

Bibliography

- Abbott, Alison*, Europe Rules Against Stem-Cell Patents, 471 Nature 280 (2011).
- Abramowicz, Michael*, Perfecting Patent Prizes, Law and Economics Working Paper Series No 01-29, Arlington: George Mason University School of Law (2003).
- Abramowicz, Michael/Duffy, John F.*, Intellectual Property for Market Experimentation, 83 N.Y.U. L. Rev. 337 (2008).
- Abramowicz, Michael/Duffy, John F.*, The Inducement Standard of Patentability, 120 Yale L.J. 1590 (2011).
- Agranat, Israel/Caner, Hava*, Intellectual Property and Chirality of Drugs, 4 Drug Discov. Today 313 (1999).
- Agranat, Israel/Wainschtein, Silvy R.*, The Strategy of Enantiomer Patents of Drugs, 15 Drug Discov. Today 163 (2010).
- Alazraki, Melly*, The 10 Biggest-Selling Drugs that are about to Lose Their Patents, DailyFinance, February 27, 2011.
- Allison, John R./Lemley, Mark A.*, The Growing Complexity of the United States Patent System, 82 B.U. L. Rev. 77 (2002).
- Angell, Marcia*, The Pharmaceutical Industry: To whom Is It Accountable?, 342 New Eng. J. Med. 1902 (2000).
- Angell, Marcia*, The Truth about the Drug Companies: How They Deceive Us and What to Do about It, New York: Random House (2004).
- Ann, Christoph*, Patent Trolls – Menace or Myth? in: Zu Waldeck und Pyrmont, Wolrad P., Adelmann, Martin J., Brauneis, Robert, Drexl, Joseph, Nack, Ralph (eds), Patents and Technological Progress in a Globalized World, Liber Amicorum Joseph Straus, Berlin, Heidelberg: Springer (2009).
- Anonymous*, Bigger isn't Always Better, 418 Nature 353 (2002).
- Anonymous*, Daiichi Sankyo to Buy Control of Ranbaxy of India for up to \$4.6 Billion, New York Times, June 11, 2008.
- Anonymous*, The Disclosure Function of the Patent System (or Lack Thereof), 118 Harv. L. Rev. 2007(2005).
- Anten, Lewis*, What's new with novelty - Section 102 of S. 643, 54 J. Pat. Off. Soc'y 75 (1972).
- Arbex, Danieli S. Costa*, Essay on Incentives for Pharmaceutical Research: A Double Push-Pull Program, Ann Arbor: Proquest LLC (2009).
- Ariëns, Everhardus J./Wuis, Eveline W.*, Bias in Pharmacokinetics and Clinical Pharmacology, 42 Clin. Pharmacol. & Ther. 361 (1987).
- Armstrong, Drew*, Eli Lilly CEO Says Cost Cutting Won't Solve Drug Sales Loss, Bloomberg, April 12, 2012, available at: <http://www.bloomberg.com/news/2012-04-12/eli-lilly-ceo-says-cost-cutting-won-t-solve-drug-revenue-losses.html>.

Bibliography

- Arora, Ashish/Ceccagnoli, Marco/Cohen, Wesley M.*, R&D and the Patent Premium, 26 Int. J. Ind. Organ. 1153 (2008).
- Arrow, Kenneth*, Economic Welfare and the Allocation of Resources for Invention, in The Rate and Direction of Inventive Activity 609, 619-22, Princeton: Princeton University Press of Nat'l Bureau of Econ. Research (1962).
- Arrowsmith, John/Harrison, Richard*, Drug Repositioning: The Business Case and Current Strategies to Repurpose Shelved Candidates and Marketed Drugs, in: Barratt, Michael J. and Frail, Donald E. (eds), Drug Repositioning: Bringing New Life to Shelved Assets and Existing Drugs, New Jersey: John Wiley & Sons, Inc (2012).
- Arundel, Anthony/Kabla, Isabelle*, What Percentage of Innovations are patented? Empirical Estimates for European Firms, 27 Res. Policy, 127, 138 (1998).
- AstraZeneca*, AstraZeneca Annual Report 2010, available at: http://www.astrazeneca-annualreports.com/AZ_AR_100311_single.pdf.
- AstraZeneca*, AstraZeneca Annual Report 2011, available at: http://www.astrazeneca-annualreports.com/2011/documents/pdfs/annual_report_pdf_entire.pdf.
- AstraZeneca*, AstraZeneca Annual Review 2000, available at: <http://www.astrazeneca.com/cs/Satellite?blobcol=urldata&blobheader=application%2Fpdf&blobheadername1=Content-Disposition&blobheadername2=MDT-Type&blobheader-value1=inline%3B+filename%3DAnnual-Review.pdf&blobheadervalue2=abinary%3B+charset%3DUTF-8&blobkey=id&blobtable=MungoBlobs&blobwhere=1285635038761&ssbinary=true>.
- Avorn, Jerry*, Sending Pharma Better Signals, 309 Science 669 (2005).
- Bacher/Melullis*, in: Benkard, Georg, et al., Patentgesetz, Gebrauchsmustergesetz, 10th Ed. München: C. H. Beck (2006).
- Barnett, Jonathan M.*, Cultivating the Genetic Commons: Imperfect Patent Protection and the Network Model of Innovation, 37 San Diego L. Rev. 987 (2000).
- Barratt, Michael J./Frail, Donald E.*(eds), Drug Repositioning: Bringing New Life to Shelved Assets and Existing Drugs, New Jersey: John Wiley & Sons, Inc (2012).
- Bartfai, Tamas/Lees, Graham V.*, Drug Discovery: From Bedside to Wall Street, Burlington: Elsevier Academic Press (2006).
- Barth, Gerhard/Zimmer, Franz-Josef*, The Olanzapine Patent Dispute: German Court Grants a Preliminary Injunction on a Patent Invalidated by the First-Instance Federal Patent Court, 28 Biotechnology L. Rep. 532 (2008).
- Barton, John H./Abbott, Frederick M./Correa, Carlos M./Drexler, Josef/Foray, Dominique/Marchant Ron* (eds), Views on the Future of the Intellectual Property System, Geneva: ICTSD (2007).
- Beary, John F.*, Chirality and Drug Development, 339 Lancet 495 (1992).
- Belenzon, Sharon*, Knowledge Flow and Sequential Innovation: Implications for Technologz diffusion, R&D and Market Value, Discussion Paper Series No 256, Oxford: Oxford University (2006).
- Benjamin, Stuart M./Rai, Arti K.*, Who's Afraid of the APA? What the Patent System Can Learn from Administrative Law, 95 Geo. L. J. 269 (2007).

- Benkard, Georg/Asendorf, Claus Dietrich/Rogge, Rüdiger/Bacher, Klaus/Schäfers, Alfons/Goebel, Frank Peter/Scharen, Uwe/Grabinski, Klaus/Schmidt, Christof/Melullis, Klaus-Jürgen/Ullmann, Eike* (eds.), *Patentgesetz, Gebrauchsmustergesetz*, 10th Ed. München: C. H. Beck (2006).
- Berger, Jonathan M.*, Tripping over Patents: AIDS, Access to Treatment and the Manufacturing of Scarcity, 17 *Conn. J. Int'l L.* 157 (2002).
- Berndt, Ernst R.*, Pharmaceuticals in U.S. Health Care: Determinants of Quantity and Price, 16 *J. Econ. Perspect.* 45 (2002).
- Bernstein, Joel*, *Polymorphism in Molecular Crystals*, New York: Oxford University Press (2002).
- Bessen, James/Maskin, Eric*, *Sequential Innovation, Patents and Imitation*, Working Paper No 11/99, Massachusetts: MIT (1999).
- Bessen, James/Maskin, Eric*, *Sequential Innovation, Patents, and Imitation*, 40 *RAND J. Econ.* 611 (2009).
- Bessen, James/Meurer, Michael J.*, *Patent Failure: How Judges, Bureaucrats, and Lawyers Put Innovators at Risk*, Princeton: Princeton University Press (2008).
- Blair, Roger D./Cotter, Thomas F.*, Rethinking Patent Damages, 10 *Tex. Intell. Prop. L. J.* 1 (2001).
- Blanco White, Thomas A.*, *Patents for inventions and the protection of industrial designs*, London: Stevens & Sons, 5th Ed. (1983).
- Bohsem, Guido*, *Wie Medikamente Billiger Werden Sollen*, *Süddeutsche Zeitung*, January 23, 2012, available at: <http://www.sueddeutsche.de/wirtschaft/pharmaindustrie-wie-medikamente-billiger-werden-sollen-1.1264493>.
- Bond, Ronald S./Lean, David F.*, *Sales, Promotion, and Product Differentiation in Two Prescription Drug Markets*, Washington, DC: U.S. Federal Trade Commission. Bureau of Economics (1977).
- Boyd, Karen I.*, Nonobviousness and the Biotechnology Industry: A Proposal for a Doctrine of Economic Nonobviousness, 12 *Berkeley Tech. L.J.* 311 (1997).
- Brandi-Dohrn, Matthias*, *Der zu weite Patentsanspruch*, *GRUR Int* 1995, 541.
- Brandt, Karsten*, *Die Schutzfrist des Patents*, Munich: C.H. Beck (1996).
- Bresalier, et al.*, Cardiovascular Events Associated with Rofecoxib in a Colorectal Adenoma Chemoprevention Trial, 352 *New Eng. J. Med.* 1092, 1098 (2005).
- Brittain, Harry G.* *Theory and Principles of Polymorphic Systems*, in: Brittain, Harry G. (ed), *Polymorphism in Pharmaceutical Solids*, New York: Informa Healthcare, 2nd Ed. (2009).
- Brown, Lucille J.*, The Markush Challenge, 31 *J. Chem. Inf. Comp. Sci.* 2 (1991).
- Bublak, Wolfgang/Coehn, Markus.*, Offenbarungsgehalt der Vorveröffentlichung einer chemischen Strukturformel (Disclosure in the Prior Publication of a Chemical Structural Formula), *GRUR* 2009, 382.
- Buhrow, Astrid/Nordemann, Jan B.*, Grenzen ausschließlicher Rechte geistigen Eigentums durch Kartellrecht (Q 187), *GRUR Int* 2005, 407.
- Burgess, Lesley J./Terblanche, Marli*, The Future of the Pharmaceutical, Biological and Medical Device Industry, 3 *Open Access J. Clin. Trials* 45 (2011).

