

Hearing #4 on Competition and Consumer Protection in the 21st Century

Federal Trade Commission

Constitution Center

October 23, 2018



Welcome

We Will Be Starting Shortly



Welcome

Suzanne Munck

Federal Trade Commission
Office of Policy Planning



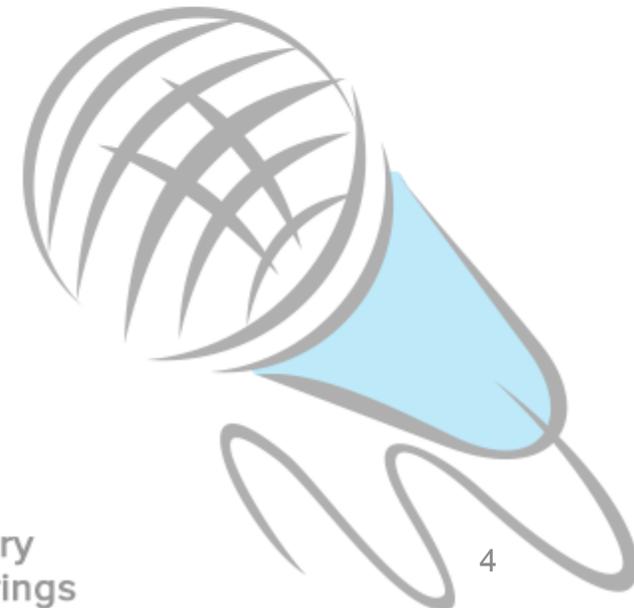
An Overview of Innovation and IP Policy

Session moderated by:

