

# **New Insights and Characterization of Patenting Trends in the United States**

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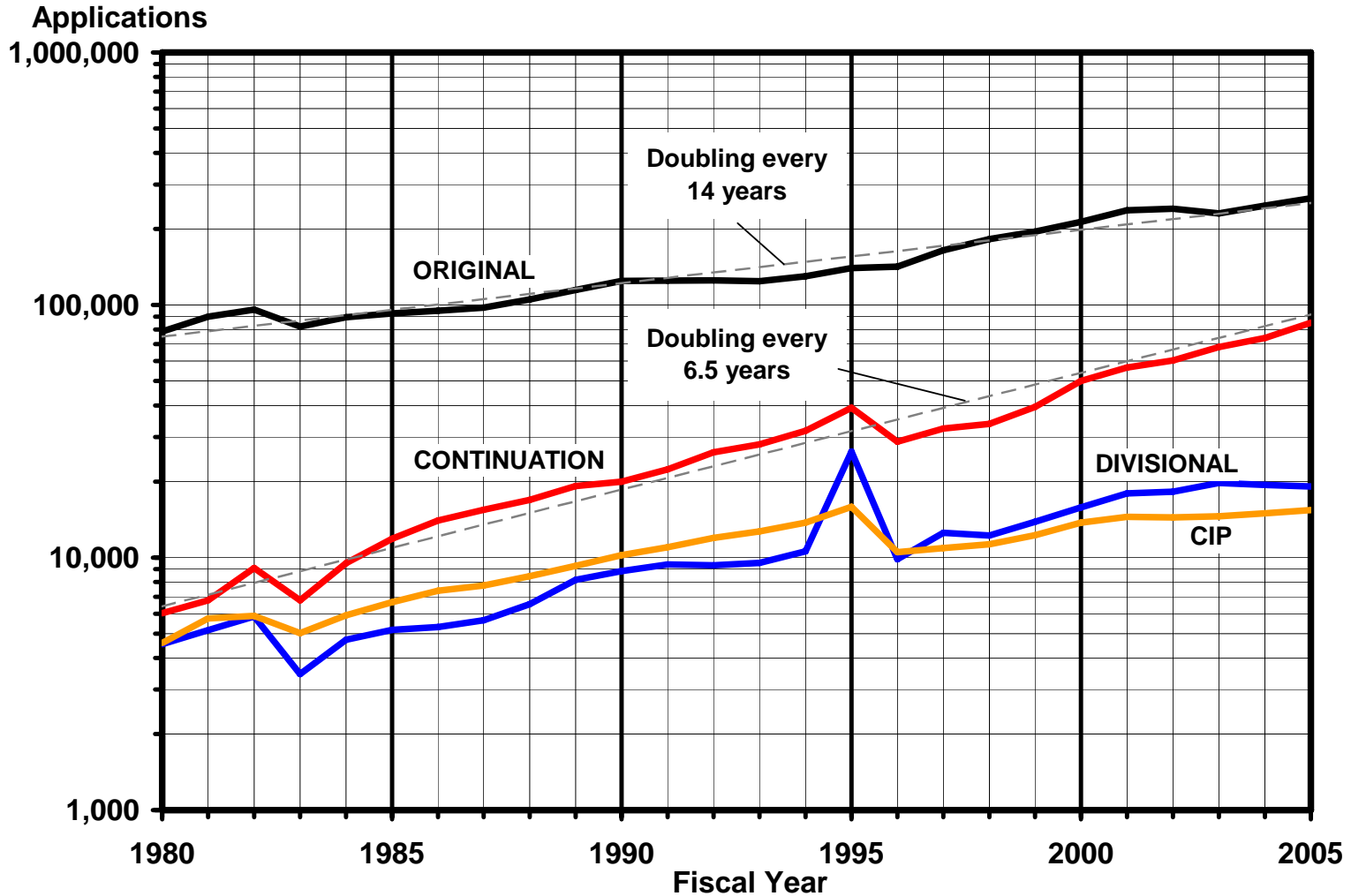
# Content

- Patent application filing rates
  - Continuations market trends and their essential role in securing US international IP competitiveness
- Examination of related factual predicates that motivate patent reform
- Unintended(?) consequences of proposed patent reforms
  - First-to-file vs. First-to-invent

# **Patent Application Components And Their Growth Trends**

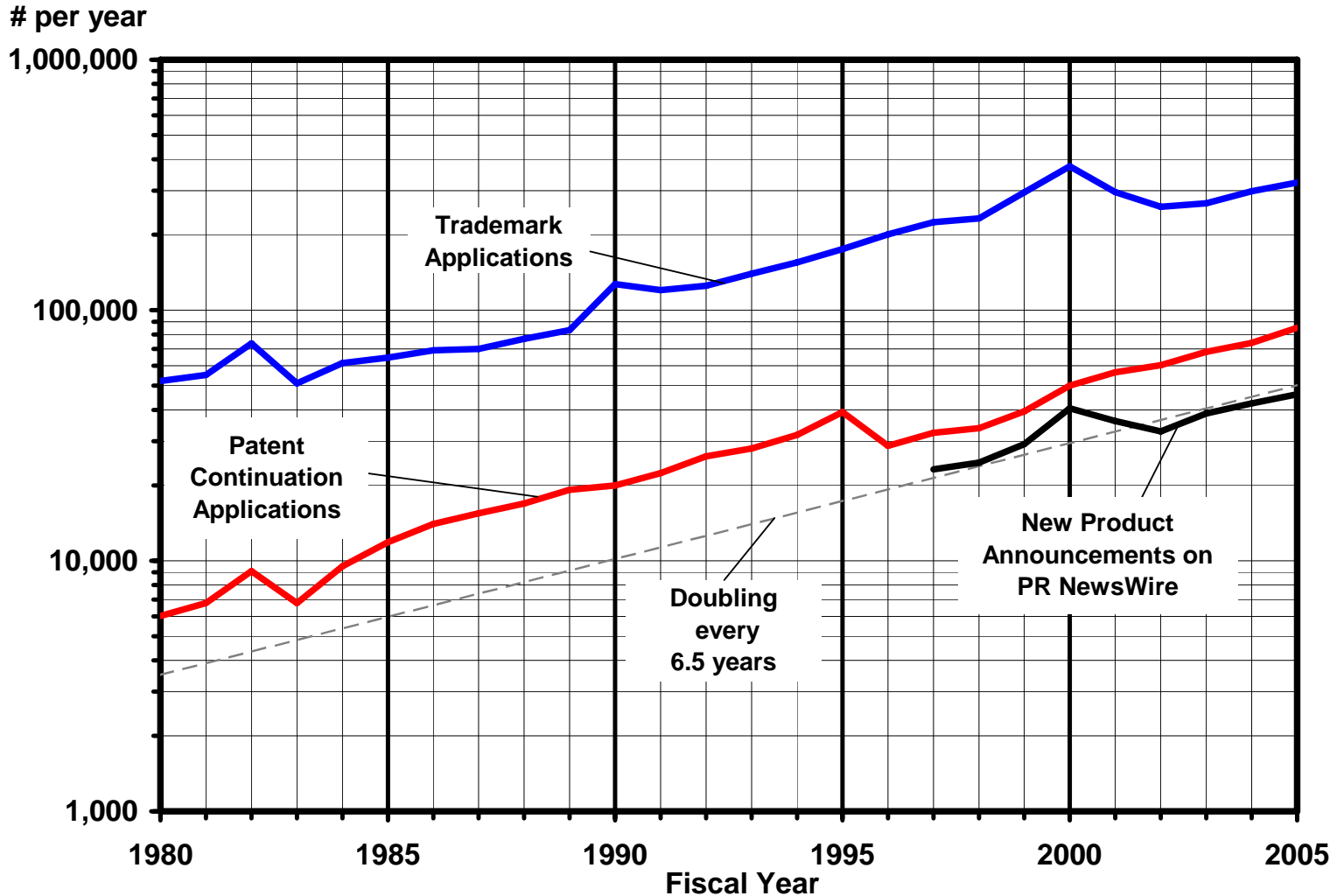
# Continuations Are Filed At Progressively Higher Rate For The Last 25 Years