Bibliography

- Burk, Dan L./Lemley Mark A., Biotechnology's Uncertainty Principle, 54 Case W. Res. L. Rev. 691 (2003).
- Burk, Dan L./Lemley Mark A., Is Patent Law Technology-Specific?, 17 Berkeley Tech. L.J. 1155 (2002).
- Burk, Dan L./Lemley Mark A., Policy Levers in Patent Law, 89 Va. L. Rev. 1575 (2003).
- Cadot, Olivier/Lippman, Steven, Barriers to Imitation and the Incentive to Innovate", Working Paper No. 434, Los Angeles: Western Management Science Institute (1995).
- Caira, Mino R., Crystalline Polymorphism of Organic Compound, in: Weber, Edwin, Design of Organic Solids, Berlin: Springer (1998).
- Caldwell, John, Do Single Enantiomers Have Something Special to Offer?, 16 Hum. Psychopharm. S67 (2001).
- Carmichael, Begley S., Desperately Seeking Cures, News Wk. May 15, 2010, available at: <http://www.newsweek.com/id/238078>.
- Chakrabarti, Jiban K./Horsman, Linda/Hotten Terrence M/Pullar Ian A./Tupper David E./Wright Francesca C., 4-Piperaziny-10H-thieno[2,3-b][1,5]benzodiazepines as potential neuroleptics, 28 J. Med. Chem. 874 (1980).
- Chandy, Rajesh/Hopstaken, Brigitte/Narasimhan, Om/Prabhu, Jaideep, From Invention to Innovation: Conversion Ability in Product Development, 43 J. Marketing Res. 494 (2006).
- Chang, Howard F., Patent Scope, Antitrust Policy, and Cumulative Innovation, 26 RAND J. Econ. 34 (1995).
- Chisum, Donald S., Chisum on Patents, Newark: LexisNexis (2012).
- Chisum, Donald S., Comment: Anticipation, Enablement and Obviousness: An Eternal Glden Braid, 15 AIPLA Q. J. 57 (1987).
- Chou, Teyu/Haller, Hans, The Division of Profit in Sequential Innovation Reconsidered, Department of Economics Working Paper no. E95-02, Blacksburg: Virginia Polytechnic Institute and State University (1995).
- Christie, Andrew F./Dent, Chris/McIntyre, Peter/Wilson, Lachlan/Studdert, David M., Patents Associated with High-Cost Drugs in Australia, 8 PLoS Med 1 (2013).
- Cockburn, Iain M., Is the Pharmaceutical Industry in a Productivity Crisis?, in: Jaffe, Adam B., Lerner Josh, and Stern, Scott (eds), Innovation Policy and Economics, volume 7, Cambridge: MIT press (2006).
- Coggio, Brian D./Cerrito, Francis D., The Application of the Patent Laws to the Drug Approval Process, 52 Food & Drug L.J. 345 (1997).
- Cohen, Mesley M./Nelson, Richard R./Walsh, John P., Protecting Their Intellectual Assets: Appropriability Conditions and Why U.S. Manufacturing Firms Patent (or Not), NBER Working Paper No. 7552. Cambridge: NBER (2000).
- Comanor, William S., Research and Competitive Product Differentiation in the Pharmaceutical Industry in the United States, 31 Economia, 372 (1964).
- Cornelli, Francesca/Schankerman, Mark, Patent renewals and R&D Incentives, 30 RAND J. Econ. 197 (1999).
- Cornish, William R./Llewelyn, David/Aplin, Tanya, Intellectual Property : Patents, Copyright, Trade marks and Allied Rights, London: Sweet & Maxwell, 7th Ed. (2010).

- Correa, Carlos M.*, Public Health and Patent Legislation in Developing Countries, 3 Tul. J. Tech. & Intell. Prop. 1 (2001).
- Correa, Carlos*, Guidelines for the Examination of Pharmaceutical Patents: Developing a Public Health Perspective - A Working Paper, Geneva: ICTSD, WHO, UNCTAD (2006).
- Crews, Kenneth D.*, Looking Ahead and Shaping the Future: Provoking Change in Copyright Law, 49 J. Copyright Soc'y U.S.A. 549 (2001).
- Crouch, Dennis D.*, Nil: the Value of Patents in a Major Crisis such as an Influenza Pandemic, 39 Seton Hall L. Rev. 1125 (2009).
- Crouch, Dennis D.*, The Patent Lottery: Exploiting Behavioral Economics for the Common Good, 16 Geo. Mason L. Rev. 141 (2008).
- Dam, Kenneth W.*, The Economic Underpinnings of Patent Law, 23 J. Legal Stud. 247 (1994).
- Daniels, Jonathan M./Nestmann, Earle R./Kerr, Alex*, Development of Stereoisomeric (Chiral) Drugs: A Brief Review of Scientific and Regulatory Considerations, 31 Drug Info. J. 639 (1997).
- Danzon, Patricia M./Epstein, Andrew/Nicholson, Sean*, Mergers and Acquisitions in the Pharmaceutical and Biotech Industries, 28 Manage. Decis. Econ. 307 (2007).
- Darrow, Jonathan J.*, The Patentability of Enantiomers: Implications for the Pharmaceutical Industry, 2 Stan. Tech. L. Rev. 1 (2007).
- Dasgupta, Partha*, Patents, Priority and Imitation or the Economics of Races and Waiting Games, 98 Econ. J. 66 (1988).
- Davis, Steven J./Murphy, Kevin M./Topel, Robert H.*, Entry, Pricing and Product Design in an Initially Monopolized Market, NBER Working Paper No. 8547, Cambridge: NBER (2001).
- den Exter, André*, The Pharmaceutical Sector Inquiry: 'Hamlet' in a Nutshell, 17 Eur. J. Health L. 125 (2010).
- Denicolò, Vincenzo*, Patent Races and Optimal Patent Policy, 44 J. Ind. Econ. 249 (1996).
- Denicolò, Vincenzo*, Two-Stage Patent Races and Patent Policy, 31 RAND J. Econ. 488 (2000).
- Denicolò, Vincenzo/Zanchettin, Piercarlo*, How should forward patent protection be provided?, 20 Int'l. J. Indus. Org. 801 (2002).
- Dessementet, François*, The Legal Protection of Know-How in the United States of America, Geneva: Librairie Droz, H.W. Clarke trans., 2nd Ed. (1976).
- DeStevens, George*, Lead Structure Discovery and Development, in: Hansch, Corwin, Sammes, Peter G., and Taylor, John B. (eds.), Comprehensive Medicinal Chemistry: The Rational Design, Mechanistic Study and Therapeutic Applications of Chemical compounds, Oxford: Pergamon Press (1990).
- Deutsches Patent- und Markenamt*, Jahresbericht 2007, München: DPMA (2008).
- DG Competition*, Pharma Sector Inquiry - Final Report (2009), available at http://ec.europa.eu/competition/sectors/pharmaceuticals/inquiry/staff_working_paper_part1.pdf.