Suzanne Munck & John Dubiansky

Federal Trade Commission

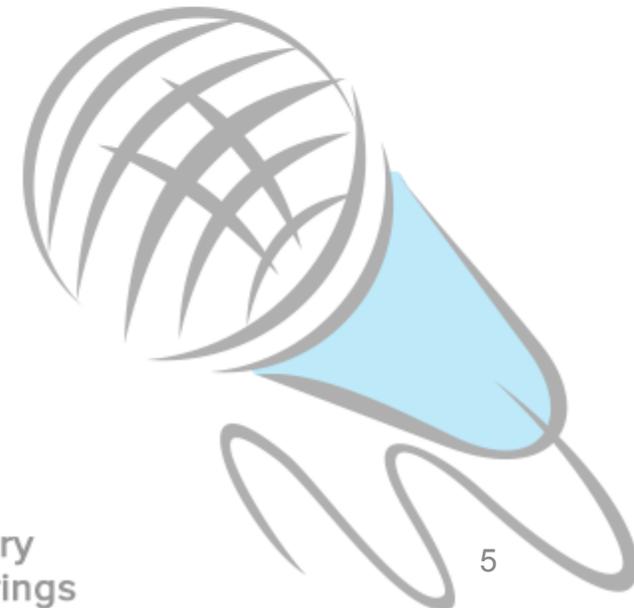
Office of Policy Planning



An Overview of Innovation and IP Policy

Thomas F. Cotter

University of Minnesota Law School



An Overview of Innovation and IP Policy

Arti Rai

Duke University School of Law



An Overview of Innovation and IP Policy

Competition, Trade, and Innovation: Recent Empirical Findings

Pian Shu

Georgia Institute of Technology
Scheller College of Business

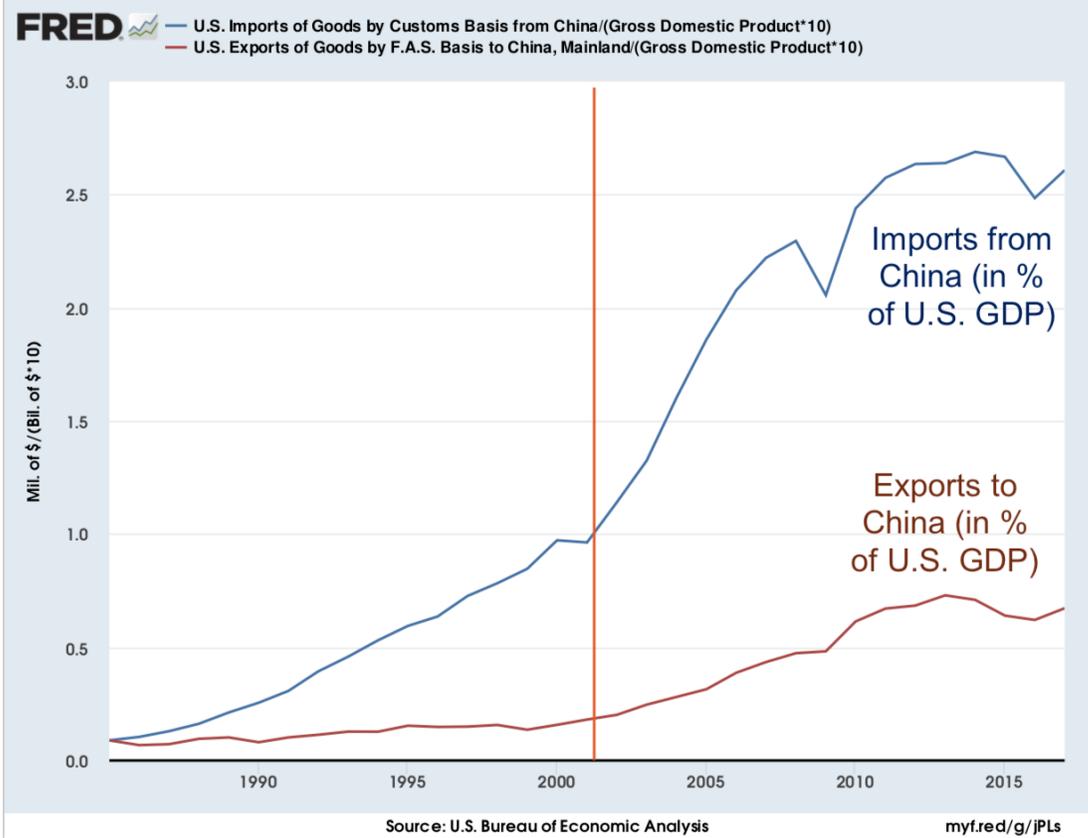


Basis of This Talk

- Autor, Dorn, Hanson, Pisano, and Shu (2016), “Foreign Competition and Domestic Innovation: Evidence from U.S. Patents.” NBER Working Paper No. 22879.
- Shu and Steinwender (2018), “The Impact of Trade Liberalization on Firm Productivity and Innovation,” forthcoming in NBER Innovation Policy and the Economy, Volume 19.



Import Competition: Why Should We Care?



Import Competition: Why Should We Care?

Chinese imports can:

- Generate competition for firms in the same industry (*focus of this talk*)
- Provide access to imported intermediate inputs for downstream firms

In theory, impact of competition on innovation is unclear:

- “Schumpeterian effect” (**negative**)
- “Escape-competition effect” (**positive**)
- “Preference effect” (**positive**)

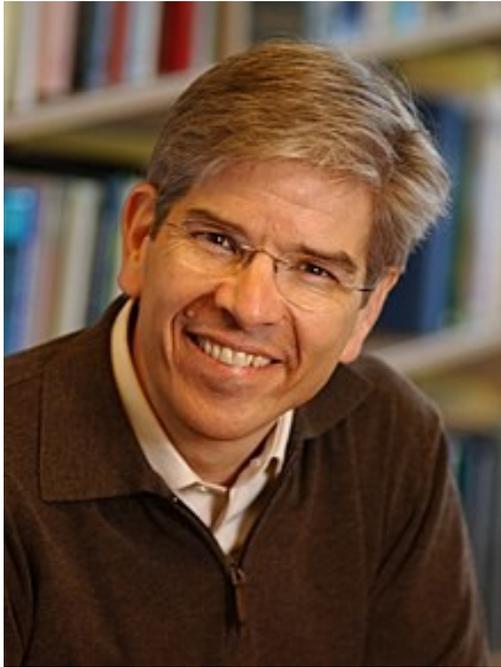


Impact of Chinese Import Competition on U.S. Innovation

- **Data:** USPTO patent data matched to firm-level data (for public firms) and industry-level data on trade exposure
- **Analysis:** How did changes in Chinese import penetration between 1991 and 2007 affect changes in firm patenting?
- **Key Findings:**
 - Import competition had a negative impact on sales, profitability, and employment of U.S. firms.
 - Import competition had a negative impact on patenting and R&D expenditures of U.S. firms.



How to Interpret These Findings?

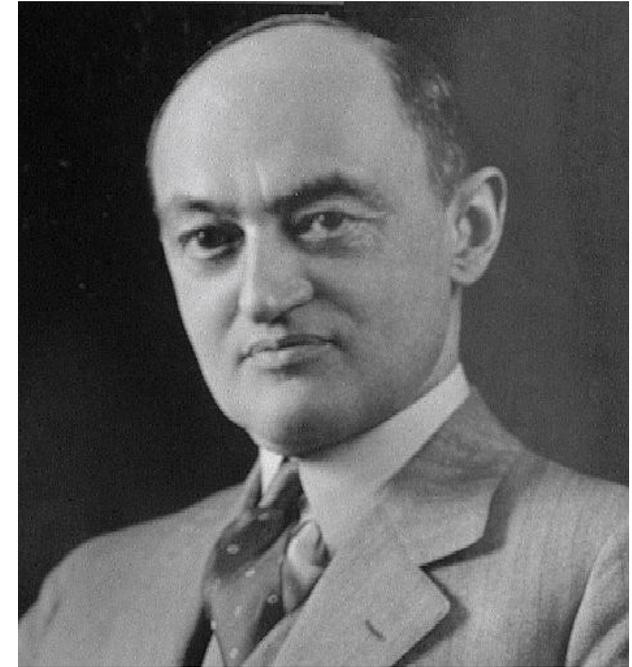


Paul Romer

A slowdown in
innovation and growth?

Or

A natural part of
“creative destruction”?



Joseph Schumpeter



How to Interpret These Findings?