## Annual Trends in USPTO Utility Patent Applications

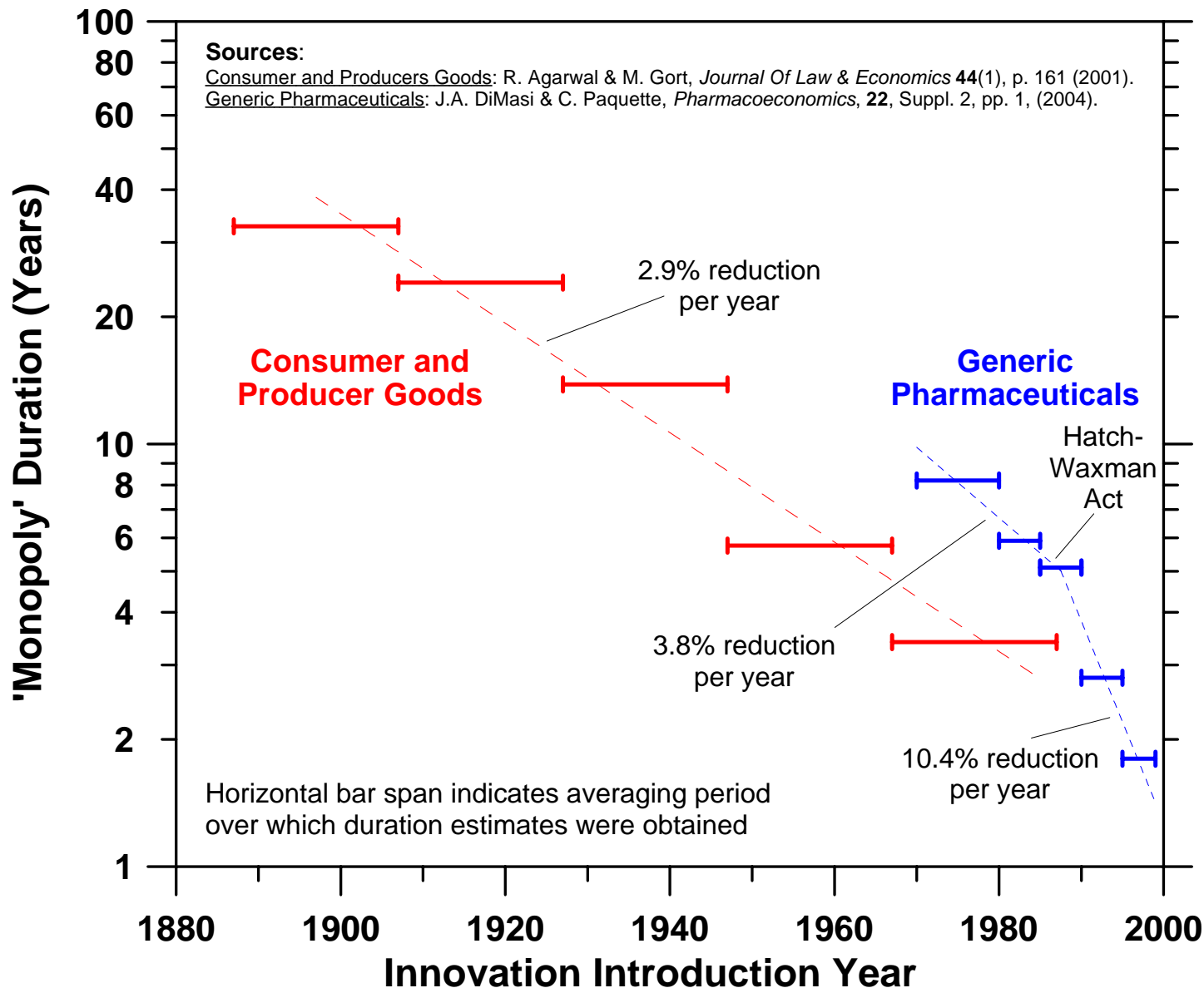


# Continuations Are Filed To Better Match Claims To New Products In The Market

## Annual Trends in New Product Introductions



# Historical Decline in Duration of Interval Prior to Competitive Entry for Innovations



# Continuations Filing Growth Rate Exceeds That Of Original Applications Because:

- Historical product life cycle reduction and the exponential growth in new product introductions necessitate new or amended patent claims in progressively growing fraction of inventions.
- Product lifecycle reduction over time is accompanied with the grant of patents with progressively diminishing claim scope.
- Patent continuations are essential for applicants who seek to appropriate equivalent returns from their inventions.
- However, as a steady 60% of Continuations, RCEs have not been the reason per se for increased growth rate.