Bibliography

- Dickson, Michael/Gagnon, Jean Paul*, Key Factors in the Rising Cost of New Drug Discovery and Development, 3 *Nat. Rev. Drug Discov.* 417 (2004).
- Dickson, Michael/Gagnon, Jean Paul*, The Cost of New Drug Discovery and Development, 4 *Discov. Med.* 172 (2004).
- DiMasi, Joseph A./Hansen, Ronald W./Grabowski, Henry G.*, Cost of Innovation in the Pharmaceutical Industry, 10 *J. Health. Econ.* 107 (1991).
- DiMasi, Joseph A./Hansen, Ronald W./Grabowski, Henry G.*, The Price of Innovation New Estimates of Drug Development Costs, 22 *J. Health Econ.* 151 (2003).
- Dinwoodie, Graeme B./Dreyfuss, Rochelle C.*, Diversifying without Discriminating: Complying with the Mandates of the TRIPS Agreement, 13 *Mich. Telecomm. Tech. L. Rev.* 445 (2007).
- Doi, Teruo*, The Territoriality Principle of Patent Protection and Conflict of Laws: A Review of Japanese Court Decisions, 26 *Fordham Int'l L.J.* 377 (2002).
- Domeij, Bengt*, *Pharmaceutical patents in Europe*, Hague: Kluwer Law International (2000).
- Donohue, Julie M/Cevasco, Marisa/Rosenthal, Meredith B.*, A Decade of Direct-to-Consumer Advertising of Prescription Drugs, 357 *N. Eng J. Med.* 673 (2007).
- Drexl, Josef*, Responding to the Challenges for Development with a Competition-Oriented Approach, in: Barton, John H., Abbott, Frederick M., Correa, Carlos M., Drexl, Josef, Foray, Dominique, and Marchant Ron (eds), *Views on the Future of the Intellectual Property System*, Geneva: ICTSD (2007).
- Drexl, Josef/Hilty, Reto M./Boy, Laurence/Godt, Christine/Remiche, Bernard* (eds), *Technology and Competition : Contributions in Honour of Hanns Ullrich*, Bruxelles: Larcier (2009).
- Duffy, John F.*, Rethinking the Prospect Theory of Patents, 71 *U. Chi. L. Rev.* 439 (2004).
- Duffy, John F.*, Rules and Standards on the Forefront of Patentability, 51 *Wm. & Mary L. Rev.* 609 (2009).
- Durham, Alan L.*, *Patent Law Essentials: A Concise Guide*, Westport: Praeger (1999).
- Dutfield, Graham*, *Intellectual Property Rights and the Life Science Industries*, London: World Scientific Publishing Co., 2nd Ed. (2009).
- Dutfield, Graham/Suthersanen, Uma*, The Innovation Dilemma: Intellectual Property and the Historical Legacy of Cumulative Creativity, 8 *Intell. Prop. Q.* 379 (2004).
- Eidson, B. Scott*, How Safe Is the Harbor? Considering the Economic Implications of Patent Infringement in Section 271(e)(1) Analysis, 82 *Wash. U. L. Rev.* 1169 (2004).
- Eisenberg, Rebecca S.*, Analyze This: A Law and Economics Agenda for the Patent System, 53 *Vand. L. Rev.* 2081 (2000).
- Eisenberg, Rebecca S.*, Obvious to Whom? Evaluating Inventions from the Perspective of PHOSITA, 19 *Berkeley Tech. L.J.* 885 (2004).
- Eisenberg, Rebecca S.*, Patents and the Progress of Science: Exclusive Rights and Experimental Use, 56 *U. Chi. L. Rev.* 1017 (1989).
- Eisenberg, Rebecca S.*, The Problem of New Uses, 5 *Yale J. Health Pol'y L. & Ethics* 717 (2005).

- Eisenberg, Rebecca S.*, The Role of the FDA in Innovation Policy, 13 Mich. Telecomm. Tech. L. Rev. 345 (2007).
- Ellery, Tony/Hansen, Neal*, Pharmaceutical Lifecycle Management: Making the Most of Each and Every Brand, New Jersey: John Wiley & Sons, Inc (2012).
- Engelberg, Alfred B.*, Special Patent Provisions for Pharmaceuticals: Have they Outlived Their Usefulness - A Political Legislative and Legal History of U.S. Law and Observations for the Future, 39 IDEA 389 (1999).
- Engelberg, Alfred B./Kesselheim, Aaron S./Avorn, Jerry*, Balancing Innovation, Access, and Profits--Market Exclusivity for Biologics, 361 New Eng. J. Med. 1917 (2009).
- Eswaran, Mukesh/Gallini, Nancy*, Patent Policy and the Direction of Technological Change, 27 RAND J. Econ. 722 (1996).
- European Federation of Pharmaceutical Industries and Associations*, The Pharmaceutical Industry in Figures, 2012, available at: <http://www.efpia.eu/sites/www.efpia.eu/files/EFPIA%20Figures%202012%20Final.pdf>.
- EvaluatePharma*, World Preview 2014, (2009) available at: <http://www.evaluatepharma.com/pdf/EvaluatePharma%20World%20Preview%202014.pdf>.
- FDA*, FY 2011 Innovative Drug Approvals, (2011), available at: <http://www.fda.gov/downloads/aboutfda/reportsmanualsforms/reports/ucm278358.pdf>.
- Federal Trade Commission*, Generic Drug Entry Prior to Patent Expiration, an FTC Study, 2002, available at: <http://www.ftc.gov/os/2002/07/genericdrugstudy.pdf>.
- Federsel, Hans-Jürgen*, Process R&D under the Magnifying Glass: Organization, Business Model, Challenges, and Scientific Context, 18 Bioorgan. Med. Chem. 5775 (2010).
- Fitt, Robert*, Selection Patents and Markush Claims in Europe, 20 Biotechnol. Law Rep. 17 (2010).
- Frank, Richard G.*, Behavioral Economics and Health Economics, NBER Working Paper No. 10881. Cambridge: NBER (2004).
- Frank, Richard G.*, Editorial: New Estimates of Drug Development Costs, 22 J. Health Econ. 325 (2003).
- von der Freien, Klaus Roth*, Von Vollmilch bis Bitter, edelste Polymorphie, 39 Chemie in Unserer Zeit 416 (2005).
- Friebel, Guido/Koch, Alexander K./Prady, Delphine/Seabright, Paul*, Objective and Incentives at the European Patent Office, Toulouse: Institut d'Economie Industrielle (2006).
- Gagnon, Marc-André/Lexchin, Joel*, The Cost of Pushing Pills: A New Estimate of Pharmaceutical Promotion Expenditures in the United States, 5 PLOS Med. e1 (2008).
- Gallini, Nancy/Scotchmer, Suzanne*, Intellectual Property: When Is It the Best Incentive System, in: Jaffé, Adam B., Lerner, Josh, Stern, Scott (eds), Innovation Policy and the Economy, Vol. 2, Massachusetts: MIT Press (2002).
- Gaudillière, Jean-Paul*, Professional or Industrial Order? Patents, Biological Drugs, and Pharmaceutical Capitalism in Early Twentieth Century Germany, 24 Hist. & Tech. 107 (2008).

Bibliography

- Gaudry, Kate S*, Evergreening: a Common Practice to Protect New Drugs, 29 *Nature Biotech.* 876 (2011).
- Germinario, Claudio*, Double Patenting in the Practice of the European Patent Office, IIC 2011, 387.
- Gervais, Daniel*, *The TRIPS Agreement: Drafting History and Analysis*, London: Sweet & Maxwell, 4th Ed. (2012).
- Ghofrani, Hossein A./Osterloh, Ian H./Grimminger, Friedrich*, Sildenafil: from Angina to Erectile Dysfunction to Pulmonary Hypertension and Beyond, 5 *Nat. Rev. Drug Discov.* 689 (2006).
- Gilbert, Richard/Shapiro, Carl*, Optimal patent length and breadth, 21 *RAND J. Econ.* 106 (1990).
- Gilbody, Simon/Wilson, Paul/Watt, Ian*, Benefits and harms of direct to consumer advertising: a systematic review, 14 *Quality & Safety in Health Care* 246 (2005).
- Gilfillan, S. C.*, The Root of Patents, or Squaring Patents by Their Roots, 31 *J. Pat. & Trademark Off. Soc'y* 611 (1949).
- Giron, Danielle*, Characterisation of Salts of Drug Substances, 73 *J. Thermal Analysis & Calorimetry* 441 (2003).
- Glasgow, Lara J.*, Stretching the Limits of Intellectual Property Rights: Has the Pharmaceutical Industry Gone Too Far?, 41 *IDEA* 227 (2001).
- GlaxoSmithKlein*, GSK's Position on Evergreening, 2011 available at: <http://www.gsk.com/policies/GSK-and-evergreening.pdf>.
- Gordon, Wendy J.*, A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property, 102 *Yale L. J.* 1533 (1993).
- Grabowski, Henry G./Kyle, Margaret*, Generic Competition and Market Exclusivity Periods in Pharmaceuticals, 28 *Manage. Decis. Econ.* 491 (2007).
- Grabowski, Henry G./Kyle, Margaret*, Mergers and Alliances in Pharmaceuticals: Effects on Innovation and R&D productivity, in: Gugler, Klaus and Yurtoglu, B. Burcin (eds.), *The Economics of Corporate Governance and Mergers*, Cheltenham: Edward Elgar (2008).
- Grabowski, Henry G./Vernon, John M.*, Brand Loyalty, Entry, and Price Competition in Pharmaceuticals after the 1984 Drug Act, 35 *J. Law Econ.* 331 (1992).
- Grabowski, Henry/Vernon, John*, Longer Patents for Increased Generic Competition in the US. The Waxman-Hatch Act after One Decade, 10 *Suppl 2 Pharmacoeconomics* 110 (1996).
- Grady, Mark F./Alexander, Jay I.*, Patent Law and Rent Dissipation, 78 *Va. L. Rev.* 305 (1992).
- Green, Jerry R./Scotchmer, Suzanne*, On the division of Profit in Sequential Innovation, 26 *RAND J. Econ.* 20 (1995).
- Grubb, Philip W./Thomsen, Peter R.*, *Patents for Chemicals, Pharmaceuticals and Biotechnology : Fundamentals of Global Law, Practice and Strategy*, Oxford: Oxford Univ. Press, 5th Ed. (2010).
- Günzel, Brigitte*, Die Anhängigkeit der Stammanmeldung als Voraussetzung für die Einreichung einer Teilanmeldung – ein Bericht und viele Fragen, IIC Int 2008, 644.