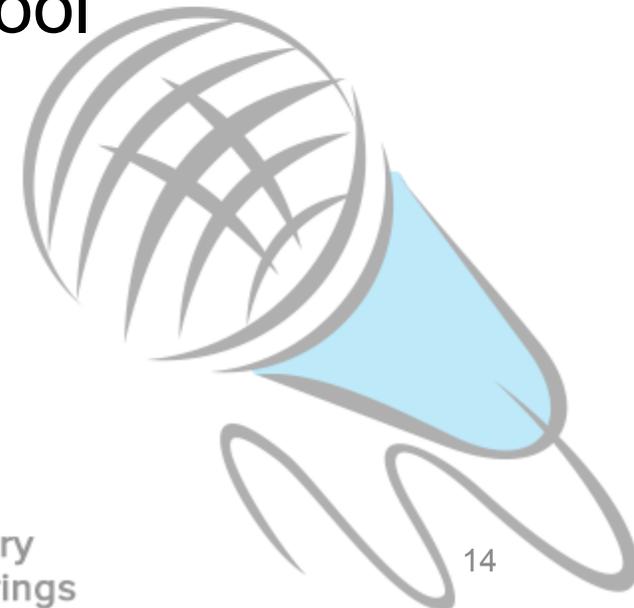
- Unique features of Chinese import competition (pre-2007):
 - Unprecedented increase in intensity of competition
 - Increased competition concentrated on low-cost offerings
- Chinese import competition is found to have a positive impact on firm innovation in Europe and developing economies
- Access to imported intermediates is found to have generally positive effects on firm innovation (but we need more evidence from the U.S.)



An Overview of Innovation and IP Policy

William E. Kovacic

George Washington University Law School



An Overview of Innovation and IP Policy

Panel Discussion:

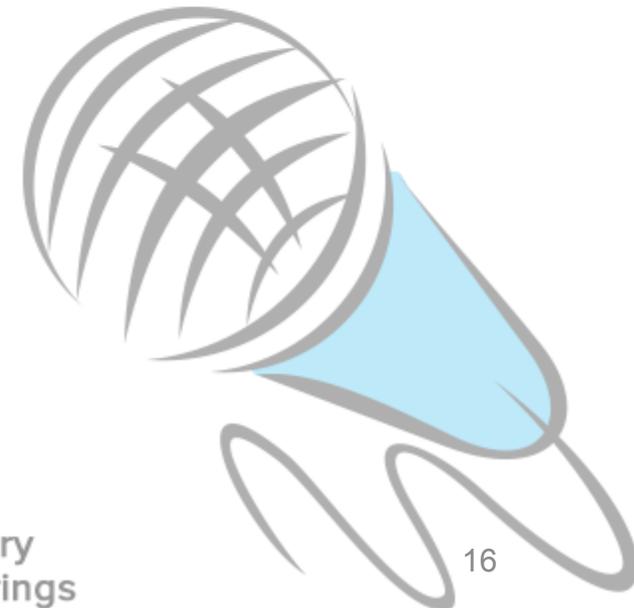
Thomas F. Cotter, William E. Kovacic,
Arti Rai, Pian Shu

Moderators: Suzanne Munck & John Dubiansky



Break

10:45-11:00 am



Understanding Innovation and IP in Business Decisions

Session moderated by:

Suzanne Munck & Elizabeth Gillen

Federal Trade Commission

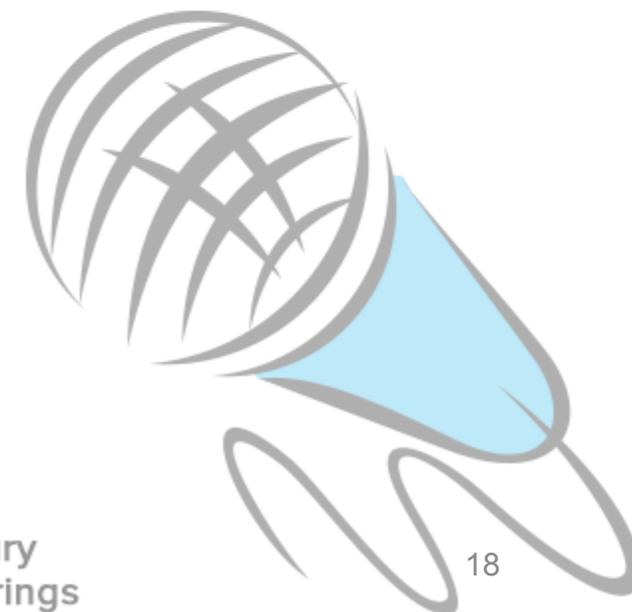
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Understanding Innovation and IP in Business Decisions

