis.
- Messeni Petruzzelli A., Natalicchio A., Garavelli A.C., 2015, *Technology Analysis & Strategic Management*, <http://dx.doi.org/10.1080/09537325.2015.1019851>.
- IPRs and international knowledge flows: Evidence from six large emerging countries.
- Montobbio F., Primi A., Sterzi V., 2015, *Tijdschrift voor Economische en Sociale Geografie*, 106 (2), 187–204.
- Keyword selection and processing strategy for applying text mining to patent analysis.
- Noh H., Jo Y., Lee S., 2015, *Expert Systems with Applications*, 42 (9), 4348–4360.
- Knowledge creation through diverse knowledge networks.
- Moslehi A., Linger H., Tanner K., 2013, *Proceedings of the 24th Australasian Conference on Information Systems*, 1–11.
- Knowledge flows, the influence of national R&D structure and the moderating role of public–private cooperation.
- Azagra-Caro J.M., Consoli D., 2014, *Journal of Technology Transfer*, <http://dx.doi.org/10.1007/s10961-014-9382-7>.
- Major factors contributing to wind power diffusion.
- Lehtovaara M., Karvonen M., Kapoor R., Kassi T.S., Pyrhonen J., 2014, *Foresight*, 16 (3), 250–269.
- Markets versus spillovers in outflows of university research.
- Mowery D.C., Ziedonis A.A., 2015, *Research Policy*, 44 (1), 50–66.
- Markets, availability, notice, and technical performance of terahertz systems: Historic development, present, and trends.
- Hochrein T., 2014, *Journal of Infrared, Millimeter, and Terahertz Waves*, 36 (3), 235–254.
- Mathematical simulation of low-temperature conversion cogeneration system in power engineering.
- Gergelizhiu P.S., Khaustov S.A., Tabakaev R.B., Novoseltsev P.U., Kazakov A.V., Zavorin A.S., 2014, *Proceedings of 2014 International Conference on Mechanical Engineering, Automation and Control Systems*, [MEACS2014], 6986901.
- Measuring patent's influence on technological evolution: A study of knowledge spanning and subsequent inventive activity.

- Corredoira R.A., Banerjee P.M., 2015, Research Policy, 44 (2), 508–521.
- Measuring the value of patents with fuzzy multiple criteria decision making: Insight into the practices of the Industrial Technology Research Institute.
- Wang B., Hsieh C.-H., 2015, Technological Forecasting & Social Change, 92, 263–275.
- Melanocortin-4 receptor modulators for the treatment of obesity: a patent analysis (2008–2014).
- Lee, E.C.Y., Carpino, P.A., 2015, Pharmaceutical Patent Analyst, 4 (2), 95–107.
- Methodology for innovative eco-design based on TRIZ.
- Cherifi A., Dubois M., Gardoni M., Tairi A., 2015, International Journal on Interactive Design and Manufacturing, <http://dx.doi.org/10.1007/s12008-014-0255-y>.
- Metrics of innovation: Measuring the Italian gap.
- Benvenuti M., Casolari L., Gennari E., 2014, Politica Economica, 30 (1), 5–50.
- Mining technical topic networks from Chinese patents.
- Han H., Xu S., Zhu L., Qiao X., Gui J., Zhang Z., 2014, CEUR Workshop Proceedings, 1292.
- Monitoring innovation in electrochemical energy storage technologies: A patent-based approach.
- Muller S., Sandner P., Welpe I., 2014, Energy Procedia, 61, 2293–2296.
- Nanotechnologies and green knowledge creation: paradox or enhancer of sustainable solutions?
- Gauthier C., Genet C., 2014, Journal of Business Ethics, 124 (4), 571–583.
- New multi-stage similarity measure for calculation of pairwise patent similarity in a patent citation network.
- Rodriguez A., Kim B., Turkoz M., Lee J.-M., Coh B.-Y., Jeong M.K., 2015, Scientometrics, 103 (2), 565–581.
- Observations on Indian scientific innovation output.
- Thakurta R., Banerjee K., 2014, Innovation Journal, 19 (2), 7.
- On the relation between communication and innovation activities: A comparison of hybrid electric and fuel cell vehicles.
- Budde B., Alkemade F., Hekkert M., 2015, Environmental Innovation and Societal Transitions, 14, 45–59.
- Organizational policies for science, technology and innovation and management of industrial property: A comparative analysis in research institutions [Políticas organizacionais de ciência, tecnologia e inovação e gestão da propriedade industrial: Uma análise comparativa em instituições de pesquisa].
- Quintal R.S., Dos Santos e Silva Riscado Terra B.R.C., 2014, Gestao e Producao, 21 (4), 760–780.
- Patent analyses by business intelligence tools and strategic growth opportunities.
- Ignat V., Becker L., Lorenz P., 2014, Applied Mechanics and Materials, 657, 901–905.
- Patent oppositions and opposition outcomes: evidence from domestic appliance companies.
