

The Thick & Thin of Markets & Patent Thickets

From a Team with almost 30 Years of Collaboration
(around the globe, across academic, government, and private sectors)



Dr. Thomas D. Grant,
Fellow, Lauterpacht Centre for International Law,
Senior Fellow, Wolfson College,
University of Cambridge,
Former Senior Advisor for Strategic Planning,
Bureau of International Security and Nonproliferation,
US Department of State



Hon. F. Scott Kieff,
Stephenson Bernard Professor,
GW Law School,
Visiting Fellow,
Stanford University's Hoover Institution,
Former Commissioner,
US International Trade Commission

For the
GMU Center for Intellectual Property x Innovation Policy
2023 Annual Conference on The Role of IP Rights in Markets
October 12-13, 2023, Mason Square, Arlington, VA
Panel 5B: Patent Thickets, October 12, 10:35 am

Introducing a New Initiative

LITSAT

Leadership in International Trade and
Security from Antiquity to Tomorrow

Brought to You by Scholars at
GW, Yale, and Cambridge Universities;
and Hosted at GW's Foggy Bottom
Campus in Washington, DC



What Links 200 BC Han China with 300 BC Ptolemaic Egypt and 1700 BC Mesopotamia with Today's Advanced Economies of East Asia, North America, and Europe?

www.law.gwu.edu/litsat-initiative

Ideas from Law & Tradition Inform Today's Debates about Patents

What if a Native American makes the patented product here,
with only materials she pulled from her ancestral ground,
for only a very good reason like saving a life,
without copying or knowing the patent?

Hint:
if all elements of
the patent claim,
isn't that
infringement?



Cahokia Mounds, from c. 1050–1350,
at apex, population may have exceeded London at the time,
larger than any subsequent city in the US until 1780s Philadelphia

Red herring arguments:

But she owns title to the stuff
(this is intangible property)

But she didn't copy, or know
(patent infringement has strict
liability & key high-tech cases
were willful like eBay, TiVo, i4i)

But some True Owner
(we long ago rejected jus tertii
defenses: relativity of title)

But GFPV
(recording makes not GF)

But freedom
(we choose law to restrain us:
entitlements easements,
mortgages, IP, regulations, etc.)

Ideas Shared by Three Intellectually Diverse Forefathers

(overlapping property rights approach to patents)



Hon. Jerome N. Frank
Judge, 2nd Cir, Chair, SEC,
Chicago South-Sider



Hon. B. Learned Hand
Judge, SDNY & 2nd Cir



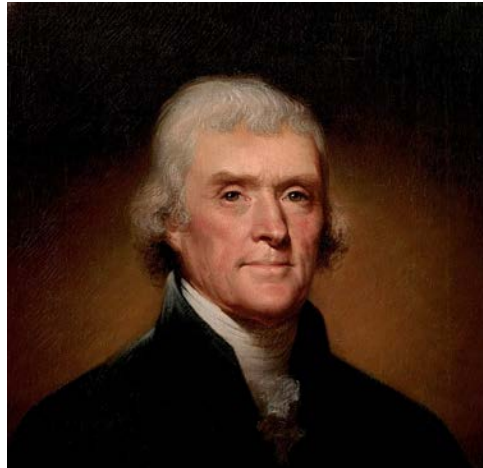
Hon. Giles S. Rich
Judge, CCPA & Fed Cir,
Co-author of '52 Act

Note: none trained in technology

Philosophy & Insights From IP & Light?

He who receives an idea from me, receives instruction himself without lessening mine;

as he who lites his taper at mine, receives light without darkening me



I know well the difficulty of drawing a line between

the things which are worth to the public

the embarrassment of an exclusive patent,

and those which are not

Thomas Jefferson
Jefferson's 'taper' (a candle)
in letter to Isaac McPherson, 1813

1st Secretary of State under Washington (1790-1793)
(himself an inventor who ran what then operated as the Patent Office)
2nd Vice President under Adams (1797-1801)
3rd President (1801-1809)

Why have the guy who doesn't seem to like patents run the patent office?
Why look to him as an authority on patents?

Might it Work the Other Way?

**BLOWING
OUT
SOMEONE
ELSE'S
LIGHT
DOESN'T
MAKE
YOURS
BRIGHTER.**



A Frequent Theme in Debates about Patents

(subject matter, the prior art, the patent's disclosure, infringement, antitrust)

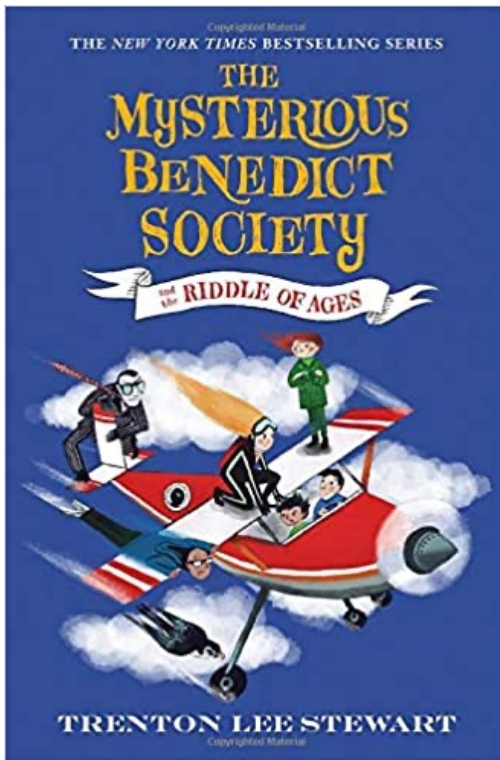
A child says, with enthusiasm:

"Glasstanium!

Clear as glass and
strong as titanium...

They invented that in my book."

