

**Much Patent Reform Has Already Taken Place.
Any Further Reforms Must Be
Directed At U.S. Patent Office
Operations**

(Revised)

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Presented at

“The Perfect Storm of Patent Reform?”

Fenwick & West Lecture Series Inaugural Symposium,

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Content

- Much Patent Reform Has Already Taken Place
- Many problems identified by legislative reform proponents are best addressed instead by reforms of PTO operations
- But not by expanding PTO's rulemaking authority powers
 - PTO to focus on its statutory "Job Description" and not overstep on the domains of Congress and the Courts
- Improving PTO's operations and core competencies

Much Patent Reform Has Already Taken Place

- The Courts recently made substantive changes in patent law
 - *eBay v. MercExchange* (May 15 2006)
 - *MedImmune v. Genentech* (January 9, 2007)
 - *KSR v. Teleflex* (April 30, 2007)
 - *In Re Seagate Technology* (Aug 20, 2007)
 - *In Re Bilski* (October 30, 2008)
 - Others
- Many problems identified by legislative reform proponents are best addressed instead by reforms of PTO operations
 - Patent Examination Quality
 - Revise performance metrics
 - Management and examiner incentive structures
 - Major examination resource augmentation (possible fee increases)
- Congress has a role to play – Oversight of PTO reforms

PTO's “measurable organization goals in key operational areas”* have long been improperly implemented

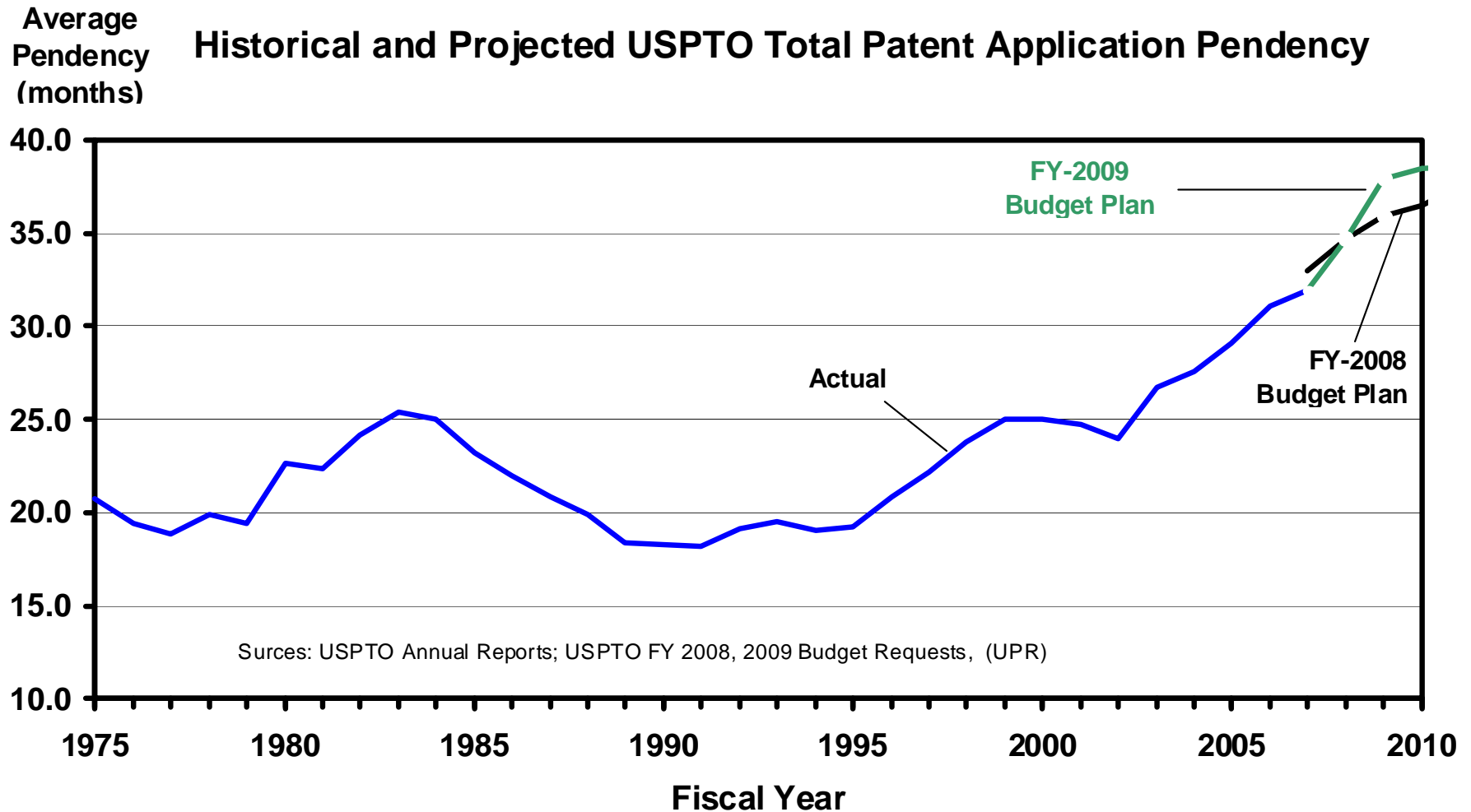
- Pendency
- Allowance rate
- Examiner count system
- Examination Error Rate

* 35 U.S.C. § 3(b)(2)(B) (Patent Commissioner's annual performance agreement)

Average pendency is not one of the express statutory pendency requirements

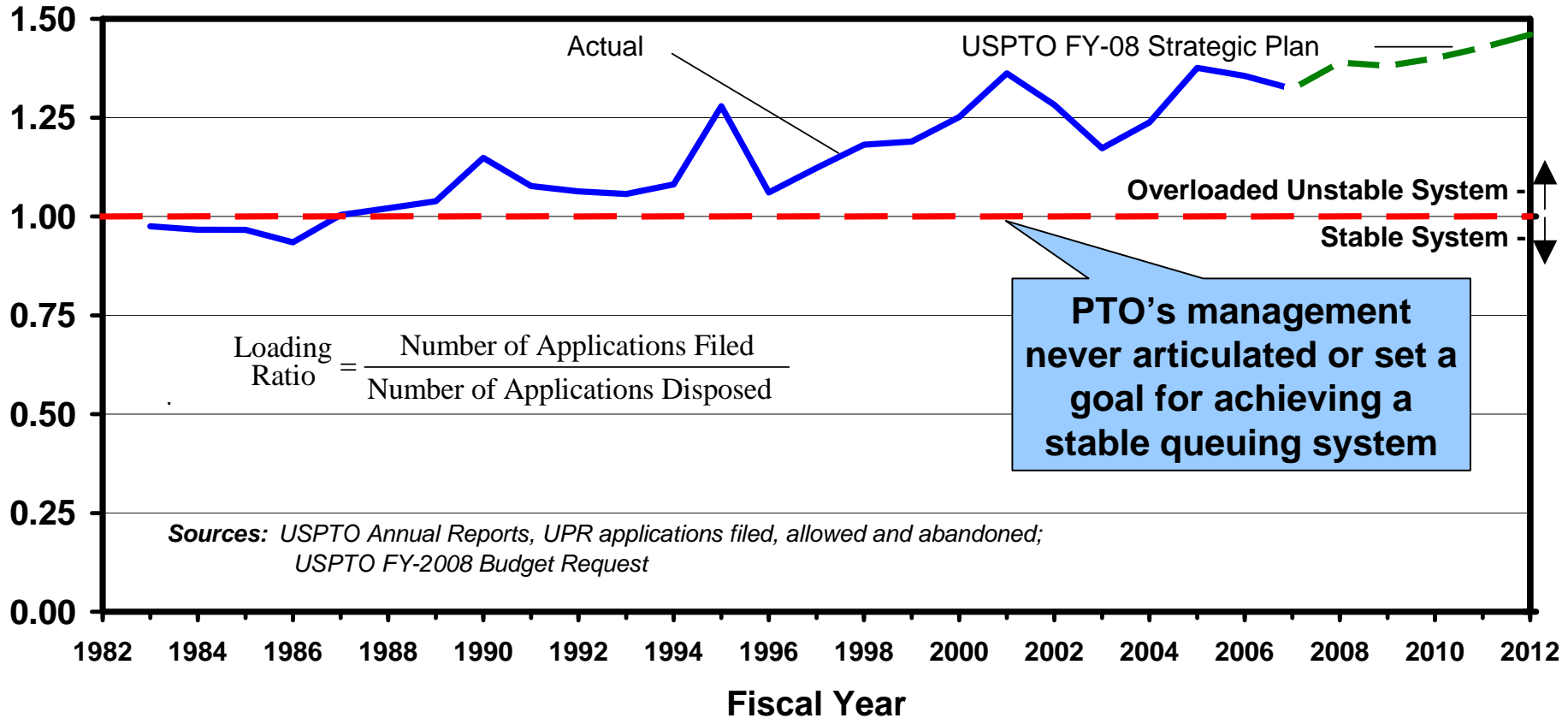
- Rather, key statutory pendency goals are
 - 35 U.S.C. § 154(b)(1)(A)(i) – First Office Action within 14 months
 - 35 U.S.C. § 154(b)(1)(B) – Patent grant within 3 years
 - Patent term must be adjusted day-for-day of PTO delays
- PTO's attempts to control *average* pendency are often detrimental to Congress' goals as expressed in § 154(b)
- While average pendency can be a useful descriptor, setting any specific average pendency goal is arbitrary, as it has no direct connection with objective criteria that determine examination queuing stability

