March 10, 2015

The Honorable Chuck Grassley *Chairman*Committee on the Judiciary
United States Senate
Washington, D.C. 20510

The Honorable Bob Goodlatte *Chairman*Committee on the Judiciary
U.S. House of Representatives
Washington, DC 20515

The Honorable Patrick Leahy *Ranking Member*Committee on the Judiciary United States Senate
Washington, D.C. 20510

The Honorable John Conyers *Ranking Member*Committee on the Judiciary
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Grassley, Ranking Member Leahy, Chairman Goodlatte, and Ranking Member Conyers:

As economists and law professors who conduct research in patent law and policy, we write to express our deep concerns with the many flawed, unreliable, or incomplete studies about the American patent system that have been provided to members of Congress. Unfortunately, much of the information surrounding the patent policy discussion, and in particular the discussion of so-called "patent trolls," is either inaccurate or does not support the conclusions for which it is cited.

As Congress considers legislation to address abusive patent litigation, we believe it is imperative that your decisions be informed by reliable data that accurately reflect the real-world performance of the U.S. patent system. The claim that patent trolls bring the majority of patent lawsuits is profoundly incorrect. Recent studies further indicate that new patent infringement filings were down in 2014, with a significant decline in non-practicing entity (NPE) case filings. Unfortunately, these facts have gone largely unnoticed. Instead, unreliable studies with highly exaggerated claims regarding patent trolls have stolen the spotlight after being heavily promoted by well-organized proponents of sweeping patent legislation.

Indeed, the bulk of the studies relied upon by advocates of broad patent legislation are infected by fundamental mistakes. For example, the claim that patent trolls cost U.S. businesses \$29 billion a year in direct costs has been roundly criticized. Studies cited for the proposition that NPE litigation is harmful to startup firms, that it reduces R&D, and that it reduces venture capital investment are likewise deeply flawed. In the Appendix, we point to a body of research that calls into question many of these claims and provides some explanation as to the limitations of other studies.

Those bent on attacking "trolls" have engendered an alarmist reaction that threatens to gut the patent system as it existed in the Twentieth Century, a period of tremendous innovation and economic growth. Indeed, award-winning economists have linked the two trends tightly together, and others have noted that it is exactly during periods of massive innovation that litigation rates have risen. We are not opposed to sensible, targeted reforms that consider the costs created by

both plaintiffs and defendants in patent litigation. Yet, tinkering with the engine of innovation—the U.S. patent system—on the basis of flawed and incomplete evidence threatens to impede this country's economic growth. Many of the wide-ranging changes to the patent system currently under consideration by Congress raise serious concerns in this regard.

That these proposed changes to the patent system have not been supported by rigorous studies is an understatement. We are very concerned that reliance on flawed data will lead to legislation that goes well beyond what is needed to curb abusive litigation practices, causing unintended negative consequences for inventors, small businesses, and emerging entrepreneurs. It is important to remember that inventors and startups rely on the patent system to protect their most valuable assets. Legislation that substantially raises the costs of patent enforcement for small businesses risks emboldening large infringers and disrupting our startup-based innovation economy. If reducing patent litigation comes at the price of reducing inventors' ability to protect their patents, the costs to American innovation may well outweigh the benefits.

As David Kappos, the Director of the Patent Office from 2009 to 2013, stated in 2013 testimony before the House Judiciary Committee, "we are not tinkering with just any system here; we are reworking the greatest innovation engine the world has ever known, almost instantly after it has just been significantly overhauled" by the America Invents Act in 2011. "If there were ever a case where caution is called for, this is it." As Congress addresses this important issue, we hope you will demand empirically sound data on the state of the American patent system.