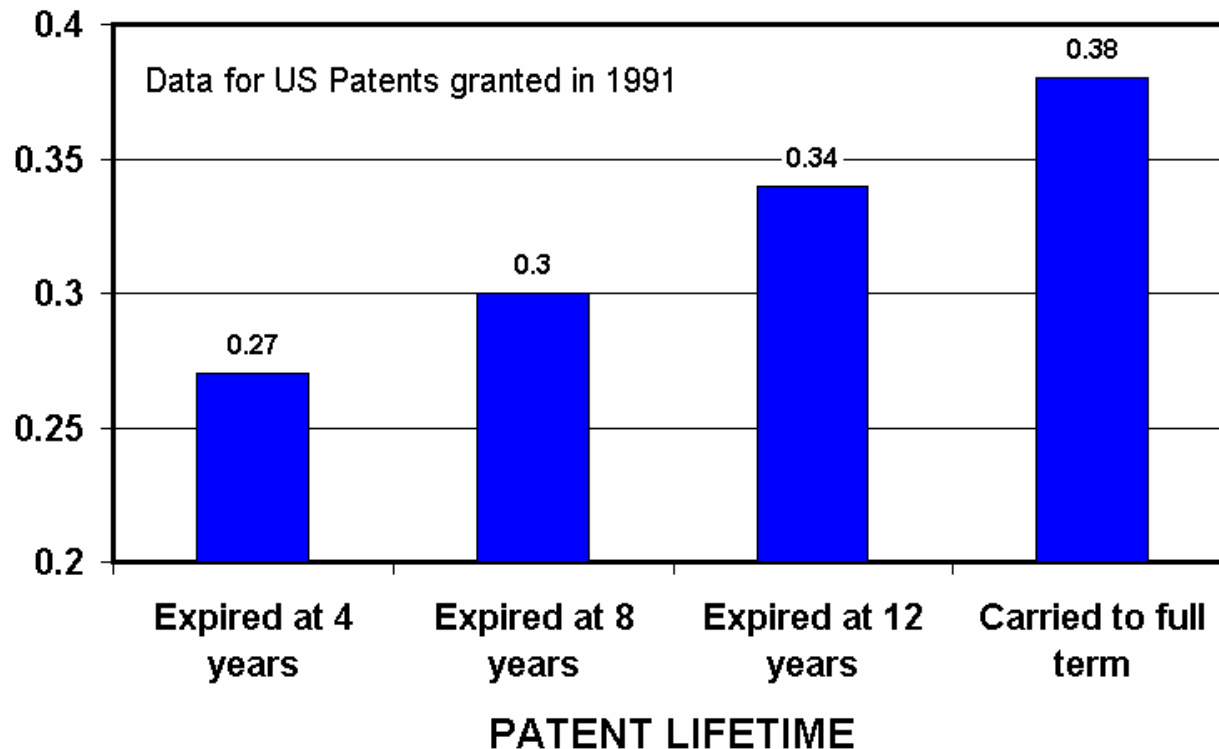
# Continuations' Important Role During The Pendency Of A Prior Application

- Claiming one's invention need not end at the original filing date
- Facilitates presentation of claims based on new market, new development and prior art information
- Enables improved matching of claims' scope and content to actual products in the market place
- “Breaths new life” in protecting inventions embedded in products under *ever-increasing obsolescence rate*
- Continuations are unique to the US patent system



