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February 12, 2016

The Hon. Michelle K. Lee
Under Secretary of Commerce
Director, U.S. Patent and Trademark Office

Re: Request for Submission of Topics for USPTO Quality Case Studies

Dear Director Lee:

We write to you today in response to the U.S. Patent and Trademark Office’s (USPTO) Request for Submission of Topics for USPTO Quality Case Studies, published December 21, 2015.¹ We applaud the USPTO’s ongoing efforts to enhance the quality of U.S. patents, particularly those efforts that leverage the agency’s ability and expertise in collecting and analyzing quantitative data. Open patent data is a vital innovation asset that facilitates the transfer, management, and dissemination of innovation and currently supports well over 100 startups and patent data companies.² The additional datasets that have been made available during this Administration, particularly under the auspices of the Office of Chief Economist, should only bring more clarity and transparency to the innovation ecosystem. It is in this spirit of harnessing the power of data to improve patent quality that we offer our comments.

As empirical scholars interested in using data to drive policy-making, we commend the USPTO’s approach of using “case studies” of the type specified in the RFC—i.e., “reviews of applications” and “examiner work products”—to help illuminate, inform, and hypothesis-test potential best practices in patent quality. However, we would like to draw attention to two, thus far largely overlooked sources of data outside the USPTO’s own prosecution records: (1) the prosecution records of foreign patent offices that examine counterparts to applications filed in the U.S. and (2) the outcomes of lawsuits and other proceedings that review the validity of issued U.S. patents.

Below, we propose three case studies that leverage these data sources for your consideration:

¹ 80 Fed. Reg. 79277 (proposed Dec. 21, 2015), *available at* <https://www.gpo.gov/fdsys/pkg/FR-2015-12-21/pdf/2015-31897.pdf>.

² *The Patent Data 100+*, Colleen V. Chien and Reuben Bauer (forthcoming); working list of companies available at <http://tinyurl.com/patentdatacos>.

Title:

Case Study of Comparative Patent Examination

Proposal for Study:

The European Patent Office (EPO) is consistently ranked as producing the highest quality patents in the world.³ A comparative study of the EPO's examination practices may illuminate practices that the USPTO can adapt to US settings (or at least experiment with) to improve US patent quality.

Explanation:

While the substantive patent laws of Europe and the US are largely harmonized, the USPTO and EPO use different procedures to examine patents. For example, European examination is bifurcated into search and examination, whereas USPTO examiners integrate search and examination at every step. Examination at the EPO is also "front-loaded," with an estimated 8-12 hours devoted to search at the outset of the review process,⁴ as compared to an estimated average 2 hours at the USPTO, though the amount allocated varies considerably.⁵ Moreover, unlike the EPO, the USPTO allows applicants to accelerate consideration of their patent applications, to "continue" examination after a final rejection, and (for small users) to pay reduced fees. However, the basic task between examiners on both sides of the Atlantic are the same – to evaluate the invention described in the patent and the patent itself, in light of the relevant prior art, for its novelty, nonobviousness, and the other requirements of patentability.

In surveys of patentholders and patent practitioners, the EPO has consistently ranked highest in patent quality, as well as customer service.⁶ The agency's top marks in service, which we understand to indicate customer satisfaction, are particularly interesting because they were earned despite a relatively low allowance rate⁷ and a relatively high rate of withdrawal by the

³ See, e.g. *Quality and Procurement*, IAM Magazine, 2015, available at [http://documents.epo.org/projects/babylon/eponet.nsf/0/4783c6465d9a2b5fc1257e5900242b3f/\\$FILE/IAM72_benchmarking_q_p_en.pdf](http://documents.epo.org/projects/babylon/eponet.nsf/0/4783c6465d9a2b5fc1257e5900242b3f/$FILE/IAM72_benchmarking_q_p_en.pdf), tables 6-11 (reporting survey results that show the shared view of attorneys, companies, and patent holders that EPO patents are of the highest quality). *Accord The EPO Tops The Quality Table Once Again, As The USPTO And SIPO Make Forward Strides*, May 29, 2012, available at <http://www.iam-media.com/blog/detail.aspx?g=f7470c76-8fe7-42e3-a4bb-fce2b4fa1a17>.

⁴ Bruno van Pottelsberghe de la Potterie, *The Quality Factor in Patent Systems* (2011) at 1778, 2015 correspondence with the EPO.

⁵ Frakes, Michael and Melissa Wasserman, *Is the Time Allocated to Review Patent Applications Inducing Examiners to Grant Invalid Patents?: Evidence from Micro-Level Application Data* (NBER Working Paper No. w20337, 2014), 4, available at <http://ssrn.com/abstract=2472794>

⁶ IAM Magazine 2015, *supra*, tables 12-14.

⁷ See e.g. Colleen V. Chien, *Comparative Patent Quality*, Presentation to Santa Clara University Hogan Lovells Conference November 4, 2015, (slide 19) available at Appendix A and <http://digitalcommons.law.scu.edu/cgi/viewcontent.cgi?article=1900&context=facpubs> Jensen et al., *Disharmony in International Patent Office Decisions*, 15 Federal Circuit Bar Journal 679 (2005); Webster et al., *Characteristics of International Patent Application Outcomes*, 95 Economics Letters 362, 368 (2007); Palangkaraya et al., *Misclassification between Patent Offices: Evidence from a Matched Sample of Patent Applications*, 93.3 Review of Economics and Statistics 1063, 1075 (2011); Webster et al., *Patent Examination Outcomes and the National Treatment Principle*, 45 The RAND Journal of Economics 449, 469 (2014) (finding that local offices tend to favor

applicant.⁸ To further explore what the EPO does to ensure both high patent quality and satisfied stakeholders, the USPTO could consider publishing an RFC or holding a roundtable to better understand why the EPO is perceived to produce high quality patents.

The USPTO could also consider conducting a study of matched samples of international patent applications that were filed with both the USPTO and EPO.⁹ Existing studies of this kind suggest that EPO examination procedures successfully weed out many low quality applications that, in US, are granted and are later enforced at great cost to those forced to challenge them. One of us recently found, for example that, of 169 US patents challenged in inter partes review that had foreign counterpart applications filed with the EPO, more than half were issued only in the US, with a large proportion of the non-issued EPO applications withdrawn.¹⁰

Title:

Case Study of the Examiner Citation of Non-Patent Literature (NPL) and Foreign Prior Art (FPA)

Proposal for Study:

A high quality patent must be novel and nonobvious in light of all applicable prior art. However, not all relevant prior is readily accessible to applicants and examiners. Non-patent literature (NPL) and foreign prior art (FPA) can be unusually difficult to locate and consider. A study of the relative rates of NPL citation across USPTO art units, as well as in comparison to that of parallel EPO examinations can help the USPTO determine whether, and how, to support examiners' consideration of NPL and FPA.

Explanation:

Several studies related to patent quality support the USPTO's focus on NPL as a significant quality lever, through for example, its February 20, 2014 executive action on crowd-sourcing prior art and the automated pre-examination search pilot, efforts that we applaud. For example, an analysis that one of us did of 311 patents that were the subject of inter partes review decisions, found that NPL was cited by the examiner during the prosecution of around 16% of the 311 cases, but the PTAB cited NPL around 40% of the time.¹¹ Moreover, it appears that across all types of patents, EPO examiners are more likely to include NPL in their search reports than are US examiners to cite NPL in their examination.¹² In addition, multiple studies of litigated patents

local applicants), Graham and Harhoff, *Separating Patent Wheat from Chaff: Would the U.S. Benefit from Adopting a Patent Post-Grant Review?*, 43 Research Policy 1649, 1659 (2009). In other work by the same authors, they found that EPO equivalents of US litigated patent applications were more likely to be awarded EPO patent protection than were equivalents of unlitigated patents (Stuart J.H. Graham and Dietmar Harhoff, *Can Post-Grant Reviews Improve Patent System Design? A Twin Study of US and European Patents* (Center for Economic Policy Research Discussion Paper No. 5680, 2006))

⁸ Colleen V. Chien 2015, *supra*, at slide 20-21.