Nicole Morris

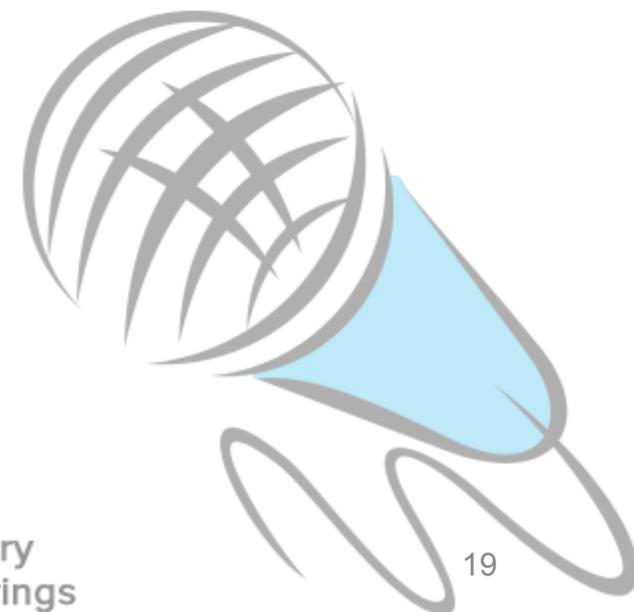
Emory University School of Law



Understanding Innovation and IP in Business Decisions

Michal Rosenn

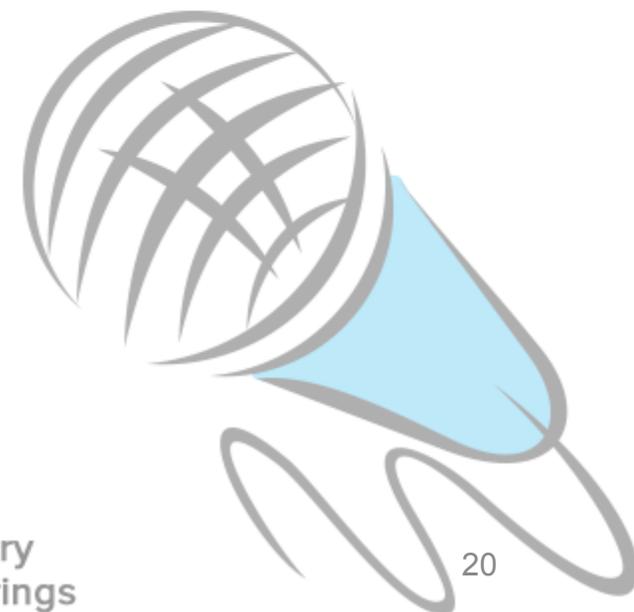
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Understanding Innovation and IP in Business Decisions

Greg Raleigh

New Enterprise Associates



Intro and Summary

- Greg's perspective: an inventor and VC - 300 US and 150 overseas patents - over 3 billion users currently benefit from daily use of these patented inventions
- For 200 years US patent system enabled individuals and small companies to create and own inventions to win market share from dominant incumbent companies
- For the past 15 years the so-called "patent troll" narrative has driven a series of damaging structural changes to the US patent system that have "stopped trolls", but in the process have also "harmed US invention"
- The FTC has unique power to help fix this problem by using a different approach to addressing abusive behavior while prioritizing important patent protections



Investment Incentives for Foundational Invention

- A large percentage of foundational, globally important inventions come from inventors and startups that do not work for the dominant incumbent companies
 - Dominant companies are not incentivized to disrupt their own products
- Dominant companies typically wait until an invention is proven and then use size and market power to quickly copy and distribute competing products – often driving new companies out of the market
- Two things can maintain incentives to create foundational inventions – (1) injunction to stop the copying and/or (2) substantial damage awards that are a multiple of the capital invested



What Today's Inventor Faces

- Typically \$100M-\$300M investment and 7-10 years to develop invention to profitability
- This level of investment and time requires an outcome of \$0.5B to \$1.0B to make sense
- Virtually certain that a foundational new invention will be copied by dominant incumbents
- Likelihood of injunction in ITC or courts is now so low it is often assumed impossible
- Successfully navigating PTAB, ITC and Fed Circuit appeals to achieve a significant 9-figure damage award is so unlikely now that it is often assumed impossible
- This has suppressed startup investment in key US industries - investment increasingly going overseas



Right to Injunction No Longer Justifies Investment Risk

- The Supreme Court's 2006 eBay decision effectively stripped inventors of any right to claim that their IP rights represent "property"
- Prior to eBay, an infringer was required either to take a license from the inventor or discontinue use of the invention
- After eBay, injunctions are granted to patent owners in only about 15% of cases where patents are valid and infringed – with many of these injunctions being temporary
- Given an 85% chance of failure, the investment assumption is injunction is not possible



Damage Awards No Longer Justify Investment Risk

- Example basket of tech companies: Apple, Google, Microsoft and Samsung
- The group has implemented a regime of serial IPRs and appeals to avoid paying the awards and keep the window open to repeatedly attack the patents
- From the vast number of infringement cases, only 10 resulted in large damage awards in the 9-figure range
- No injunctions were issued on these or any other cases against these tech companies
- None of the 10 judgement awards have been paid
- Latest failure is WARF in their 7 year long case against Apple - sent back from appeal



Impact for Startup Investment

- **Exemplary strategic sectors that have declined as % of total VC funding**

- Core internet/wireless networking
- Internet software
- Operating system software
- Semiconductors
- Pharmaceuticals
- Drug Discovery
- Surgical/Medical Devices