Adults laugh at SNL & Julia Louis Dreyfuss:
the Mercedes AA Class – an electric car that runs
all day on "the" AA battery
(no emissions, no plugs, just 9,648 AA batteries)



Patent lawyers and inventors know it's all way more complicated
and arguments in this style lead debates astray

Same with Debates about Antitrust & Bundling:
What are they selling? What are they giving away?

Space to sit, work, talk? Food? WiFi?

Cove

Sette

Starbucks

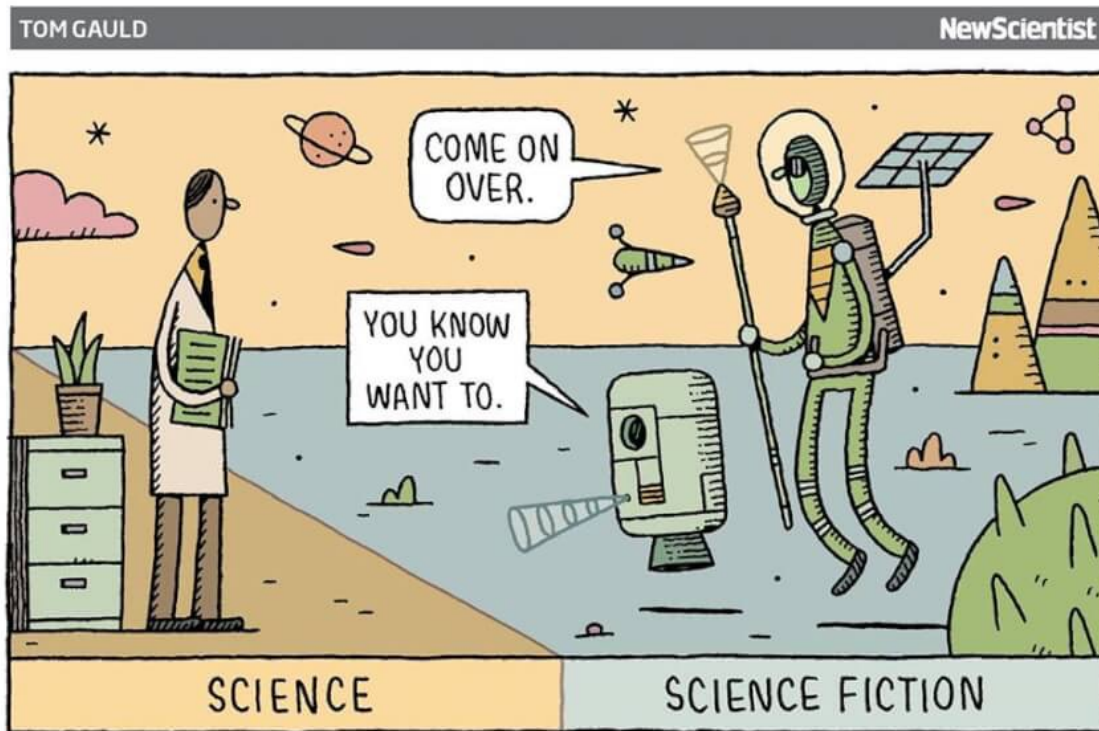


~2019

Connecticut Ave & R Street, NW

Why should policy makers favor one over the other?

Same with Debates about a Search for Scientific Evidence around Damages: History or Fiction?



Apple v. Motorola 869 FSupp2d 901(NDIII 2012)

Judge Posner strikes economics experts not grounded in science and historical fact.

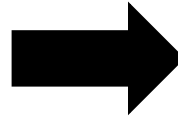
Want facts? Try asking what a real company would pay.

All that's left is fiction: we know this infringer decided to infringe rather than pay.

Legal Details May Matter More Than Numbers: Property Rights at Their Best & Worst

- Attributes

- Predictable enforcement
- Flexibility in the field
 - Can be traded and licensed
 - Can be bundled & divided

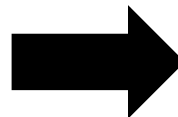


- Effects

- Users deal with private individuals
- Easy for market actors to use
- Stimulate competition, innovation, economic growth, and jobs

- Attributes

- Government flexibility
 - Created or changed at discretion of government
- Rigidity
 - Fixed owner
 - Fixed contours

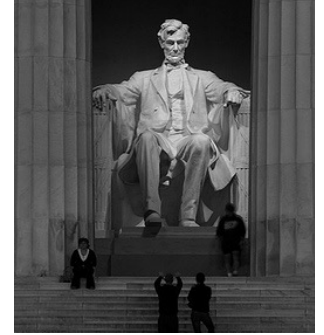


- Effects

- Users deal with government
- Easy for political actors to use (regulators and powerful political constituents)
- Concentrate wealth and power

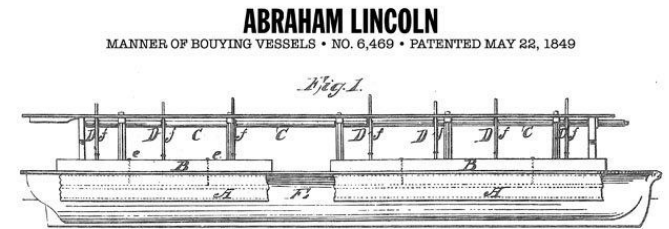
Remember: specialization and division of labor, allow us to be different from each other and still get from each other and give to each other by trading with each other to pick up gains from trade.

Property Rights in IP as Keys to Innovation and Competition



“The patent system ... added the fuel of interest to the fire of genius in the discovery and production of new and useful things” (Abraham Lincoln)

- Get inventions put to use: Not just incentives to invent
- By facilitating coordination among complementary users of the invention (investors, managers, marketers, laborers, owners of other inventions, etc)
- The D part of R&D: “beacon” not “carrot”



(Kieff, Coordination, Property & Intellectual Property: An Unconventional Approach to Anticompetitive Effects & Downstream Access, 56 Emory L.J. 327 (2006); Kieff, On Coordinating Transactions in Information: A Response to Smith’s Delineating Entitlements in Information, 117 Yale L.J. Pocket Part 101 (2007); Smith, Intellectual Property as Property: Delineating Entitlements in Information. 116 Yale L. J. 1742 (2007))

Big Firms May Want Patents; But Who Likes Weaker Patents?