- Gugler, Klaus/Yurtoglu, B. Burcin* (eds.), *The Economics of Corporate Governance and Mergers*, Cheltenham: Edward Elgar (2008).
- Hall, Bronwyn H./Rosenberg, Nathan* (eds.), *Handbook of The Economics of Innovation*, Oxford: Elsevier B.V. (2010).
- Hall, Stephen S.*, The Claritin Effect; Prescription for Profit, *The New York Times*, March 11, 2001, available at: <http://www.nytimes.com/2001/03/11/magazine/the-claritin-effect-prescription-for-profit.html?pagewanted=all&src=pm>.
- Hansch, Corwin/Sammes, Peter G./Taylor, John B.* (eds.), *Comprehensive Medicinal Chemistry: The Rational Design, Mechanistic Study and Therapeutic Applications of Chemical compounds*, Oxford: Pergamon Press (1990).
- Hansen, Bernd/Hirsch, Fritjoff*, *Protecting Inventions in Chemistry - Commentary on Chemical Case Law under the European Patent Convention and the German Patent Law*, Weinheim: Wiley-VCH (1997).
- Haracoglou, Irina*, *Competition Law and Patents: a Follow-on Innovation Perspective in the Biopharmaceutical Industry*, Cheltenham: Edward Elgar (2008).
- Harhoff, Dietmar*, *Economic Cost-benefit Analysis of a Unified and Integrated European Patent Litigation System*, Tender No MARKT/2008/06/D, Munich: Ludwig-Maximilians-Universität München (2009).
- Harmon, Robert L./Homan, Cynthia A./McMahon, Charles M.*, *Patents and the Federal Circuit*, Arlington: BNA Books, 10th Ed. (2010).
- Harrelson, John A.*, *Trips, Pharmaceutical Patents, and the HIV/AIDS Crisis: Finding the Proper Balance between Intellectual Property Rights and Compassion*, 7 *Wid. L. Symp. J.* 175 (2001).
- Harris, Gardiner*, *Prilosec's Maker Switches Users To Nexium, Thwarting Generics*, *The Wall Street Journal*, June 6, 2002, available at: <http://online.wsj.com/article/0,,SB1023326369679910840,00.html>
- Hays, Thomas*, *An application of the European Rules on Trademark Exhaustion to Extra-market Goods*, 91 *Trademark Rep.* 675 (2001).
- Heilman RD*, *Drug development history, "overview," and what are GCPs?*, 4 *Quality Assurance*, 75 (1995).
- Heller, Michael A.*, *The Tragedy of the Anticommons: Property in the Transition from Marx to Markets*, 111 *Harv. L. Rev.* 621 (1998).
- Heller, Michael A./Eisenberg, Rebecca S.*, *Can Patents Deter Innovation? The Anticommons in biomedical Research*, 280 *Science* 698 (1998).
- Hemphill, C. Scott/Sampat, Bhaven N.*, *Evergreening, Patent Challenges, and Effective Market Life in Pharmaceuticals*, 31 *J. Health Econ.* 327 (2012).
- Hemphill, C. Scott/Sampat, Bhaven N.*, *Drug Patents at the Supreme Court*, 339 *Science* 1386 (2013).
- Henderson, Rebecca/Cockburn, Iain*, *Scale, Scope, and Spillovers: The Determinants of Research Productivity in Drug Discovery*, 27 *RAND J. Econ.* 32 (1996).
- Henkel, Joachim/Jell, Florian*, *Alternative Motives to File for Patents: Profiting from Pendency and Publication* (2009), Working paper, available at: <http://ssrn.com/abstract=1271242>.

Bibliography

- Herper, Matthew*, Solving The Drug Patent Problem, *Forbes*, February 5, 2002, available at: <http://www.forbes.com/2002/05/02/0502patents.html>.
- Higgins, Matthew J./Rodriguez, Daniel*, The Outsourcing of R&D through Acquisitions in the Pharmaceutical Industry, 80 *J. Financ. Econ.* 351 (2006).
- Higgins, Matthew J./Graham, Stuart J. H.*, Balancing Innovation and Access: Patent Challenges Tip the Scales, 326 *Science* 370 (2009).
- Hilty, Reto M.*, The Role of Patent Quality in Europe, in: Drexl, Josef, Hilty, Reto M., Boy Laurence, Godt, Christine, Remiche, Bernard (eds), *Technology and Competition : Contributions in Honour of Hanns Ullrich*, Bruxelles: Larcier (2009).
- von Hippel, Eric*, *The Sources of Innovation*, New York: Oxford University Press (1988).
- Hoffman, David C.*, A Modest Proposal: Toward Improved Access to Biotechnology Research Tools by Implementing a Broad Experimental Use Exception, 89 *Cornell L. Rev.* 993 (2004).
- Holbrook, Timothy R.*, Possession in Patent Law, 59 *SMU L. Rev.* 123 (2006).
- Holmes, David*, Skies Darken over Drug Companies, 379 *Lancet* 1863 (2012).
- Hopenhayn, Hugo A./Mitchell, Matthew F.*, Innovation Variety and Patent Breadth, 32 *RAND J. Econ.* 152 (2001).
- Hopkins, Andrew L./Groom, Colin R.*, The Druggable Genome, 1 *Nature Rev. Drug Discov.* 727 (2002).
- Horton, Richard*, Vioxx, the implosion of Merck, and aftershocks at the FDA, 364 *Lancet* 1995 (2004).
- Hovenkamp, Herbert/Janis, Mark D./Lemley, Mark A./Leslie, Christopher R.*, *IP and Antitrust - An Analysis of Antitrust Principles Applied to Intellectual Property Law*, Austin: Wolters Kluwer Law & Business, Aspen Publ, 2nd Ed. (2010).
- Howard, Leighton*, Use of Patents in Drug Lifecycle Management, 4 *J. Generic Med* 231 (2007).
- Hunt, Robert M.*, Nonobviousness and the Incentive to Innovate: An Economic Analysis of Intellectual Property Reform, Working Paper No. 99-3, Philadelphia: Federal Reserve Bank Of Philadelphia (1999).
- Hutt, A.J./Valentová, J.*, The Chiral Switch: The Development of Single Enantiomer Drgs from Racemates, 50 *Acta Facultatis Pharmaceuticae Universitatis Comenianae* 7 (2003).
- IMAP*, *Global Pharma and Biotech M&A Report-2012* (2012), available at: http://www.imap.com/imap/media/resources/Pharma_Report_2012_FINANCIAL_2F6C8ADA76680.pdf.
- IMS Health*, *Top 20 Global Products(2010)*, available at: http://imshealth.com/deployed-files/imshealth/Global/Content/StaticFile/Top_Line_Data/Top_20_Global_Products.pdf.
- Ionescu, Corina/Caira, Mino R.*, *Drug Metabolism - Current Concepts*, Dordrecht: Springer (2005).
- Jack, Andrew*, Drugs Groups Forced to Put Squeeze on R&D, *Fin. Times*, October 17, 2011.

- Jackson, Richard T.*, A Lockean Approach to the Compulsory Patent Licensing Controversy, 9 J. TECH. L. & POL'Y, 117 (2004).
- Jacob, Robin*, Novelty of Use Claims, IIC 1996, 170.
- Jacob, Robin*, Patents and Pharmaceuticals – a Paper given on 29th November at the Presentation of the Directorate-General of Competition's Preliminary Report of the Pharma-sector Inquiry, December, The Chartered Institute of Patent Attorneys 711 (2008).
- Jacob, Robin*, Some Recent Cases of Significance in the UK, IIC 1997, 880.
- Jaenichen, Hans-Rainer*, The Grant of a Compulsory License for Recombinant γ -IFN in Germany, 11 Biotechnol. Law Rep. 369 (1992).
- Jaffe, Adam B.*, Lerner Josh, and Stern, Scott (eds), Innovation Policy and Economics, volume 7, Cambridge: MIT press (2006).
- Jaffe, Adam B.*, The U.S. Patent System in Transition: Policy Innovation and the Innovation Process, 29 Res. Policy 531 (2000).
- Jaffe, Adam B./Lerner, Josh*, Innovation and Its Discontents - How Our Broken Patent System Is Endangering Innovation and Progress and What To Do About It, Princeton: Princeton University Press (2004).
- Janis, Mark D.*, On Courts Herding Cats: Contending with the "Written Description" Requirement (and Other Unruly Patent Disclosure Doctrines), 2 Wash. U. J. L. & Pol'y 55 (2000).
- Janis, Mark D.*, Second Tier Patent Protection, 40 Harv. Int'l L. J. 151 (1999).
- Jantzen, Gwen M./Robinson, Joseph R*, Sustained- and Controlled- Release Drug-Delivery System, in: Banker, Gilbert S and Rhodes Christopher T.(eds), Modern Pharmaceutics, 4th Ed. New York: Marcel Dekker (2002).
- Johnson-Laird, Andrew*, Software Reverse Engineering in the Real World, 19 U. Dayton L. Rev. 843 (1994).
- Julian-Arnold, Gianna*, International Compulsory Licensing: The Rationales and the Reality, 33 IDEA 349 (1993).
- Karmien, Morton I./Schwartz, Nancy L.*, Market Structure and Innovation, Cambridge: Cambridge University Press (1982).
- Kash, Don E/Kingston, William*, Patents in a world of complex technologies, 28 Sci. & Pub. Pol'y 11 (2001).
- Katzenberger, Paul*, Mannheim Conference on fundamental Questions of Patent Protection for Chemical Inventions, IIC 1972, 357.
- Keeling, David T.*, Intellectual Property Rights in Eu Law: Free Movement and Competition Law, Oxford: Oxford University Press (2003).
- Kefauver, Estes*, In a few hands : Monopoly power in America, Harmondsworth: Penguin Books (1966).
- Kieff, Scott F.*, On the Economics of Patent Law and Policy, in: Toshiko Takenaka (ed), Patent Law and Theory, Cheltenham: Edward Elgar Publishing Limited (2008).
- Kieff, Scott F.*, Property Rights and Property Rules for Commercializing Inventions, 85 Minn. L. Rev. 697 (2001).

