HEARINGS ON THE EVOLVING IP MARKETPLACE The Operation of IP Markets March 18-19, 2009 Speaker Biographies

Robert A. Armitage

Robert A. Armitage became Senior Vice President and General Counsel for Eli Lilly and Company in January 2003, and is a member of the company's executive committee. He joined the company as Vice President and General Patent Counsel, Lilly Research Laboratories, in October 1999.

Mr. Armitage received a B.A. degree in physics and mathematics in 1970 from Albion College. He received a master's degree in physics from the University of Michigan in 1971 and a J.D. from the University of Michigan Law School in 1973. Prior to joining Lilly, Mr. Armitage was Chief Intellectual Property Counsel for The Upjohn Company from 1983 to 1993. He also was a partner in the Washington, D.C., office of Vinson & Elkins LLP from 1993 to 1999.

Mr. Armitage is a member and a past President of the American Intellectual Property Law Association (AIPLA) and the Association of Corporate Patent Counsel (ACPC). He is also a past chair of the Patent Committee of the Pharmaceutical Research and Manufacturers of America (PhRMA), the National Council of Intellectual Property Law Associations (NCIPLA), the Intellectual Property Committee of the National Association of Manufacturers (NAM), the Fellows of the American Intellectual Property Law Association, and the Intellectual Property Law Section of the State Bar of Michigan.

Mr. Armitage has served as an Adjunct Professor of Law at George Washington University, as a member of the board of directors of Human Genome Sciences, Inc., and as President of the Board of Directors of the Hospice of Southwest Michigan, Inc. He also has served as a member of the Board of Directors of both Intellectual Property Owners (IPO) and the National Inventors Hall of Fame Foundation (NIHFF). He currently is serving as a member of the Council for the Intellectual Property Law Section of the American Bar Association (ABA IPL Section), a member of the Board of Directors of the Indianapolis Symphony Orchestra, a member of the Greater Indianapolis Progress Committee and the Indianapolis Race Relations Leadership Network, and a trustee on the Albion College Board of Trustees.

Ashish Arora

Ashish Arora is currently a visiting professor of strategy at the Fuqua School of Business at Duke University, on leave from Carnegie Mellon University, where he holds the H. John Heinz, III, Professorship of Economics, Innovation and Economic Development. His research focuses on the economics of technology and technical change. Professor Arora's research includes the study of technology-intensive industries such as software, biotechnology and chemicals, the role of patents and licensing in promoting technology startups, and the economics of information security. Along with Alfonso Gambardella and Andrea Fosfuri, he authored *Markets for Technology: The Economics of Innovation and Corporate Strategy*, MIT Press, 2001.

Professor Arora served as a co-director of the Software Industry Center at Carnegie Mellon University until 2006. He is an Associate Editor for *Management Science* and is on the editorial board of several other academic journals including *Strategic Management Journal, Research Policy,* and *Industrial & Corporate Change*. Professor Arora has served on a number of committees for bodies such as the National Academy of Sciences and the Association of Computing Machinery. He recently completed his service on the Advisory Committee on Measuring Innovation in the 21st Century to the Secretary of Commerce.

Professor Arora received his Ph.D. in economics from Stanford University in 1992.

Christine P. Bellon

Christine P. Bellon is Vice President of Intellectual Property & Legal Affairs for Hydra Biosciences and is responsible for all legal matters for the company. Dr. Bellon was previously Assistant General Counsel, Intellectual Property, for Infinity Pharmaceuticals, where she focused on the company's intellectual property strategy and patent portfolio. Prior to joining Infinity, Dr. Bellon was Patent Counsel at Wyeth, where she was responsible for the company's small molecule Cardiovascular and Metabolic Disease patent portfolio and the company's structural biology patent portfolio. Prior to Wyeth, Dr. Bellon was an attorney in the Boston office of Fish & Richardson P.C., where her practice focused on patent prosecution and client counseling in the areas of pharmaceuticals, chemicals, polymers, and biotechnology.

Dr. Bellon graduated from Yale University with honors, with a B.S. in chemistry. She received a Ph.D. in organic chemistry from the Massachusetts Institute of Technology, where she did research in ligand accelerated catalysis and asymmetric synthesis under the direction of K. Barry Sharpless. Dr. Bellon holds a J.D. degree from Columbia Law School.

James Bessen

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has been influential in European policy deliberations. He is the author (along with Michael J. Meurer) of *Patent Failure: How Judges, Bureaucrats, and Lawyers Put Innovators at Risk* (Princeton 2008).