# US Patents Issued From Continuations, CIPs and Divisions Have Longer Lifetimes

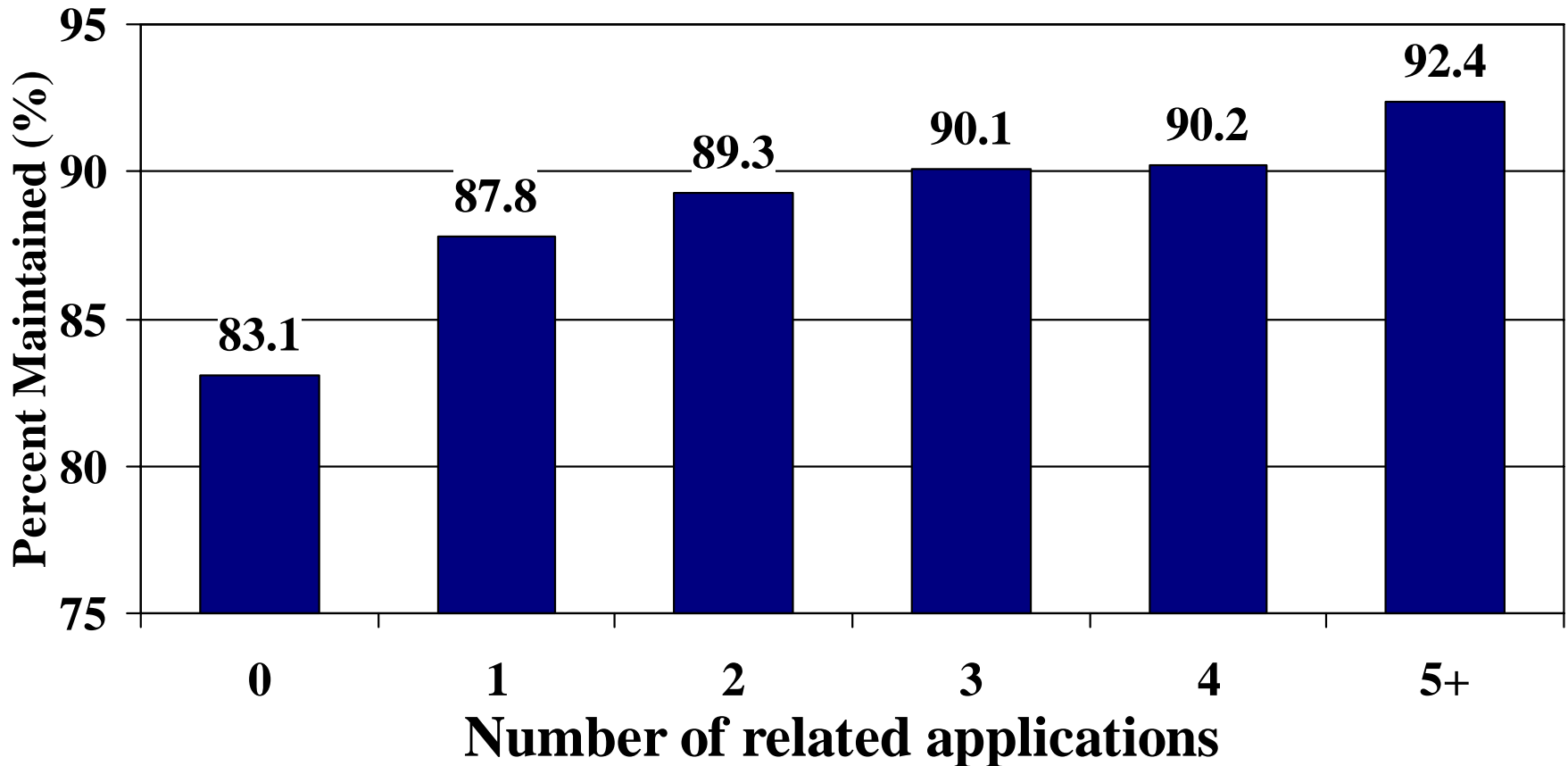
Average number of related applications



- **Source:** K.A. Moore, Worthless Patents, *Berkeley Technology Law Journal*. 20(4), p.1521, (Fall 2005) (Table 6).

# US Patents Issued From Continuations, CIPs and Divisions Have Longer Near Term Lifetimes

4<sup>th</sup> year patent survival rate by priority chain length

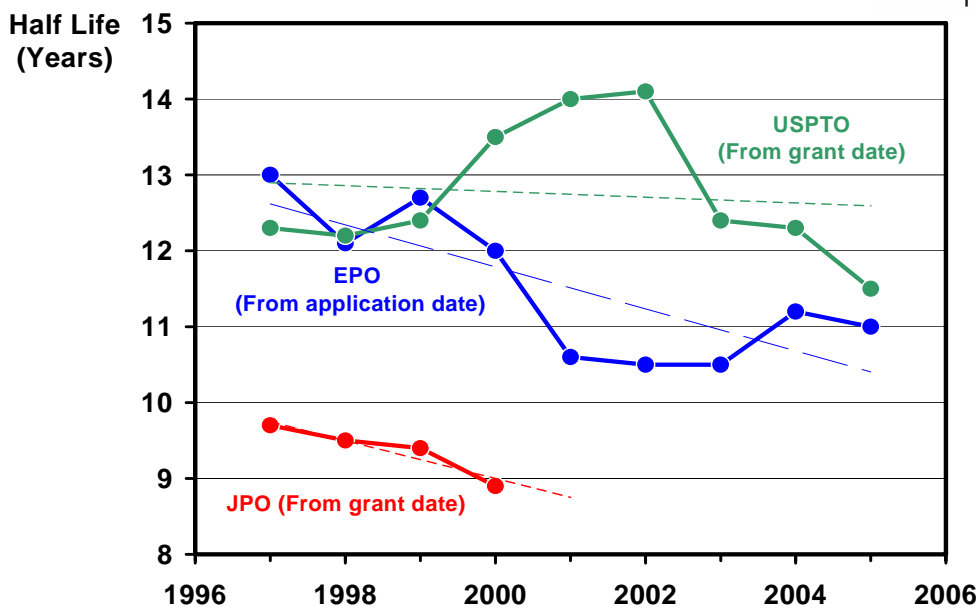
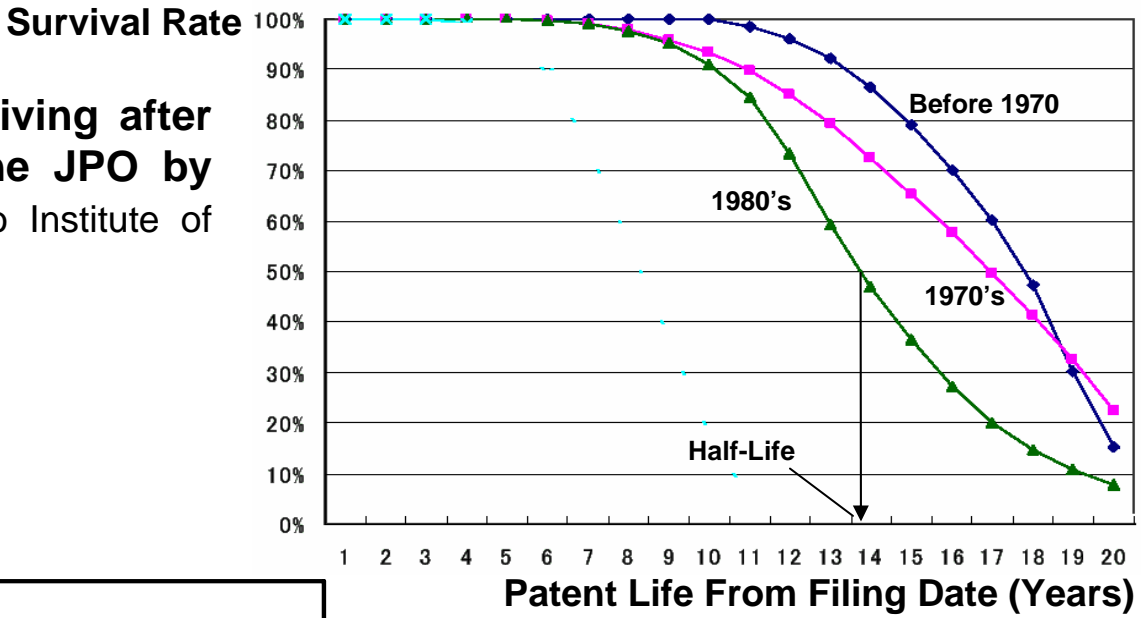


Source: J.A. Barney, *AIPLA Quarterly Journal*, 30(3), pp. 317-352 (September 2002).

Data for patents granted in 1996.

