



**HOOVER INSTITUTION
STANFORD UNIVERSITY**

**PATENT HOLDUP THEORY
IMPLICATIONS FOR THE COURTS,
GOVERNMENT, AND THE LEGISLATURE**

**The Working Group on Intellectual Property,
Innovation, and Prosperity**

A Washington DC Symposium

*The Hoover Institution Washington DC Office
1399 New York Ave, NW, 5th Floor
Washington, DC 20005*

Tuesday, October 4, 2016

PATENT HOLDUP THEORY

IMPLICATIONS FOR THE COURTS, GOVERNMENT, AND THE LEGISLATURE

Does the US patent system allow the owners of intellectual property to engage in patent holdup, thereby frustrating innovation? Or do the actions of antitrust authorities and the limitations on intellectual property rights that are designed to mitigate patent holdup undermine the innovation ecosystem and put US technological leadership at risk?

The Hoover Institution Working Group on Intellectual Property, Innovation, and Prosperity (Hoover IP²) symposium's purpose is to debate these questions openly by addressing a set of core questions:

- What is patent holdup; is it a straightforward variant of holdup as it is understood in the economics profession or is it an entirely new formulation?
- What is the relationship of patent holdup to the concept of royalty stacking?
- Is royalty stacking merely patent holdup repeated numerous times on the same product or do the mechanics of patent holdup and royalty stacking logically exclude one another?
- How do both patent holdup and royalty stacking relate to the theory that industry standards can confer market power on the patents that read on those standards?
- What evidence has been advanced to support the hypothesis that patent holdup, royalty stacking, and industry standards hinder innovation?
- Is that evidence dispositive?

In short, is patent holdup a logically consistent theory that is supported by systematic evidence, or is it an incomplete theory, lacking in empirical support, and, hence, should not be used as a guide by legislators, regulators, and jurists?

The Hoover IP² symposium consists of three panels of distinguished government officials, jurists, and academic experts who will address those questions and engage a select, by-invitation-only group of congressional and federal agency staff, federal judicial clerks, academic researchers, and industry practitioners under Chatham House rules.

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Agenda

- 1:15 P.M. Welcome and Introduction: **Stephen Haber**, Hoover Institution
- 1:30 P.M. “What Is Patent Holdup: Is It a Variant of Transaction Cost Holdup and Is It an Anti-Trust Issue?”
Panelists: **Alexander Galetovic**
Joshua Wright
Alan Marco
Anne Layne-Farrar

Moderator: **Richard Sousa**
- 2:30 P.M. “Patent Holdup, Royalty Stacking, and Standards: Theory and Evidence”
Panelists: **Jorge Contreras**
Stephen Haber
Daniel Spulber
Moderator: **Ross Levine**
- 3:30 P.M. Break
- 3:45 P.M. “Implications”: A roundtable of government officials
Panelists: **F. Scott Kieff**
Maureen Ohlhausen
Moderator: **David Kappos**
- 5:15 P.M. Cocktail Reception

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Presenters

Jorge L. Contreras is an associate professor in the S.J. Quinney College of Law and an adjunct associate professor of human genetics at the University of Utah. At the College of Law, he teaches in the areas of intellectual property, law and science, and property law. He is the recipient of the Early Career Teaching Award at the College of Law and serves on the Scientific Advisory Board of the Utah Genome Project. He previously served on the law faculties of American University Washington College of Law and Washington University in St. Louis. He clerked for Chief Justice Thomas R. Philips of the Texas Supreme Court and he was a partner at the international law firm Wilmer Cutler Pickering Hale and Dorr LLP. Contreras's current research focuses, among other things, on the development of technical standards and the use and dissemination of data generated by large-scale scientific research projects. His published work has appeared in scientific, legal and policy journals including and he recently co-edited an interdisciplinary volume exploring legal issues at the intersection of biological and computational science, *Bioinformatics Law: Legal Issues for Computational Biology in the Post-Genome Era*. Contreras serves as co-chair of the Technical Standardization Committee of the ABA's Section of Science & Technology Law and is a member of the National Institutes of Health Council of Councils, the Advisory Council of the National Center for the Advancement of Translational Sciences, the Cures Acceleration Network Board at NIH, and the Intellectual Property Rights Policy Committee of the American National Standards Institute (ANSI). He has recently served as Co-Chair of the National Conference of Lawyers and Scientists and as a member of the National Academy of Sciences Committee on Intellectual Property Management in Standard-Setting Processes and the National Advisory Council for Human Genome Research at NIH.

Alexander Galetovic is professor of economics at the Universidad de los Andes in Santiago, Chile. His current research focuses on standard essential patents, competition policy, and public-private partnerships (PPPs). He has published widely in leading economics journals, among them the *Journal of Political Economy*, the *Review of Economics and Statistics*, the *Journal of the European Economic Association* and the *Harvard Business Review*. His recent book, *The Economics of Public-Private Partnerships: A Basic Guide* (Cambridge University Press, 2014), synthesizes twenty years of research in public-private partnerships. He has been advisor on PPPs to the Chilean government and multilateral organizations such as the World Bank and the Inter-American Development Bank. He has been a research scholar at the International Monetary Fund, a Tinker Visiting Professor at Stanford, and a National Fellow at the Hoover Institution. He is also listed among Who's Who Legal Competition Economists. He holds a Bachelor's degree from the Catholic University of Chile and a PhD in economics from Princeton University.