Average Patent Application Pendency



PTO's patent application disposal capability consistently fails to withstand filing rates, even under PTO's own Five-Year Targets

Loading Ratio

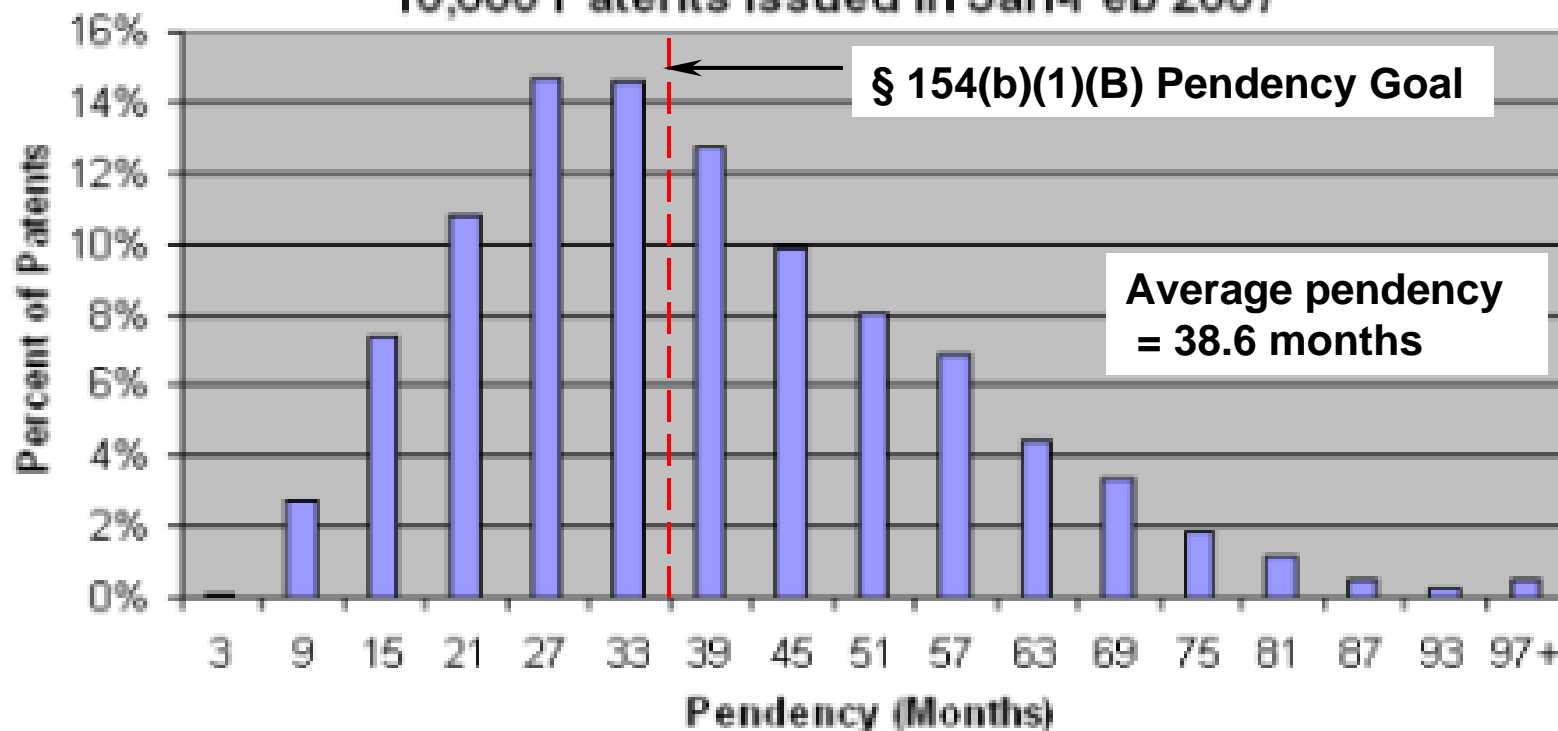


PTO Pendencies in FY 2007

PTO's reported average pendency for FY-2007 was 31.9 months. This includes issued and abandoned applications. The study below found an average pendency of 38.6 months for issued patents. Pendency for Issued patents is considerably longer than that of other disposals. It is estimated that disposals other than allowances had an average pendency of less than 30 months.

Patently-O

Chart I: Pendency Histogram of
10,000 Patents Issued in Jan-Feb 2007



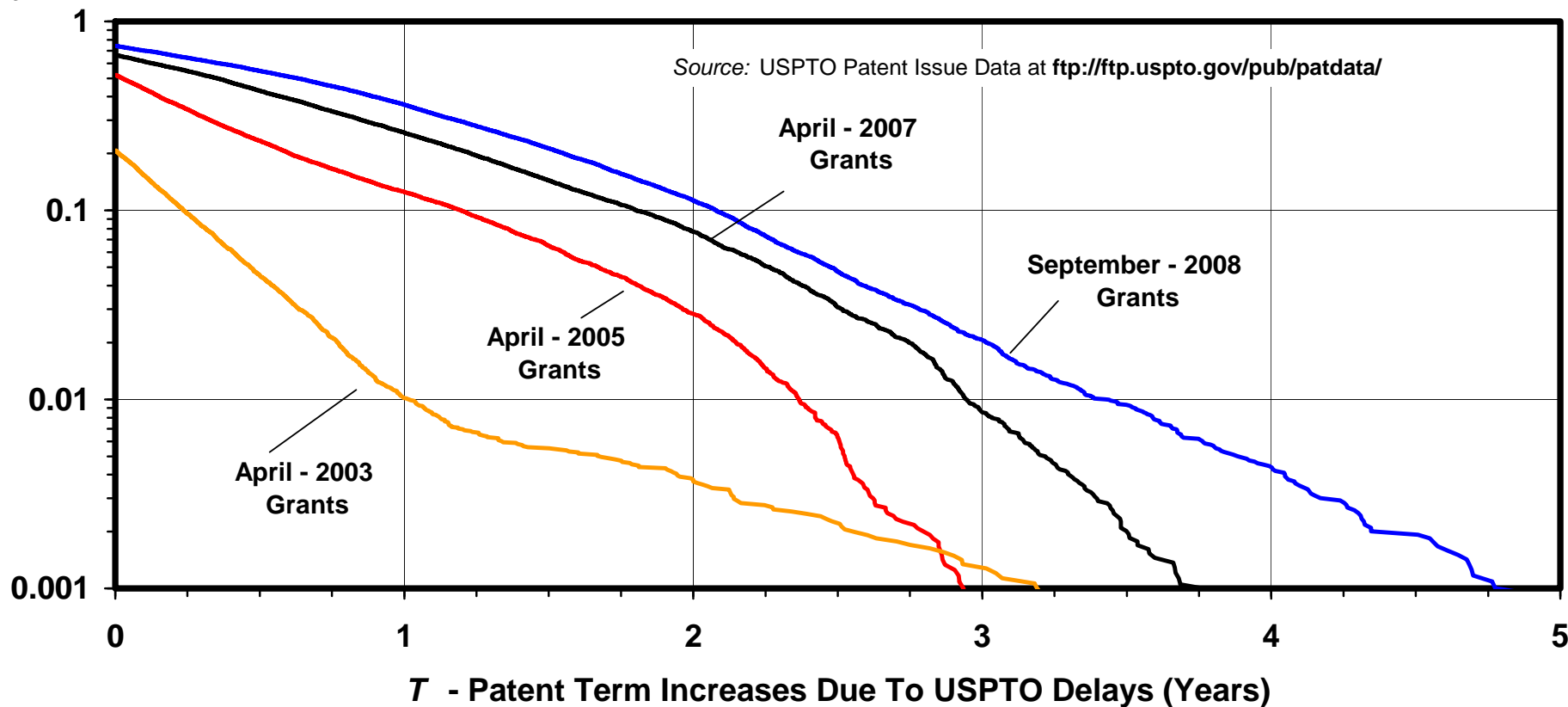
Source: Dennis Crouch, Patently-O February 2007, at http://www.patentlyo.com/patent/2007/02/prosecution_dat.html

Patent Term Adjustment Due to PTO Delays

This is what really matters

Fraction of patents
with term adjusted
by more than T

Ballooning Patent Term Increases Under 35 USC §154(b)