- Sterlacchini A., 2015, European Journal of Law and Economics, <http://dx.doi.org/10.1007/s10657-015-9494-z>.
- Patent review on synthesis of Red-M₂Si₅N₈(M = Ca, Sr, Ba) phosphors.
- Zhang Y.-P., 2015, Faguang Xuebao/Chinese Journal of Luminescence, 36 (2), 135–140.
- Patents as instruments for exploring innovation dynamics: geographic and technological perspectives on “photovoltaic cells”.
- Leydesdorff L., Alkemade F., Heimeriks G., Hoekstra R., 2015, Scientometrics, 102 (1), 629–651.
- Playing the ‘Name Game’ to identify academic patents in Germany.
- Schoen A., Heinisch D., Buenstorf G., 2014, Scientometrics, 101 (1), 527–545.
- Prospective study of luminous radiation associated technology photosensitive compounds for treatment of diseases.
- Pires-Santos G.M., De Oliveira S.C.P.S., Monteiro J.S.C., Sampaio F.J.P., Brugnara A., Zanin F.A.A., Almeida P., Pinheiro A.L.B., 2015, Progress in Biomedical Optics and Imaging - Proceedings of SPIE, 9309, 93090Y.
- R&D on carbon nanostructures in Russia: Scientometric analysis, 1990–2011.
- Terekhov A.I., 2015, Journal of Nanoparticle Research, 17 (2), 80–105.
- R&D internationalisation patterns in the global pharmaceutical industry: evidence from a network analytic perspective.
- Hu Y., Scherngell T., Qiu L., Wang Y., 2015, Technology Analysis & Strategic Management, 27 (5), 532–549.
- Recent advances in patent analysis network.
- Gavilanes-Trapote J., Rio-Belver R., Cilleruelo E., Larruscain J., 2014, Lecture Notes in Engineering and Computer Science, 3, 307–314.
- Recent patent activities in flexible transparent conductive substrate technology.
- Yan T., Maebius S.B., 2014, Nanotechnology Law and Business, 11 (3), 195–205.
- Recognizing and evaluating the technology opportunities via clustering method and Google Scholar.
- Chiu T.-F., Hong C.-F., 2015, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 9012, 159–169.
- Relatedness and technological change in cities: The rise and fall of technological knowledge in US metropolitan areas from 1981 to 2010.
- Boschma R., Balland P.-A., Kogler D.F., 2015, Industrial and Corporate Change, 24 (1), dtu012, 223–250.
- Research and development projects upon real options view.
- Metelski D., Mihi-Ramirez A., Arteaga-Ortiz J., 2014, Engineering Economics, 25 (3), 283–293.

- Research of a multi-level analytic comprehensive evaluation model and applied.
- Tao Y., Cheng X.F., 2014, Applied Mechanics and Materials, 631–632, 1320–1324.
- Seeing the non-stars: (Some) sources of bias in past disambiguation approaches and a new public tool leveraging labeled records.
- Ventura S.L., Nugent R., Fuchs E.R.H., 2015, Research Policy, <http://dx.doi.org/10.1016/j.respol.2014.12.010>.
- Selling patents at auction: An empirical analysis of patent value.
- Odasso C., Scellato G., Ughetto E., 2015, Industrial and Corporate Change, 24 (2) dtu015, 417–438.
- Service activity-based provision mechanism for cloud computing systems: A case study of cloud patent map system.
- Chen C.-C., Tsai Y.-J., Lin C.-Y., Hu T.-Y., Chen R., 2014, Proceedings - 2014 IEEE International Conference on Granular Computing, [GrC2014], 6982804, 39–44.
- Should cohesion policy focus on fostering R&D? Evidence from Spain [¿Debería la política de cohesión centrarse en el fomento de la I + D?: Evidencia para España].
- Maza A., Villaverde J., Hierro M., 2014, Investigaciones Regionales, (29), 139–164.
- Social capital and national innovation system: A cross-country analysis.
- Ghazinoory S., Bitaab A., Lohrasbi A., 2014, Cross Cultural Management, 21 (4), 453–475.
- Spinoffs and the mobility of U.S. merchant semiconductor inventors.
- Cheyre C., Klepper S., Veloso F., 2015, Management Science, 61 (3), 487–506.
- Technological convergence and the absorptive capacity of standardisation.
- Gauch S., Blind K., 2015, Technological Forecasting & Social Change, 91, 236–249.
- Technological indicators of nanocellulose advances obtained from data and text mining applied to patent documents.
- Milanez D.H., Do Amaral R.M., De Faria L.I.L., Gregolin J.A.R., 2014, Materials Research, 17 (6), 1513–1522.
- Technological innovation capability, knowledge sourcing and collaborative innovation in Gulf Cooperation Council countries.
- Tseng C.-Y., 2014, Innovation: Management, Policy and Practice, 16 (2), 212–223.