Stephen Haber, Peter and Helen Bing Senior Fellow at the Hoover Institution and A.A. and Jeanne Welch Milligan Professor in the School of Humanities and Sciences at Stanford University, is also professor of political science, history, and (by courtesy) economics at Stanford. He has been awarded every teaching prize at Stanford, including the Walter J. Gores Award for distinguished teaching. His research examines political institutions and economic policies that "hold up" innovation. His current research examines the creation of regulatory barriers to entry in finance, the economic and political consequences of hold up problems created by different systems of agricultural production, and the comparative development of patent systems. Haber's most recent book, *Fragile by Design* (with Charles Calomiris), examines how governments

and industry incumbents often craft banking regulatory policies in ways that stifle competition and increase systemic risk.

David Kappos is a partner at Cravath, Swaine & Moore LLP; former undersecretary of commerce and director of the United States Patent and Trademark Office (USPTO). He is recognized as a leader in the field of intellectual property, including intellectual property management and strategy, the development of global intellectual property norms, laws and practices as well as commercialization and enforcement of innovation-based assets. As director of the USPTO, he advised the President, Secretary of Commerce, and the administration on intellectual property policy matters. He led the agency in dramatically reengineering its entire management and operational systems as well as its engagement with the global innovation community. He was instrumental in achieving the greatest legislative reform of the US patent system in generations through passage and implementation of the Leahy-Smith America Invents Act, signed into law in 2011. Prior to leading the USPTO, Mr. Kappos held several executive posts in the legal department of IBM. Mr. Kappos was named one of the 50 Most Influential People in Intellectual Property by *Managing IP*, one of the Top 50 Intellectual Property Trailblazers & Pioneers, one of the 100 Most Influential Lawyers in America by *The National Law Journal*, and Intellectual Property Professional of the Year by the Intellectual Property Owners Association. He was inducted into the Intellectual Property Hall of Fame by *Intellectual Asset Management Magazine* in 2012.

F. Scott Kieff was sworn in on Friday, October 18, 2013, as a Commissioner of the US International Trade Commission for the term expiring on June 16, 2020. Kieff is on leave of absence from his post as the Fred C. Stevenson Research Professor at the George Washington University Law School. He was the Ray and Louise Knowles Senior Fellow at the Hoover Institution, Stanford University; a faculty member of the Munich Intellectual Property Law Center at Germany's Max Planck Institute; a visiting professor in the law schools at Northwestern, Chicago, and Stanford; and a faculty fellow in the Olin Program on Law and Economics at Harvard. Before entering academia, Kieff practiced law for over six years as a trial lawyer and patent lawyer and served as a law clerk to US Circuit Judge Giles S. Rich. He was recognized as one of the nation's "Top 50 under 45" by the magazine *IP Law & Business* in May, 2008, and was inducted as a Member of the European Academy of Sciences and Arts in March 2012.

Anne Layne-Farrar is a vice president in the Antitrust & Competition Economics Practice of Charles River Associates and an adjunct professor at Northwestern University School of Law. At CRA, her work includes analyzing reasonable licensing, including RAND and FRAND; calculating damages; assessing economic incentives and firm behavior within standard setting organizations; reviewing the competitive implications of licensing pharmaceuticals; defining markets; and determining costs and benefits for legislative proposals covering healthcare, credit and debit cards, labor unions, television ratings, software security, and e-commerce. She works in a variety of jurisdictions, including the US, Europe, and Asia (South Korea and China). Layne-Farrar has coauthored a book on law and economics, has published articles in magazines including *Antitrust*, *Global Competition Review*, and *Regulation* and in academic journals, including *Antitrust Law Journal*, *International Journal of Industrial Organization*, and *Journal of Competition Law and Economics*. Layne-Farrar has given oral and written expert testimony in a variety of US courts and has provided other submissions, including ones before the US Supreme Court and before regulatory bodies including the US Federal Trade Commission, the US Department of Justice, the US Senate, the European Commission, and Ministry of Commerce of the People's Republic of China.

Ross Levine is the Willis H. Booth Chair in Banking and Finance at the Haas School of Business, University of California, Berkeley; a research associate at the NBER; a member of the Council on Foreign Relations; and a member of the Scientific Advisory Council of the European Systemic Risk Board. His work

focuses on the linkages among financial sector policies, the operation of financial systems, and the functioning of economies. His two most recent books, *Rethinking Bank Regulation: Till Angels Govern* and *Guardians of Finance: Making Regulators Work for Us*, stress that regulatory policies often stymie competition and encourage risk-taking, with deleterious effects on productivity growth and living standards. Levine has published more than one hundred scholarly articles and advises governments, central banks, and multilateral organizations.