- **% of total VC funding in 2004: 20.95%**

- **% of total VC funding in 2017: 3.22%**

- **Exemplary sectors that have increased as % of total VC funding**

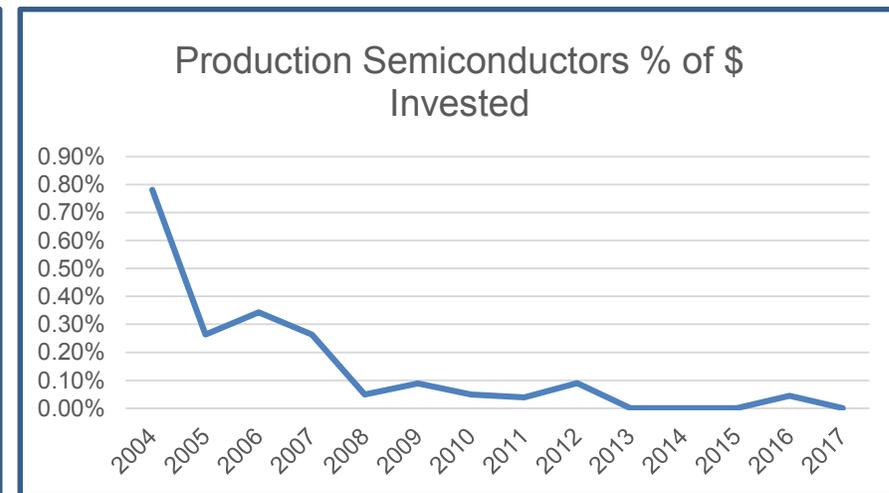
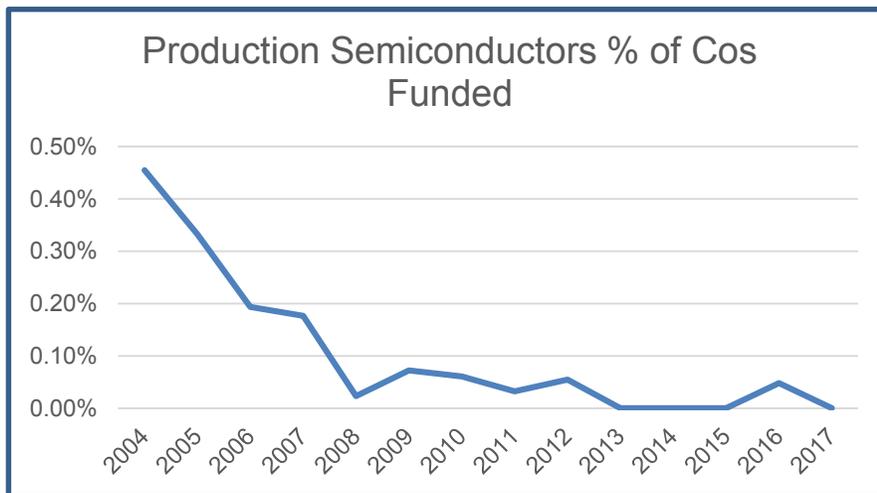
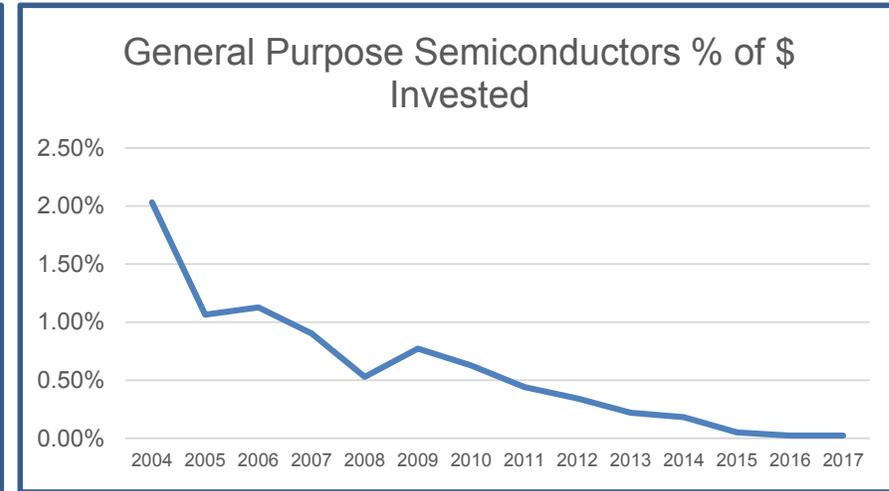
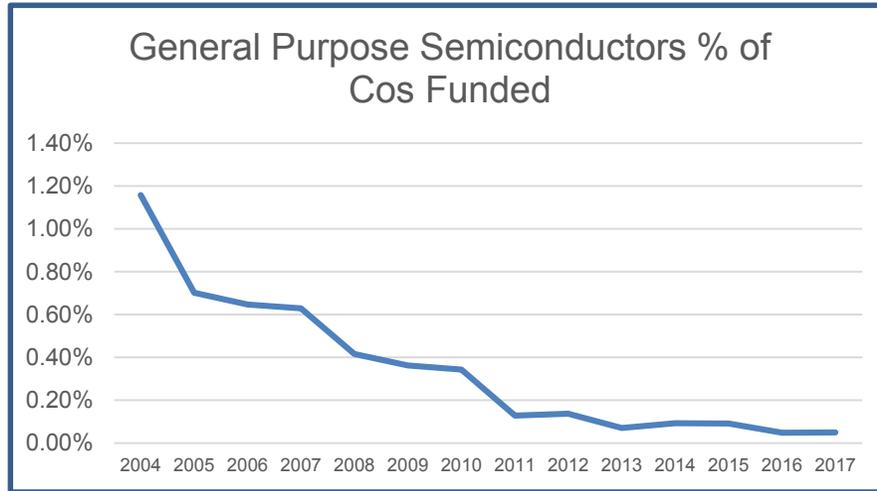
- Social network platforms
- Software apps
- Consumer apparel and accessories
- Food products
- Restaurants, hotels and leisure
- B2C companies in general
- Consumer finance
- Financial services in general