- Technological surveillance in advanced steel used in the automotive industry.
- Lopez C. C.A., Zartha Sossa J.W., 2014, Espacios, 35 (8), 1.
- Technology analysis from patent data using latent Dirichlet allocation.
- Kim G., Park S., Jang D., 2014, Advances in Intelligent Systems and Computing, 271, 1, 71–80.
- Technology development and acquisition of competitive competence in mature industry; Patent study on the US and Japan slide fastener industry.
- Takekura T., Hirano M., Tanaka H., 2015, Kyokai Joho Imeji Zasshi/Journal of the Institute of Image Information and Television Engineers, 69 (3), J133–J138.
- Technology effect of international trade: Based on the perspective of technology spillover.
- Xu Y., Chen Y.-L., 2014, Zhongguo Renkou Ziyuan Yu Huan Jing/China Population Resources and Environment, 24 (1), 148–156.
- The coincidence of patent thickets - A comparative analysis.
- Fischer T., Ringler P., 2015, Technovation, 38, 42–49.
- The core-peripheral structure of international knowledge flows: Evidence from patent citation data.
- Chen Z., Guan J., 2015, R & D Management, <http://dx.doi.org/10.1111/radm.12119>.
- The diffusion of patented oil and gas technology with environmental uses: A forward patent citation analysis.
- Duch-Brown N., Costa-Campi M.T., 2015, Energy Policy, <http://dx.doi.org/10.1016/j.enpol.2015.03.001>.
- The effect of patent grant on the geographic reach of patent trade.
- Drivas K., Fafaliou I., Fampiou E., Yannelis D., 2015, Journal of High Technology Management Research, <http://dx.doi.org/10.1016/j.hitech.2015.04.006>.
- The emergence of care robotics - A patent and publication analysis.
- Goeldner M., Herstatt C., Tietze F., 2015, Technological Forecasting & Social Change, 92, 115–131.
- The Emerging Clusters Model: A tool for identifying emerging technologies across multiple patent systems.
- Breitzman A., Thomas P., 2015, Research Policy, 44 (1), 195–205.
- The evolution of South Korea's innovation system: moving towards the triple helix model?
- Yoon J., 2015, Scientometrics, <http://dx.doi.org/10.1007/s11192-015-1541-6>.
- The impact of multilevel networks on innovation.
- Guan J., Zhang J., Yan Y., 2015, Research Policy, 44 (3), 545–559.
- The influence of ethnic community knowledge on Indian inventor innovativeness.
- Almeida P., Phene A., Li S., 2015, Organization Science, 26 (1), 198–217.
- The innovation process of Huawei and ZTE: Patent data analysis.
- Kang B., 2014, China Economic Review, <http://dx.doi.org/10.1016/j.chieco.2014.12.003>.
- The longitudinal study of highly-impact-technology enterprises in the ICT industry: A social network perspective.
- Yeh H.-Y., Huang M.-H., Chen D.-Z., 2014, Journal of Global Information Management, 22 (4), 54–74.

- The nature of innovative activity and the protection of intellectual property in Asia.
- Geng D., Saggi K., 2015, Asian Economic Policy Review, 10 (1), 71–91.
- The ownership of academic patents and their impact: Evidence from five European countries.
- Lissoni F., Montobbio F., 2015, Revue Economique, 66 (1), 143–171.
- The patent landscape of silicon nanowire energy storage devices.
- Sharrott D., Austin E.J.D., 2015, Nanotechnology Law and Business, 12 (1), 20–48.
- The rate and motives of the internationalisation of large firm R&D (1994–2005): Towards a turning point?
- Laurens P., Le Bas C., Schoen A., Villard L., Laredo P., 2015, Research Policy, 44 (3), 765–776.
- The Renaissance Man is not dead! The role of generalists in teams of inventors.
- Melero E., Palomeras N., 2015, Research Policy, 44 (1), 154–167.
- The role of ego network structure in facilitating ego network innovations.
- Carnovale S., Yeniyurt S., 2015, Journal of Supply Chain Management, 51 (2), 22–46.
- The role of exploration/exploitation knowledge process in collaborative knowledge creation.
- Moslehi A., Linger H., Tanner K., 2013, Proceedings of the 24th Australasian Conference on Information Systems.
- The role of innovation in inventory turnover performance.
- Lee H.-H., Zhou J., Hsu P.-H., 2015, Decision Support Systems, <http://dx.doi.org/10.1016/j.dss.2015.02.010>.
- The strategies of patent introduction into patent pools.
- Baron J., Delcamp H., 2015, Economics of Innovation and New Technology, <http://dx.doi.org/10.1080/10438599.2015.1004245>.
- Time gap analysis by the topic model-based temporal technique.
- Jeong D.-H., Song M., 2014, Journal of Informetrics, 8 (3), 776–790.
- Topic based classification and pattern identification in patents.
- Venugopalan S., Rai V., 2015, Technological Forecasting & Social Change, 94, 236–250.