PTO's Distorted "Patent Quality" Measures

*Bad Science in Search of "Good" Patents **

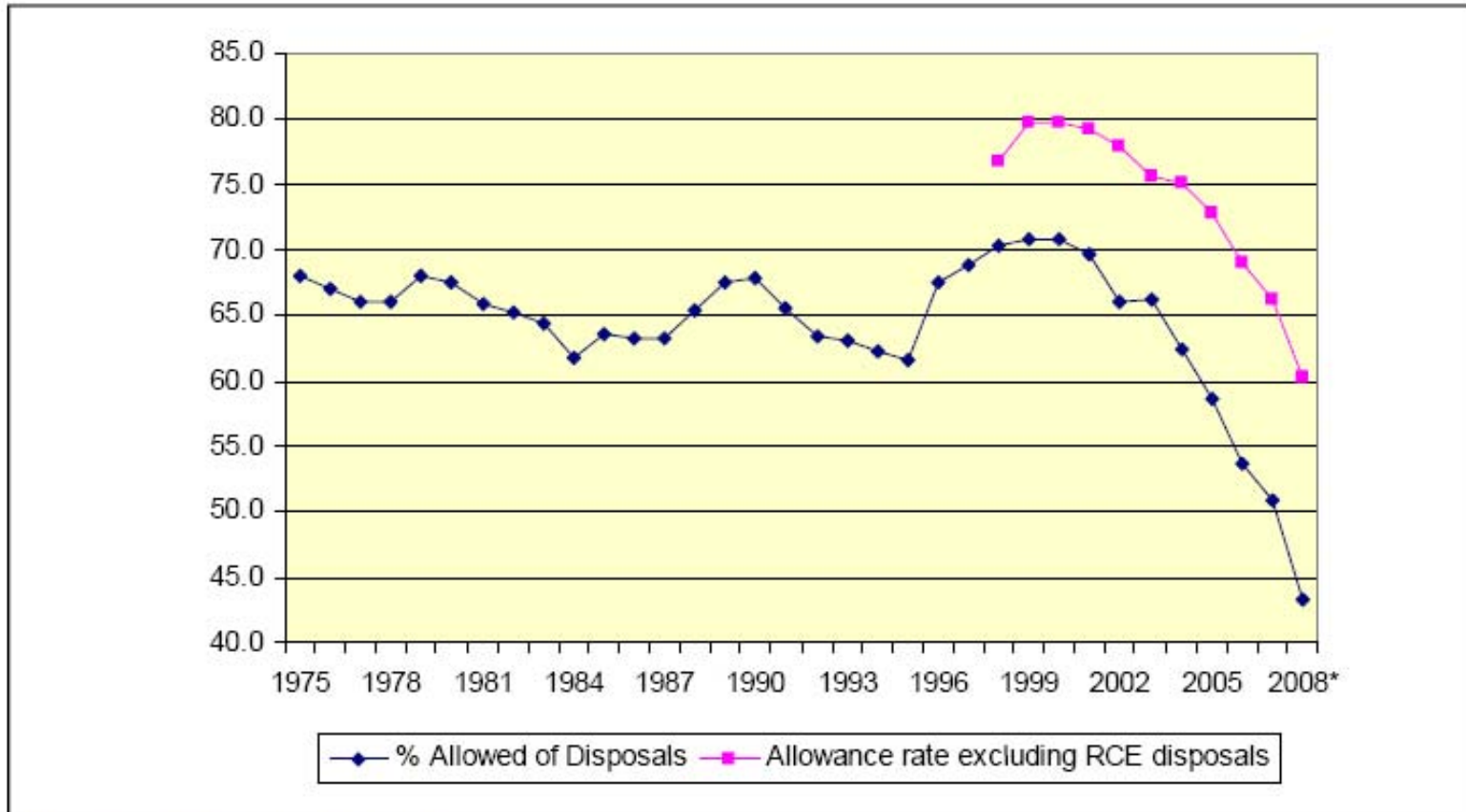
* This tag line complements the title and content of my paper:

Bad Science in Search of "Bad" Patents, *Federal Circuit Bar Journal*, Vol. 17, No, 1, pp.1-30, (2007).
Available at <http://works.bepress.com/rkatznelson/1> .



Allowance Rate over Time

PTO touts its lowering Allowance Rate as indicative of patent quality improvements



Data is through the 3rd Quarter of 2008.

From: James A. Toupin, IPO Annual meeting, September 21-23, 2008.

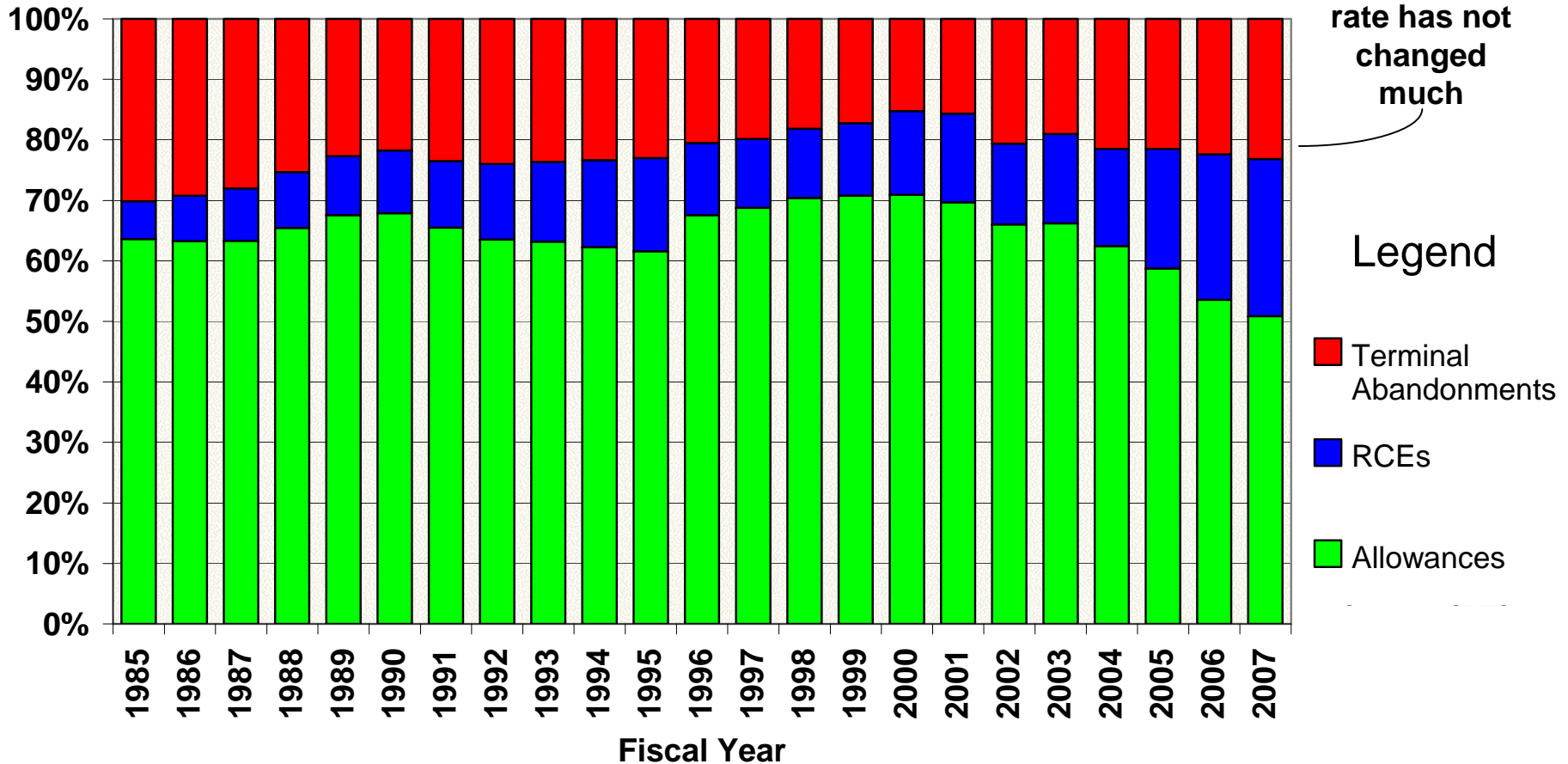
But is it really? Note the share of disposals at PTO

Allowances, Terminal Abandonments and RCEs

RCEs include CPA, Rule 129, File Wrapper CON.