- **% of total VC funding in 2004: 11.4%**

- **% of total VC funding in 2017: 36.3%**



Example: Investment Decline in US Semiconductors



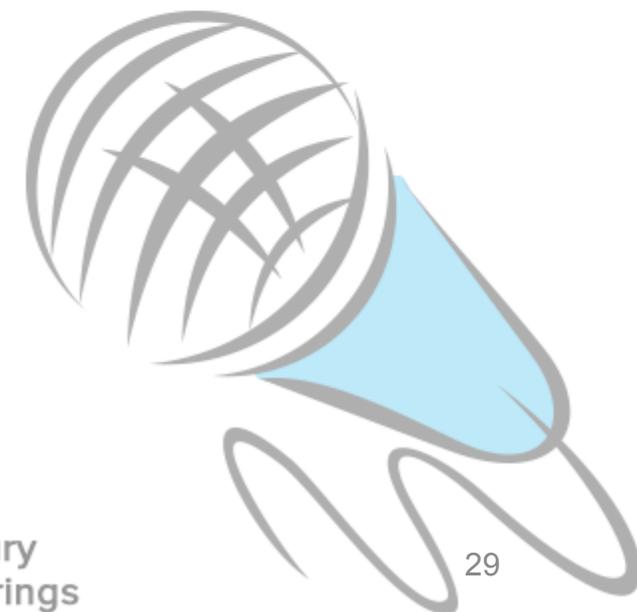
What The FTC Can Do To Restore Incentives

- We must change our approach to addressing the so-called “patent troll”
- Real trolls use patents that would never stand up in court to extort money from small entities by charging less than litigation cost for licensing - their patents by definition would never win injunction or a large damage award
- FTC policy and programs can address this behavior without destroying patent rights:
 - Penalize “real troll” behavior while supporting injunction and the possibility of fair damage awards for important inventions
- This would help restore incentives for US invention
- Other reforms in the USPTO PTAB and our courts are also needed



Understanding Innovation and IP in Business Decisions

Talal Shamoon
Intertrust



Understanding Innovation and IP in Business Decisions

Panel Discussion:

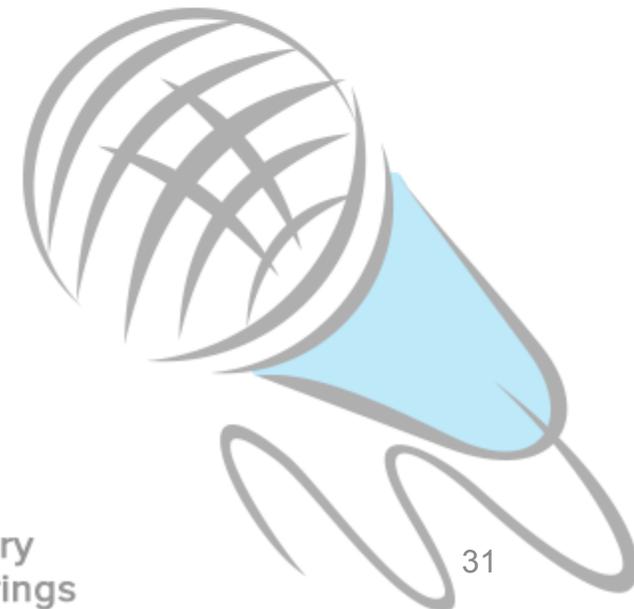
Nicole Morris, Greg Raleigh,
Michal Rosenn, Talal Shamoon

Moderators: Suzanne Munck & Elizabeth Gillen



Break

12:30-1:30 pm



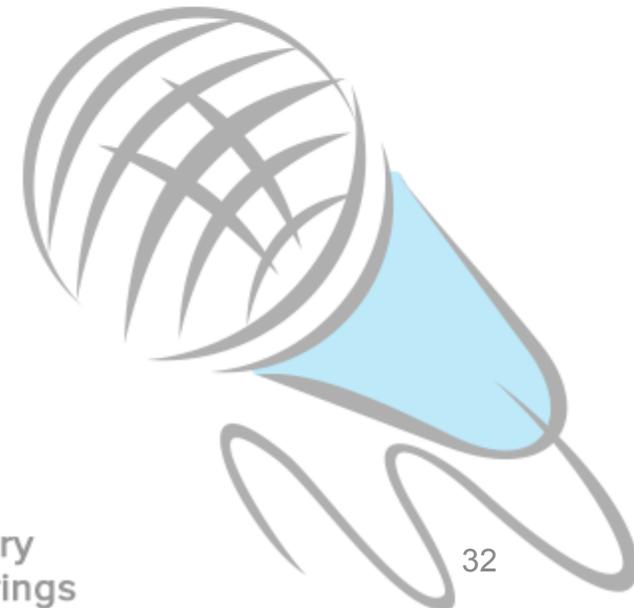
Competition Policy & Copyright Law

Session moderated by:

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Federal Trade Commission

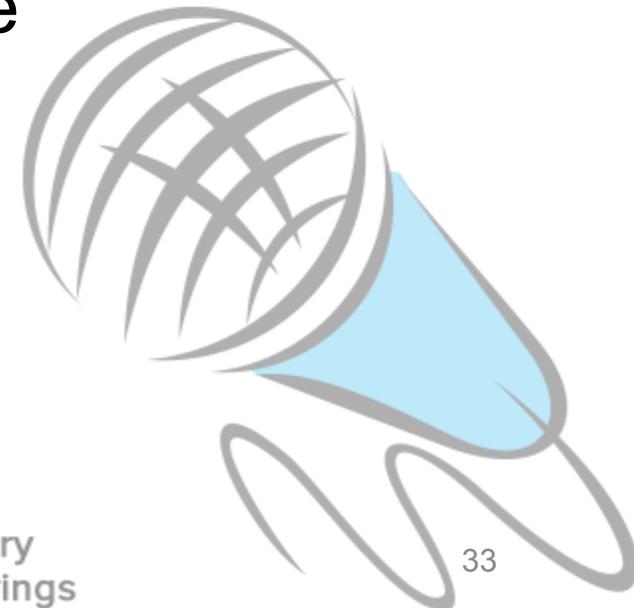
Office of Policy Planning



Competition Policy & Copyright Law

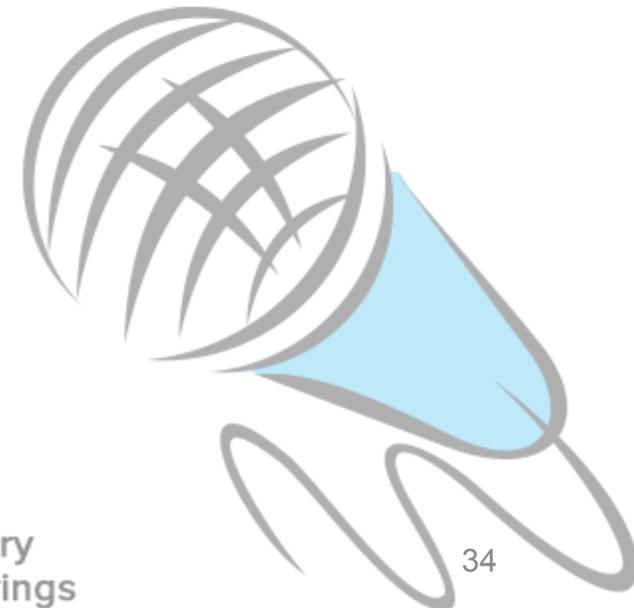
Eric Cady

Independent Film & Television Alliance



Competition Policy & Copyright Law

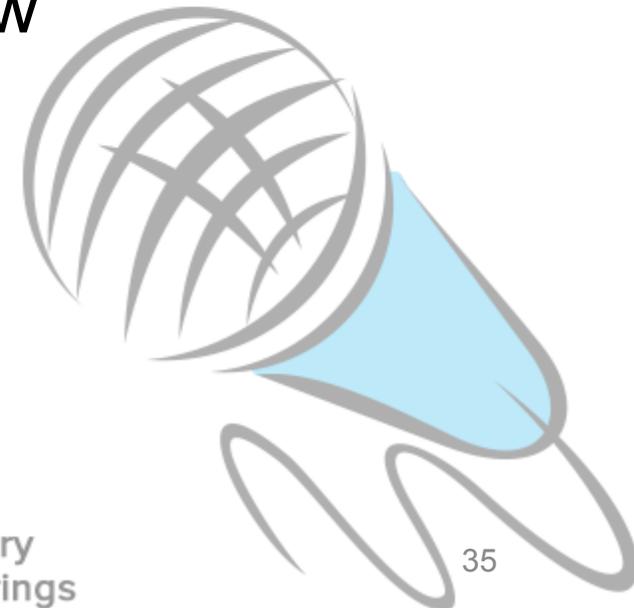
Meredith Rose
Public Knowledge



Competition Policy & Copyright Law

Sean O'Connor

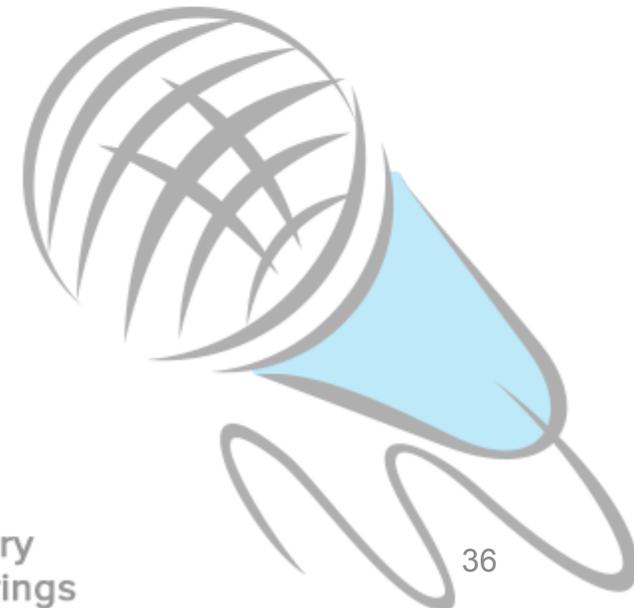
University of Washington School of Law



Competition Policy & Copyright Law

Peter Jaszi

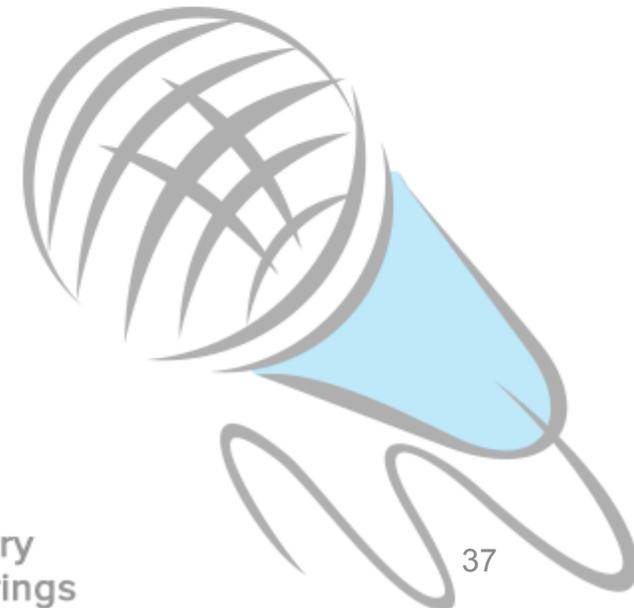
American University
Washington College of Law



Competition Policy & Copyright Law