- Trajectories of science and technology and their co-evolution in BRICS: Insights from publication and patent analysis.
- Wong C.-Y., Wang L., 2015, Journal of Informetrics, 9 (1), 90–101.
- Trends in patent applications relating to organic Rankine cycle.
- Fu B.-R., Hsu S.-W., Liu C.-H., 2014, Procedia Engineering, 79 (C), 249–257.
- Understanding trends in the patent domain: User perceptions on trends and trend related concepts.
- Schluss J.M., Mandl T., Schwantner M., Womser-Hacker C., 2014, CEUR Workshop Proceedings, 1292.
- Using TRIZ inventive principles for the analysis of similarities and differences in inventive thinking: A case study of inventions in the field of solar cell modules comparing Japanese and European engineers.
- Moehrle M.G., Paetz H., 2014, International Journal of Technology Intelligence and Planning, 10 (2), 150–165.
- Visual exploration of patent collections with IPC clouds.
- Herr D., Han Q., Lohmann S., Brugmann S., Ertl T., 2014, CEUR Workshop Proceedings, 1292.
- ## 2.2. Patents
- ### 2.2.1. Relating to life sciences and pharmaceuticals
- “Open” disclosure of innovations, incentives and follow-on reuse: Theory on processes of cumulative innovation and a field experiment in computational biology.
- Boudreau K.J., Lakhani K.R., 2015, Research Policy, 44 (1), 4–19.
- A comprehensive review of patented antileishmanial agents.
- Rama, M., Kumar, N.V.A., Balaji, S., 2015, Pharmaceutical Patent Analyst, 4 (1), 37–56.
- A cross-country index of intellectual property rights in pharmaceutical inventions.
- Liu M., La Croix S., 2015, Research Policy, 44 (1), 206–216.
- An empirical analysis of primary and secondary pharmaceutical patents in Chile.
- Sittler, M.J.A., Hall, B., Helmers, C., 2015, NBER Working Paper No. 20995, <http://dx.doi.org/10.3386/w20995>.
- An Indian path to biocapital? The traditional knowledge digital library, drug patents, and the reformulation regime of contemporary ayurveda.
- Gaudilliere J.-P., 2014, East Asian Science, Technology and Society, 8 (4), 391–415.
- Analysis of TRIPS Agreement and the justification of international IP rights protection in the WTO's multilateral trading system, with particular reference to pharmaceutical patents.
- Sundaram J., 2015, Information and Communications Technology Law, <http://dx.doi.org/10.1080/13600834.2015.1004244>.
- Are the gene-patent storm clouds dissipating? A global snapshot.
- Liddicoat J., Whitton T., Nicol D., 2015, Nature Biotechnology, 33 (4), 347–352.
- Bioenergy innovation and energy policy.
- Lundmark R., Backstrom K., 2015, Economics of Innovation and New Technology, <http://dx.doi.org/10.1080/10438599.2014.998862>.
- Biomedical applications of hydrogels: A review of patents and commercial products.
- Calo E., Khutoryanskiy V.V., 2015, European Polymer Journal, 65, 252–267.

- Biotechnological inventions and patentability of life. The US and European experience.
- Stazi A., 2015, Edward Elgar, Cheltenham, ISBN: 9781784715892.
- Click chemistry patents and their impact on drug discovery and chemical biology.
- Xu, H., Jones, L.H., 2015, *Pharmaceutical Patent Analyst*, 4 (2), 109–119.
- Common pools in aquaculture: Exploring patent law, ABS and *sui generis* options.
- Walloe Tvedt M., 2013, Common Pools of Genetic Resources: Equity and Innovation in International Biodiversity Law, 168–189.
- Demand-pull and technology-push public support for eco-innovation: The case of the biofuels sector.
- Costantini V., Crespi F., Martini C., Pennacchio L., 2015, *Research Policy*, 44 (3), 577–595.
- Does governmental venture capital spur invention and innovation? Evidence from young European biotech companies.
- Bertoni F., Tykova T., 2015, *Research Policy*, 44 (4), 925–935.
- ENaC inhibitors for the treatment of cystic fibrosis.
- Butler, R., Hunt, T., Smith, N.J., 2015, *Pharmaceutical Patent Analyst*, 4 (1), 17–27.
- Global research on medical cotton - Evidence from patent landscape study.
- Panja S., Majumder P., Sarkar B.K., Mukim K.K., Hati A., 2015, *Journal of Intellectual Property Rights*, 20 (1), 39–50.
- Law, history and lessons in the CRISPR patent conflict.
- Sherkow J.S., 2015, *Nature Biotechnology*, 33 (3), 256–257.
- Oral insulin-delivery system for diabetes mellitus.
- Kanzarkar, M., Pathak, P.P., Vaidya, M., Brumlik, C., Choudhury, A., 2015, *Pharmaceutical Patent Analyst*, 4 (1), 29–36.