# Continuations Help Reduce US Patents' Lifetime Erosion Compared to That of Other Nations




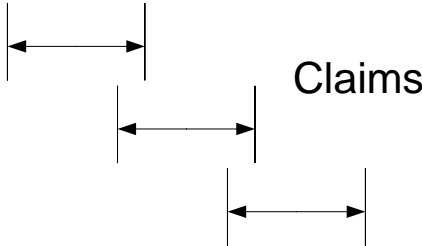
Percent of patents surviving after renewal payments at the JPO by grant era. *Source: Tokyo Institute of Intellectual Property (2006).*



Patent lifetime at the USPTO, EPO and JPO. Half-Life is the patent age at which 50% of the patents are not renewed by their owners. *Source: Trilateral Patent Offices (2006).*

# Separation of The Two Patent Pillars

## Time spans and relevance

The Patent Bargain	20th Century	21st Century
<b>Disclosure</b>		
<b>Right To Exclude</b>		

- Bifurcating events of disclosure and events of obtaining claims becomes necessary due to shortening product lifecycles and accelerated claim obsolescence.

# Limiting Continuations at the USPTO Will Harm US Competitiveness in World Markets

- In the unavoidable product lifetime reduction market environment, patent claim obsolescence is an increasing problem
- Foreign patents' lifetime erosion has been a contributor to their inability to sustain full incentives and protection to their owners.
- US continuations provides US patentees unique means for mitigating patent obsolescence
- The US is moving towards greater reliance on innovation and IP while loosing more of its industrial base. Any patent reform that reduces our patent system to an eroding patent system as used by our trading partners, will only weaken the US.

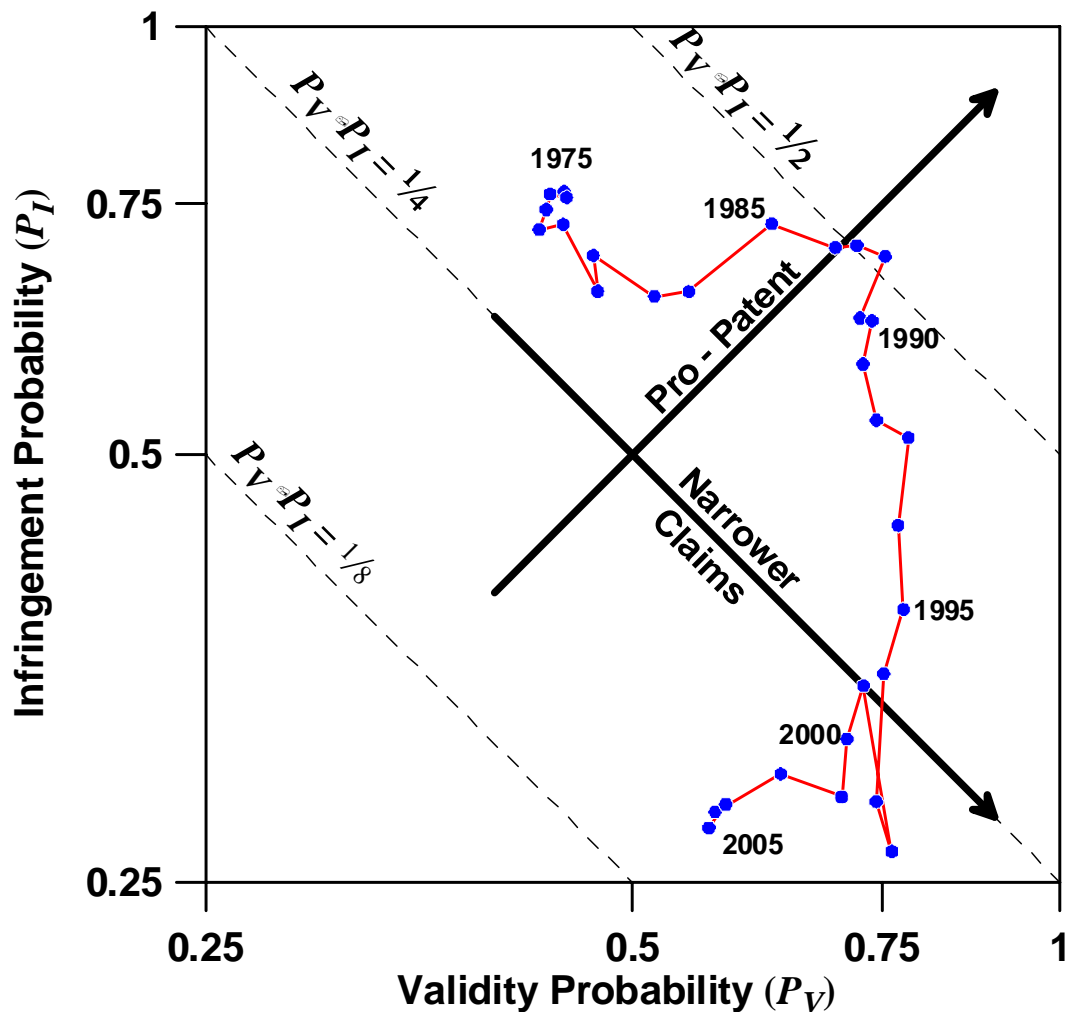
# Myth: Overbroad Patents Are Issued

*“The Subcommittee may ... examine the extent to which current patent law permits and contributes to the issuance of overbroad patents, as well as other patent law problems”.*

-- House Judiciary Committee Oversight Plan  
110<sup>th</sup> Congress, (February 7, 2007)

# Patents Are Issued With Gradually Diminishing Scope

## Patent Decision Trends in Federal District Courts



- Adjudicated claims were of gradually diminishing scope relative to alleged infringing activities and the accumulating prior art record.
- Notwithstanding litigation selection effects, the adjudicated claims narrowing trend is reflective generally of the patent base as a whole.

Data source: Henry & Turner (2006), note 147 for 1975-2000 and *Patstats* for 2001-2005.