<u>Dan L. Burk</u>

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Mr. Clarke began his career at the Office in 1990 as a patent examiner in former Group 3300, now TC 3700. He received a bachelors degree in molecular genetics from the University of Rochester in 1989, a J.D. with honors from the Catholic University of America in 1995, and is a member of the Virginia State Bar. Mr. Clarke has been the recipient of two Department of Commerce Silver Medals. The first medal was awarded in 2001 for his efforts in implementation of the AIPA of 1999. The second medal was awarded in 2004 for his work related to patent examination in the electronic environment.

Sarah T. Harris

Ms. Harris is Vice President and Chief Counsel, Intellectual Property at AOL, LLC in Dulles, Virginia. She is responsible for establishing AOL's intellectual property policies and strategies and managing all of AOL's intellectual property issues, including those related to patent litigation, patent prosecution and copyrights, trademarks, and domain names. Prior to joining AOL, Ms. Harris was the Chief Intellectual Property Counsel at Cooper Industries, an electrical products and tools manufacturing comp

Bob Hunt

Bob Hunt is an Assistant Vice President at the Federal Reserve Bank of Philadelphia. After ten years in the Research Department, he joined the bank's Payment Cards Center in January 2009.

Dr. Hunt's research has focused on the economics of innovation, intellectual property, economic geography, consumer payments and consumer finance. His work includes studies of the effects of changes in intellectual property reform, the emergence and effects of patents on computer programs and business methods, the effects of patents for financial services, and the distribution of innovation across firms, locations, and time.

Dr. Hunt has also written on the dynamics of consumer credit reporting industry, credit counseling organizations, debt collection, and antitrust issues in consumer payment networks.

Dr. Hunt received a B.A. from Butler University in 1986 and a Ph.D. in economics from the University of Pennsylvania in 1996. Prior to joining the Bank in 1998, he worked for the U.S. Congressional Budget Office.

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particular, Mr. Kappos is responsible for the management of IBM's patent and trademark portfolios; protecting and licensing intellectual property (patents, copyrights, trademarks, know how and technology) worldwide; directing intellectual property law operations relating to the research, services, consulting, computer systems, storage products, semiconductor and technology development, software, marketing and other groups, divisions, and entities within IBM. In addition, Mr. Kappos has responsibility for IP policy and coordination with IBM's litigation and corporate development groups in matters relating to intellectual property.

Mr. Kappos serves on the Board of Directors of the American Intellectual Property Law Association, the Intellectual Property Owners Association, and the International Intellectual Property Society. He is also the Vice President of the Intellectual Property Owners Association. He has held various previous leadership positions in intellectual property law associations in Asia and the U.S. He has written and spoken widely in Asia, Europe, and the U.S. on intellectual property topics.

Mr. Kappos received his B.S. degree in electrical and computer engineering from the University of California Davis in 1983, and his law degree from the University of California Berkeley in 1990. He joined IBM in 1983 as a Development Engineer and has served as an Intellectual Property Law attorney in IBM's Storage Division and Litigation group, as IP Law Counsel in IBM Software Group, as Assistant General Counsel in IBM Asia/Pacific, IBM Corporate Counsel and as Assistant General Counsel prior to his current position.

Ron D. Katznelson

establishment of patent policy for the various Patent Organizations under the Commissioner for Patents, including changes in patent practice, revision of rules of practice and procedures, establishment of examining priorities and classification of technological arts, and oversaw the operations of the Office of Patent Legal Administration, Patent Cooperation Treaty Legal Administration, and the Office of Petitions. Additionally, in January 1993, Mr. Kunin was designated by the Secretary of Commerce to perform the functions of the Assistant Commissioner for Patents on an acting basis until a new Assistant Commissioner for Patents was appointed in 1994.

Mr. Kunin, as a Partner, serves as a patent consultant who advises clients on patent prosecution and policy matters and prepares infringement and non-infringement opinions. He also serves as an expert witness on patent law, policy, practice and procedure.

Mr. Kunin also now serves as the Intellectual Property Program Director at the George Mason School of Law where he is an adjunct professor who teaches patent law and intellectual property law classes.

Mr. Kunin graduated with honors from Washington University in May of 1970 with a B.S. degree in electrical engineering. He attended the National Law Center of the George Washington University, receiving his J.D., with honors, in May of 1975. He is a graduate of the Harvard University Kennedy School of Government SMG Program.

Mr. Kunin received numerous awards during his career at the USPTO,

infringement and validity analysis in opinion work and in support of litigation for computer-related patents.