Terminal Abandonment is an abandonment not followed by an RCE

Disposals



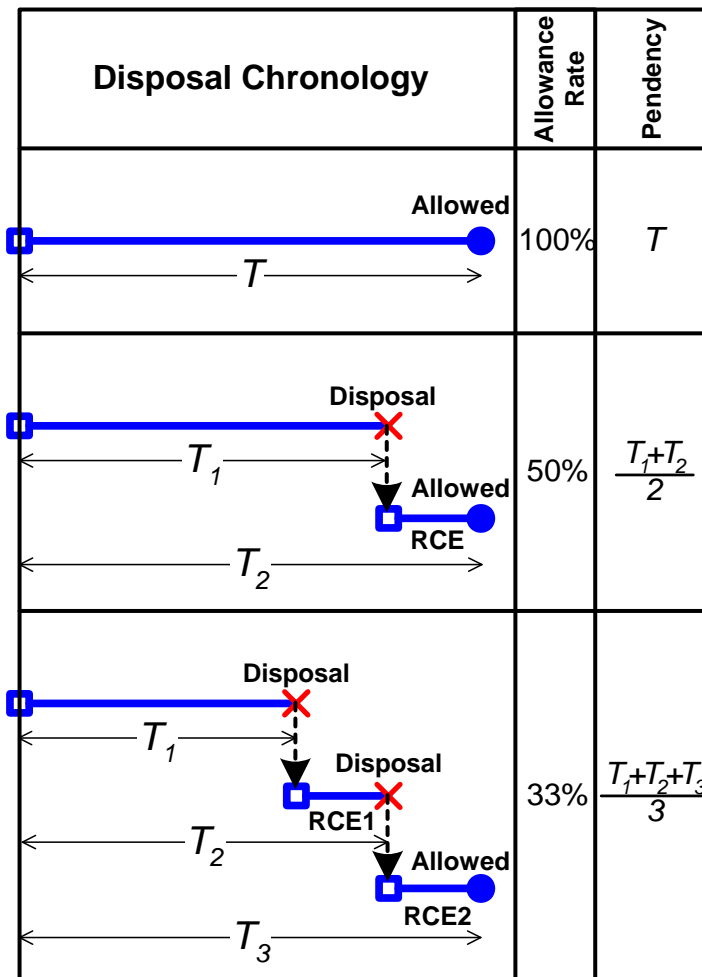
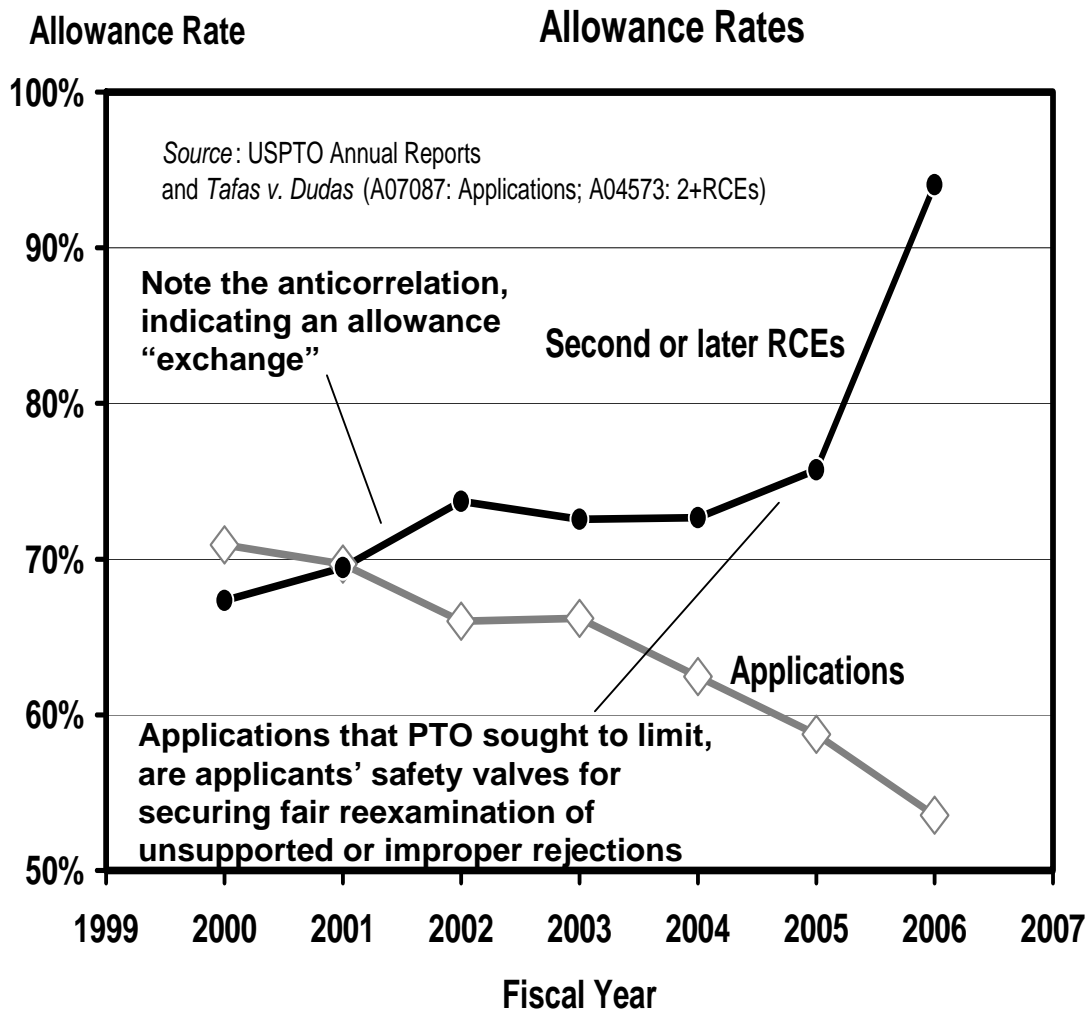
Sources: PTO Annual Reports, PTO data produced in *Tafas v. Dudas* (2007), .

What is the real story with Requests for Continued Examination? (RCE)

- RCE is applicant's statutory right under 35 U.S.C. § 132(b) for reexamination of rejected application when the applicant believes that the (amended) claims do merit allowance

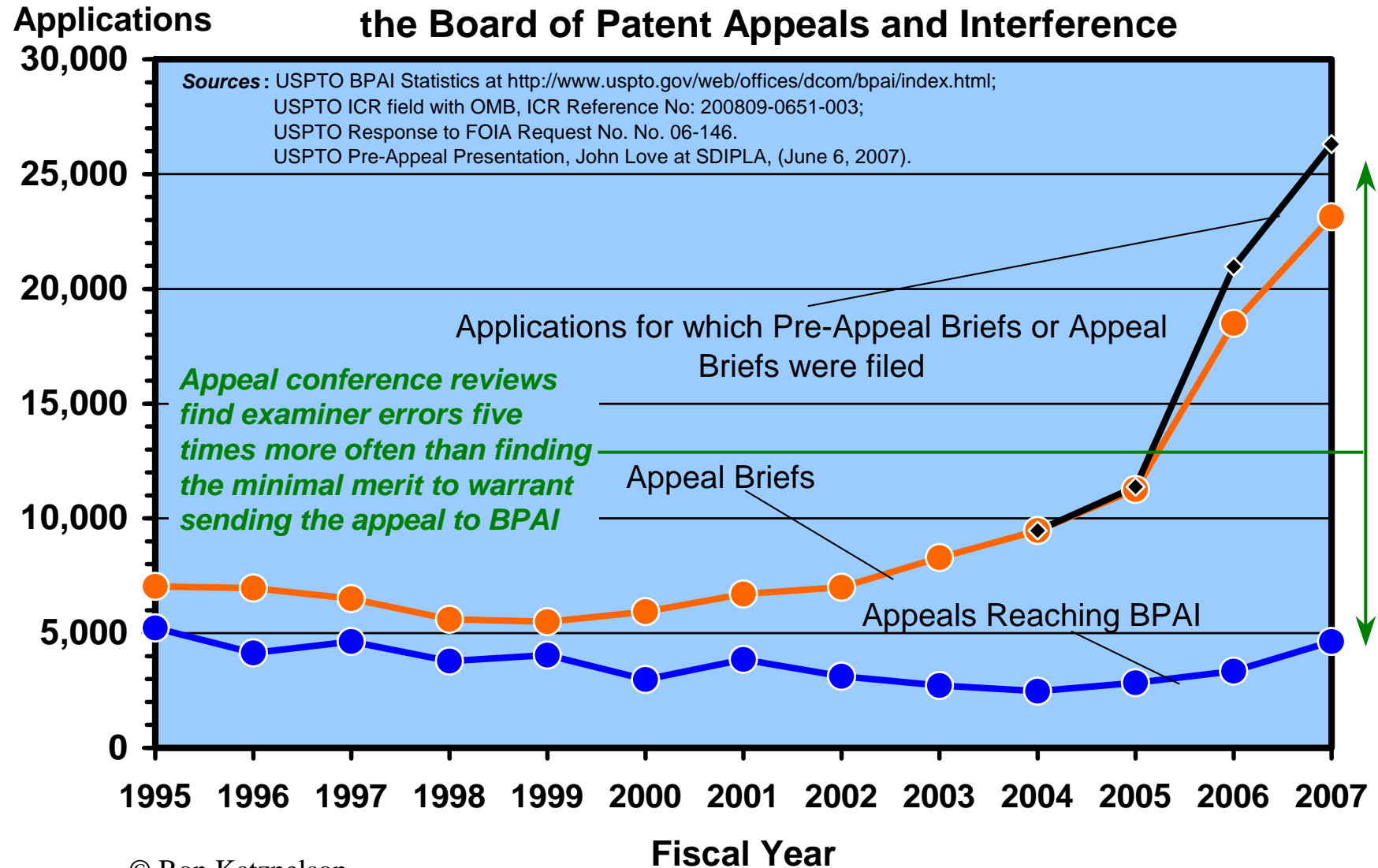
PTO's "Decreasing" Allowance Rate is Mostly an Illusion. Improper Final Rejections Mostly Defer Allowances to RCE Phase

Applications vs. Requests for Continued Examination



The growth of improper/premature final rejections also results in unprecedented growth in appeals

Appeals at USPTO and Appeals Reaching the Board of Patent Appeals and Interference



PTO's "Decreasing" Allowance Rate is Mostly an Expensive Illusion.