Big firms have

- other ways to earn rents than relying on strong patents
- and many ways that rely on weak patents

Little firms have

- vital need for strong patents
- and little use for weak patents

So Why Might BigCos Like Big Patent Counts?

- Consider a regulator in a field such as antitrust, consumer safety, environment, food & drug, etc.
- Consider a BigCo who finds itself losing a case brought by the regulator (such as IBM or Xerox in the famous antitrust cases of the 1970s).
 - Why not ask the regulator... since we can all agree that regardless of historical behavior, as well all move forward together, surely it would be good for society if we were to provide not just ongoing products and services, but even better ones that are innovative....?!?!
 - Why would the regulator disagree?
 - And how might the regulator and the regulated agree on how to price all that new stuff?
 - How about counting patents!?
 - But will anyone be enforcing those patents? (Not likely)
 - Is the regulator expert on patents (validity, infringement, or value)?
(Aren't they expert on antitrust, consumer safety, environment, food & drug, etc.?)
- Also consider recent pushes in US & UK for "patent box" tax treatment?
(lower rate, shifting accounting type or geographic base, deductions, etc)
(Governments then get things to count to show a public eager for metrics of innovation)

Rhetoric on the Ethics of Patents in Biomedicine

- Let's ask Dr. Michael Crichton...
- May 2005 Remarks to the Commonwealth Club: Our Greatest Challenge
 - “The greatest challenge facing mankind is the challenge of distinguishing reality from fantasy, truth from propaganda”
- NYT February 13, 2007: Patenting Life
 - “YOU, or someone you love, may die because of a gene patent that should never have been granted in the first place.
 - ... by now one-fifth of the genes in your body are privately owned.”
- NYT March 19, 2006: This Essay Breaks the Law
 - “Elevated homocysteine is linked to B-12 deficiency, so doctors should test homocysteine levels to see whether the patient needs vitamins.
 - I can't make that last statement. A corporation has patented that fact, and demands a royalty for its use.”

OK, how does Crichton himself measure up?

Not under patent law (or other current laws)

So what? Why be so afraid of infringement?

Blumenthal Surveys on Data Sharing?

See, e.g., Eric G. Campbell, et al., Data Withholding in Academic Genetics: Evidence From a National Survey, 287 JAMA 473 (2002)

- Usual cast of real bad actors:

- Gender
- Race
- Prestige
- Etc

The screenshot shows the official website of the Board of Governors of the Federal Reserve System. The header includes the title "Board of Governors of the Federal Reserve System" and a tagline: "The Federal Reserve, the central bank of the United States, provides the nation with a safe, flexible, and stable monetary and financial system." Below the header is a navigation menu with categories like "About the Fed", "News & Events", "Monetary Policy", "Supervision & Regulation", "Financial Stability", "Payment Systems", "Economic Research", "Data", and "Consumers & Communities". The main content area is titled "Board Members" and lists several members. Lisa D. Cook is highlighted, with a small portrait photo and a detailed biography. Her bio states she took office in May 2022, was a professor at Michigan State University, and worked at the National Bureau of Economic Research. It also mentions her time at Harvard University and her role as a senior economist on the Council of Economic Advisers under President Barack Obama.

- Patents?

- Irrelevant or....
- Positive (proxy for folks with transactional nature)

The Role of Independent Invention in U.S. Technological Development, 1880–1930

TOM NICHOLAS

The Journal of Economic History, Vol. 70, No. 1 (March 2010),¹

One reason that independent inventors could thrive was the institutional structure of the patenting system. The democratic nature of U.S. patenting encouraged individual inventors and facilitated their response to demand-based incentives.¹⁵ Patent agents and solicitors diffused geographically with urbanization, creating relational self-enforcing agreements between independent inventors and intermediaries.¹⁶ It was also cheaper to patent

¹⁵ Sokoloff, "Inventive Activity"; Khan and Sokoloff, "Institutions"; and Khan, *Democratization of Invention*.

¹⁶ Lamoreaux and Sokoloff, "Inventors, Firms" and "Intermediaries."

The Blumenthal group at Harvard Medical School has done many studies over many years of data-sharing in science. They do find it is a much bigger problem than we would like and than many acknowledge outside of blind surveys. The bad actors are usually characterized by the same invidious discrimination we too often see against race, gender, "prestige" etc. But it turns out that patents are not a big factor, except as a factor associated with a decrease in the problem. This is consistent with the historical work by Naomi Lamoreaux, Zorina Khan, and Ken Sokoloff cited in this article by Tom Nichols. It also is consistent with the historical work by Lisa Cook on negative racial impact and negative overall impact on innovation: "Violence and Economic Growth: Evidence from African American Patents, 1870-1940," *Journal of Economic Growth*. 19: 221-257. June 2014.

