Bi-Level Technologies

From the SelectedWorks of Ron D. Katznelson

November 7, 2008

The Perfect Storm of Patent Reform?

Ron D Katznelson, Bi-Level Technologies

Available at: https://works.bepress.com/rkatznelson/54/
Much Patent Reform Has Already Taken Place. Any Further Reforms Must Be Directed At U.S. Patent Office Operations
(Revised)

By Ron D. Katznelson, Ph.D.

Presented at
“The Perfect Storm of Patent Reform?”
Fenwick & West Lecture Series Inaugural Symposium,
UC Davis School of Law
November 7, 2008
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

Average pendency is not one of the express statutory pendency requirements

- Rather, key statutory pendency goals are
  - 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

Historical and Projected USPTO Total Patent Application Pendency

Fiscal Year

Average Pendency (months)

Sources: USPTO Annual Reports; USPTO FY 2008, 2009 Budget Requests, (UPR)
PTO’s patent application disposal capability consistently fails to withstand filing rates, even under PTO’s own Five-Year Targets.

Sources: USPTO Annual Reports, UPR applications filed, allowed and abandoned; USPTO FY-2008 Budget Request
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.


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Patent Term Adjustment Due to PTO Delays

This is what really matters

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:
Available at http://works.bepress.com/rkatznelson/1 .
PTO touts its lowering Allowance Rate as indicative of patent quality improvements.

From: James A. Toupin, IPO Annual meeting, September 21-23, 2008.
Allowances, Terminal Abandonments and RCEs

RCEs include CPA, Rule 129, File Wrapper CON.
Terminal Abandonment is an abandonment not followed by an RCE

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


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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

Allowance Rates

Source: USPTO Annual Reports and Tafas v. Dudas (A07087: Applications; A04573: 2+RCEs)

Note the anticorrelation, indicating an allowance “exchange”

Applications that PTO sought to limit, are applicants’ safety valves for securing fair reexamination of unsupported or improper rejections

Disposal Chronology

<table>
<thead>
<tr>
<th>Disposal Status</th>
<th>Allowance Rate</th>
<th>Pendency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposal</td>
<td>100%</td>
<td>T</td>
</tr>
<tr>
<td>Disposal</td>
<td>50%</td>
<td>$\frac{T_1+T_2}{2}$</td>
</tr>
<tr>
<td>Disposal</td>
<td>33%</td>
<td>$\frac{T_1+T_2+T_3}{3}$</td>
</tr>
</tbody>
</table>

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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**


- Applications for which Pre-Appeal Briefs or Appeal Briefs were filed
- Appeal conference reviews find examiner errors five times more often than finding the minimal merit to warrant sending the appeal to BPAI
- Appeal Briefs
- Appeals Reaching BPAI

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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

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


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

- Used in many counties 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

Percentage of Applications Examined by Patent Offices

Examination Rate (%)

USPTO
EPO
JPO

Source: Trilateral Patent Offices Annual Reports
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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.

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

Continuation chain distribution at USPTO

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

Annual Trends in USPTO Utility Patent Applications


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

Annual Trends in New Product Introductions


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

The ‘monopoly’ duration is the initial period of a product life cycle. As product life cycle contracts, so does the monopoly duration.

Sources:

Horizontal bar span indicates averaging period over which duration estimates were obtained.
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

<table>
<thead>
<tr>
<th>PATENT LIFETIME</th>
<th>Average Number of Related Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expired at 4 years</td>
<td>0.27</td>
</tr>
<tr>
<td>Expired at 8 years</td>
<td>0.3</td>
</tr>
<tr>
<td>Expired at 12 years</td>
<td>0.34</td>
</tr>
<tr>
<td>Carried to full term</td>
<td>0.38</td>
</tr>
</tbody>
</table>

Data for US Patents granted in 1991

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


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

<table>
<thead>
<tr>
<th>The Patent Bargain</th>
<th>20th Century</th>
<th>21st Century</th>
</tr>
</thead>
<tbody>
<tr>
<td>Useful Life of Disclosure</td>
<td>Specification</td>
<td>Specification</td>
</tr>
<tr>
<td>Useful Life of Right To Exclude</td>
<td>Claims</td>
<td>Claims</td>
</tr>
</tbody>
</table>

- 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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