- Synthetic biology and intellectual property rights: six recommendations.
- Minssen, T., Rutz, B., van Zimmeren, E., 2015, *Biotechnology*, 10, (2), 236–241.
- The challenge of patent expiry: A case study of pharmaceutical industry.
- Aamir M., Ahmad S.T., Ali U., Zaman K., Mehmood Q.S., Jamil R.A., 2014, *Mediterranean Journal of Social Sciences*, 5 (27), 1728–1734.
- The exhaustion doctrine and genetic use restriction technologies: A look at *Bowman v Monsanto*.
- Lai J.C., 2014, *Journal of World Intellectual Property*, 17 (5–6), 129–141.
- The Genealogy of a Gene.
- Jackson M.W., 2015, MIT Press, Cambridge, MA, ISBN: 9780262028660.
- The impact of the patent cliff on Pharma-Chem output in Ireland.
- Enright S., Dalton M., 2014, *Journal of the Statistical and Social Inquiry Society of Ireland*, 43, 91–113.
- The world of biotechnology patents.
- Salazar S., 2013, in *Trading in Knowledge: Development Perspectives on TRIPS, Trade and Sustainability*, chapter 11, 117–126.
- Transient receptor potential ankyrin 1 (TRPA1) antagonists.
- Preti, D., Saponaro, G., Szallasi, A., 2015, *Pharmaceutical Patent Analyst*, 4 (2), 75–94.
- ### 2.2.2. Relating to software
- Alice v. CLS bank: Are US business-method and software patents doomed? Part 2.
- Stern R.H., 2014, *IEEE Micro*, 34 (6), 6981850, 98–105.
- Debugging software's schemas.
- Osenga K., 2014, *George Washington Law Review*, 82 (6), 1832–1857.
- Global data meets 3-D printing: The quest for a balanced and globally collaborative solution to prevent patent infringement in the foreseeable 3-D printing revolution.
- Macik T., 2015, *Indiana Journal of Global Legal Studies*, 22 (1), 149–173.
- Managing organisations in Schumpeterian environments: intra-industry diversification through strategic technology alliances and patents.
- Sebrek S.S., 2015, *Technology Analysis & Strategic Management*, 27 (2), 161–181.
- Patenting behaviour and the survival of newly listed European software firms.
- Useche D., 2015, *Industry and Innovation*, 22 (1), 37–58.
- Study on patentability of cloud computing related techniques.
- Cheng G.H., 2014, *Applied Mechanics and Materials*, 608–609, 309–312.
- The role of software intellectual property rights in strengthening industry performance: Evidence from South Korea.
- Suh D., Oh D.-H., 2015, *Technological Forecasting & Social Change*, 92, 140–154.
- ### 2.2.3. Policy and strategic issues
- A combinatorial optimization model for enterprise patent transfer.
- Xie Y., Takala J., Liu Y., Chen Y., 2014, *Information Technology and Management*, <http://dx.doi.org/10.1007/s10799-014-0207-z>.
- A dynamic comparative analysis of international innovation networks in emerging market MNCs.
- Wang Y., Sutherland D., Ning L., 2014, *Industry and Innovation*, 21 (6), 457–475.
- A taxonomy of patent strategies in Taiwan's small and medium innovative enterprises.
- Hsueh C.-C., Chen D.-Z., 2015, *Technological Forecasting & Social Change*, 92, 84–98.

- An economic analysis of deferred examination system: Evidence from a policy reform in Japan.
- Yamauchi I., Nagaoka S., 2015, International Journal of Industrial Organization, 39, 19–28.
- Cultivating Chinese indigenous innovation and knowledge creativity in food industry: Government supports in patent application, protection, sharing and utilization.
- Luo L., Zhou L., 2015, Advance Journal of Food Science and Technology, 7 (5), 326–331.
- Defensive disclosure of patentable inventions under antitrust enforcement.
- Bhaskarabhatla A., Pennings E., 2014, Industry and Innovation, <http://dx.doi.org/10.1080/13662716.2014.987452>.
- Different impacts of scientific and technological knowledge on economic growth: Contrasting science and technology policy in East Asia and Latin America.
- Kim Y.K., Lee K., 2015, Asian Economic Policy Review, 10 (1), 43–66.
- Effects of government financial incentives on firms' innovation performance in China: Evidences from Beijing in the 1990s.
- Guan J.C., Yam R.C.M., 2015, Research Policy, 44 (1), 273–282.
- Energy technology innovation in Brazil.
- Emodi N.V., Bayaraa Z., Yusuf S.D., 2015, International Journal of Energy Economics and Policy, 5 (1), 263–287.
- Environmental regulation and the cross-border diffusion of new technology: Evidence from automobile patents.
- Dechezlepretre A., Neumayer E., Perkins R., 2015, Research Policy, 44 (1), 244–257.
- Exploring car manufacturers' responses to technology-forcing regulation: The case of California's ZEV mandate.