2023 Nobel



Katalin Karikó stuck with her mRNA research despite a struggle to publish her work and obtain big grants. HANNAH YOON/BLOOMBERG NEWS

HEALTH

After Shunning Scientist, University of Pennsylvania Celebrates Her Nobel Prize

School that once demoted Katalin Karikó and cut her pay has made millions of dollars from patenting her work

By Gregory Zuckerman

Oct. 4, 2023 at 1:50 pm ET

A Life Sciences Case Study

- Before 1980, U.S., Europe, & Japan all had NO patents in basic biotechnology, like DNA
- After 1980, only the U.S. has patents in biotech
 - Large increase in number of new drugs & devices actually commercialized
 - Large pool of ~ 1,400 small & medium biotech companies *

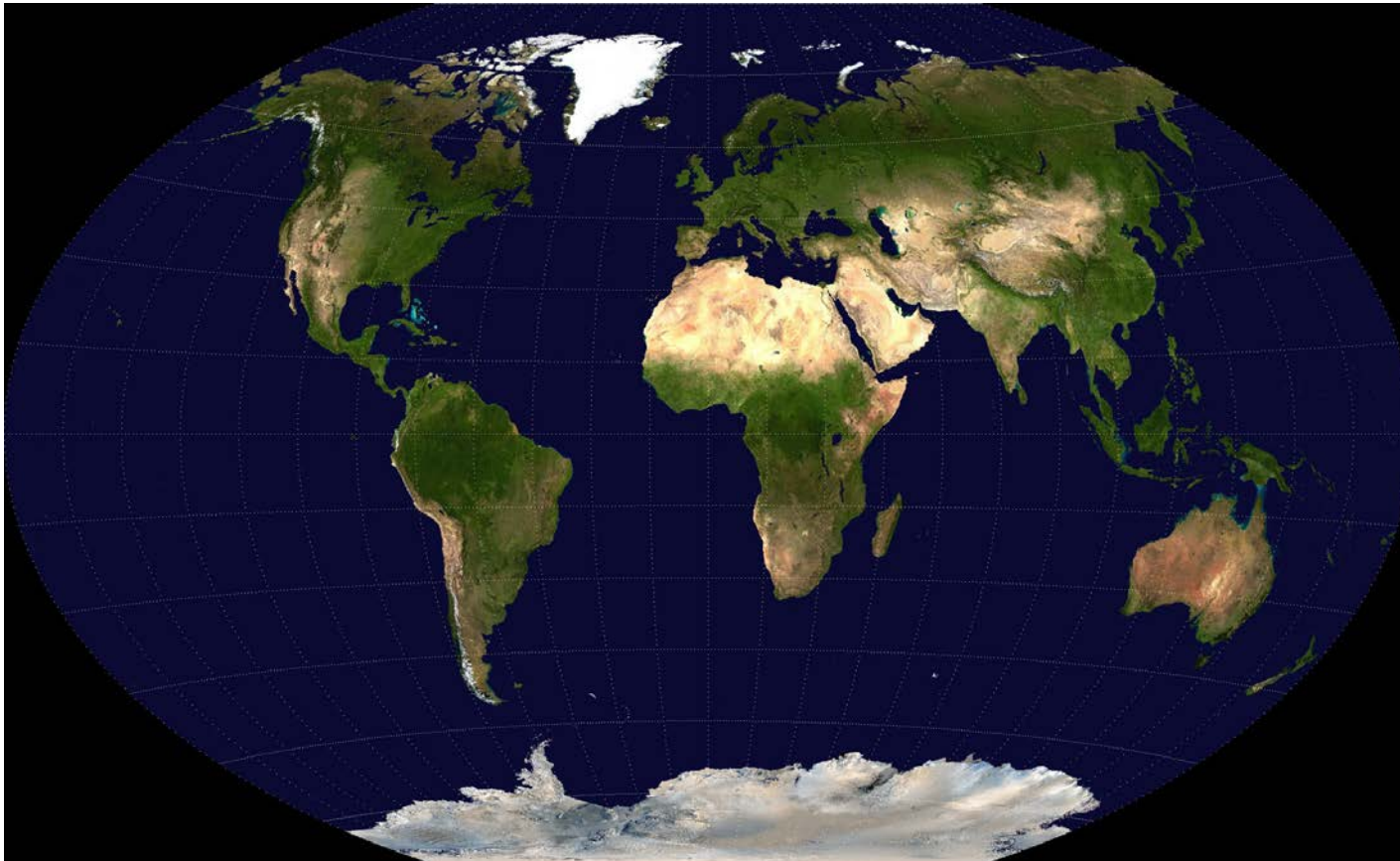
* 2003 Hearing at House Energy & Commerce Committee, Health Subcommittee, Statement of Stanford Associate Dean Phyllis Gardner

“2005 implementation of patent protection for pharmaceutical products in India increased average prices only slightly, and also had little impact on quantities”

U.S. Int'l Trade Commission, Economics Impact of Trade Agreements Implemented Under Trade Authorities Procedures, 2016 Report, Publication Number: 4614 Investigation Number: 332-555, at p. 80, Jun. 2016 (citing Duggan, Mark, Craig Garthwaite, and Aparajita Goyal. “The Market Impacts of Pharmaceutical Product Patents in Developing Countries: Evidence from India.” American Economic Review 106, no. 1 (2016): 99–135)

Late 1980s Post Cold War Era

Unipolar Power / Pax Americana / or Just Plain Pax?



Or ... Neither Polar, Nor Power, Nor Pax, Nor Americana?



Happy Little
[coun]trees

By 2014, Recognized to Be in an Era of Great Power Competition

US

China

Russia

India



EU



“How the United States Could Lose a Great-Power War”
October 29-30, 2019 RAND version, from Foreign Affairs,
By Elbridge Colby & David Ochmanek
Both are former DAS-Defense for Force Development
2017-2018 (Trump) and 2009-2014 (Obama)

Coverage on US & China Steel



45 CONGRESS SECURITY THE NINE TRUMPAMERICA STATE

Trump to aides: 'I want tariffs'



By [Jeremy Diamond](#), CNN

Updated 6:16 AM ET, Mon August 28, 2017



Does it Last?

CNN

World | U.S. Politics | Money | Entertainment | Tech | Sports

US and China call trade ceasefire



Both sides say they have agreed to not impose new tariffs on one another while talks continue

May 21, 2018 Julia Horowitz

How Long... and How Broad?