- Because the PTO considers a disposal that is followed by an RCE an abandonment, it results in a reported allowance rate that can be manipulated downwards by issuing poorly supported, or premature, final rejections
- PTO's incentives to "transfer" substantive examination into induced RCE prosecution are rooted in its metrics:
 - Obtain early "freebee" disposals disallowing original applications, thereby reduce reported "Allowance" Rate
 - Reduce reported Average Pendency by adding early disposals
 - "Stop the clock" of Patent Term Adjustment. RCE prosecution time is excluded from computing PTO delay under 35 U.S.C. §154(b)(1)(B)(i).
 - Generate an additional RCE filing fee revenue
 - Increase examiner "Count" towards performance quota.
- Creates incentives to reject meritorious applications
- Results in increased filings of RCEs and appeals

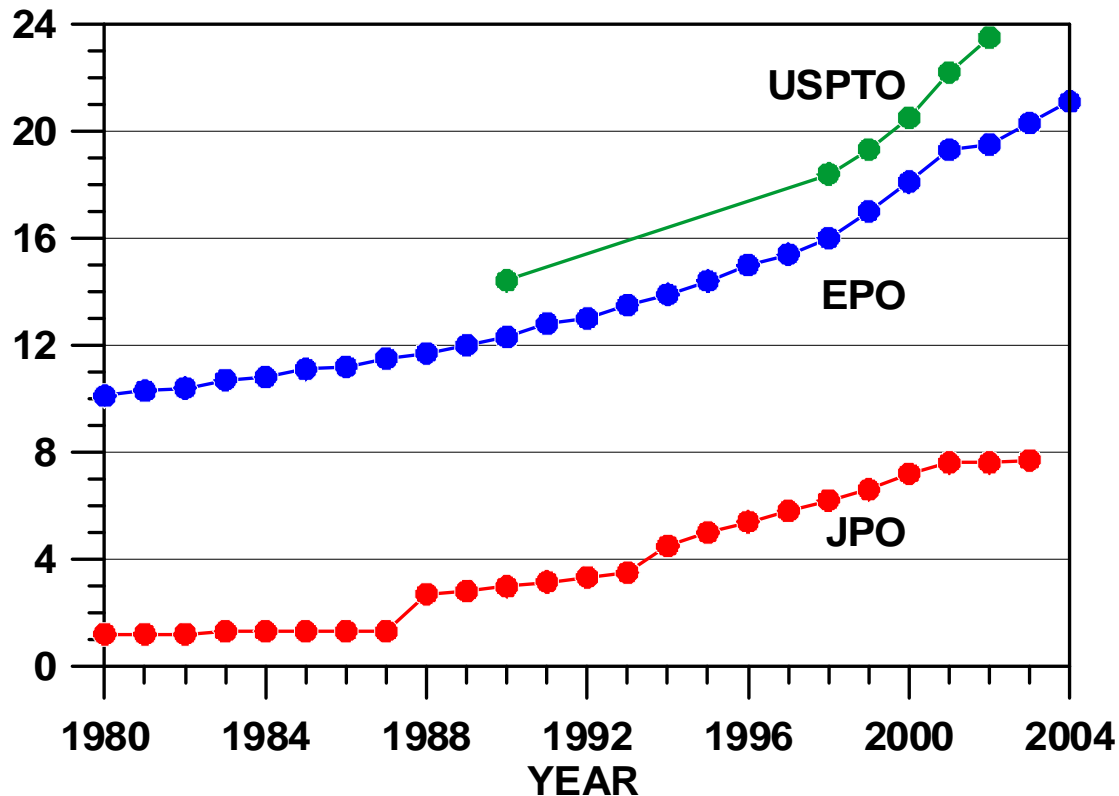
PTO's Distorted Measures Lead to Counterproductive Incentives

- *Allowance Rate* should be eliminated as a “quality” proxy. The incentives it creates in every level of PTO's management hierarchy only detract from patent quality
- *Average Pendency* measures have been abused and should be abandoned as operational metrics. Instead, the statutory and operationally more relevant metrics of Patent Term Adjustment measures and Application Loading Factor should be widely adopted
- Tailor examiners' performance metrics and incentives to align them with the patent statute and quality examination
 - Allotment of examination time in proportion to complexity (claim count, disclosure length and number of references in IDS)
 - Abolish the “Count” system as a *sole* measure of examiner workload
 - Permit examiners to specialize in their field. More time allowance for professional development and attending industry conferences and trade shows.

The Growing Examination Burdens Per Application

Number of Claims Filed in Patent Applications

Average Number of Claims at Filing



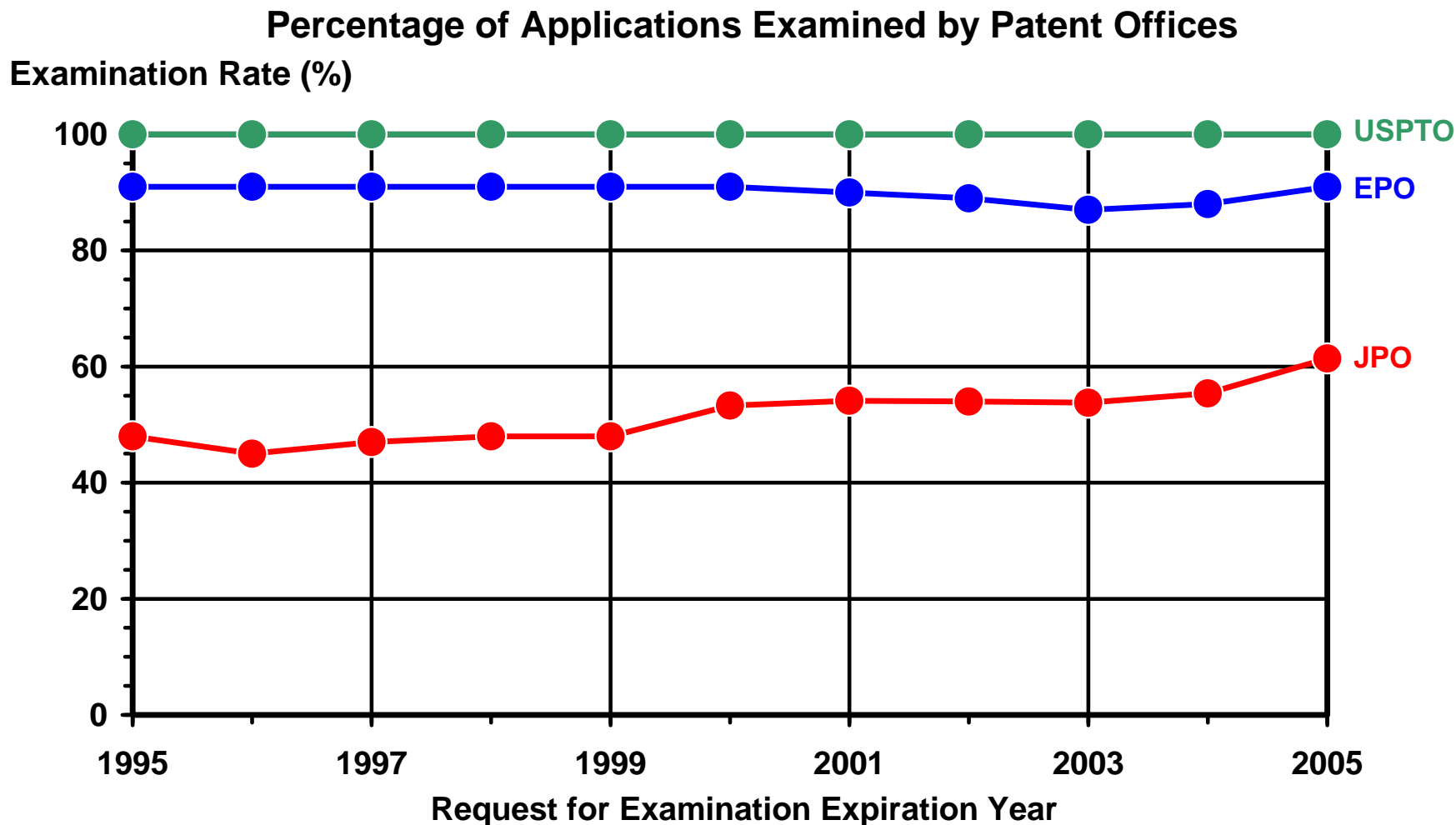
- Assign examination resources to match complexity
- Change examiner production quotas and incentives to reflect actual required burden
- Hire & train more examiners (fee increase)

Source: Ron D. Katznelson, Bad Science in Search of “Bad” Patents, *Federal Circuit Bar Journal*, Vol. 17, No. 1, pp.1-30, (2007)
Available at <http://ssrn.com/abstract=1007629>

First Step of Improvement: Examination On Request (aka Deferred Examination)

- Used in many countries such as Canada, Japan and in Europe.
- Applications are not examined automatically - only upon a specific Request For Examination within a set time-period, say 3 years.
- If no request is filed within that period, the application is deemed abandoned and is never examined.
- Proposal for the U.S. provides that any third party may trigger examination after publication of the application.
 - This will prevent a patentee from holding off prosecution of a patent that others find problematic and in need of early patentability resolution.
- From experience of other patent offices, 10% to 40% of applications are never examined under Examination On Request systems
- Substantial workload reduction due to applicants' voluntary abandonment of obsolete claims prior to the Request For Examination deadline.
- Under current PTO practice, applications that become obsolete, but receive examination by the PTO, are the worst investment the PTO can make because their obsolescence is unlikely to fetch any renewal fees.