Bibliography

- Kieff, Scott F.*, The Case for Registering Patents and the Law and Economics of Present Patent-Obtaining Rules, 45 B.C.L.Rev., 55 (2003).
- Kieff, Scott F./Schwartz, Herbert F./Newman, Pauline*, Principle of Patent Law, New York: Foundation Press, 5th Ed. (2011).
- Kilger, Christian/Feldges, Joachim/Jaenichen, Hans-Rainer*, The Erosion Of Compound Protection In Germany: Implementation Of The EU Directive On The Legal Protection Of Biotechnological Inventions -- The German Way, 87 J. Pat. & Trademark Off. Soc'y 569 (2005).
- Kitch, Edmund W.*, Graham v. John Deere Co.: New Standards for Patents, 1966 Sup. Ct. Rev. 293 (1966).
- Kitch, Edmund W.*, The Nature and Function of the Patent System, 20 J. Law Econ. 265 (1977).
- Klemperer, Paul*, How Broad should the Scope of Patent Protection Be?, 21 Rand J. Econ. 113 (1990).
- Kling, Jim*, From Hypertension to Angina to Viagra, 1 Modern Drug Discov. 31 (1998).
- Klöpösch, Gerald*, The Patentability of Pharmaceuticals According to the European Patent Collection (EPC), IIC 1982, 457.
- Knowles, Jonathan/Gromo, Gianni*, Target Selection in Drug Discovery, 2 Nat. Rev. Drug Discov. 63 (2003).
- Kola, Ismail/Landis, John*, Can the pharmaceutical industry reduce attrition rates?, 3 Nat. Rev. Drug Discov. 711 (2004).
- Kraßer, Rudolf*, Patentrecht, 6th Ed. München: C. H. Beck (2009).
- La Manna, Manfredi, M.A.*, Optimal Patent Life vs Optimal patentability standards, 10 Int'l. J. Indus. Org. 81 (1992).
- Lakdawalla, Darius N./Goldman, Dana P./Michaud, Pierre-Carl/Sood, Neeraj/Lempert, Robert/Cong, Ze/Vries, Han de/Gutierrez, Italo*, U.S. Pharmaceutical Policy In A Global Marketplace, 28 Health Affairs w138 (2009).
- Landes, William M./Posner, Richard A.*, The Economic Structure of Intellectual Property Law, Cambridge: The Belknap Press of Harvard University Press (2003).
- Langreth, Robert/Murphy, Victoria*, Perennial Patents, Forbes, Apr. 2, 2001, available at: http://www.forbes.com/forbes/2001/0402/052_print.html.
- Lanjouw, Jean O./Schankerman, Mark*, Patent Quality and Research Productivity: Measuring Innovation with Multiple Indicators, 114 Econ. J. 441 (2004).
- Lemley, Mark A.*, Rational Ignorance at the Patent Office, 95 Nw. U. L. Rev. 1495 (2001).
- Lemley, Mark A.*, The Economics of Improvement in Intellectual Property Law, 75 Tex. L. Rev. 989 (1997).
- Lerner, Joshua*, The Importance of Patent Scope: An Empirical Analysis, 25 RAND J. Econ. 319 (1994).
- Lerner, Josh/Merges, Robert P.*, The Control of Strategic Alliances: An Empirical Analysis of Biotechnology Collaborations, NBER Working Paper No. 6014. Cambridge: NBER (1997).
- Lessig, Lawrence*, Intellectual Property and Code, 11 St. John's J. Legal Comment. 635 (1996).

- Levin, Richard C./Klevorick, Alvin K./Nelson, Richard R/ Winter, Sidney G.*, Appropriating the Returns from Industrial Research and Development, 1987 Brookings Paper on Econ. Activity, 783 (1987).
- Lichtenberg, Frank R.*, Are The Benefits Of Newer Drugs Worth Their Cost? Evidence From The 1996 MEPS-The newer the drug in use, the less spending on nondrug items, 20 Health Affair. 241 (2001).
- Lichtenberg, Frank R.*, The Impact of New Drug Launches on Longevity: Evidence from Longitudinal, Disease-Level Data from 52 Countries, 1982–2001, 5 Int. J. Health Care Fi. 47 (2005).
- Lichtman, Douglas/Baker, Scott/Kraus, Kate*, Strategic Disclosure in the Patent System, 53 Vand. L. Rev. 2175 (2000).
- Lindgardt, Zhenya/Reeves, Martin/Wallenstein, Judith*, Waking the giant: business model innovation in the drug industry, 26 In Vivo: Bus. Med. Rep. 1 (2008).
- Long, Clarisa*, Our Uniform Patent System, 55 Fed. Law. 44 (2008).
- Luski, Israel/Wettstein, David*, An Optimal Patent Policy in a Dynamic Model of Innovation, 1 Probl. Perspect. Manage. 31 (2004).
- Machlup, Fritz*, An Economic Review of the Patent System : Study No. 15 of the subcommittee on Patents, Trademarks, and Copyrights of the Committee on the Judiciary, United States Senate, 85th Congress, 2nd Sess. / Fritz Machlup. - Washington : G P O (1958).
- Macomber, Roger*, Organic Chemistry, Sausalito: University Science Books (1996).
- Mahajan, Anthony J.*, Note, Intellectual Property, Contracts and Reverse Engineering after ProCD: A Proposed Compromise for Computer Software, 67 Fordham L. Rev. 3297 (1999).
- Mahato, Ram I./Narang, Ajit S.*, Pharmaceutical Dosage Forms and Drug Delivery, Boca Ranton: CRC Press, 2nd Ed (2012).
- Mahn, Terry G.*, Patenting Drug Products: Anticipating Hatch-Waxman Issues during the Claims Drafting Process, 54 Food & Drug L.J. 245 (1999).
- Mann, Ronald D./Andrews, Elizabeth B*, Introduction, in: Mann, Ronald D., and Andrews, Elizabeth B (eds), Pharmacovigilance, Chichester: John Willey & Sons, Ltd. (2007).
- Mansell, Peter*, Who is afraid of the patent cliff? 1 Scrip Executive Briefing 1 (2008).
- Mansfield, Edwin*, Patents and Innovation: An Empirical Study, 32 Manage. Sci. 173 (1986).
- Mansfield, Edwin/Schwartz, Mark/Wagner, Samuel*, Imitation Costs and Patents: an Empirical Study, 91 Econ. J. 907 (1981).
- Mansfield, Peter/Henry, David/Tonkin, Anne*, Single-Enantiomer Drugs: Elegant Science, Disappointing Effects, 43 Clin. Pharmacokinet. 287 (2004).
- Martin, Ben R./Nightingale, Paul (eds.)*, The Political Economy of Science, Technology, and Innovation, Cheltenham: Edward Elgar Publishing Limited (2000).
- Martinez, Barbara/Mathews, Anna Wilde/ Lublin, Joann S./Winslow, Ron*, Merck Pulls Vioxx from Market After Link to Heart Problems, Wall St. J., Oct. 1, 2004, available at: <http://online.wsj.com/article/0,,SB109654671320932405,00.html>.