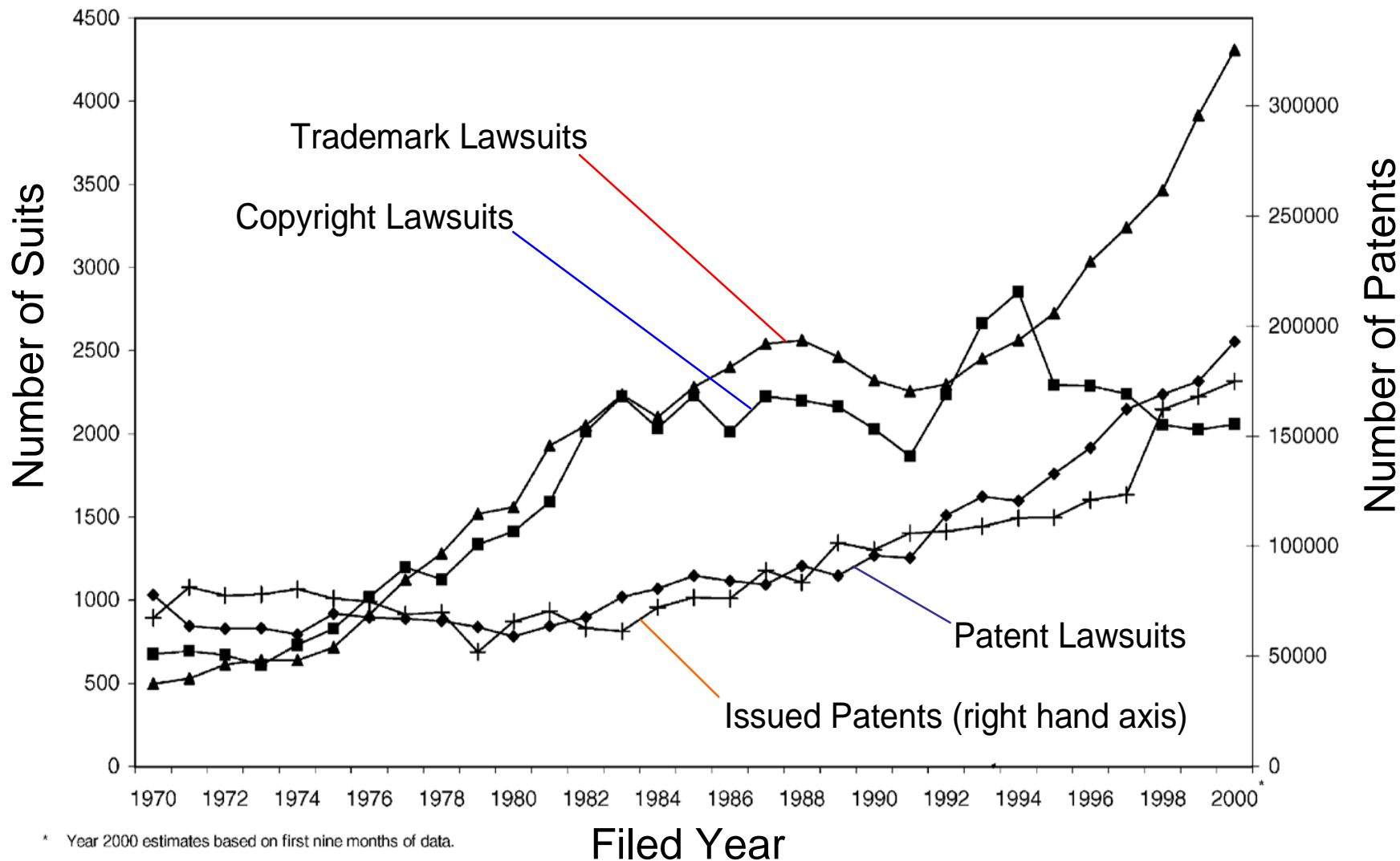
# Myth: The Patent Litigation “Explosion”

“... *burgeoning patent litigation is increasingly making lawyers the key players in competitive struggles rather than entrepreneurs and researchers.*” (emphasis supplied)

-- Jaffe & Lerner, *Innovation and its discontents* (2004), section “The Patent Litigation Explosion”, at 13.



# Compared To What?



\* Year 2000 estimates based on first nine months of data.

Source: Somaya (2004), note 200, Courtesy of Elsevier Ltd.

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# Trend Analysis Is Meaningless Without A Comparison Scale

- The growth in the number of patent lawsuit filings was substantially lower than that of trademark lawsuit filings.
- As an indicator of commercial activity, the relative number of patent lawsuits has not changed much. Patent lawsuits in 2005 were 1% of all Federal civil lawsuits - the same percentage as that recorded in 1975.

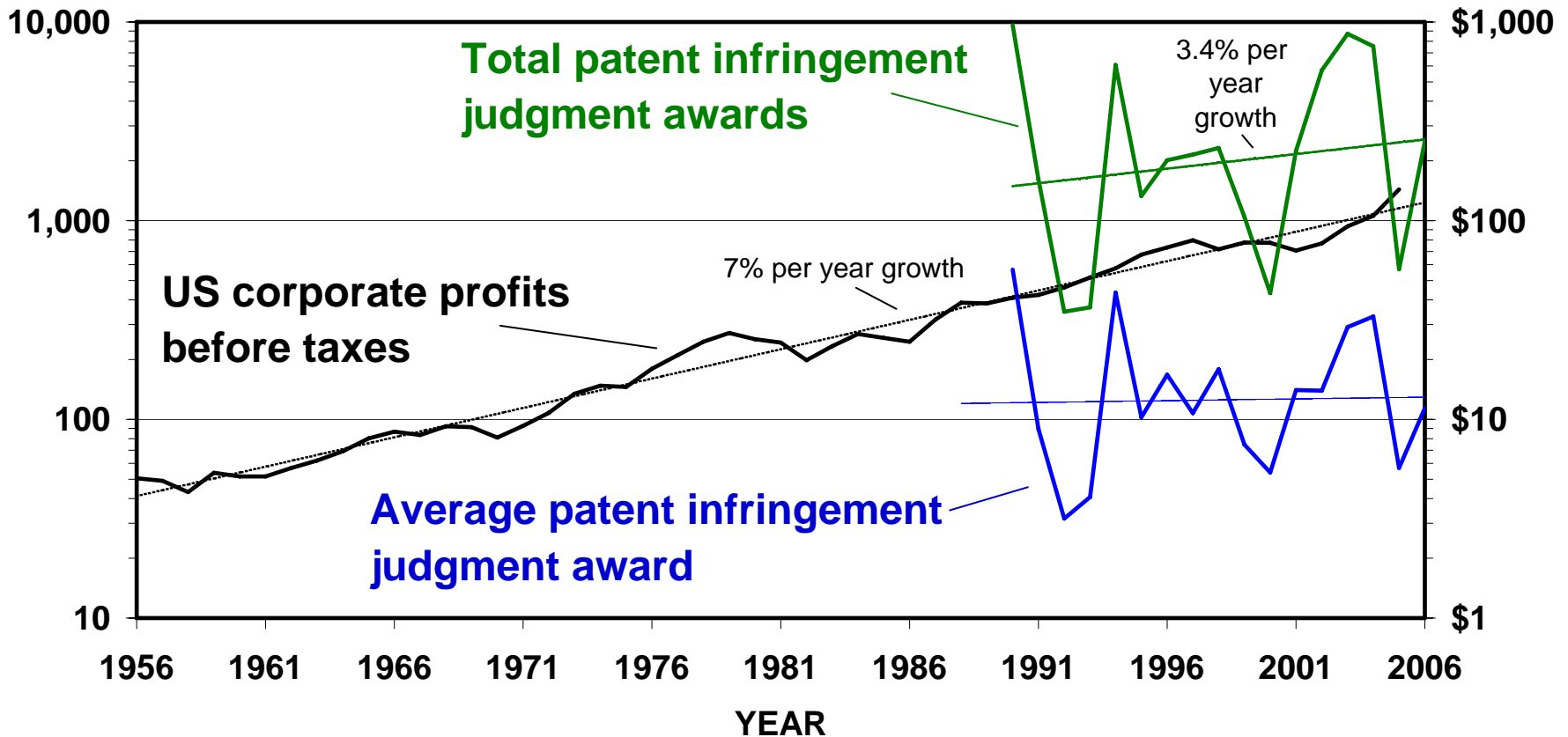
# Myth: Patent Infringement Damage Awards “Have Grown Out Of Control”