Moving To 'Examination On Request' or 'Deferred Examination' Can Immediately Save 20% Workload



Source: Trilateral Patent Offices Annual Reports

Continuations and Claims Rules

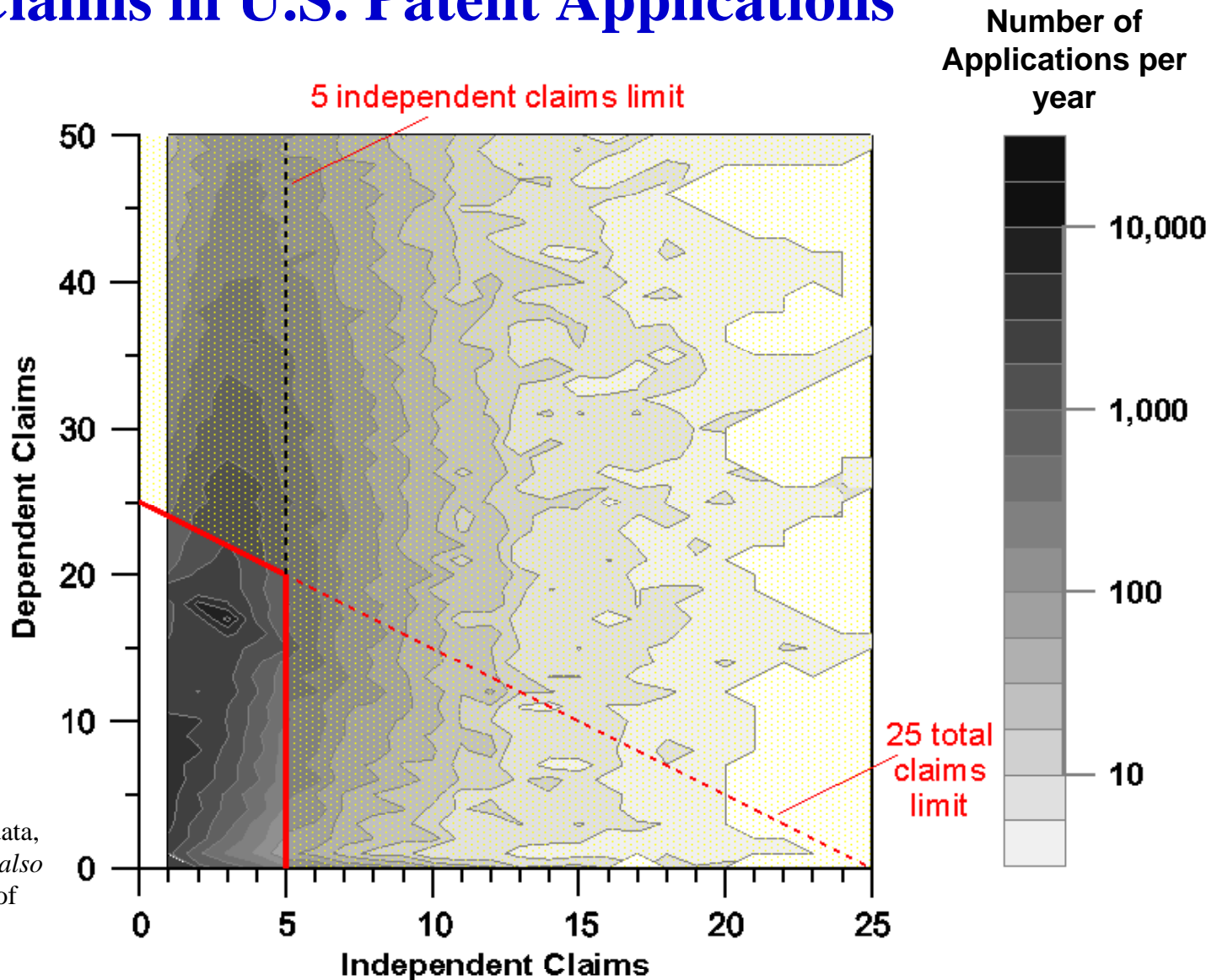
PTO's Enjoined* Rules

1. Limits the number of **claims** that may be examined in a single application to 5 independent or 25 total claims. Required an Examination Support Document (ESD) when the **5/25** limit is exceeded
2. Limits the number of **continuations, RCEs and divisionals** - (“2+1”). Requires a petition and showing to exceed limits
3. Requirements related to **co-pending applications** and **applications containing patentably indistinct claims**

* *Tafas v. Dudas*, 541 F.Supp.2d 805 (E.D. Va. 2008)

Joint Distribution of Independent and Dependent Claims in U.S. Patent Applications

It is estimated that as of 2007, 30% of pending applications had more than 5 independent or more than 25 total claims. Region shown in dotted mesh.

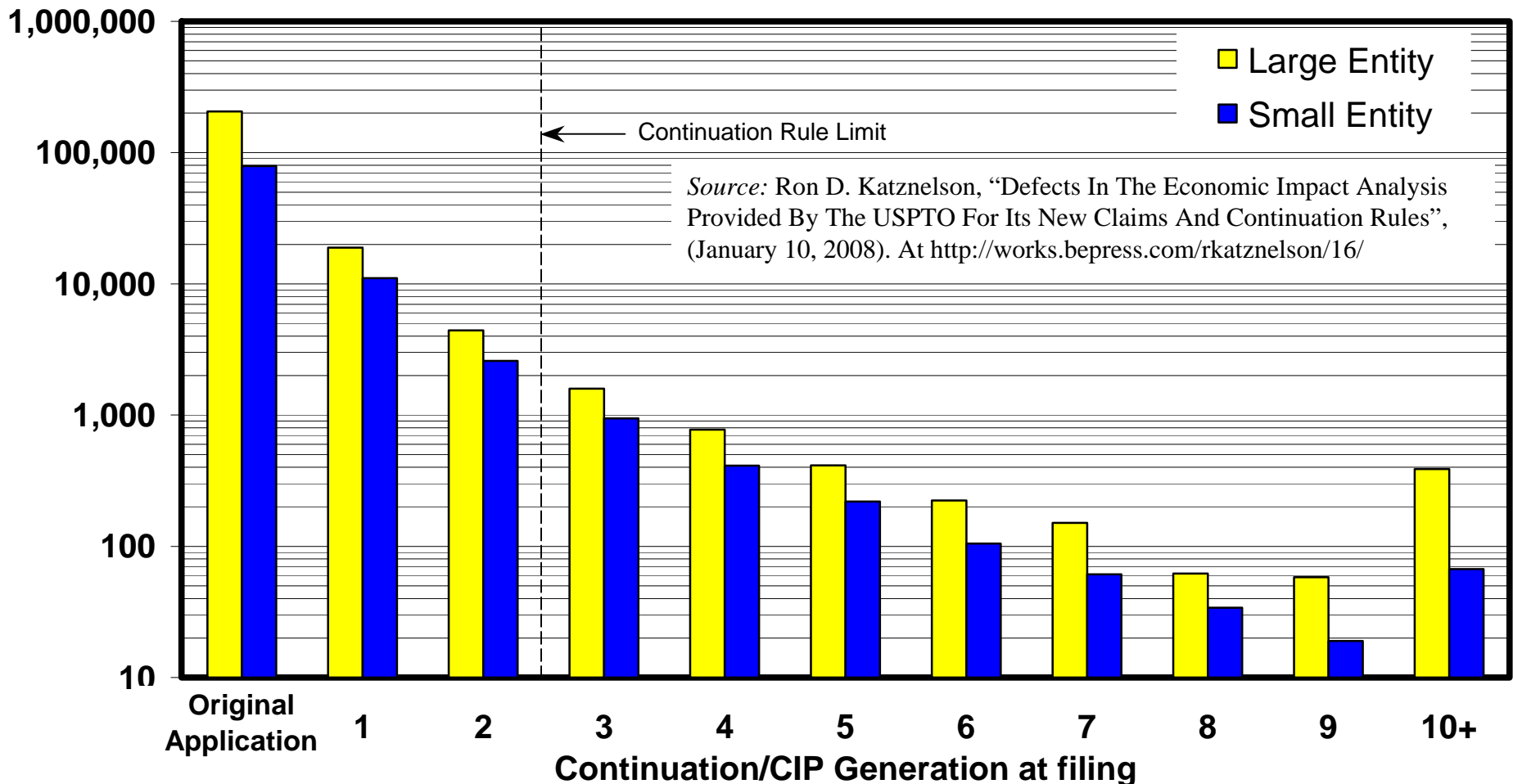


Source: USPTO, FY-2004 data, *Tafas v. Dudas* (2007). See also Figure 3 in the cited source of the next slide (#24).