- Wesseling J.H., Farla J.C.M., Hekkert M.P., 2015, Environmental Innovation and Societal Transitions, <http://dx.doi.org/10.1016/j.eist.2015.03.001>.
- India reviews patent policy: Can it snip contested clauses?
- Harachand S., 2015, Contract Pharma, http://www.contractpharma.com/issues/2015-01-01/view_india-report/india-reviews-patent-policy.
- Influence of patent policy in the South on the research and development of the North: Exploration of the foreign direct investment channel.
- Sharma R., 2015, Journal of World Intellectual Property, 18 (1–2), 29–40.
- Information- and rivalry-based perspectives on reactive patent litigation strategy.
- Chen Y.-M., Ni Y.-T., Liu H.-H., Teng Y.-M., 2015, Journal of Business Research, 68 (4), 788–792.
- Knowledge creation and exploitation in Italian universities: The role of internal policies for patent activity.
- Romano M., Giudice M.D., Nicotra M., 2014, Journal of Knowledge Management, 18 (5), 952–970.
- Leveraging intellectual property rights to encourage green product design and remanufacturing for sustainable waste management.
- Krystofik M., Wagner J., Gaustad G., 2015, Resources, Conservation and Recycling, 97, 44–54.
- Mergers and acquisitions strategies for industry leaders, challengers, and niche players: Interaction effects of technology positioning and industrial environment.
- Lin B.-W., Chen W.-C., Chu P.-Y., 2015, IEEE Transactions on Engineering Management, 62 (1), 7001580, 80–88.
- Multinational firms and the internationalization of green R&D: A review of the evidence and policy implications.
- Noailly J., Ryfisch D., 2015, Energy Policy, <http://dx.doi.org/10.1016/j.enpol.2015.03.002>.
- Patent Law Treaty: Promises not delivered-how the negotiations resulted in ambiguities in the Treaty.
- Mulder C., 2014, Journal of World Intellectual Property, 17 (5–6), 160–190.
- Patently wrong? Firm strategy and the decision to disband technological assets.
- Lowe R.A., Veloso F.M., 2015, European Management Review, <http://dx.doi.org/10.1111/emre.12044>.
- Research on the impact of China's 'independent innovation policy' on patent licensing's geographical evolution in strategic emerging industries.
- Yang X., Gu X., Wang Y., 2015, Communications in Computer and Information Science, 482, 653–663.
- Standards, innovation, and latecomer economic development: Conceptual issues and policy challenges.
- Ernst D., Lee H., Kwak J., 2014, Telecommunications Policy, 38 (10), 853–862.
- The impact of patent protection on US pharmaceutical exports to developing countries.
- Boring A., 2015, Applied Economics, 47 (13), 1314–1330.
- The latecomer strategy for global ICT standardization: Indigenous innovation and its dilemma.
- Wang P., Kwak J., Lee H., 2014, Telecommunications Policy, 38 (10), 933–943.
- The organizational advantage in early inventing and patenting: Empirical evidence from interference proceedings.
- Laplume A.O., Xavier-Oliveira E., Dass P., Thakur R., 2015, Technovation, <http://dx.doi.org/10.1016/j.technovation.2015.03.005>.
- When and how to support renewables?—Letting the data speak.
- Zachmann G., Peruzzi M., 2015, Green Energy and Technology, 164, 291–332.

2.2.4. Other patent topics

- An examination of the antecedents and implications of patent scope.
- Novelli E., 2015, Research Policy, 44 (2), 493–507.

- Chemical engineering and the law-case examples in industrial litigation.
- Almaula S., 2014, Environmental Division 2014 - Core Programming Area at the 2014 AIChE Spring Meeting and 10th Global Congress on Process Safety, 354–360.
- Commercialization of university inventions: Individual and institutional factors affecting licensing of university patents.
- Wu Y., Welch E.W., Huang W.-L., 2015, Technovation, 36, 12–25.
- Competing visions of patentable subject matter.
- Chiang T.-J., 2014, George Washington Law Review, 82 (6), 1858–1906.
- Consensus modeling in multiple criteria multi-expert real options-based valuation of patents.
- Barbazza A., Collan M., Fedrizzi M., Luukka P., 2014, Advances in Intelligent Systems and Computing, 322, 269–278.
- Divergent patterns of engagement in Internet standardization: Japan, Korea and China.
- Contreras J.L., 2014, Telecommunications Policy, 38 (10), 914–932.
- Do patents and copyrights give their holders excessive control over the material property of others?
- Varelius J., 2014, Ethics and Information Technology, 16 (4), 299–305.
- Does the mobility of R&D labor increase innovation?
- Kaiser U., Kongsted H.C., Ronde T., 2015, Journal of Economic Behavior and Organization, 110, 91–105.
- Enforcement of essential patents and industry standards: more economic or innovative approach?