U.S.-China trade dispute could last 'not just over months or years, but even decades'



Brooke DiPalma
Associate Producer

YAHOO!
FINANCE

Yahoo Finance May 21, 2019

The Washington Post
Democracy Dies in Darkness

National Security

As Trump escalates China trade dispute, economic ties lose stabilizing force in matters of national security

Trump on China trade war: 'We always win'

President Trump on May 14 called the escalating trade fight between the United States and China "a little squabble." (Photo: Jabin Botsford/The Washington Post)

By **Paul Sonne**
May 19

CNN politics

China looms large as Biden makes submarine moves with UK, Australia

By Jeremy Diamond and Kevin Liptak, CNN
Updated 6:04 AM EDT, Tue March 14, 2023

Tiger...by Tail



Broadcom chief executive Hock E Tan at the White House

Updated 13 Mar 2018, 2:24am

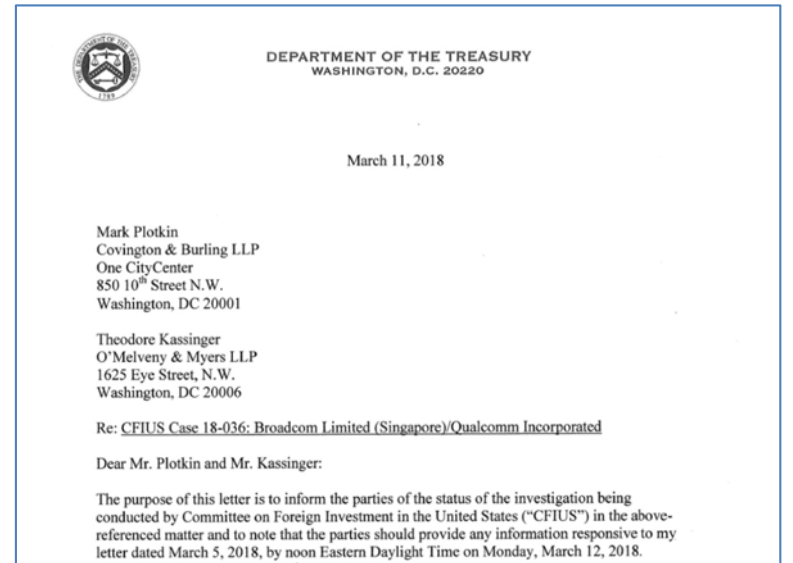
In happier times — Broadcom boss Hock E. Tan and Donald Trump announce moving the Singaporean company's headquarters to the US.

Reuters: Carlos Barria

TOP STORIES

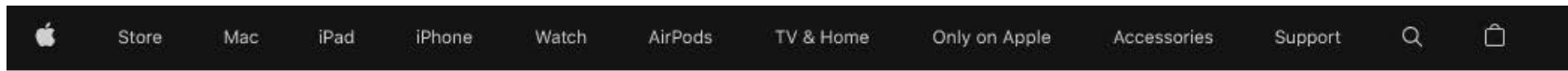
- 'I'm a realist': Bowen quits Labor leadership race
- 'I was in shock': Australian who bit husband's tongue in Iceland fights for justice
- 'Selfish and despicable': Five arrested over alleged \$1.1 million NDIS fraud
- Opinion: To all those

November 2, 2017



Did Silicon Valley Really Mean Any of its Prior Objections to Applying Older Legal Doctrines in High Tech Settings?

[hwww.apple.com/newsroom/2021/11/apple-sues-nso-group-to-curb-the-abuse-of-state-sponsored-spyware/](https://www.apple.com/newsroom/2021/11/apple-sues-nso-group-to-curb-the-abuse-of-state-sponsored-spyware/)



Newsroom

Search Newsroom

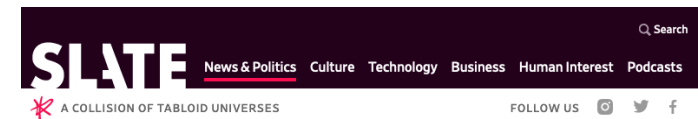
Popular Topics

PRESS RELEASE
November 23, 2021

Apple sues NSO Group to curb the abuse of state-sponsored spyware

Apple also announced a \$10 million contribution to support cybersurveillance researchers and advocates

- Computer Fraud and Abuse Act (but didn't that kill Aaron Swartz?)
- CA's unfair competition statute (but Intel v. Hamidi & no harm?)
- Breach of contract or unjust enrichment? (but ProCD & preemption?)



CRIME A Year After Aaron Swartz's Death, Our Terrible Computer Crime Laws Remain Unchanged

BY JUSTIN PETERS
JAN 13, 2014 • 6:00 PM



Aaron Swartz at a Boston Wiki Meetup in 2009.
Photo courtesy Sage Ross/Wikimedia Commons

On Jan. 18, 2013, one week after Aaron Swartz committed suicide, a group of his friends and admirers gathered in the lobby of the MIT Media Lab to

Arguments over abstract, technocratic balancing
fast become
argument by epithet, back and forth