Bibliography

- Matutes, Carmen/Regibeau, Pierre/Rockett, Katharine*, Optimal Patent Design and the diffusion of Innovation, 27 RAND J. Econ. 60 (1996).
- Mauer, Stephen M./Scotchmer, Suzanne*, The Independent-Invention Defense in Intellectual Property, 69 *Economica* 535 (2002).
- Mazzoleni, Roberto/Nelson, Richard R*, The Benefits and Costs of Strong Patent Protection: A Contribution to the Current Debate. 27 *Res. Policy*, 273 (1998).
- McGuire, Alistair/Drummond, Michael/Rutten, Frans*, Reimbursement of pharmaceuticals in the European Union, in: Mossialos, Elias, Mrazek, Monique F. and Walley, Tom (eds.), *Regulating pharmaceuticals in Europe: striving for efficiency, equity, and quality*. European Observatory on health systems and policies . Maidenhead: Open University Press (2004).
- Meier-Beck, Peter*, Die Rechtsprechung des Bundesgerichtshofs zum Patent und Gebrauchsmusterrecht im Jahr 2008, GRUR 2009, 893.
- Merck*, Merck Press Release, Merck Settles Thousands of Vioxx Claims for \$4.85 Billion, Nov. 9, 2007, available at: <http://www.officialvioxxsettlement.com/documents/Official%20Press%20Release%20-%20Vioxx%20Settlement.pdf>.
- Merges, Robert P.*, A Brief Note on Blocking Patents and Reverse Equivalents: Biotechnology as an Example, 73 *J. Pat. & Trademark Off. Soc'y* 878 (1991).
- Merges, Robert P.*, Commercial Success and Patent Standards: Economic Perspectives on Innovation, 76 *Cal. L. R.* 803 (1988).
- Merges, Robert P.*, Intellectual Property Rights and Bargaining Breakdown: the Case of Blocking Patents, 62 *Tenn. L. Rev.* 75 (1994).
- Merges, Robert P.*, One Hundred Years of Solicitude: Intellectual Property Law, 88 *Cal. L. Rev.* 2187 (2000).
- Merges, Robert P.*, Uncertainty and the Standard of Patentability, 7 *High Tech. L. J.* 1 (1992).
- Merges, Robert P./Duffy, John F.*, *Patent Law and Policy: Cases and Materials*, Newark: LexisNexis, 5th Ed. (2011).
- Merges, Robert P./Nelson, Richard R.*, On Limiting or Encouraging Rivalry in Technical Progress: The Effect of Patent Scope Decision, 25 *J. Econ. Behav. Organ.* 1 (1994).
- Merges, Robert P./Nelson, Richard R.*, On the Complex Economics of Patent Scope, 90 *Colum. L. Rev.* 839 (1990).
- Meurer, Michael J.*, Business Method Patents and Patent Floods, 8 *Wash. U. J. L. & Pol'y* 309 (2002).
- Michele Boldrin/David K. Levine.*, *Against Intellectual Monopoly*, Cambridge: Cambridge Univ. Press (2010).
- Miller, Christ P./Evans, Mark J.* *The Chemist's Companion Guide to Patent Law*, New Jersey: John Wiley & Sons, Inc (2010).
- Morgan, Steven G/Bassett, Kenneth L/Wright, James M/Evans, Robert G/Barer, Morris L/Caetano, Patricia A/Black, Charlyn D.*, "Breakthrough" Drugs and Growth in Expenditure on Prescription Drugs in Canada, 331 *Brit. Med. J.* 815 (2005).
- Mueller, Janice M.*, The Evolving Application of the Written Description Requirement to Biotechnological Inventions, 13 *Berkeley Tech. L.J.* 615 (1998).

- Mueller, Janice M./Chisum, Donald S.*, Enabling Patent Law's Inherent Anticipation Doctrine, 45 Hous. L. Rev. 1101 (2008).
- Munos, Bernard*, Lessons from 60 Years of Pharmaceutical Innovation, 8 Nat. Rev. Drug Discov. 959 (2009).
- Nastelski, Karl*, Product Protection for Chemical Inventions in Germany, IIC 1972, 267.
- Nathan, Carl/Goldberg, Frederick M.*, The Profit Problem in Antibiotic R&D, 4 Nat. Rev. Drug Discov. 887 (2005).
- National Institute for Health Care Management Research and Educational Foundation*, Changing patterns of pharmaceutical innovation. Washington, DC;NIHCM (2002). Available at: <http://nihcm.org/pdf/innovations.pdf>.
- Nelson, Richard R.*, The Simple Economics of Basic Scientific Research, in: Martin, Ben R./Nightingale, Paul (eds.), The Political Economy of Science, Technology, and Innovation, Cheltenham: Edward Elgar Publishing Limited (2000).
- Nelson, Richard, R./Winter, Sidney G.*, An Evolutionary Theory of Economic Change Cambridge: The Belknap Press of Harvard University Press (1982).
- Nordhaus, William D.*, Invention, Growth, and Welfare - A Theoretical Treatment of Technological Change, Massachusetts: MIT Press (1969).
- Norrby, S. Ragnar/Nord, Carl Erik/Finch, Roger*, Lack of Development of New Antimicrobial Drugs: a Potential Serious Threat to Public Health, 5 Lancet Infect. Dis. 115 (2005).
- O'Donoghue, Ted*, A Patentability Requirement for Sequential Innovation, 29 RAND J. Econ. 654 (1998).
- O'Donoghue, Ted*, Patent Protection When Innovation is Cumulative, Ann Arbor: UMI Company (1996).
- O'Donoghue, Ted*, Suzanne Scotchmer, and Jacques-François Thisse, 7 J. Econ. Manage. Strat. 1 (1998).
- Oellerich, Michael/Armstrong, Victor W.*, Prodrugs Metabolites: Implications for Therapeutic Drug Monitoring, 47 Clin. Chem. 805 (2001).
- Osterrieth, Christian/Köhler, Martin/Haft, Klaus (eds)*, Patentrecht, Festschrift für Thomas Reimann zum 65. Geburtstag, Köln: Carl Hezmanns Verlag (2009).
- Outterson, Kevin/Samora, Julie B./Keller-Cuda, Karen*, Will Longer Antimicrobial Patents Improve Global Public Health?, 7 Lancet Infect. Dis. 559 (2007).
- Owen-Smith, Jason/Powell, Walter W.*, To Patent or Not: Faculty Decisions and Institutional Success at Technology Transfer, 26 J. Technol. Transfer 99 (2001).
- Pagenberg, Jochen*, Beweisanzeichen auf dem Prüfstand Für eine objektive Prüfung auf erfinderische Tätigkeit, GRUR Int 1986, 83.
- Parthasarathy, R/Goddar, Heinz*, Patentability of Pharmaceutical Products in India - The Novartis Case, IIC 2009, 38.
- Patented Medicine Prices Review Board*, Annual Report 2004, Ottawa: PMPRB (2005).
- Paul, Steven M./Mytelka, Daniel S./Dunwiddie, Christopher T./Persinger, Charles C./Munos, Bernard H./Lindborg, Stacy R./Schacht, Aaron L.*, How to Improve R&D Productivity: the Pharmaceutical Industry's Grand Challenge, 9 Nat. Rev. Drug Discov. 203 (2010).

Bibliography

- Peterson, John M.*, Finite Mathematics, New York: Holt, Rinehart and Winston (1974).
- Pfizer*, Annual Review 2009, (2009), available at: <http://www.pfizer.com/files/annual-report/2009/annual/review2009.pdf>.
- Pifferi, G./Perucca, E.*, The Cost Benefit Ratio of Enantiomeric Drugs, 20 Eur. J. Drug Metab. Ph. 15 (1995).
- Pisano, Gary P.*, Science Business: the Promise, the Reality, and the Future of Biotech, Boston: Harvard Business School Press (2006).
- Power, Eddie*, Impact of Antibiotic Restrictions: the Pharmaceutical Perspective, 12 Clin. Microbiol. Infec. 25 (1998).
- Privitera, Michael*, Large Clinical Trials in Epilepsy: Funding by the NIH versus Pharmaceutical Industry, 68 Epilepsy Res. 52 (2006).
- Rai, Arti K.*, Fostering Cumulative Innovation in the Biopharmaceutical Industry: The Role of Patents and Antitrust 16 Berkerly. Tech. L. J. 813 (2001).
- Rai, Arti K.*, Intellectual Property Rights in Biotechnology: Addressing New Technology 34 Wake Forest L. Rev. 827 (1999).
- Rai, Arti K.*, The Information Revolution Reaches Pharmaceuticals: Balancing Innovation Incentives, Cost, and Access in the Post-Genomics Era, 2001 Ill. L. Rev. 173 (2001).
- Rautio, Jarkko/Kumpulainen, Hanna/Heimbach, Tycho/Oliyai, Reza/Oh, Dooman/Järvinen, Tomi/Savolainen, Jouko*, Prodrugs: Designs and Clinical Applications, 7 Nat. Rev. Drug Discov. 255 (2009).
- Reichman, Jerome H.*, Intellectual Property in the Twenty-First Century: Will the Developing Countries Lead or Follow? 46 Hous L. Rev. 1115 (2009).
- Reichman, Jerome H./Hasenzahl, Catherine*, Non-Voluntary Licensing of Patented Inventions: Historical Perspective, Legal Framework under TRIPS, and an Overview of the Practice in Canada and the USA1-2, (2003), Issue Paper, Geneva: ICTSD-UNCTAD, available at: http://ictsd.net/downloads/2008/06/cs_reichman_hasenzahl.pdf.
- Reichman, Jerome H./Dreyfuss, Rochelle C.*, Harmonization without Consensus: Critical Reflections on Drafting a Substantive Patent Law Treaty, 57 Duke L. J. 85 (2007).
- Roberts, Tim*, Broad Claims for Biotechnological Inventions, EIPR, 1994, 371.
- Robinson, Christopher*, Patent Protection for Chemical Products in Canada, Great Britain and the United States, IIC 1972, 139.
- Rockett, Katharine*, Property Rights and Inventions, in: Hall, Bronwyn H./Rosenberg, Nathan (eds.), Handbook of The Economics of Innovation, Oxford: Elsevier B.V. (2010).
- Roin, Benjamin N.*, Unpatentable Drugs and the Standards of Patentability, 87 Tex. L. Rev. 503 (2009).
- Rose, Carol M.*, Possession as the Origin of Property, 52 U. Chi. L. Rev. 73 (1985).
- Rosenbaum, Sara E.*, Basic Pharmacokinetics and Pharmacodynamics, An Integrated Textbook and computer Simulations, New Jersey: John Wiley & Sons, Inc (2011).