⁹ A sizeable literature, including papers by one of us, explains various approaches to conducting such studies. *See, e.g.* cites *supra*. We are happy to share additional details upon request.

¹⁰ Colleen V. Chien 2015, *supra*, at slide 21.

¹¹ Colleen V. Chien, unpublished analysis, available on request.

¹² Colleen V. Chien 2015, *supra*, at slide 23.

have found a significant, positive correlation between validity and the citation of FPA during examination.¹³

The USPTO could study the use of NPL and FPA by US examiners and also compare US citation rates with those of the EPO examiners. The USPTO might then decide, for example, to take corrective action in art units that exhibit the greatest disparities. In addition, looking at citation trends within USPTO prosecution over time and across art units may reveal how efforts like the Biotechnology Partnership and the executive action on crowdsourcing, as well as the development of new tools like the Automated Search contemplated by the Quality Initiative, and Google Prior Art Finder have led to greater use and awareness of NPL and FPA sources.

Title:

Case Study of Patents Adjudicated by Courts and Other Tribunals

Proposal for Study:

Courts and other adjudicative tribunals, like the PTAB, regularly evaluate the validity of patents issued by the USPTO. Whether a patent can survive a post-issuance validity challenge is an important quality check, thus, data on the outcomes of such challenges can inform efforts to improve quality. For example, a study that compares the characteristics of patents that have survived a post-grant validity challenge with the characteristics of patents invalidated post-issuance can help the USPTO identify ways to improve the examination process.

Explanation:

Opinions issued by adjudicative bodies—including federal courts, the International Trade Commission, and the Patent Trial and Appeal Board—that review the validity of issued patents are a largely untapped source of quality-related data. While several scholars have studied the characteristics of adjudicated patents,¹⁴ these studies have generally been modest in scale, due in large measure to the effort historically required to identify litigated patents and access their prosecution histories. Fortunately, data on patent litigation and prosecution – in part thanks to the USPTO’s own open data initiatives – is more accessible today than it ever has been before. Companies like Lex Machina now collect patent litigation documents that were previously only available through PACER and make them available in a single, searchable database, which the GAO has already utilized to study patent quality.¹⁵ The USPTO recent release of a large amount

¹³ See Ronald J. Mann & Marian Underweiser, *A New Look at Patent Quality: Relating Patent Prosecution to Validity*, 9 J. EMPIRICAL L. STUDIES. 1, 21 (2012) (“[T]he variable for foreign references . . . is positive and significantly different from zero”); Kentaro Nagata, et al., *Empirical Analysis of Japan Patent Quality*, Proc. 18th International Conference on Management of Technology at *13 (2008) (“[T]he number of foreign patent references which a patent examiner cited and the number of foreign patent references specifically added by a patent examiner are statistically significant predictors of patent legal quality.”).

¹⁴ See, e.g., Josh Lerner, et al., *Financial Patent Quality: Finance Patents After State Street*, Harvard Business School Working Paper 16-068 (2015), available at http://www.hbs.edu/faculty/Publication%20Files/16-068_702dabb8-70c5-4917-a257-75dc8b0c4f6b.pdf; Ronald J. Mann & Marian Underweiser, *A New Look at Patent Quality: Relating Patent Prosecution to Validity*, 9 J. EMPIRICAL L. STUDIES. 1 (2012); Kentaro Nagata, et al., *Empirical Analysis of Japan Patent Quality*, Proc. 18th International Conference on Management of Technology (2008).

¹⁵ USGAO, Intellectual Property: Assessing Factors That Affect Patent Infringement Litigation Could Help Improve Patent Quality, GAO 13-465, pub’d Aug. 22, 2013, available at http://www.uspto.gov/sites/default/files/aia_implementation/GAO-12-465_Final_Report_on_Patent_Litigation.pdf.

of application-level data on patent prosecution that was previously only available through PAIR¹⁶ has already started to stimulate research and study.¹⁷ In short, the USPTO's ability to access and analyze this kind of information has never been greater.

By cross referencing data on patent validity determination with data on patents' characteristics and prosecution histories, the USPTO can determine whether any patent characteristics correlate strongly with validity and, if so, which ones.¹⁸ For example, this analysis might reveal that the citation of NPL or FPA during prosecution, as described above, is strongly and positively correlated with validity. If so, the USPTO might decide in the future to stress to its examiners the importance of looking for prior art outside databases of U.S. patents or to implement additional training for examiners in this regard.

While in an ideal world the USPTO might conduct this kind of study using with a complete sample of all patents adjudicated by any tribunal, the USPTO could focus first on "institution decisions" and "final written decisions" issued by the Patent Trial and Appeal Board in inter partes reviews (IPRs).¹⁹ In the last three years, thousands of invalid claims in hundreds of issued patents have been eliminated in IPRs and many more have been deemed likely invalid in reviews that were settled after an institution decision.²⁰ As the USPTO has already recognized, these decisions offer useful feedback for (at least) the examiner of record of invalidated patents.²¹ Moreover, the USPTO has already collected a good deal of data on PTAB outcomes and, thus, likely need not rely on databases created by third parties (or otherwise reinvent the wheel) to identify confirmed and invalidated patents.²² Finally, compared to litigation outcomes (as well as reexaminations), IPR decisions are made (and become final) relatively quickly²³ and likely involve newer patents – facts that help mitigate the confounding influence of the fact that legal rules and USPTO policies have shifted over time.

* * *

We are delighted that the USPTO is carrying out quality case studies and in support of this effort, encourage the USPTO to take a broad view of what "case studies" it might be possible to carry

¹⁶ Patent Examination Research Dataset, <http://www.uspto.gov/learning-and-resources/electronic-data-products/patent-examination-research-dataset-public-pair> (last accessed Feb. 12, 2016).

¹⁷ See Alan C. Marco, et al., Patent Claims Data and Implications for Patent Quality (June 16, 2015), available at <http://hooverip2.org/wp-content/uploads/Marco-Sarnoff-deGrazia-061615.pdf>.

¹⁸ Lists of patent characteristics that could be studied are available in the literature. See, e.g., Mann & Underweiser, *supra*.

¹⁹ One of us has already begun to conduct just such a study. If the USPTO is interested, we are available to share more details on this ongoing project.

²⁰ See, e.g., Brian J. Love & Shawn Ambwani, *Inter Partes Review: An Early Look at the Numbers*, 81 U. CHI. L. REV. DIALOGUE 93 (2014), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2512519.

²¹ Evolving Programs of the Enhanced Patent Quality Initiative, available at <http://www.uspto.gov/sites/default/files/documents/Evolving%20Programs%20One-Sheet%20Public%20Final.pdf> (suggesting that the USPTO plans to "develop a process for providing post-grant outcomes from sources, such as the Patent Trial and Appeal Board (PTAB), to the examiner of record and the examiners of related applications").

²² PTAB/BPAI Statistics Archive Page, <http://www.uspto.gov/patents-application-process/appealing-patent-decisions/statistics/ptabbpai-statistics-archive-page#toc-fy2015> (last accessed Feb. 12, 2016).

²³ Love & Ambwani, *supra*, at 99.

out. We believe that the three case studies described above, which include data from PTAB, other tribunals, and the EPO, will improve the agency's Patent Quality Initiative, and can also serve as effective pilots for future PTO efforts to study patent quality.