- Lee S.-H., 2015, Asia-Pacific Journal of Accounting and Economics, 22 (1), 55–77.
- Expansion of design patent: From united patents to continuation patents.
- Chen R., Chang H.-Y., 2014, Journal of Industrial and Production Engineering, 32 (1), 16–23.
- Firm patenting, innovations, and government institutional support as a double-edged sword.
- Shu C., Wang Q., Gao S., Liu C., 2015, Journal of Product Innovation Management, 32 (2), 290–305.
- First mover advantages and optimal patent protection.
- Scherer F.M., 2015, Journal of Technology Transfer, <http://dx.doi.org/10.1007/s10961-015-9394-y>.
- Flook says one thing, Diehr says another: A need for housecleaning in the law of patentable subject matter.
- Golden J.M., 2014, George Washington Law Review, 82 (6), 1765–1795.
- Forcing patent claims.
- Chiang T.-J., 2015, Michigan Law Review, 113 (4), 513–558.
- Grey in the innovation process.
- Jeffery K.G., Asserson A., 2013, GL-Conference Series: Conference Proceedings, 19–23.
- Imperfect patent protection and innovation.
- Krasteva S., 2014, Journal of Industrial Economics, 62 (4), 682–708.
- Indirect and feedback effects as measure of knowledge spillovers in French regions.
- Moussa I., Laurent T., 2015, Applied Economics Letters, 22 (7), 511–514.
- Intellectual property protection mechanisms in collaborative new product development.
- Manzini R., Lazzarotti V., 2015, R & D Management, <http://dx.doi.org/10.1111/radm.12126>.
- Knowledge, location, and internationalization: empirical evidence for manufacturing SMEs.
- Lejpras A., 2015, Economics of Innovation and New Technology, <http://dx.doi.org/10.1080/10438599.2014.997460>.
- More is better: evidence that joint patenting leads to quality innovation.
- Briggs K., Wade M., 2014, Applied Economics, 46 (35), 4370–4379.
- More stars stay, but the brightest ones still leave: Job hopping in the shadow of patent enforcement.
- Ganco M., Ziedonis R.H., Agarwal R., 2015, Strategic Management Journal, 36 (5), 659–685.
- Nanotechnologies and the law of patents: A collision course.
- Vaidhyanathan S., 2013, Nanotechnology Risk, Ethics and Law, Chapter 18, 225–236.
- Novelty does not necessarily mirror infringement: product-by-process claims.
- Smyth, D., 2015, Journal of Intellectual Property Law and Practice, 10 (2), 218–319.
- Patent eligibility post-Myriad: A reinvigorated judicial wildcard of uncertain effect.
- Holman C.M., 2014, George Washington Law Review, 82 (6), 1796–1831.
- Patents and cumulative innovation: Causal evidence from the courts.
- Galasso A., Schankerman M., 2015, Quarterly Journal of Economics, 130 (1) qju029, 317–369.
- Pedagogical experience in engineering education: Studying cases of patent dispute as a method for both innovation and legal education.
- Lai R.-J., 2014, ASME International Mechanical Engineering Congress and Exposition, Proceedings (IMECE), 5.
- Quality signals? The role of patents, alliances, and team experience in venture capital financing.
- Hoenig D., Henkel J., 2015, Research Policy, 44 (5), 1049–1064.
- R&D collaboration with uncertain intellectual property rights.

- Czarnitzki D., Hussinger K., Schneider C., 2015, Review of Industrial Organization, 46 (2), 183–204.
- Same difference? Minority ethnic inventors, diversity and innovation in the UK.
- Nathan M., 2015, Journal of Economic Geography, 15 (1), 129–168.
- Selection Biases in Complementary R&D Projects.
- Choi J.P., Gerlach H., Journal of Economics and Management Strategy, 23 (4), 899–924.
- Structure of Chinese city network as driven by technological knowledge flows.
- Ma H., Fang C., Pang B., Wang S., 2015, Chinese Geographical Science, <http://dx.doi.org/10.1007/s11769-014-0731-0>.
- The impact of patent litigation on shareholder value in the smartphone industry.
- Nam S., Nam C., Kim S., 2015, Technological Forecasting & Social Change, <http://dx.doi.org/10.1016/j.techfore.2015.01.015>.
- The Vonage trilogy: A case study in “patent bullying”.
- Sichelman T., 2015, Notre Dame Law Review, 90 (2), 543–578.
- Threshold effects of environmental regulation on total factor energy efficiency in China.
- Huang L.Y., Xie H.Q., 2015, Open Fuels and Energy Science Journal, 8 (1), 33–37.
- Two methodologies for predicting patent litigation outcomes: Logistic regression versus classification trees.
- Cowart T.W., Lirely R., Avery S., 2014, American Business Law Journal, 51 (4), 843–877.
- Unpacking Patent Assertion Entities (PAEs).
- Cotropia C.A., Kesan J.P., Schwartz D.L., 2014, Minnesota Law Review, 99 (2), 649–703.