Alan C. Marco is chief economist, US Patent and Trademark Office (USPTO), where he has worked since 2012. Previously, he was an associate professor of economics at Washington and Lee University and Vassar College. He also worked as an associate at the global consulting firm LECG. As the USPTO chief economist, Marco is responsible for advising the Under Secretary of Commerce for Intellectual Property and director of the USPTO on the economic implications of policies and programs affecting the US intellectual property system. His personal research focuses on policy-relevant topics in intellectual property. He is one of the leads on the development of PatentsView.org, a platform designed to democratize patent data and make it accessible and functional for a host of different types of users. He has published articles on the IP marketplace, uncertainty in intellectual property rights, patent valuation, and high-tech mergers. He holds a PhD in economics from the University of California, Berkeley, and his undergraduate degree is from Skidmore College.

Maureen K. Ohlhausen was sworn in as a Commissioner of the Federal Trade Commission (FTC) on April 4, 2012, to a term that expires in September 2018. Prior to joining the Commission, Ohlhausen was a partner at Wilkinson Barker Knauer, LLP, where she focused on FTC issues, including privacy, data protection, and cybersecurity. Ohlhausen previously served at the commission for eleven years, most recently as director of the Office of Policy Planning from 2004 to 2008, where she led the FTC's Internet Access Task Force. She was also deputy director of that office. From 1998 to 2001, Ohlhausen was an attorney advisor for former FTC Commissioner Orson Swindle, advising him on competition and consumer protection matters. She started at the FTC General Counsel's Office in 1997. Before coming to the FTC, Ohlhausen spent five years at the US Court of Appeals for the DC Circuit, serving as a law clerk for Judge David B. Sentelle and as a staff attorney. Ohlhausen also clerked for Judge Robert Yock of the US Court of Federal Claims from 1991 to 1992. Ohlhausen was on the adjunct faculty at George Mason University School of Law, where she taught privacy law and unfair trade practices. She served as a senior editor of the *Antitrust Law Journal* and a member of the American Bar Association Task Force on Competition and Public Policy. She has authored a variety of articles on competition law, privacy, and technology matters.

Richard Sousa, research fellow at the Hoover Institution, is an economist who specializes in human capital, discrimination, labor market issues, and K-12 education. He coauthored *School Figures: The Data behind the Debate* and coedited *What Lies Ahead for America's Children and Their Schools* and *Reacting to the Spending Spree: Policy Changes We Can Afford*; his opinion articles have appeared in newspapers throughout the country. Sousa, who served as senior associate director at Hoover until 2014, was responsible for launching the Institution's major communications initiatives, including the *Hoover Digest*, *Education Next*, *Policy Review*, and *Uncommon Knowledge*. From 1990 to 1995, he directed the Institution's Diplomat Training Program. He served as director of the Hoover Institution Library and Archives from 2007 to 2012 and was responsible for major acquisitions, including the Chiang Kai-shek diaries; the William Rehnquist papers; the Georgia, Estonia, and Lithuanian KGB files; and the Iraqi B'ath Party collection.

Daniel Spulber is the Elinor Hobbs Distinguished Professor of International Business and professor of strategy at the Kellogg School of Management, Northwestern University, and professor of law (by courtesy) at Northwestern University School of Law. In addition, he has taught at Brown University, the University of

Southern California, and Cal Tech. He is the research director for the Searle Center on Law, Regulation and Economic Growth, founding editor of the *Journal of Economics & Management Strategy*, and served as the founding director of Kellogg's International Business and Markets Program. Spulber's research is in the areas of innovation, international economics, industrial organization, microeconomic theory, management strategy, and law. He has received research grants from the National Science Foundation, the Searle Fund, and the Ewing Marion Kauffman Foundation. Spulber has published numerous journal articles in economics journals and law reviews and is the author of thirteen books; his most recent is *The Innovative Entrepreneur*. He received his PhD and MA in economics from Northwestern University and his BA from the University of Michigan.

Joshua D. Wright is university professor and director of the Global Antitrust Institute at George Mason University School of Law; he holds a courtesy appointment in the department of economics. He served as commissioner of the Federal Trade Commission from 2013 through 2015. Wright is a leading scholar in antitrust law, economics, and consumer protection and has published more than sixty articles and book chapters, co-authored a leading casebook, and edited several book volumes focusing on these issues. Wright also served as co-editor of the *Supreme Court Economic Review* and a Senior Editor of the *Antitrust Law Journal*. Wright previously served the commission in the Bureau of Competition as its inaugural Scholar-in-Residence from 2007 to 2008, where he focused on enforcement matters and competition policy. Wright received his JD from UCLA in 2002, his PhD in economics from UCLA in 2003, and graduated with honors from the University of California, San Diego, in 1998. He is a member of the California Bar. Wright clerked for Judge James V. Selna of the United States District Court for the Central District of California and taught at the Pepperdine University Graduate School of Public Policy.

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