Sincerely,

Colleen V. Chien

Brian J. Love

Law in the Global Marketplace: Intellectual Property and Related Issues Comparative Patent Quality

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Hogan
Lovells



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Patent quality is an international priority



“Only high-quality patents and processes
serve the needs of inventors, innovation
and society alike”
- EPO Annual Report 2014



The difficulty in ensuring patent quality are not new

"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, 1813



But recent developments highlight the cost of low-quality patents

DataTreasury Patents Nixed By PTAB In AIA Review

By Matthew Bultman



And the question of when and how broadly quality filters should be applied

Stage of Patent Lifecycle	Quality Mechanisms
Pre-Application	Legal requirements, fees, quality of submission, third-party submissions
Pre-Grant	Prosecution levers
Post-Grant	Post-Grant Procedures, Reissue, Reexam, Maintenance Fees

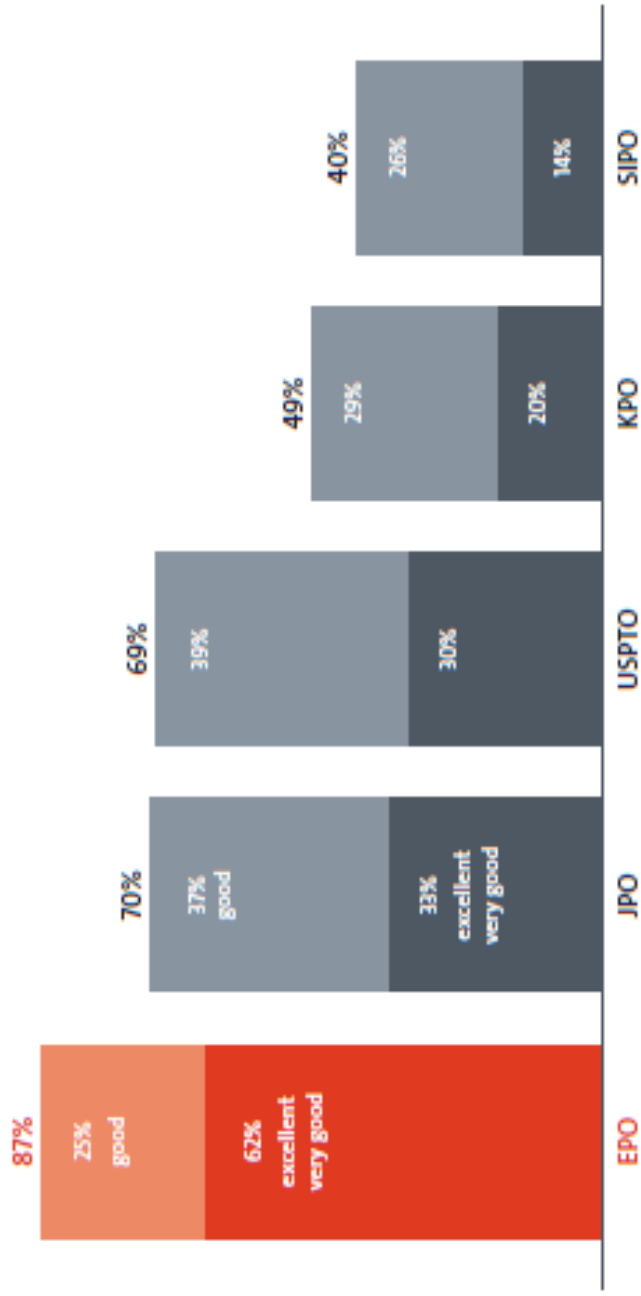
This presentation applies a comparative lens to patent quality



Rating of the quality of patents issued by each of the five largest IP offices

Intellectual Asset Management Magazine benchmark survey 2015 among 650 patent professionals

Private practice
lawyers and attorneys



Bearing in mind that there are many differences between the European and US systems...

Factor	US	Europe
Examiner Pay	US civil service grades	Double US levels, limited taxes
Examiner Turnover	~33% per year	5% per year
Bifurcation of Search & Examination	No	Yes
Loser Pays	No	Yes



“And the wisdom to know the difference...”

Sources: Drahos (2010), van Pottelsberghe de la Potterie (2011), Temmerman (2013), EPO, USPTO 2015

This presentation considers US and EP outcomes at aggregate and “matched pair” levels

- “Exact match” matched pair approach for prosecution outcomes (Graham & Harhoff, 2006). Filing date / priority date matches.
- Data sources: Innography, Lex Machina, PATSTAT, Google Patents, WIPO/Schmcoch, NSF, PTO/EPO
- Related work: Jensen, et al. (2005, 2007, 2008 2011, 2014), Graham & Harhoff (2006, 2009), Wright (2009), Sampat et al. (2015)