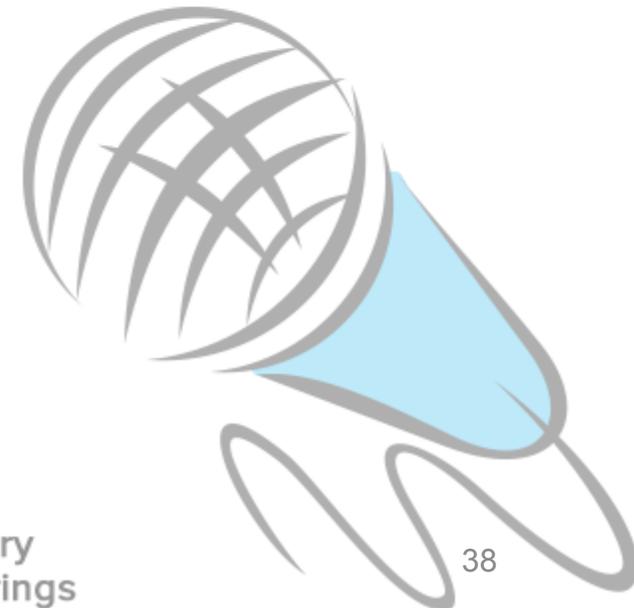
Tyler Ochoa

Santa Clara University School of Law



Competition Policy & Copyright Law

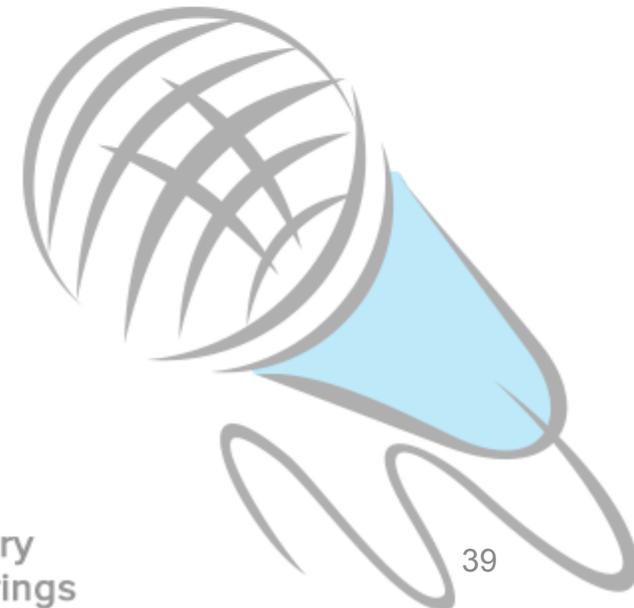
Keith Kupferschmid
Copyright Alliance



Competition Policy & Copyright Law

Peter Menell

University of California, Berkeley
School of Law



Competition Policy & Copyright Law

Panel Discussion

Eric Cady, Peter Jaszi,
Keith Kupferschmid, Peter Menell,
Tyler Ochoa, Sean O'Connor,
Meredith Rose

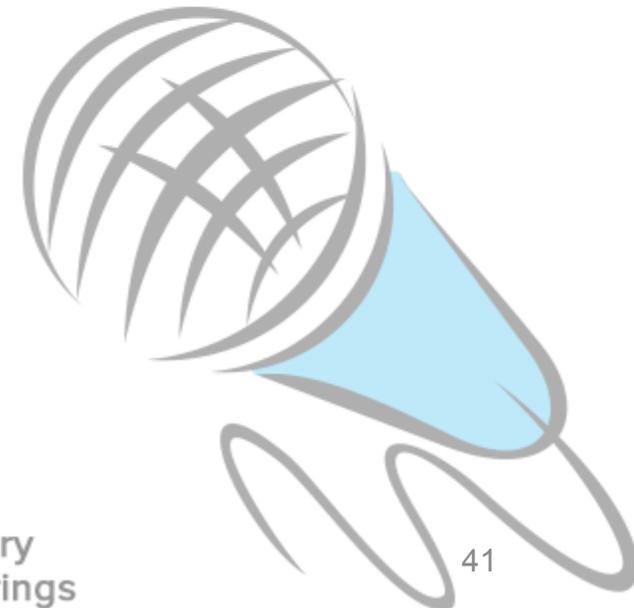
Moderator: Suzanne Munck & Elizabeth Gillen



Closing Remarks

Suzanne Munck

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Thank You, Join Us Tomorrow