Sincerely,

Michael Abramowicz George Washington University Law School

Martin J. Adelman George Washington University Law School

Andrew Beckerman-Rodau Suffolk University Law School

David C. Berry Western Michigan University - Cooley Law School

Ralph D. Clifford University of Massachusetts School of Law

Christopher A. Cotropia University of Richmond School of Law

Gregory Dolin University of Baltimore School of Law John Duffy

University of Virginia School of Law

Richard A. Epstein

New York University School of Law

Chris Frerking

University of New Hampshire School of Law

Damien Geradin

EdgeLegal

George Mason University School of Law

Richard S. Gruner

John Marshal Law School

Stephen Haber

Stanford University

Timothy R. Holbrook

Emory University School of Law

Chris Holman

UMKC School of Law

Ryan Holte

Southern Illinois University School of Law

Gus Hurwitz

Nebraska College of Law

Jay P. Kesan

University of Illinois College of Law

B. Zorina Khan

Bowdoin College

Anne Layne-Farrar

Charles River Associates

Northwestern University School of Law

Stephen M. Maurer

University of California at Berkeley Goldman School of Public Policy

Damon C. Matteo Fulcrum Strategy Tsinghua University in Beijing

Michael Mazzeo

Northwestern University Kellogg School of Management

Adam Mossoff George Mason University School of Law

Sean O'Connor University of Washington School of Law

Kristen Osenga University of Richmond School of Law

Jorge Padilla Compass Lexecon

Lee Petherbridge Loyola Law School, Los Angeles

Michael Risch Villanova University School of Law

Mark Schultz Southern Illinois University School of Law

David L. Schwartz IIT Chicago-Kent College of Law

Ted Sichelman University of San Diego School of Law

Brenda M. Simon Thomas Jefferson School of Law

Matthew Laurence Spitzer Northwestern University School of Law

Daniel F. Spulber Northwestern University Kellogg School of Management

David J. Teece University of California at Berkeley Haas School of Business Shine Tu

West Virginia University College of Law

R. Polk Wagner

University of Pennsylvania Law School

Brian Wright

University of California at Berkeley

Christopher S. Yoo

University of Pennsylvania Law School

cc: The Honorable Mitch McConnell

Majority Leader United States Senate Washington, DC 20510

The Honorable John Cornyn

Majority Whip United States Senate Washington, DC 20510

The Honorable John Boehner

Speaker

United States House of Representatives

Washington, DC 20515

The Honorable Kevin McCarthy

Majority Leader

United States House of Representatives

Washington, DC 20515

The Honorable Harry Reid

Minority Leader United States Senate Washington, DC 20510

The Honorable Richard J. Durbin

Minority Whip United States Senate Washington, DC 20510

The Honorable Nancy Pelosi

Minority Leader

United States House of Representatives

Washington, DC 20515

The Honorable Steny Hoyer

Minority Whip

United States House of Representatives

Washington, DC 20515

Members of the United States Senate and United States House of Representatives

APPENDIX

Patent Litigation Studies and Related Articles

- Ashtor, Jonathan H., Michael Mazzeo, and Samantha Zyontz, <u>Patents at Issue: The Data Behind the</u>
 <u>Patent Troll Debate</u>, George Mason Law Review, 21 (2014): 957
- Cotropia, Christopher A., Jay P. Kesan, and David L. Schwartz. *Unpacking Patent Assertion Entities (PAEs)*, Minnesota Law Review, 99 (2014): 649
- Epstein, Richard A., F. S. Kieff & Daniel F. Spulber, *The FTC, IP, and SSOs: Government Hold-Up Replacing Private Coordination*, Journal of Competition Law and Economics, 8(1) (2012):1
- Geradin, Damien, Anne Layne-Farrar, and Jorge Padilla, <u>Elves or Trolls? The Role of Non-Practicing Patent Owners in the Innovation Economy</u>, Industrial and Corporate Change, 20 (2011)
- Golden, John M., "Patent Trolls" and Patent Remedies, Texas Law Review, 85 (2007): 2111
- Graham, Stuart J.H., Merges Robert P., Samuelson Pam, and Sichelman Ted, <u>High Technology</u>