- The patent critics argue that the trends for damage awards represent a growing unjustified “tax” on innovation.
- “..*evidence* is mounting that judicial determinations of damages for patent infringement have begun to exceed market rates.” (emphasis supplied)
  - House hearing testimony of Professor **John R. Thomas**, March 29, 2007.

# Damages - No Evidence That Use of *Georgia-Pacific* Factors Have ‘Begun to Exceed Market Rate’

US Corporate  
Profits Before  
Taxes (\$Billion)

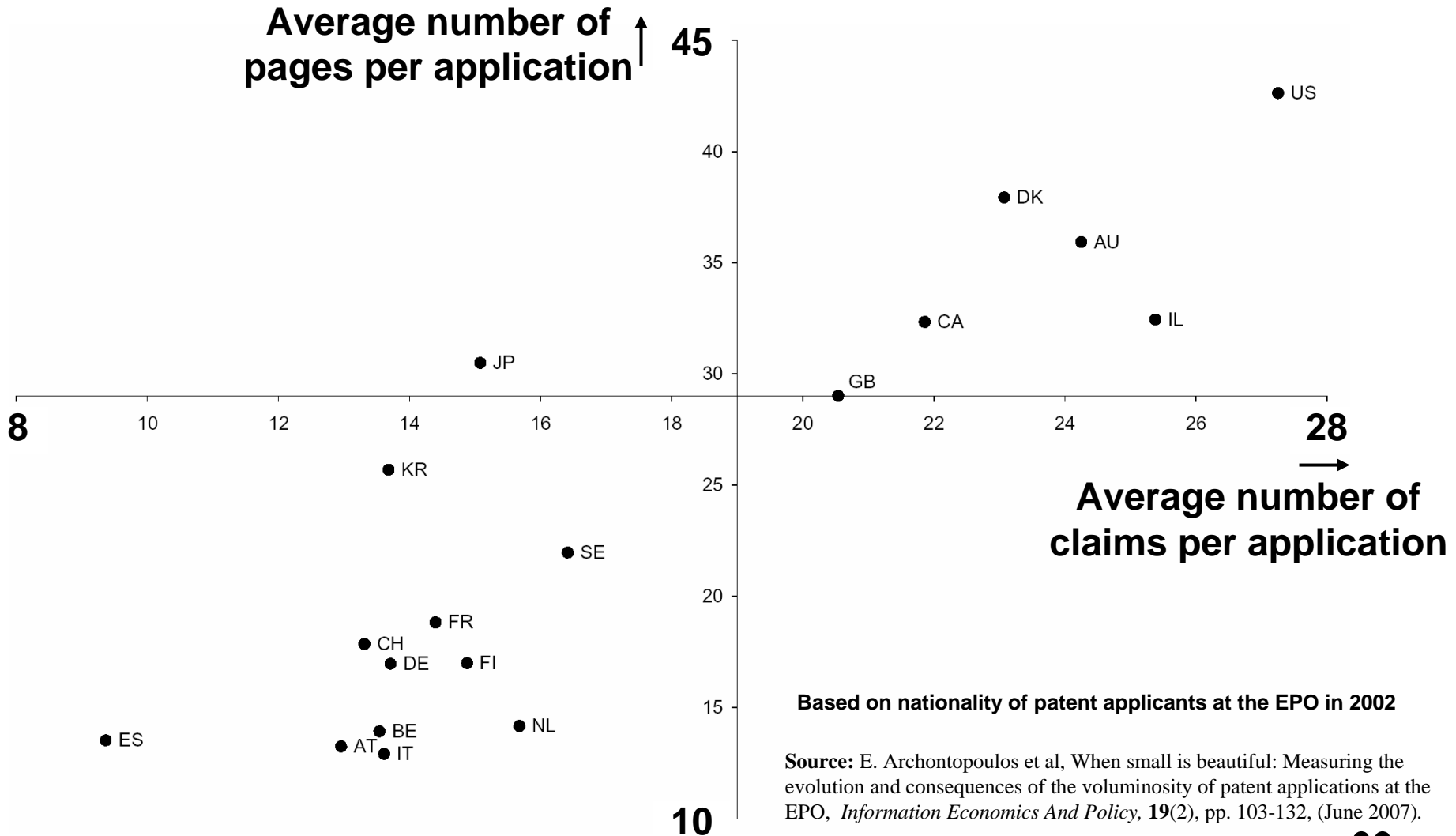
Infringement Award  
(\$Million)



Sources: US Census Bureau, *The 2007 Statistical Abstract*, Table 770. Corporate Profits, Taxes, and Dividends: 1929 to 2005; PricewaterhouseCoopers, *2007 Patent and Trademark Damages Study*.