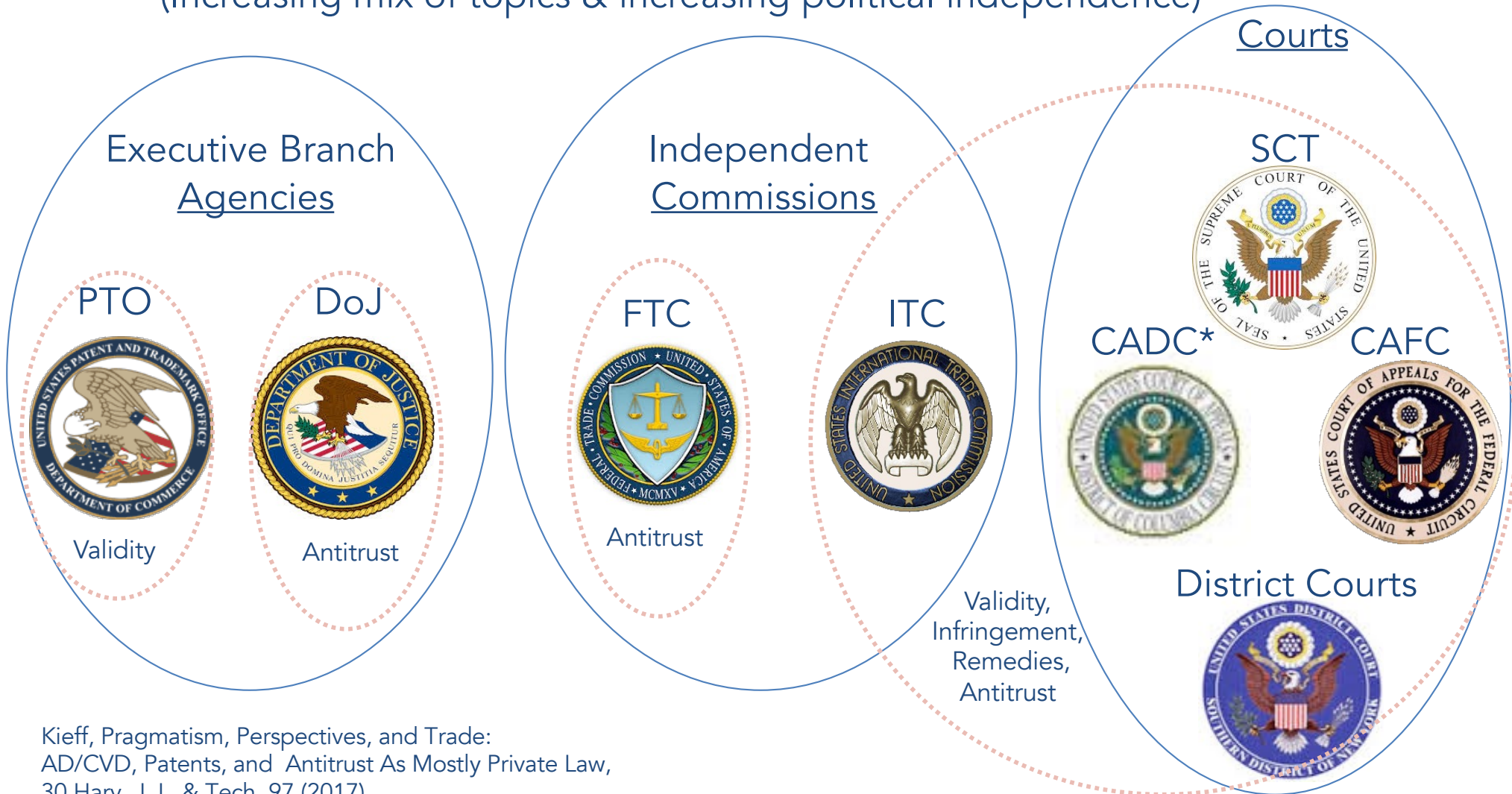


Star Trek IV: The Voyage Home, Paramount Pictures, 1986,
Captain Kirk and his crew return from 23rd Century to 1980s San Francisco

"Double dumb[y] on you!"

Compare Many Agencies of the US Patent-Antitrust Systems

(Increasing mix of topics & increasing political independence) →



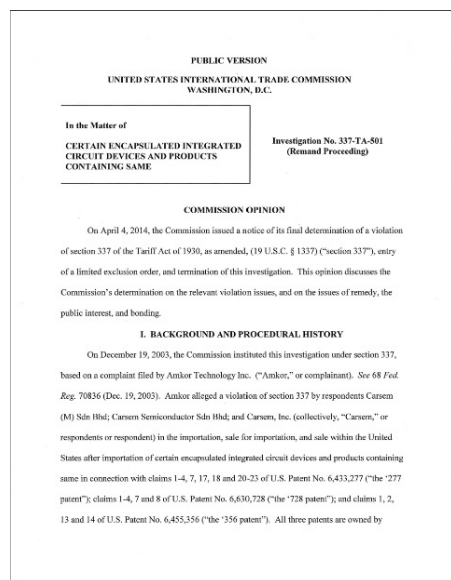
Kieff, Pragmatism, Perspectives, and Trade:
AD/CVD, Patents, and Antitrust As Mostly Private Law,
30 Harv. J. L. & Tech. 97 (2017)

(Both increases incentive self restraint in arguments raised by lawyers and adjudicators)

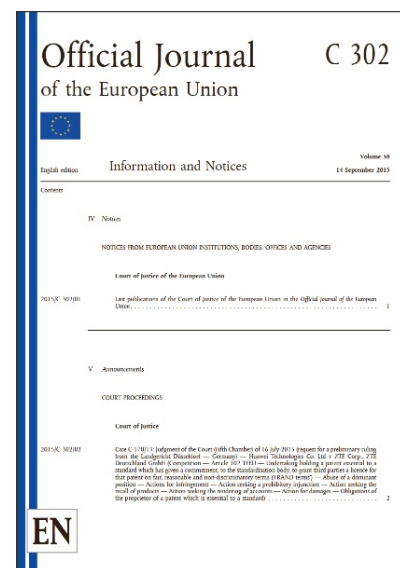
Harmony & Competition in Competition



COMPETITION APPEAL TRIBUNAL



USITC 337-TA-501, 2014
(Amkor v. Carsem encapsulated integrated circuits case involving SSO called JEDEC, with additional views of Broadbent, Kieff, and Pinkert, as well as additional views of Aranoff)



ECJ Case C-170/13
Huawei Technologies Co. Limited v. ZTE Corp.
(Fifth Chamber, 16 July 2015)

COURT OF JUSTICE OF THE EUROPEAN UNION



COMPETITION

Things We All Can Do Today



COMPETITION APPEAL TRIBUNAL



ROYAL COURT OF JUSTICE

- Falsity, fraud, trademarks, trade secrets, etc.
 - CFTC, FTC, etc.
 - ITC and US courts
 - UK, German, and Dutch Courts (some with expedited commercial dockets)
 - Regulatory agencies and related disclosures (including qui tam, whistleblower)