Prior to joining Sterne Kessler, Mr. Messinger worked as a patent examiner for more than six years in Group 2500 (Radiant Energy) at the United States Patent and Trademark Office. He examined patent applications and granted U.S. patents covering a variety of optical electronic circuits and systems including video camera inspection systems, scanners, fiber optic sensors, imaging CCD arrays, and photosensitive semiconductor junctions. Mr. Messinger regularly publishes and speaks on emerging topics in patent strategy and practice in the United States and abroad.

Steven W. Miller

Steven W. Miller is Vice President & General Counsel – Intellectual Property for the Procter & Gamble Company ("P&G"), having joined P&G in August, 1984. In this position, he oversees about 150 patent and trademark attorneys worldwide, and advises P&G's senior management on intellectual property issues. Mr. Miller has authored numerous P&G patents and patent applications and has been involved in a number of license agreements, acquisitions, interferences, arbitrations, and litigation, both in the U.S. and abroad.

Mr. Miller is currently President of the Intellectual Property Owners Association (IPO); on the Board of Directors for IPO and the IPO Education Foundation; on the Board of Directors for the AIPLA Education Foundation; on the Board of Directors for the National Inventors Hall of Fame; on the Steering Committee for the Coalition for 21st Century Patent Reform; on the Executive Committee for the Association of Corporate Patent Counsels (ACPC); on the Dean's National Council for The Ohio State University Moritz College of Law; on the Advisory Council for Intellectual Property at the Franklin Pierce Law Center; and is a member of the American Intellectual Property Law Association (AIPLA), American Bar Association – Intellectual Property Committee, and Cincy IP.

Mr. Miller has held a number of positions at Procter & Gamble. His first assignment at P&G was to support the Paper Division. In June, 1989, he was appointed Senior Patent Counsel. In December, 1994, he was appointed Associate General Counsel - Patents. In July 1999, Mr. Miller was promoted to Vice President & Associate General Counsel-Patents for the Baby Care Global Business Unit. In August 2000, Mr. Miller was appointed Chief Patent Counsel. In July 2001, Mr. Miller was appointed to his current position.

Mr. Miller has been a frequent speaker at events for the Intellectual Property Owners Association, Association of Corporate Patent Counsel, Cincy IP, and other bar associations and groups, on various IP topics including licensing and open innovation. He received a J.D. with Honors and a B.S. in mechanical engineering, cum laude, from The Ohio State University. He is licensed to practice in Ohio; U.S. Patent & Trademark Office; United States District Court for the Southern District of Ohio; United States Court of Appeals for the Sixth and Federal Circuits; and the United States Supreme Court.

Jeffrey N. Myers

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<u>Arti Rai</u>

Arti Rai is an authority in patent law, administrative law, law and the biopharmaceutical industry, and health care regulation. Her current research on innovation policy in areas such as green technology, drug development, and software is funded by NIH, the Kauffman Foundation, and Chatham House. She has published widely in both peer-reviewed journals and law reviews, including Nature Biotechnology, PLoS Biology, PLoS Medicine, the Annals of Internal Medicine, and the Columbia, Georgetown, and Northwestern law reviews. She is currently editing a book on intellectual property rights in biotechnology and has also co-authored a casebook on law and the mental health system.

Professor Rai has served as a peer reviewer for Science, Research Policy, the Journal of Legal Studies, various National Academy of Sciences reports on intellectual property, and various NIH study sections. She has also testified before the U.S. Senate on innovation policy issues. She is currently the chair of the Intellectual Property Committee of the Administrative Law Section of the American Bar Association.

Professor Rai joined the Duke Law faculty in 2003. In the winter of 2007, Professor Rai was the Hieken Visiting Professor in Patent Law at Harvard Law School. Prior to joining Duke, she was on the faculty of the University of Pennsylvania Law School, where she was also a visiting professor in Fall 2000.

Professor Rai graduated from Harvard College, *magna cum laude*, with a B.A. in biochemistry and history (history and science), attended Harvard Medical School for the 1987-1988 academic year, and received her J.D., *cum laude*, from Harvard Law School in 1991.

Teresa Stanek Rea

Teresa Stanek Rea is partner in the Washington, D.C. office of Crowell & Moring, LLP and is a member of the Intellectual Property Section.

Ms. Rea is recognized throughout the professional community for the depth and breadth of her knowledge in the area of intellectual property. In a career spanning more than 25 years, she often has been on the leading edge of emerging trends and developments. In recognition, she was named to the Best Lawyers in America© for Biotechnology Law.