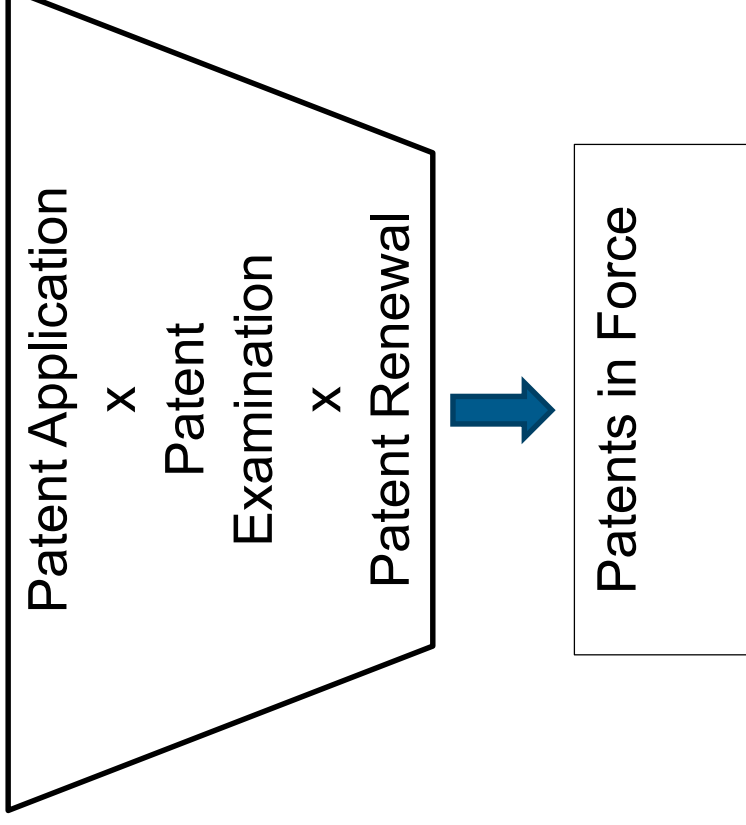
Exact
Match



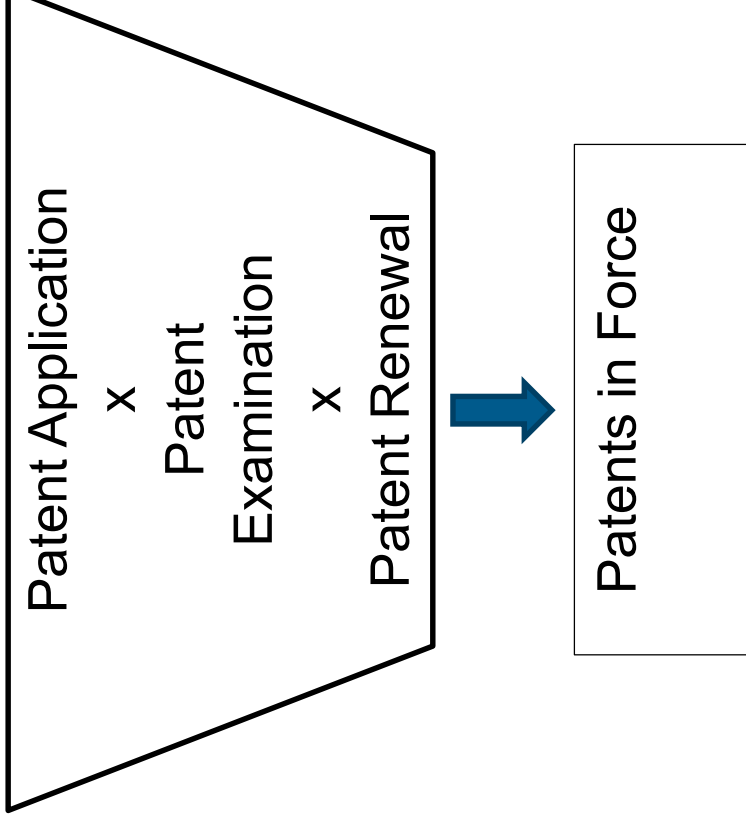
Family Relationships between Patent Documents

Document D1	Priority P1		
Document D2	Priority P1	Priority P2	
Document D3	Priority P1	Priority P2	
Document D4		Priority P2	Priority P3
Document D5			Priority P3

The quantity and quality of patents in force is the result of three sets of decisions

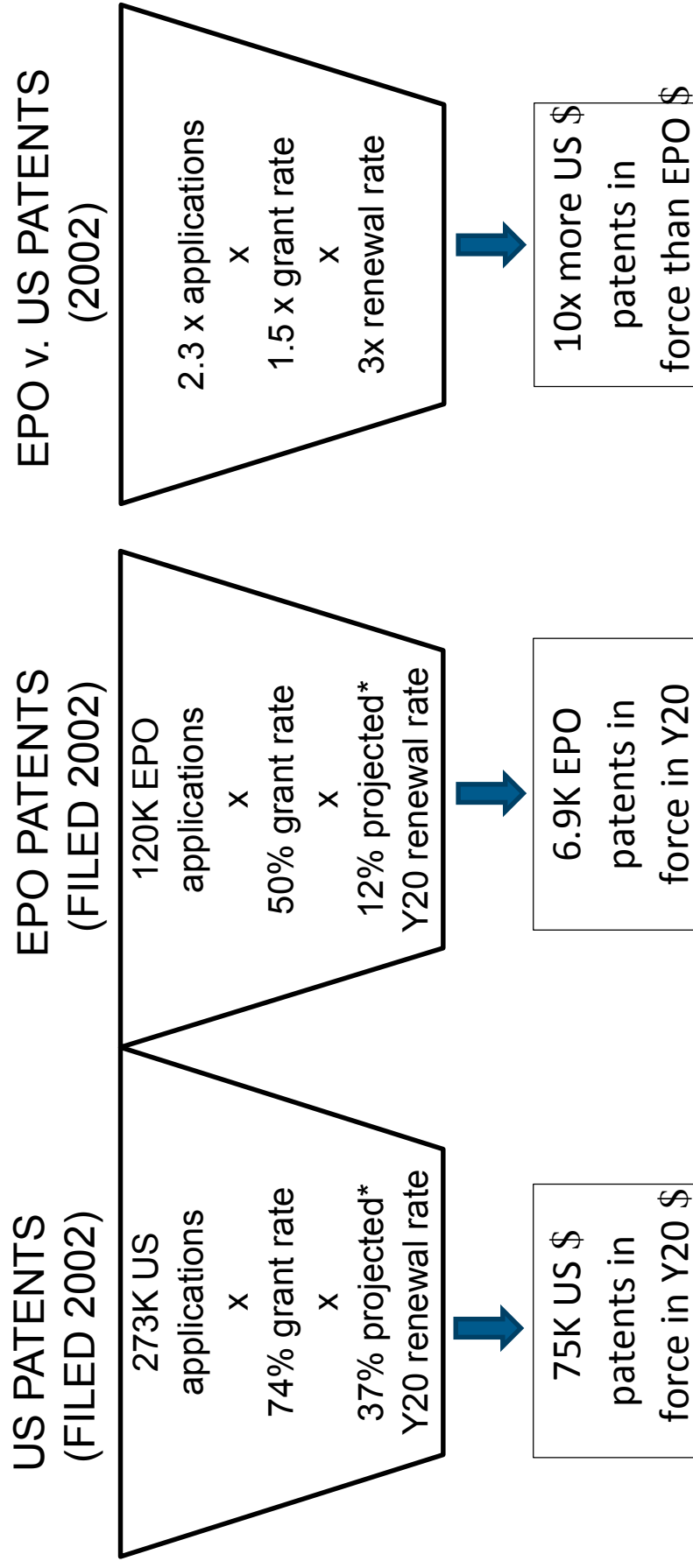


Each is influenced by doctrinal, institutional, economic, and market factors



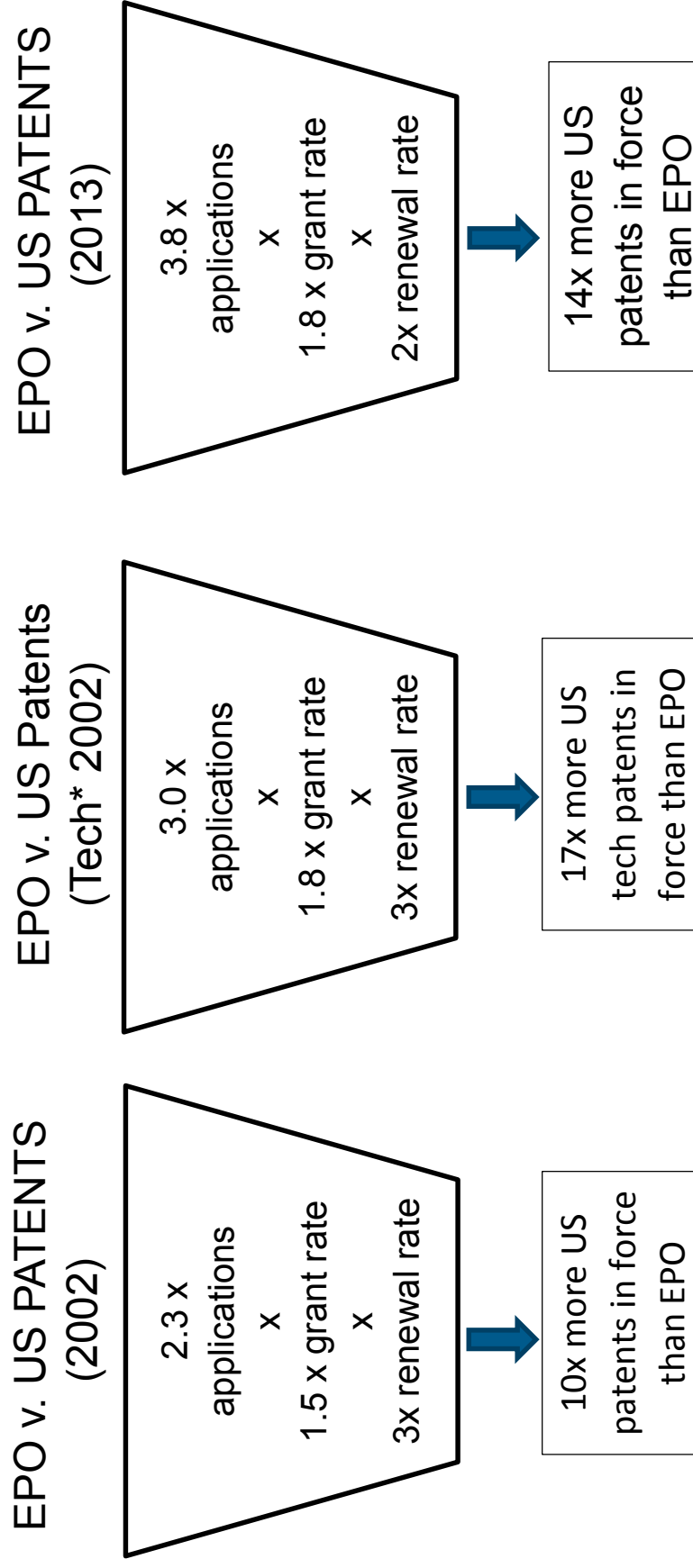
Comparing the US and EP at each of these stages...