GERMAN FEDERAL COURT OF JUSTICE

- Collusion
 - Vitamin C and steel cases at ITC and US courts
 - CMA and CAT
 - EU-DG-Competition, ECJ

COURT OF JUSTICE OF THE EUROPEAN UNION



- Commercial Arbitrations
 - International Centre for Settlement of Investment Disputes (World Bank Group)
 - United Nations Commission on International Trade Law
 - New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards



NCC Netherlands Commercial Court

- China & Russia Risk
 - SEC guidance on risk disclosures (as done recently re cyber and finance/accounting/MD&A)
 - Compliance operations (Universities already starting)



NEW YORK ARBITRATION CONVENTION

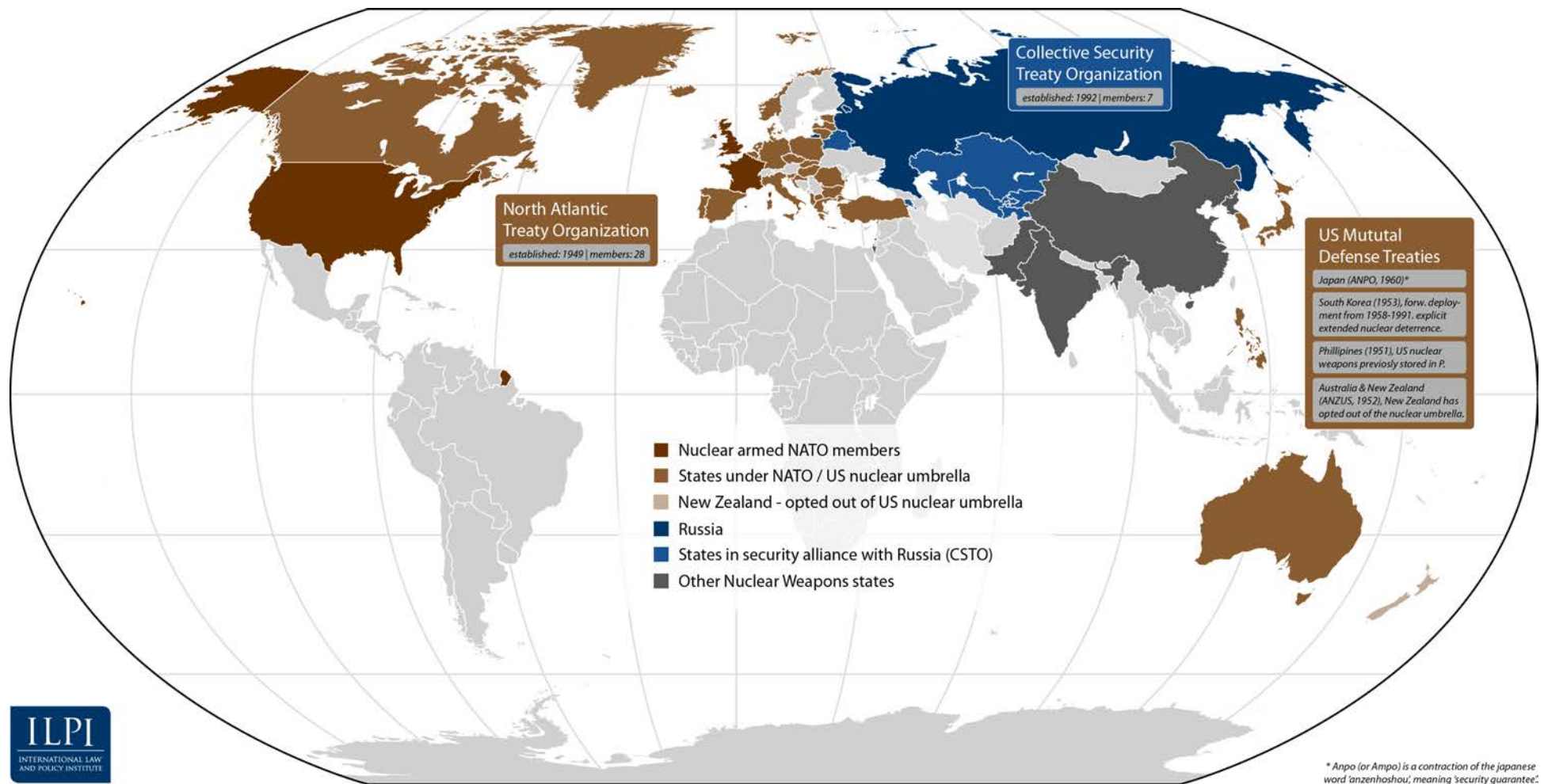


What Can Ancient Legal Systems Teach Today's Professionals about Property, States, and Individuals



- Evidence of property law systems from Southwest Asia's Mesopotamia (Tigris & Euphrates) to North Africa's Nile includes preserved texts like the Code of Hammurabi c. 1755–1750 BC inscribed on the Babylonian Stele, associated parchment records of Greek, Persian, and Hebraic laws, and Ptolemaic c. 300–30 BC land, tax, and dispute records on papyri and ostraca.
 - Many of the doctrines of property law we learn have easily identifiable roots across most of the diverse cultures spanning these centuries, geographies, cultures, and religions.
 - We also start to see emerge in antiquity a discrete role for professional legal advocates (your professional ancestors!)
- States as sovereigns. How do they sue each other and how do individuals sue when states commit wrongs?
 - Many doctrines of property law we learn involve disputes facing states and individuals.
 - Yet, there are differences: sovereign immunity, eminent domain, discovery or conquest, atrocities, torts, theft
 - Professional lawyers today and tomorrow have many options and often many private parties are involved... (be wary of broken links in chain of title; and hiding behind state power or immunity doesn't always work)

A Framework on which to Build Some More Good Coordination among Friends?