 <u>Entrepreneurs and the Patent System: Results of the 2008 Berkeley Patent Survey</u>, Berkeley Technology Law Journal 24 (2009): 1255
- Haber, Stephen and Seth H. Werfel, Why Do Inventors Sell to Trolls? Experimental Evidence for the Asymmetry Hypothesis (March 5, 2015)
- Hillel, Jonathan, Michael Mazzeo, and Samantha Zyontz, <u>Explaining the 'Unpredictable': An Empirical Analysis of US Patent Infringement Awards</u>, International Review of Law and Economics, 35 (2013): 58
- Hillel, Jonathan, Michael Mazzeo, and Samantha Zyontz, <u>Do NPEs Matter? Non-Practicing</u>
 <u>Entities and Patent-Litigation Outcomes</u>, Journal of Competition Law & Economics, 9(4) (2013): 879
- Holte, Ryan, *Trolls or Great American Inventors: Case Studies of Patent Assertion Entities*, Saint Louis University Law Journal, 59 (2015): 1
- Khan, B. Zorina, <u>Trolls and Other Patent Inventions: Economic History and the Patent Controversy</u> <u>in the Twenty-First Century</u>, George Mason Law Review, 21 (2014): 825
- Lu, Jiaqing, *The Myths and Facts of Patent Troll and Excessive Payment: Have Non-Practicing Entities (NPEs) Been Overcompensated?*, Business Economics, 47(4) (2012): 234
- Lunney, Glynn, *On the Continuing Misuse of Event Studies: The Example of Bessen and Meurer*. Journal of Intellectual Property Law, 16 (2008): 35
- Osenga, Kristen, *Formerly Manufacturing Entities Piercing the "Patent Troll" Rhetoric*, Connecticut Law Review, 47 (2014): 435
- Reilly, Greg, Linking Patent Reform and Civil Litigation Reform (Feb. 22, 2015)
- Risch, Michael, *Licensing Acquired Patents*, George Mason Law Review 21 (2014): 979

- Risch, Michael, <u>A Generation of Patent Litigation: Outcomes and Patent Quality</u>, San Diego Law Review (Forthcoming 2015)
- Sag, Matthew, *IP Litigation in United States District Courts: 1994 to 2014* (Feb. 26, 2015)
- Schwartz, David L. and Jay P. Kesan, <u>Analyzing the Role of Non-Practicing Entities in the Patent</u>

 System, Cornell Law Review, 99 (2014): 425
- Sichelman, Ted, <u>Are Patent Trolls 'Opportunistic'</u>?, San Diego Legal Studies Working Paper No. 14-175 (2014)
- Spulber, Daniel, F., <u>How Patents Provide the Foundation of the Market for Inventions</u>, Journal of Competition Law and Economics (Forthcoming 2015)
- Spulber, Daniel, F., *How Do Competitive Pressures Affect Incentives to Innovate when there is a Market for Inventions?*, Journal of Political Economy, 121(6) (2013): 1007
- Spulber, Daniel, F., <u>Innovation Economics: Technology Standards, Competitive Conduct and Economic Performance</u>, Journal of Competition Law and Economics, 9(4) (2013): 777

Some Significant Limitations of the Most Commonly Cited Studies by Advocates of Broad Patent Legislation

- *Data Sources* Many NPE studies rely on proprietary data sets from commercial entities with a financial stake in patent reform legislation that cannot be independently validated.
- *Inaccurate Proxies* Some NPE studies use inaccurate proxies to determine whether a litigant is an NPE. Other patent litigation studies cited as supporting reform do not distinguish between NPEs and operating companies whatsoever.
- *Limited, Non-Generalizable Samples* Most NPE survey studies rely on non-random samples that are not generalizable to the entire population and cannot support broader conclusions about NPE litigation statistics or behavior. Some NPE studies only examine the most litigious NPEs, which may not be indicative of NPEs as a whole.
- Measuring Costs Some NPE studies attempt to estimate the total costs of NPE lawsuits but do little to nothing to quantify the benefits of these suits or NPE activity more generally. Some widely cited studies wrongly assume that payments in litigation are primarily "social costs" rather than mere economic "transfers" that do not decrease social welfare. Other studies relied upon by proponents of reform simply track NPE litigation and do not attempt to measure costs or benefits at all. Even when estimating costs, many NPE studies make unsupported assumptions about the nature or impact of NPE suits.
- Ignoring the AIA and Other Factors Many studies fail to sufficiently explain that the so-called rise in NPE patent litigation in 2011 and 2012 was due to changes in the joinder provisions in the America Invents Act. Moreover, previous rises in NPE litigation may be attributable, at least in significant part, to other factors, such as the rise in patenting and overall innovation.