# **Unintended Consequences Of “First To File” Patent Reforms**

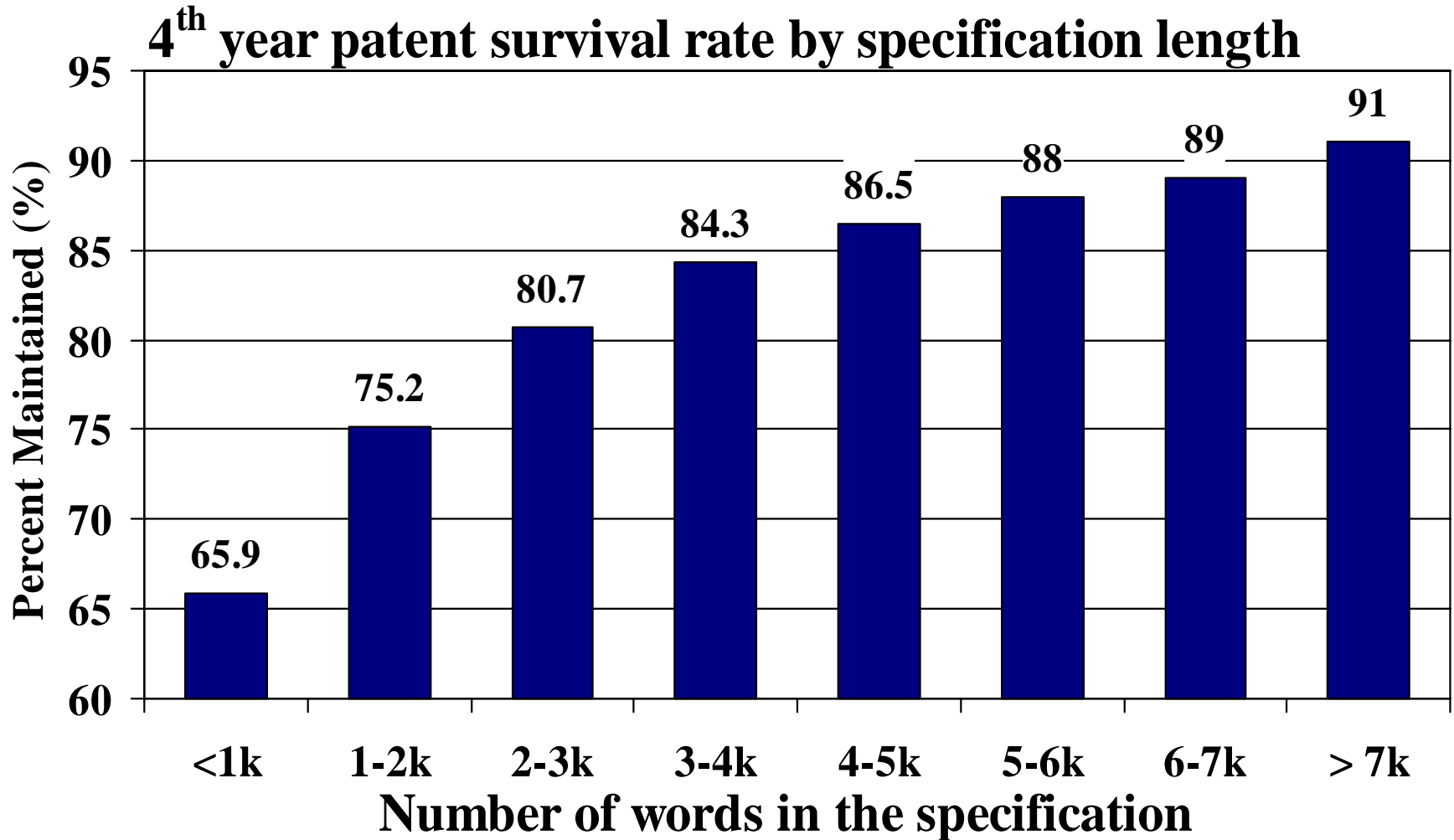
# Patentees in 'First-to-file' Countries Lag Behind in Patent Disclosure Breadth Compared to US Patentees



Based on nationality of patent applicants at the EPO in 2002

Source: E. Archontopoulos et al, When small is beautiful: Measuring the evolution and consequences of the voluminosity of patent applications at the EPO, *Information Economics And Policy*, 19(2), pp. 103-132, (June 2007).

# Longer Disclosures Confers More Valuable Patent Rights



Source: J.A. Barney, *AIPLA Quarterly Journal*, 30(3), pp. 317-352 (September 2002).

Data for patents granted in 1996.

# Unintended consequences of “Harmonizing” down

- Although other factors contribute to US’ longer disclosures than that of other countries, not having to “race-to-the-patent-office” is a significant contributor.
- In nations that use the First-to-File system, applicants are wrongly balancing disclosure and enablement detail with a race to be the first to file. (see prior slide).
- Should it be adopted, the resultant decline in disclosure breadth in a US First-to-File system would not only deny the public from receiving the full benefits of the patent bargain, but will also produce a progressively poorer prior art record, resulting in overbroad or low quality patents subsequently being issued.



# Unintended consequences of “Harmonizing” down (Contd.)

- In this regard, "Harmonization" is another word for tipping the trade scale in favor of our trading partners. Today, US patentees file more extensive and detailed applications in part because they are not under the 'First-to-File' gun. They later file the same applications in foreign countries. In both venues, US applicants are able to submit more claims that have broader support in the disclosure. – Better patents.
- Foreign inventors must make due with less specification support and are therefore generally disadvantaged compared to US applicants when the scope and number of claims are considered. This US advantage should not be taken away.
- A US originated patent right is more valuable to its owners because it is more effective in excluding foreign originated products *even in foreign markets*.
- Changing the current law for the sake of removing uncertainty in only a *few hundred interference cases* will likely have far reaching unintended consequences to the US economy.

# Conclusions

- The US patent system is the best in the world.
- Continuations must be permitted to be the wave of the future, or else, US patent rights will erode due to accelerated claim obsolescence.
- There is no factual support to allegations of overbroad patents, patent litigation “explosion” or of excessive patent damage awards.
- **Do not fix that which is not broken in the US patent system.**

**Thank You**