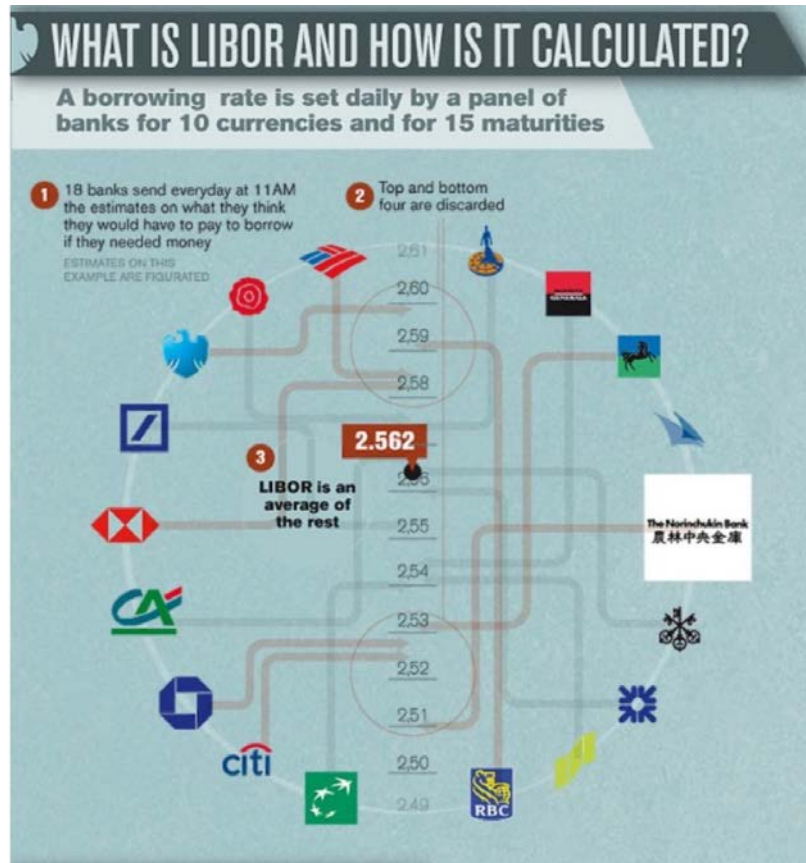
(why not expand and strengthen diverse trade collaboration?)

Consider Private Antitrust (and False Advertising)

- Spring 2018 antitrust cases:
 - SCT Vitamin C case, *Animal Science Prods. v. Hebei Welcome Pharm.*
 - ITC steel case, 337-TA-1002
 - ITC option may give comfort to both trade remedy skeptics and antitrust skeptics
 - Same intuition for ITC 337 using 43(a) at interface with FDA (reversed, vacated, remanded by Federal Circuit in *Laerdal Med. v. ITC* , No. 2017-2445, Dec. 7, 2018)

Collusion Claims Remain Viable as in the LIBOR Case

London Interbank Offered Rate (LIBOR) had evolved to have more coordination & less accuracy, at least than had been stated



SOURCES

The Economist | The Guardian | BBC | International Monetary Fund



PRODUCED BY

HealthcareAdministration.com



(Dissolved 2013)



BANK OF ENGLAND
PRUDENTIAL REGULATION
AUTHORITY

And False Advertising Also Remains Viable


Stay up to date with COVID-19 related news [here](#)

FISH.
FISH & RICHARDSON

Menu Fish Team

Charles Hieken

In memory of
Charles Hieken
1928 - 2018



Charles Hieken, a pioneer in the highly specialized world of intellectual property law, passed away on May 31, 2018 at the age of 89. Hieken was one of the co-organizers of BOSE Corporation with Dr. Amar G. Bose and Dr. Y.L. Lee and was a well-known patent attorney at Fish & Richardson in Boston for over 30 years.

Bose Corp. v. Consumers Union, 466 U.S. 485 (1984)

Lanham Act 43(a) case against 1970 Consumer Reports publication

criticizing Bose 901 reflected-sound speakers for making sounds “wander about the room”

beats First Amendment defense because critique sounded factual – not like opinion – yet was unsupported by data

Helping Students and Alum With Job Searches

The screenshot shows the profile page for F. Scott Kieff on the GW Law website. The page includes a navigation menu with links for About, Academics, Admissions, Current Students, Alumni & Giving, Library, Faculty & Scholarship, and News & Events. A sidebar on the left lists various faculty roles: Full-Time Faculty (selected), Deans, Adjunct Faculty, Emeriti Faculty, Librarians, Visiting Faculty & Fellows, Faculty Files, and Faculty Scholarship. The main content area features a portrait of F. Scott Kieff, his title as Fred C. Stevenson Research Professor of Law, C-LEAF Director of Planning and Publications, and his contact information: Address (2000 H Street, NW, Washington, DC 20052), Phone (202-994-4644), Fax (202-994-5614), and Email (skieff@law.gwu.edu). A short biography below the portrait states that he joined the faculty at GW Law in 2009 after serving at Washington University in Saint Louis.

The screenshot shows the 'Career Support' section of the GW Law website. It features a red oval highlighting the text: 'To help students interested in learning some concrete tips on how to prepare for the job search process, Professor Kieff has prepared a video and accompanying slides titled "A Soup to Nuts Overview of a Job Search: A Common Sense Primer for Law Students," presented at the 2009 January Intersession at Washington University in St. Louis School of Law.' Below this text are two buttons: 'Watch the video' and 'Download the slides'. The section also includes a sub-section titled 'In the News' with a link to an article titled '"2 Things Missing From Debates On US-China Fights"' dated March 23, 2018, which quotes Professor Kieff on trade and antitrust issues. The footer of the page displays the GW Law logo, the address (2000 H Street, NW, Washington, DC 20052), and contact numbers (p - 202.994.1010, f - 202.994.8980).

www.law.gwu.edu/f-scott-kieff

Thank You

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