Priority Generation in Continuation Applications

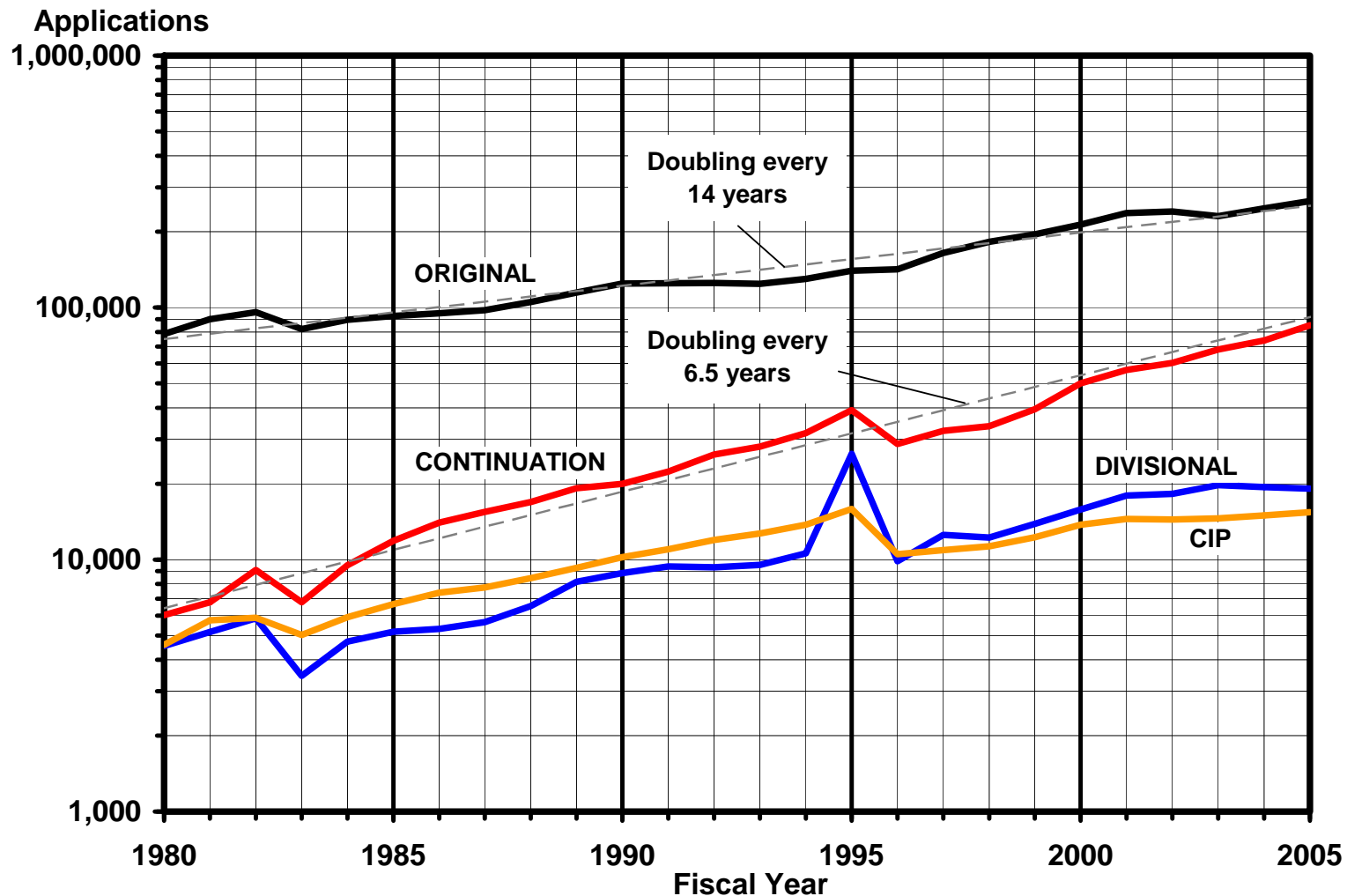
Applications Filed
in FY 2006

Continuation chain distribution at USPTO



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

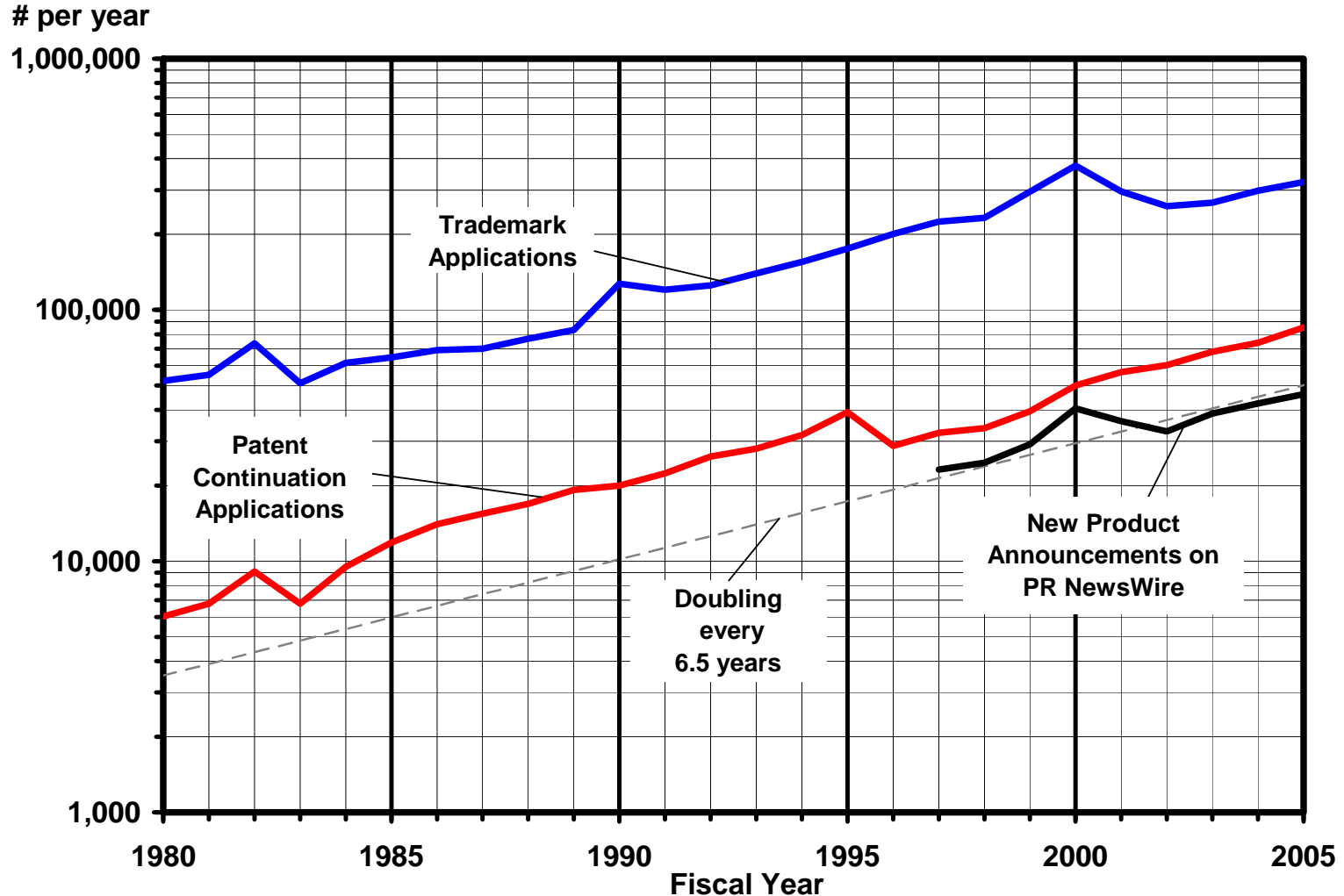
Annual Trends in USPTO Utility Patent Applications



Source: Ron D. Katznelson, Patent Continuations, Product Lifecycle Contraction and the Patent Scope Erosion – A New Insight Into Patenting Trends, *SCIPLA Spring Seminar*, Laguna Niguel, CA, (June 8 - 10, 2007), available at <http://ssrn.com/abstract=1001508>.

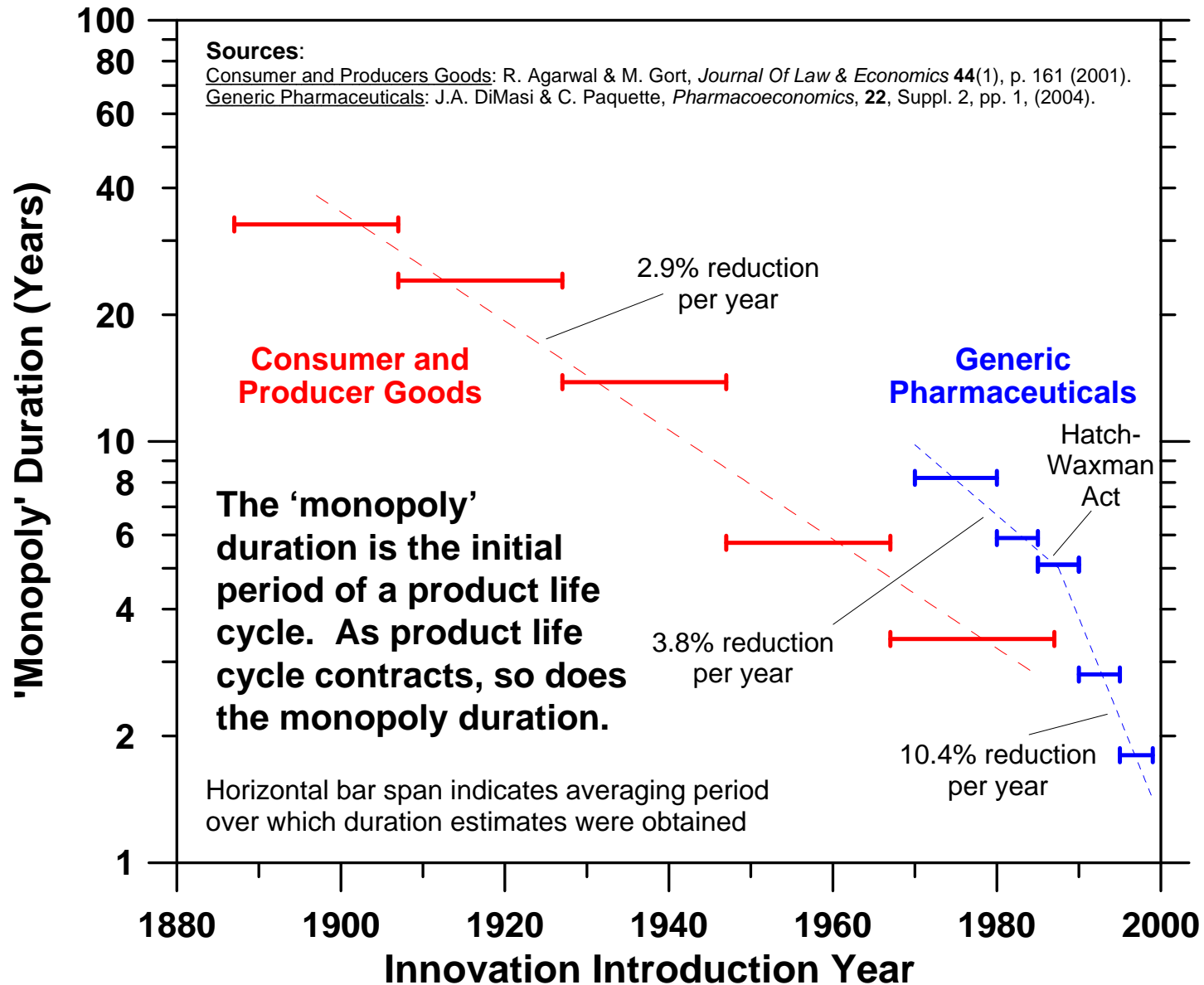
Continuations Are Mostly Filed To Better Match Claims To New Products In The Market

Annual Trends in New Product Introductions



Source: Ron D. Katznelson, Patent Continuations, Product Lifecycle Contraction and the Patent Scope Erosion – A New Insight Into Patenting Trends, *SCIPLA Spring Seminar*, Laguna Niguel, CA, (June 8 - 10, 2007), available at <http://ssrn.com/abstract=1001508>.