- Valuation of patented product features.
- Allenby G.M., Brazell J., Howell J.R., Rossi P.E., 2014, Journal of Law and Economics, 57 (3), 629–663.
- What makes patent pools successful? An analysis of optical disc and mobile phone industries.
- Rayna T., Striukova L., 2015, International Journal of Entrepreneurship and Innovation Management, 19 (1–2), 6–29.
- Who is afraid of pirates? An experiment on the deterrence of innovation by imitation.
- Engel C., Kleine M., 2015, Research Policy, 44 (1), 20–33.
- ### 2.3. Trademarks and domain names
- #### 2.3.1. Trademarks
- Application of a hybrid orthogonal function system on trademark image retrieval.
- Wang X., Wang Y., Sun H., Song R., 2014, Journal of Advanced Mechanical Design, Systems and Manufacturing, 8 (6), Paper No.13–00296.
- Content based image retrieval system based on watershed transform for trademark images.
- Crysidian C., 2015, Proceedings - 2014 Electrical Power, Electronics, Communications, Control and Informatics Seminar, [IECCIS2014] - In Conjunction with the 1st Joint Conference UB-UTHM, 7003730, 116–120.
- Design and implementation of trademark image retrieval system.
- Laiwen Y., Ping S., Yanhong L., 2015, [ICALIP2014] - 2014 International Conference on Audio, Language and Image Processing, Proceedings, 7009778, 160–165.
- Don't let China give your trademark a bad name.
- Eagleton N., 2014, Drapers (December 6, 2014), 10.
- Feature analysis for content-based trademark retrieval.
- Aires S.B.K., Freitas C.O.A., Oliveira L.E.S., 2014, 27th International Conference on Computer Applications in Industry and Engineering, [CAINE2014], 245–249.
- #### 2.3.2. Domain names
- No entries.
- ### 2.4. Designs
- Expansion of design patent: From united patents to continuation patents.
- Chen R., Chang H.-Y., 2015, Journal of Industrial and Production Engineering, 32 (2), 96–103.
- ### 2.5. Other IP; general IP issues
- #### 2.5.1. Policy and strategic issues
- No entries.
- #### 2.5.2. Other IP issues
- Branding of geographical indications in India: A paradigm to sustain its premium value.
- Aggarwal R., Singh H., Prashar S., 2014, International Journal of Law and Management, 56 (6), 431–442.
- Copyright trolling, an empirical study.
- Sag M., 2015, Iowa Law Review, 100 (3), 1105–1147.
- Happy IP: replacing the law and economics justification for intellectual property rights with a well-being approach.
- Derclaye E., Taylor T., 2015, European Intellectual Property Review, 37 (4), 197–209.
- Priority certificates: a proposal for non-intrusive forms of IP.
- Comanescu G., Hyndman K.G., 2015, Journal of Intellectual Property Law and Practice, 10 (6), 429–447.
- That's not fair! Clarifying copyright and trademark fair use for business managers.
- Brown E.J., Nagy P.F., 2015, Business Horizons, 58 (1), 17–24.
- The legal framework for the protection of geographical indications in Ethiopia: A critical review.

- Hirko S.B., 2014, *Journal of African Law*, 58 (2), 210–230.
- The Semiconductor Integrated Circuit Layout Design Act 2000 in India and the mischief of freedom of infringement.
- Bindal, S., 2015, *Journal of Intellectual Property Law and Practice*, 10 (5), 378–383.
- 2.6. Historical**
- Amateur or professional? A new look at nineteenth-century patentees in Norway.
- Basberg B.L., 2015, *Scandinavian Economic History Review*, 63 (1), 24–44.
- Borrowing brilliance: Technology transfer across sectors in the early industrial revolution.
- Tann J., 2015, *International Journal for the History of Engineering and Technology*, 85 (1), 94–114.
- Certificates of correction corrected: Their history and retroactive application.
- Priest C.A., 2015, *Stanford Law Review*, 67 (4), 961–998.
- Diversity of knowledge in patent co-authorship networks – case studies in the Victorian biotechnology industry.
- Moslehi A., Linger H., Tanner K., 2014, *VINE*, 44 (4), 496–518.
- Invented by law: Alexander Graham Bell and the patent that changed America.
- Beauchamp C., 2015, *Harvard University Press*, Cambridge, MA, ISBN 9780674368064.
- The British Patent System during the Industrial Revolution, 1700–1852.
- Bottemley S., 2015, *European Intellectual Property Review*, 37 (5), 335–336.
- The myth of the early aviation patent hold-up-how a US government monopsony commandeered pioneer airplane patents.
- Katzenbach R.D., Howells J., 2015, *Industrial and Corporate Change*, 24 (1) dtu003, 1–64.

Susan Bates
Shell International Ltd,
York Road,
London SE1 7NA,
United Kingdom

E-mail address: susan.bates@shell.com.