- Rucker, T. Donald*, Public Policy and Drug Cost: Legitimate and Bastard Options, in: Smith Mickey C (ed), Studies in Pharmaceutical Economics, Binghamton: The Haworth Press, Inc (1996).
- Russ, Andreas P./Lampel, Stefan*, The Druggable Genome: an Update, 10 Drug Discov. Today. 1607 (2005).
- Sachs, George/Shin, Jai M./Howden, Collin W.*, Review Article: the Clinical Pharmacology of Proton Pump Inhibitors, 23 (Suppl. 2) Aliment Pharm. Ther. 2 (2006).
- Safir, Peter O.*, Current Issues in the Pioneer Versus Generic Drug Wars, 50 Food & Drug L. J. 335 (1995).
- Sampson, Margaret*, The Evolution of the Enablement and Written description Requirements under 35 U.S.C. § 112 in the Area of Biotechnology, 15 Berkeley Tech. L.J. 1233 (2000).
- Satchell, Ralph D.*, Chemical Product Patent Practice in the United Kingdom, IIC 1970, 179.
- Scherer, Frederic M./Ross, David*, Industrial market structure and economic performance, Boston: Houghton Mifflin Co., 3rd Ed. (1990).
- Scherer, Frederic M.*, Innovation and Growth: Schumpeterian Perspectives, Cambridge: The MIT Prress (1984).
- Scherer, Frederic M.*, Pharmaceutical Innovation, Massachusetts: John F.Kennedy School of Government (2007).
- Scherer, Frederic M.*, The Link Between Gross Profitability and Pharmaceutical R&D Spending, 20 Health Affair. 216 (2001).
- Scherer, Frederic M.*, The Pharmaceutical Industry — Prices and Progress, 351 New Eng. J. Med. 927 (2004).
- Schmied-Kowarzik, Volker*, Chemical Inventions According to the New German Patent Act, IIC 1970, 190.
- Schneider, Dieter R.*, Patenting of Pharmaceuticals – Still a Challenge?, IIC 2008, 511.
- Schumpeter, Joseph A.*, Kapitalismus, Sozialismus und Demokratie, Bern: Verlag A. Francke AG. (1942).
- Schumpeter, Joseph*, Business Cycle, New York: McGraw-Hill Book Company (1939).
- Schumpeter, Joseph*, Theorie der Wirtschaftlichen Entwicklung, Berlin: Duncker & Humbolt (1964).
- Schuster, Daniela/Laggner, Christian/Langer, Thierry*, Why Drugs Fail - A Study on side Effects in New Chemical Entities, 11 Current Pharmaceutical Design 3545 (2005).
- Schweitzer, Stuart O.*, Pharmaceutical Economics and Policy, Oxford: Oxford University Press (2007).
- Scotchmer, Suzanne*, On the Optimality of the Patent Renewal System, 30 RAND J. Econ. 181 (1999).
- Scotchmer, Suzanne*, Protecting Early Innovators: Should Second-Generation Products be Patentable?, 27 Rand J. Econ. 322 (1996).
- Scotchmer, Suzanne*, Standing on the Shoulders of Giants: Cumulative Research and the Patent Law, 5 J. Econ. Perspect. 29 (1991).

Bibliography

- Scotchmer, Suzanne/Green, Jerry*, Novelty and Disclosure in Patent Law, 21 RAND J. Econ. 131 (1990).
- Scudellari, Megan*, Teaching an Old Drug New Tricks, The Scientist, April 1, 2011, available at: <http://www.the-scientist.com/?articles.view/articleNo/29617/title/Teaching-an-Old-Drug-New-Tricks/>.
- Seager, Spencer L./Slabaugh, Michael R.*, Chemistry for Today - General, Organic, & Biochemistry, Belmont: Brooks/Cole (2010).
- Seißer, Goetz*, Perfecting Imperfect Competition, Economics Discussion Papers No 2008-28, Kiel Institute for the World Economy (2008), available at: <http://www.economics-ejournal.org/economics/discussionpapers/2008-28>
- Seymore, Sean B.*, Rethinking Novelty in Patent Law, 60 Duke L. J., 919 (2011).
- Shadowen, Steve D./Leffler, Keith B./Lukens, Joseph T.*, Bringing Market Discipline to Pharmaceutical Product Reformulations, IIC 2011, 698.
- Shavell, Steven*, Foundations of Economic Analysis of Law, Cambridge: Belknap Press of Harvard Univ. Press (2004).
- Singer, Romuald/Singer, Margarete*, The European Patent Convention : a Commentary / Raph Lunzer, rev. English, London: Sweet & Maxwell (1995).
- Smith, Austin*, 'No' to Ban on Stem-Cell Patents, 472 Nature 418 (2011).
- Somaya, D.* 2012. Patent Strategy and Management. 38 J. Manage. 1084 (2012).
- Spellberg, Brad/Miller, Loren G./Kuo, Melissa N./Bradley, John/Scheld, William M./Edwards, John E.*, Societal Costs Versus Savings from Wild-Card Patent Extension Legislation to Spur Critically Needed Antibiotic Development, 35 Infection 167 (2007).
- Spenner, Jonathan M.*, Obvious-to Try Obviousness of Chemical Enantiomers in View of Pre-and Post-KSR Analysis, 90 J. Pat. & Trademark Off. Soc'y, 477 (2008).
- Stafford, Randall S.*, Regulating Off-Label Drug Use —Rethinking the Role of the FDA, 358 N Engl J Med, 1427 (2008).
- Steele, Henry*, Monopoly and Competition in the Ethical Drugs Market, 5 J. Law Econ. 131 (1962).
- Strandburg, Katherine J.*, Patent Fair Use 2.0, 1 UC Irvine L.R.,265 (2011).
- Straus, Joseph*, Patent Application: Obstacle for Innovation and Abuse of Dominant Position under Article 102 TFEU? 1 J. E. C. L. & Pract. 189 (2010).
- Straus, Joseph*, Zur Rolle klinischer Versuche beim Zustandekommen von so genannten Auswählerfindungen, in: Osterrieth, Christian, Köhler, Martin, Haft, Klaus (eds), Patentrecht, Festschrift für Thomas Reimann zum 65. Geburtstag, Köln: Carl Hezmanns Verlag (2009).
- Svatos, Michele*, Biotechnology and the Utilitarian Argument for Patents, 13 Soc. Philos. Policy. 113 (1996).
- Sweet, Miles J.*, The Patentability of Chiral Drugs Post-KSR: The More Things Change, the More They Stay the Same, 24 Berkeley Tech. L.J. 129 (2009).
- Szabo, George S. A.*, The Problem and Solution Approach in the European Patent Office, IIC 1995, 457.

- Talbot, George H./Bradley, John/Edwards, John E./Jr., Gilbert, David/Scheld, Michael/Bartlett, John G., Bad Bugs Need Drugs: An Update on the Development Pipeline from the Antimicrobial Availability Task Force of the Infectious Diseases Society of America, 42 Clin Infect Dis. 657 (2006).
- Teece David J., Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy, 15 Res. Policy 285 (1986).
- Temin, Peter, Technology, Regulation, and Market Structure in the Modern Pharmaceutical Industry, 10 Bell J. Econ. 429 (1979).
- ter Meer, Nicolaus, German Chemical Patent Law 1965-1975, 57 J. Pat. Off. Soc'y 763 (1975).
- Teschemacher, Rudolf, Enlarged Board of Appeal of the EPO Restores Legal Certainty for Divisional Applications – Established Practice Confirmed, IIC 2007, 703.
- The Association of the British Pharmaceutical Industry, Did you know? Facts and Figures about the Pharmaceutical Industry in the UK, 2nd Ed. (2011).
- The Infectious Diseases Society of America (IDSA), Bad Bugs, no Drugs: as Antibiotic Discovery Stagnates, a Public Health Crisis Brews, Alexandria: ISDA (2004), available at: <http://cdm266901.cdmhost.com/cdm/singleitem/collection/p266901coll4/id/801/rec/14>.
- Thomas, John R., Formalism at the Federal Circuit, 52 Am. U. L. Rev. 771 (2003).
- Thomas, Katie, Pfizer Races to Reinvent Itself, The New York Times, May 1, 2012, available at: <http://www.nytimes.com/2012/05/02/business/pfizer-profit-declines-19-after-loss-of-lipitor-patent.html>.
- Thomas, Kimberly M., Protecting Academic and Non-Profit Research: Creating a Compulsory Licensing Provision in the Absence of an Experimental Use Exception, 23 Santa Clara Computer & High Tech. L. J. 347 (2007).
- Thomson Reuters, Top 100 Global Innovators (2011), available at: <http://blogs.reuters.com/mediafile/files/2011/11/analysis.pdf>.
- Thomson Reuters, Top 100 Global Innovators (2012), available at: <http://img.en25.com/Web/ThomsonReutersScience/1001639.pdf>.
- Tilmann, Winfried, Validity of Selective Product Claims – Venice Conferences III and V, Lundbeck and Olanzapine, IIC 2010, 149.
- Tucker, Geoffrey T., Chiral Switches, 355 Lancet 1085 (2000).
- Tuominen, Nicoleta, Patenting Strategies of the EU Pharmaceutical Industry Crossroad between Patent Law and Competition Policy, Research Papers in Law 1/2011, Belgium: European Legal Studies (2011).
- U.S. Department of Commerce International Trade Administration, Pharmaceutical Price Controls in OECD Countries - Implications for U.S. Consumers, Pricing, Research and Development, and Innovation, Washington, DC: USITA (2004), available at: <http://www.ita.doc.gov/td/chemicals/drugpricingstudy.pdf>.
- UK Office of Fair Trading, The Pharmaceutical Price Regulation Scheme, London: Crown Copyright (2007), available at: http://www.offt.gov.uk/shared_offt/reports/comp_policy/oft885.pdf.