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



Continuations Filing Growth Rate Exceeds That Of Original Applications Because:

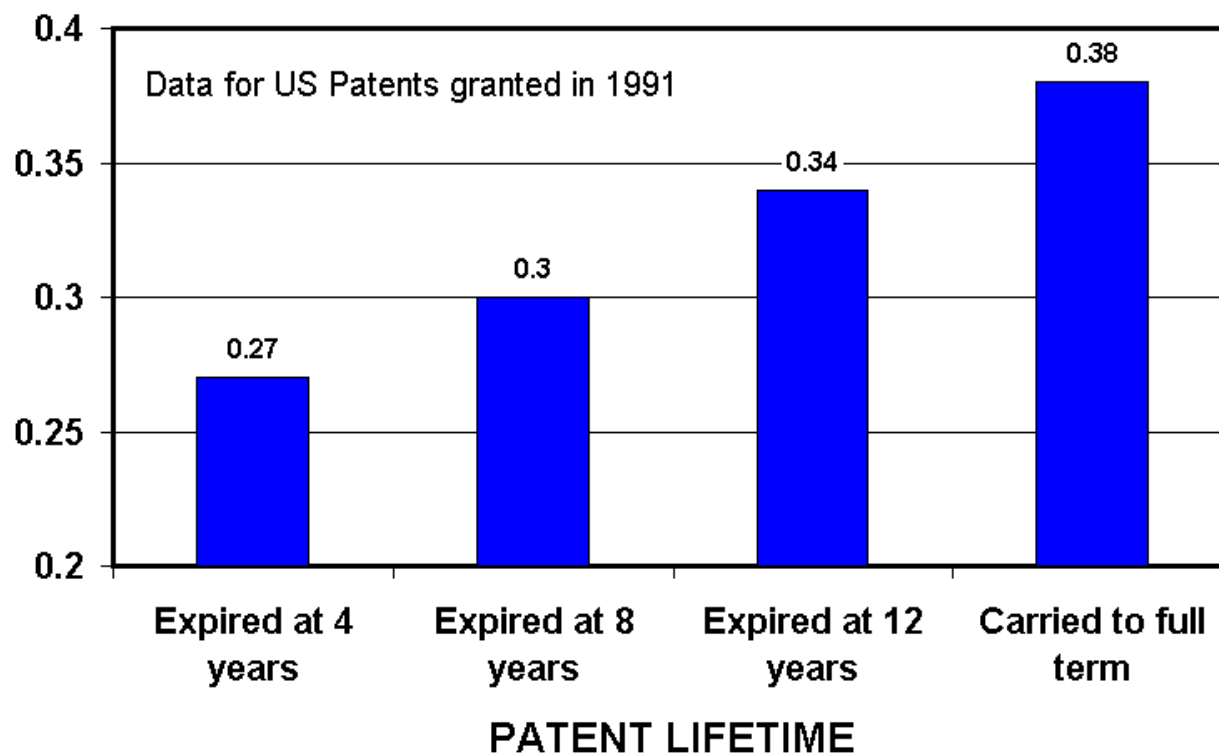
- Historical product life cycle reduction and the exponential growth in new product introductions necessitate new or amended patent claims in progressively growing fraction of inventions.
- Product lifecycle reduction over time is accompanied with the grant of patents with progressively diminishing claim scope.
- Patent continuations are essential for applicants who seek to appropriate equivalent returns from their inventions.
- RCEs became essential for ensuring proper claim coverage

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

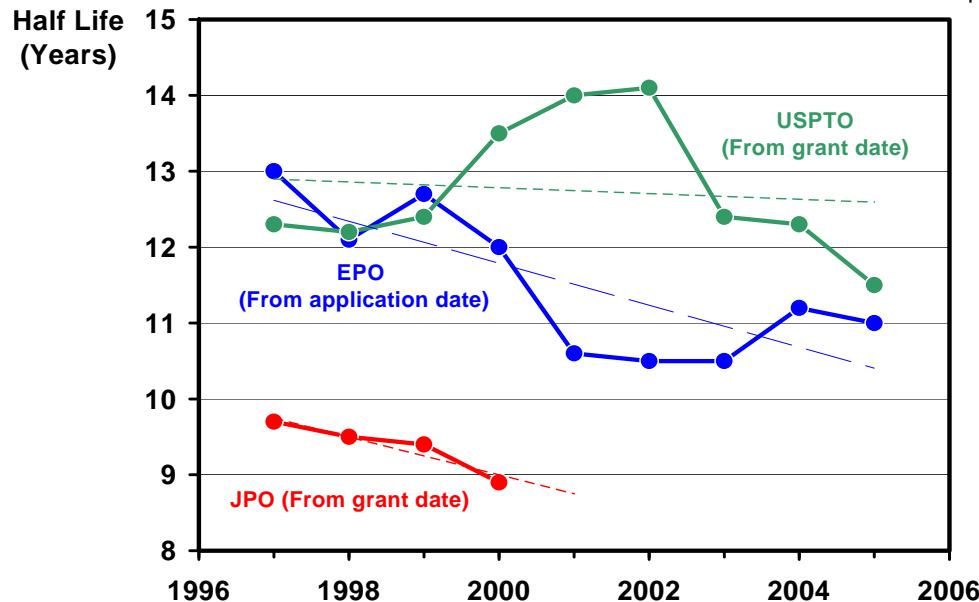
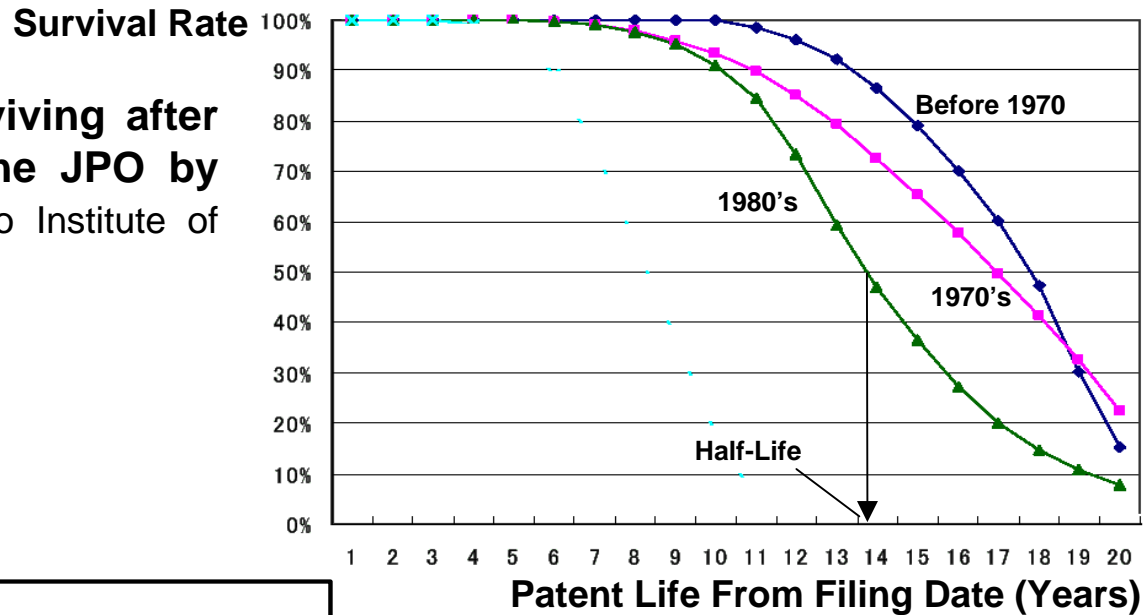
Average number of related applications



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

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).*

Matching the Quid to the Quo of the Patent Bargain

The Patent Bargain	20th Century	21st Century
Useful Life of Disclosure		
Useful Life of Right To Exclude		

- Shrinking product lifecycles and accelerated claim obsolescence increasingly require that grants of exclusive rights under the patent bargain be made in installments. These installments are made in grants of “Continuations” and “CIPs”.
- A patent system that would disallow growing use of Cons/CIPs would be doomed to fail its bargaining role in the 21st century

Conclusions

- The US patent system is the best in the world.
- Reforms and congressional oversight must be directed at the PTO.
- **Do not fix that which is not broken in the US patent system. Fix the US Patent Office.**

Thank You

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