At each stage, the US tilts towards more quantity – ex: 2002



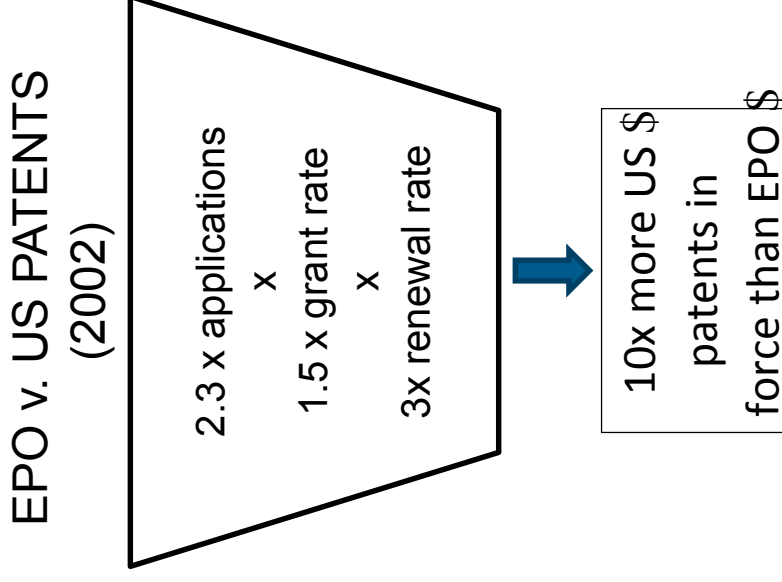
Sources: PATSTAT 2015 (application and grant numbers), Trilateral Statistics 2002 Report (projected renewal rates).

The disparities are greatest in tech, and growing

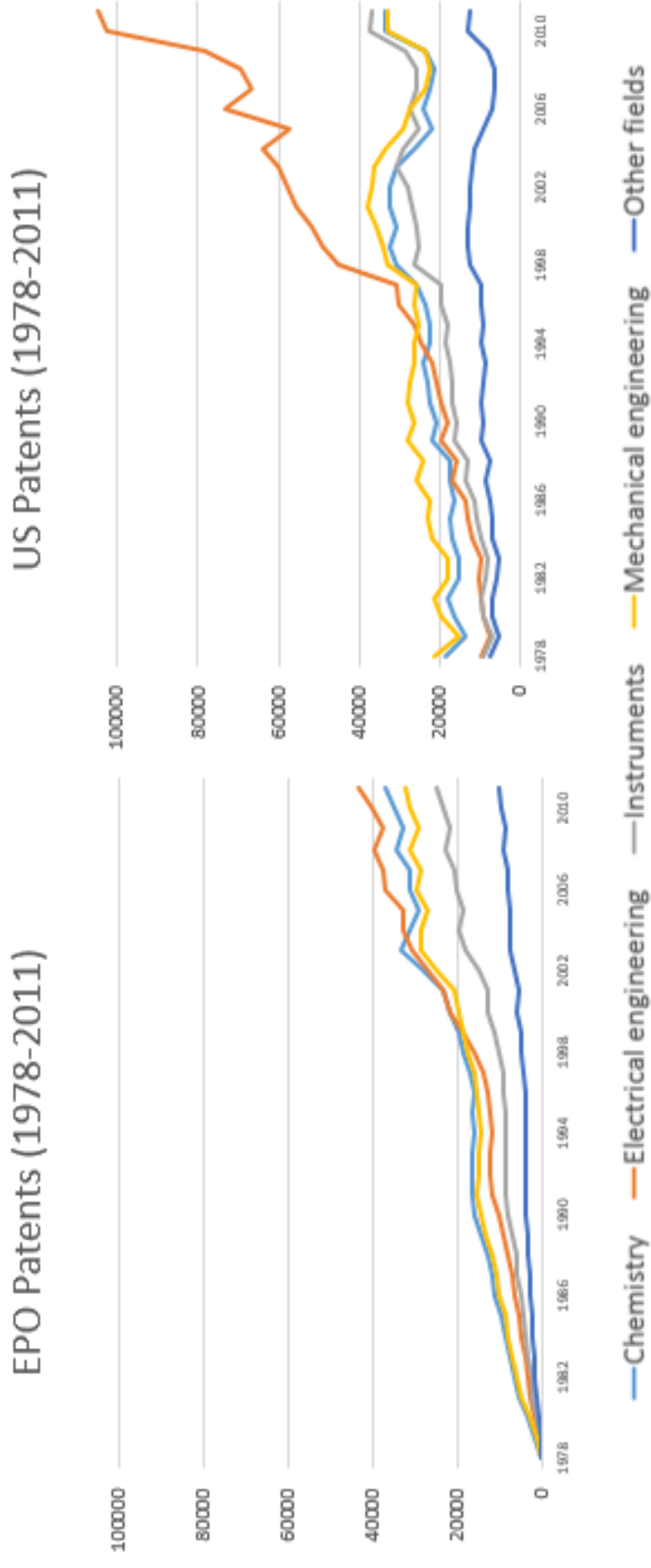


Sources: PATSTAT 2015 (application and grant numbers), Trilateral Statistics 2002 Report (projected renewal rates). *"Electrical Engineering" patents as defined by WIPO/Schmoch

What explains the differences in applications?