Bibliography

- UNCTAD-ICTSD, Resource Book on TRIPS and Development, Cambridge: Cambridge University Press (2005).
- United States General Accountability Office, Prescription Drugs: Trends in FDA's Oversight of Direct-to-Consumer Advertising (2008) available at: <http://www.gao.gov/new.items/d08758t.pdf>.
- United States General Accounting Office, Prescription drugs: FDA oversight of direct-to-consumer advertising has limitations (2002) available: <http://www.gao.gov/new.items/d03177.pdf>.
- Valance, Edward H., Understanding the Markush Claim in Chemical Patents, 1 J. Chemical Documentation, 87 (1961).
- Van Dijk, Theon, Patent Height and Competition in Product Improvements, 44 J. Ind. Econ. 151 (1996).
- Vernon, John A, Drug Research and Price Controls, Winter, Regulation, 22 (2002-2003).
- Vivian, Michael F., Novelty and Selection Inventions, IIC 1989, 303.
- Voet, Martin A., The Generic Challenge- Understanding Patents, FDA and Pharmaceutical Life Cycle Management, Florida: Brown Walker Press, 3rd Ed. (2011).
- Vossius, Corinna/Vossius, Tilman/Vossius, Volker, Der Terfenadin-Verletzungsstreit; zum Standard der Neuheitsprüfung, GRUR 1994, 472.
- Vossius, Volker, Selection Inventions in Chemistry According to German Patent Law - A Problem of Novelty, 59 J. Pat. Off. Soc'y 180 (1977).
- Vossius, Volker, Stoffschutz für Auswählerfindungen auf dem Gebiet der Chemie, GRUR 1976, 165.
- Wagner, R. Polk, (Mostly) against Exceptionalism, 50 Adv. Genet. 367 (2003).
- zu Waldeck und Pyrmont, Wolrad P./Adelmann, Martin J./Brauneis, Robert/Drexel, Joseph/Nack, Ralph (eds), Patents and Technological Progress in a Globalized World, Liber Amicorum Joseph Straus, Berlin, Heidelberg: Springer (2009).
- zu Waldeck und Pyrmont, Wolrad Prinz, BGH: Enantiomer eines bekannten Razemats kann patentiert werden- „Escitalopram“, GRUR-Prax, 2010, 13.
- Weaver, Mark/Perakis, Nikolaos/Riolo, Joseph, Novelty-Current Trends in the Jurisprudence of the boards of Appeal of the European Patent Office, 15 World Pat. Info. 81 (1993).
- Weissman, Robert, A Long, Strange Trips: The Pharmaceutical Industry Drive to Harmonize Global Intellectual Property Rules, and the Remaining WTO Legal Alternatives Available to Third World Countries, 25 U. Pa. J. Int'l Econ. L. 1079 (2004).
- Wermuth, Camille G., Strategies in the Search for New Lead Compounds or Original Working Hypotheses, in: Wermuth, Camille G. (ed), The Practice of Medicinal Chemistry, Burlington: Elsevier Ltd, 3rd Ed. (2008).
- Wertheimer, Albert I./Santella, Thomas M./Chaney, Nicole M., The World Health Organization's Essential Medicines List: An Endorsement of Incremental Innovation and Follow-On Research, 17 J. Pharmaceut. Marketing Manage. 25 (2005).

- Wertheimer, Albert/Levy, Richard/O'Connor, Thomas*, Too many drugs? The Clinical and Economic Value of Incremental Innovations, in: Farquhar, Irina, Summers, Kent and Sorkin, Alan (eds), Investing in Health: The Social and Economic Benefits of Health Care Innovation, Oxford: Elsevier Science Ltd. (2001).
- Whalen, Jeanne/Stovall, Sten*, AstraZeneca Plans to cut 7300 Jobs, the Wall Street Journal, February 2, 2012, available at: <http://online.wsj.com/article/SB10001424052970203711104577198264263381758.html>.
- White, C. Michael*, Why a Seventeen Year Patent, 38 J. Pat. Off. Soc'y 839 (1956).
- Wibbelmann, Jobst*, Broad Claims: a Nuisance, EIPR 1997, 515.
- William, Johnson. A.*, Invitation to Organic Chemistry, Sudbury: Jones and Barlett (1999).
- Willkens, Robert F./Segre, Eugene J.*, Combination Therapy with Naproxen and Aspirin in Rheumatoid Arthritis, 19 Arthritis & Rheumatism 677 (2006).
- Wilson, Duff*, Drug Firms Face Billions in Losses in '11 as Patents End, The New York Times, March 6, 2011, available at: <http://www.nytimes.com/2011/03/07/business/07drug.html?pagewanted=all>.
- WIPO, PCT*, The International Patent System, Yearly Review, Development and Performance in 2012, (2012), available at: http://www.wipo.int/freepublications/en/patents/901/wipo_pub_901_2012.pdf.
- Witherspoon, John F.* (ed), Nonobviousness: The Ultimate Condition of Patentability: Papers Compiled in Commemoration of the Silver Anniversary of 35 USC 103, Washington: The Bureau of National Affairs, Inc (1980).
- World Bank*, The World Bank Legal Review: Law and Justice for Development, Washington D.C.: Inc. World Bank (2003).
- Yu, Yu/Sachin, Gupta*, Pioneering Advantage in Generic Drug Competition, Johnson School Research Paper Series No. 37-06, Ithaca: The Johnson School at Cornell University (2008).
- Zentiva*, Zentiva the Unifying Brand for Sanofi-aventis' European Generics Business, Zentiva Press Release, Apr. 4, 2011, available at: <http://www.zentiva.com/media-centre/press-releases/pages/press-release-detail.aspx?ItemId=6>.
- Zhang, Yuting/Soumerai, Stephen B.*, Do Newer Prescription Drugs Pay For Themselves? A Reassessment Of The Evidence, 26 Health Affair. 880 (2007).
- Zins, Gerald D.*, The History of the Development of Minoxidil, 6 Clin. Dermatol. 132 (1988).

OTHER SOURCES

- EPO glossary*, available at: <http://www.epo.org/service-support/glossary.html>.
- Espacenet*, available at: <http://worldwide.espacenet.com>.
- European Patent Register*, available at: <https://register.epo.org/espacenet/regviewer>.
- FDA, Drugs@FDA Glossary of Terms*, available at: <http://www.fda.gov/Drugs/ResourcesForYou/Consumers/QuestionsAnswers/ucm100100.htm>
- FDA, Generic Drugs: Same Medicine, Lower Cost*, available at: <http://www.fda.gov/downloads/ForConsumers/ConsumerUpdates/UCM340458.pdf>

Bibliography

- FDA*, Information for Consumers, available at: <http://www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/UnderstandingGenericDrugs/ucm144456.htm>.
- O'Hagan, P/Farkas, Charles*, Bringing pharma R&D back to health. Bain Insights [online], (2009) available at: http://www.bain.com/Images/BB_Managing_RandD_HC.pdf.
- Orange Book*: Approved Drug Products with Therapeutic Equivalence Evaluations, available at: <http://www.accessdata.fda.gov/scripts/cder/ob/default.cfm>.
- Posner, Richard A.*, Do Patent and Copyright Law Restrict Competition and Creativity Excessively?, Sep, 30, 2012, available at: <http://www.becker-posner-blog.com/2012/09/do-patent-and-copyright-law-restrict-competition-and-creativity-excessively-posner.html>
- Teva*, Teva Completes Acquisition of Cephalon, Teva News Release, October 14, 2001, available at: <http://ir.tevapharm.com/phoenix.zhtml?c=73925&p=irol-newsArticle&ID=1617357&highlight=>
- USPTO*, USPTO Press Release #09-21 (Oct. 8, 2009), available at: http://www.uspto.gov/news/09_21.jsp.
- WHO*, International nonproprietary name, available at: <http://www.who.int/medicines/services/inn/en/>.
- WHO*, Pharmaceutical products, available at: http://www.who.int/topics/pharmaceutical_products/en/.