Ms. Rea focuses on complex patent litigation and *inter partes* matters, as well as patent procurement and portfolio management, including patent preparation and prosecution. She has experience in drafting infringement and validity opinions and licensing matters. She has handled many patent term extensions under 35 U.S.C. § 156, and, through her foreign filing experience, she has coordinated oppositions in Europe, Australia and Japan.

Ms. Rea represents emerging companies, corporations and universities and focuses her practice on biotechnology, pharmaceutical chemistry, medical devices, immunology, specialty chemicals, including polymers and nanotechnology. She also has experience in export control. Ms. Rea is a

registered pharmacist in the state of Michigan and worked for years as a hospital pharmacist. This experience, along with her experience as a corporate patent attorney and her work with various venture capital organizations, provides a solid foundation for seeking

Herbert F. Schwartz

Herb Schwartz is an Adjunct Professor of Law at both University of Pennsylvania Law School and New York University School of Law. Mr. Schwartz was a partner in Ropes & Gray's Intellectual Property Group until his retirement on December 31, 2007. He joined Ropes & Gray in 2005 when it merged with Fish & Neave, the IP boutique where he was a partner from 1971 to 2004 and Managing Partner from 1985 to 1991.

Mr. Schwartz spent his career litigating intellectual property law matters. He represented various clients in many well-known high profile intellectual property disputes, including Purdue Pharma in *Purdue v. Endo*, AstraZeneca and Aventis in *Housey v. AstraZeneca*, et al., Digital Equipment in *Digital v. Intel*, Motorola in *NBA v. Motorola* and Polaroid Corporation in *Polaroid v. Kodak*. In recent years, Mr. Schwartz represented many clients in significant patent, trademark, copyright, trade secret and licensing litigation. He tried many cases and argued many appeals on behalf of

Jon Soderstrom

Jon Soderstrom is currently the Managing Director of the Office of Cooperative Research at Yale University. The Office is responsible for developing and executing commercialization strategies for inventions resulting from Yale's scientific research including patent license agreements and the formation of new business ventures.

Since joining the Office in 1996, he has participated in the formation of more than 25 new ventures including polyGenomics, Molecular Staging (acquired by Qiagen), Agilix, Asilas Genomic Systems, Achillion Pharmaceuticals (NASQ: ACHN), PhytoCeutica, Protometrix (acquired by Invitrogen), Iconic Therapeutics, Applied Spine Technologies, HistoRx, VaxInnate, Affomix and Kolltan Pharmaceuticals. Collectively, these companies have raised over \$400 million in professional venture capital.

Dr. Soderstrom was a founding board member and past president of the Association of Federal Technology Transfer Executives as well as a member of the Licensing Executive Society and Association of University Technology Managers where he was the 2008 President, has served as Vice President for Public Policy and a member of the Board of Directors and Executive Committee. He is frequently asked to lecture and teach seminars on various aspects of the technology transfer process and economic development both within the United States and abroad. He has testified before Congress on technology transfer issues and served as an expert witness in patent infringement litigation.

Jennifer Stec

Jennifer Stec is Intellectual Property

Professor Stern explores how innovation - the production and distribution of "ideas" - differs from more traditional economic goods, and the implications of these differences for business and public policy. Often focusing on life sciences industries, this research is at the intersection between industrial organization and the economics of technical change. Recent studies examine the determinants of R&D productivity, the role of incentives and organizational design on the process of innovation, and the drivers of commercialization strategy for technology entrepreneurs.

Mr. Thorne is chair of the governing board of the Bishop John T. Walker School for Boys, a tuition-free private school for boys from low-income families in the Anacostia neighborhood of Washington, DC.

Thomas G. Woolston

Thomas G. Woolston is an inventor and entrepreneur. He is the named inventor or co-inventor on nine United States patents. He is the founder and currently Chief Executive Officer for MercExchange, L.L.C.. He is on the technical advisory board of the George Washington University School of Electthe advision george (advisory board of the George Washington University) and the technical advisory board of the George Washington University School of Electthe advisory (advisory) advisory board of the George Washington University and the technical advisory board of the George Washington University School of Electthe advisory (advisory) advisory) advisory (advisory) advisory (advisory) advisory (advisory) advisory (advisory) advisory (advisory) advisory) advisory (advisory) advisory (advisory) advisory (advisory) advisory (advisory) advisory) advisory (advisory) advisory (advisory) advisory) advisory (advisory) advisory (advisory) advisory (advisory) advisory) advisory (advisory) advisory (advisory) advisory) advisory) advisory (advisory) advisory) advisory) advisory) advisory (advisory) advisory) ad