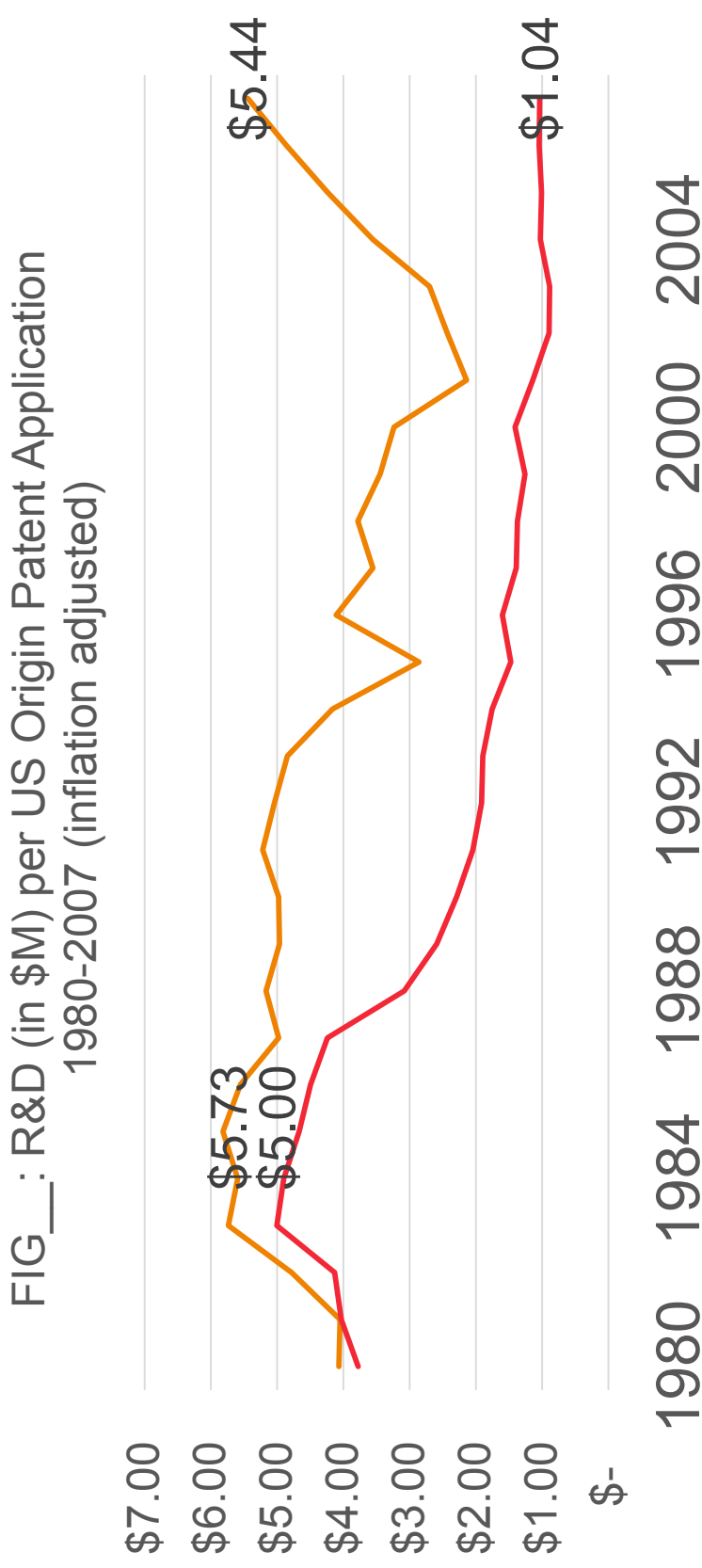
The EPO did not experience the same surge in tech patenting that the US did



Source: PATSTAT 2015, Sector data based on WIPO in accordance with Schmoch (2008)



What has driven the surge in US tech patents? Defensive/FTO driven patenting is likely one factor



— Chemicals — Electrical Equipment and Computers

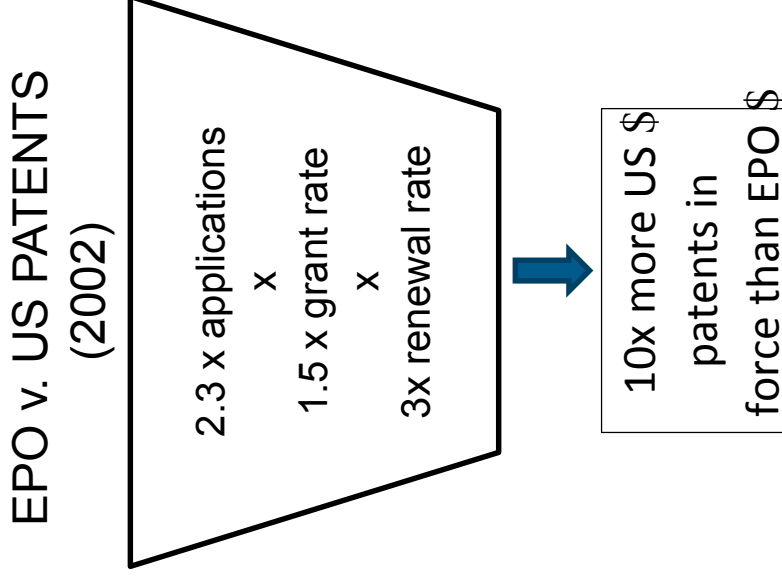
Source: NSF, USPTO via PATSTAT 2015, Lybbert and Zolas 2013

Other factors that contribute to the differences

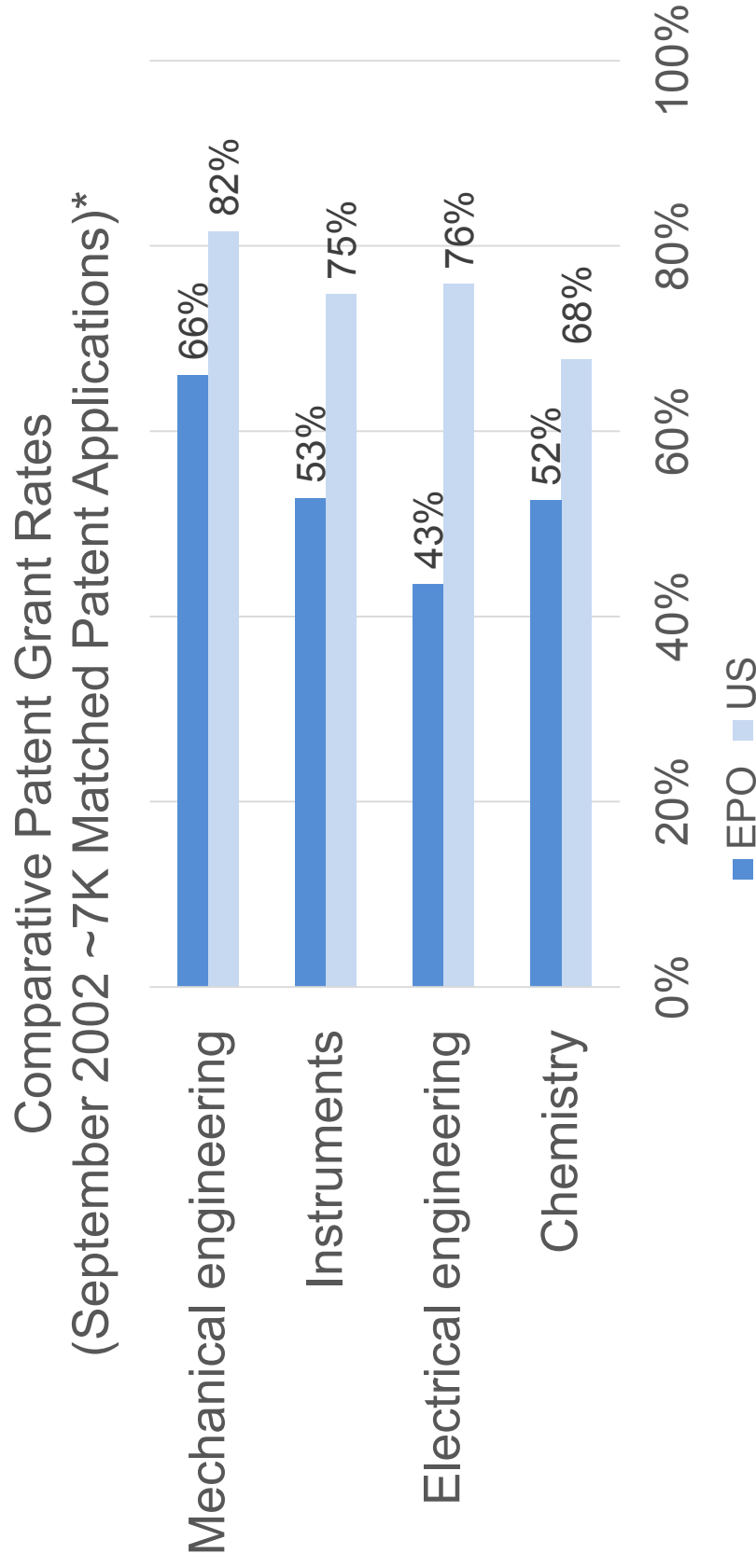
- Relative value of US v. EU patents
- Scope of patentability
- Size, importance of US v. EU markets
- Loser pays in EU, overall enforcement climate



What explains the differences in grants?



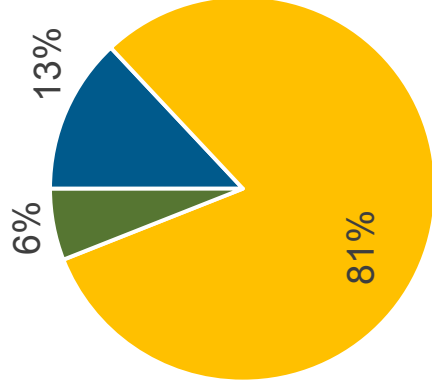
Across categories US patents are more likely to be issued than EPO patents, on the same applications



*Matched on priority date. Source: PATSTAT 2015, Innography 2015. Accord, Jensen et al 2008, Graham & Harhoff, 2009

EPO's lower grant rate is due to higher applicant withdrawal rates (not refusals)

FIG ____ The Resolution of Non-Granted European Patent Applications (N= 3,517 2002 Matched Pairs)

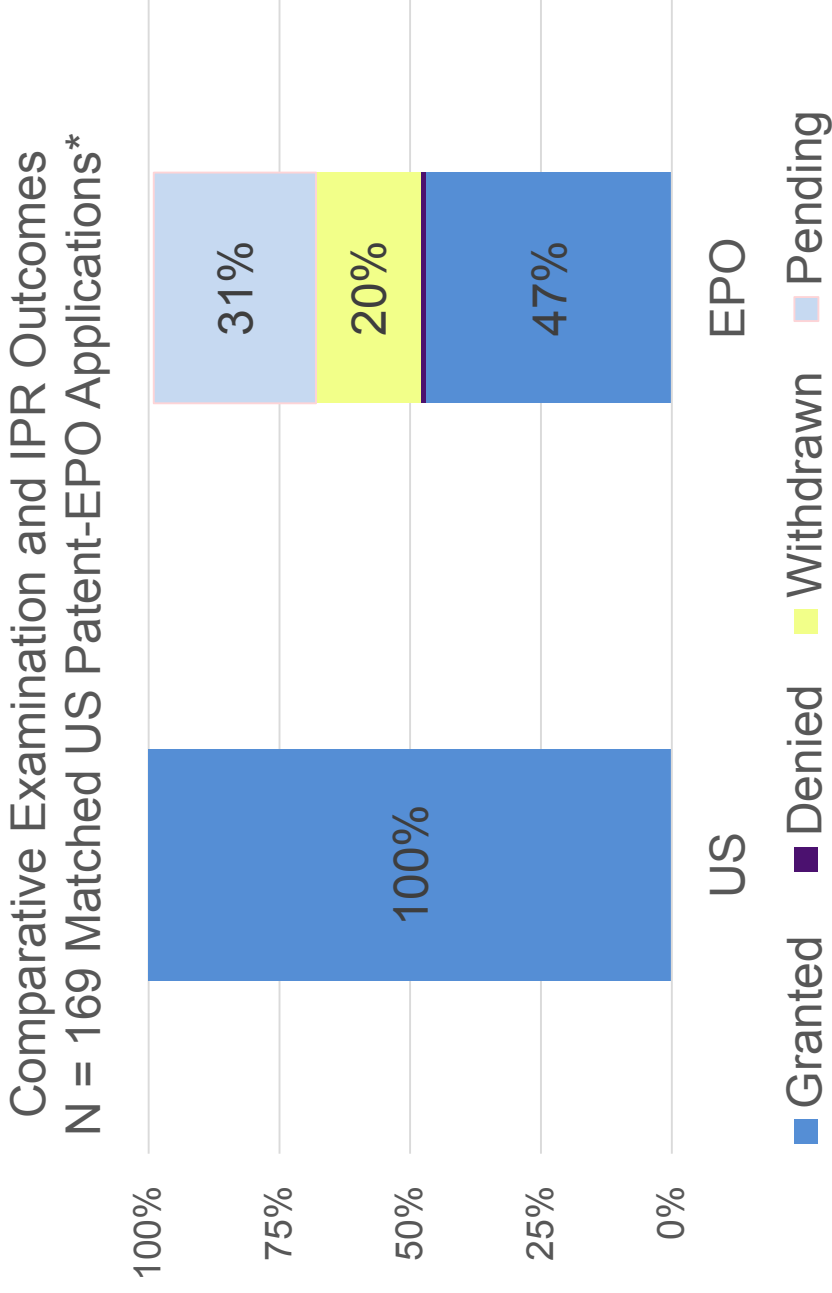


■ Pending ■ Withdrawn ■ Refused

The majority of nongranted apps in the EPO are withdrawn, not refused



Less than half of IPRed US patents* that were filed for in Europe have actually been granted in Europe... with many of the remainder withdrawn...



*IPRed patents that have been the subject of a final decision as of June 2015.
Source: Lex Machina, Innography

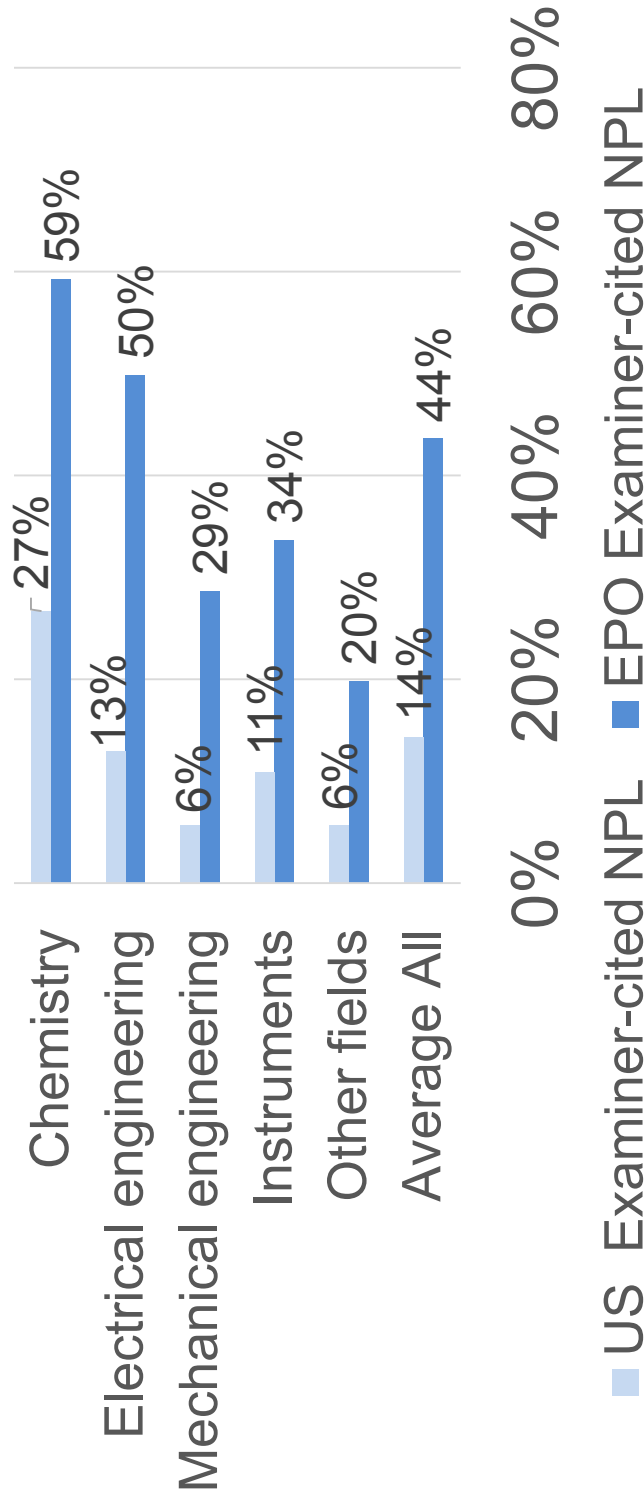
The '137 DataTreasury patent was the subject of 7 EP Applications, none of which matured into a patent

DataTreasury Patents Nixed By PTAB In AIA Review

By Matthew Bultman

EPO examiners are more likely to cite non-patent literature (NPL)

FIG ____ : US v. EPO Examiner Use of Non-Patent Literature (~7K 2002 Matched App Pairs)



Source: EP Register 2015, USPTO PAIR 2015, Google Patents (Front Page information)

Sources of Data

(12) **United States Patent**
Guevremont et al.

(54) **TANDEM FAIMS/ION-TRAPPING APPARATUS AND METHOD**

(75) Inventors: **Roger Guevremont, Gloucester (CA); Randy Purves, Gloucester (CA); David Barnett, Orleans (CA)**

(10) **Patent No.: US 6,703,609 B2**
(45) **Date of Patent: Mar. 9, 2004**

(56) **References Cited**
U.S. PATENT DOCUMENTS

5,248,875 A * 9/1993 Douglas et al. 250/282
5,811,800 A * 9/1998 Franzen et al. 250/288
6,124,592 A * 9/2000 Spangler 250/287
6,489,608 B1 * 12/2002 Skilling 250/281

OTHER PUBLICATIONS

Guevremont et al. "Atmospheric pressure ion focusing in a high-field asymmetric waveform ion mobility spectrometer", vol. 70, No. 2, Review of Scientific Instruments, pp. 1-14, Feb. 1999.*

* cited by examiner

Citations: EP1266394

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Cited in

International search	
Type:	Patent literature
Publication No.:	↗ US5283199 [M]
Type:	Patent literature
Publication No.:	↗ WO0008454 [M]
Type:	Patent literature
Publication No.:	↗ US4311669 [A]
Type:	Patent literature
Publication No.:	↗ US5420424 [A0]
Type:	Non-patent literature
Publication information:	[A0] BURYAKOV I A ET AL: "A NEW METHOD OF SEPARATION OF MULTI-ATOMIC IONS BY MOBILITY AT ATMOSPHERIC PRESSURE USING A HIGH-FREQUENCY AMPLITUDE-ASYMMETRIC STRONG ELECTRIC FIELD" INTERNATIONAL JOURNAL OF MASS SPECTROMETRY AND ION PROCESSES, ELSEVIER SCIENTIFIC PUBLISHING CO, AMSTERDAM, NL, vol. 128, 1993, pages 143-148, XP000865595 ISSN: 0168-1176 cited in the application
DOI:	↗ http://dx.doi.org/10.1016/0168-1176(93)87062-W
Type:	Non-patent literature
Publication information:	[A0] PURVES R W ET AL: "MASS SPECTROMETRIC CHARACTERIZATION OF A HIGH-FIELD ASYMMETRIC WAVEFORM ION MOBILITY SPECTROMETER" REVIEW OF SCIENTIFIC INSTRUMENTS, AMERICAN INSTITUTE OF PHYSICS, NEW YORK, US, vol. 69, no. 12, December 1998 (1998-12), pages 4694-4705, XP000918121 ISSN: 0034-6748 cited in the application
DOI:	↗ http://dx.doi.org/10.1063/1.1149255

Google Patents, 2015 Edition: NON-PATENT CITATIONS

Reference

1 * See references of [WO0169647A2](#)

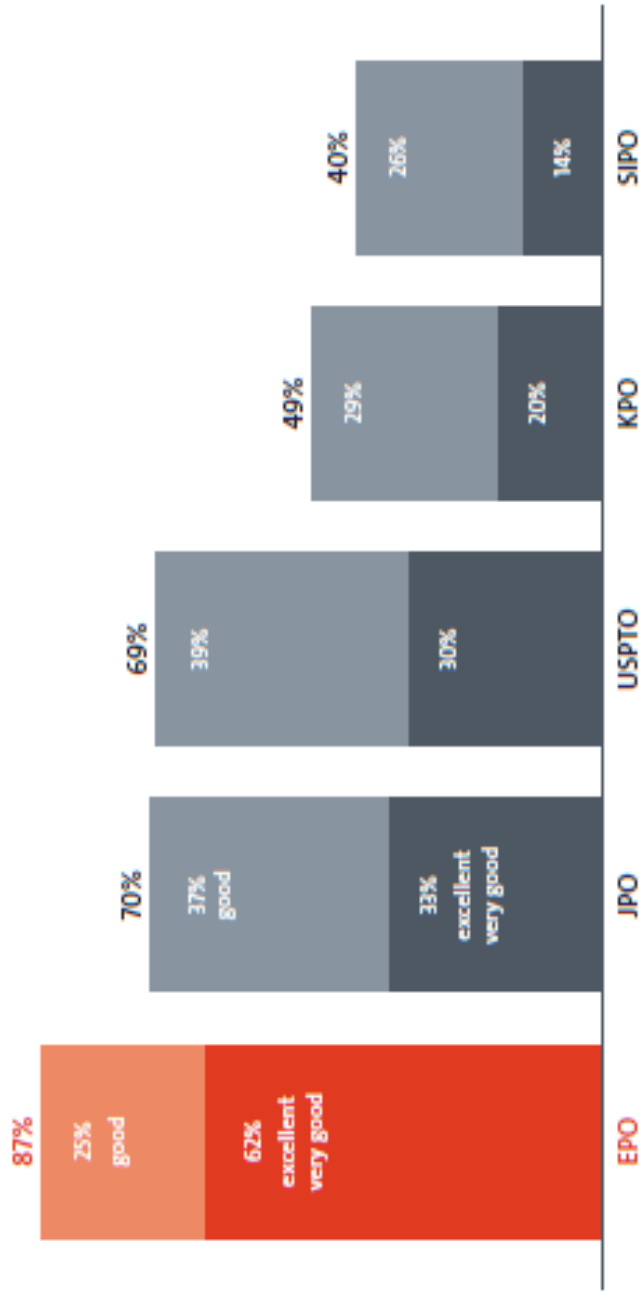
* Cited by examiner

Why does EP have high satisfaction even with relatively lower grant rate?



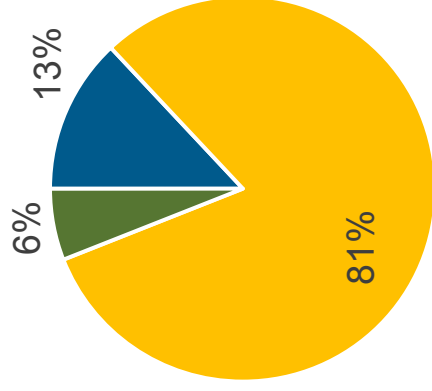
Rating of the quality of patents issued by each of the five largest IP offices
Intellectual Asset Management Magazine benchmark survey 2015 among 650 patent professionals

Private practice
lawyers and attorneys



EPO's lower grant rate is due to higher applicant withdrawal rates (not refusals)

FIG ____ The Resolution of Non-Granted European Patent Applications (N= 3,517 2002 Matched Pairs)



■ Pending ■ Withdrawn ■ Refused

The majority of nongranted apps in the EPO are withdrawn, not refused



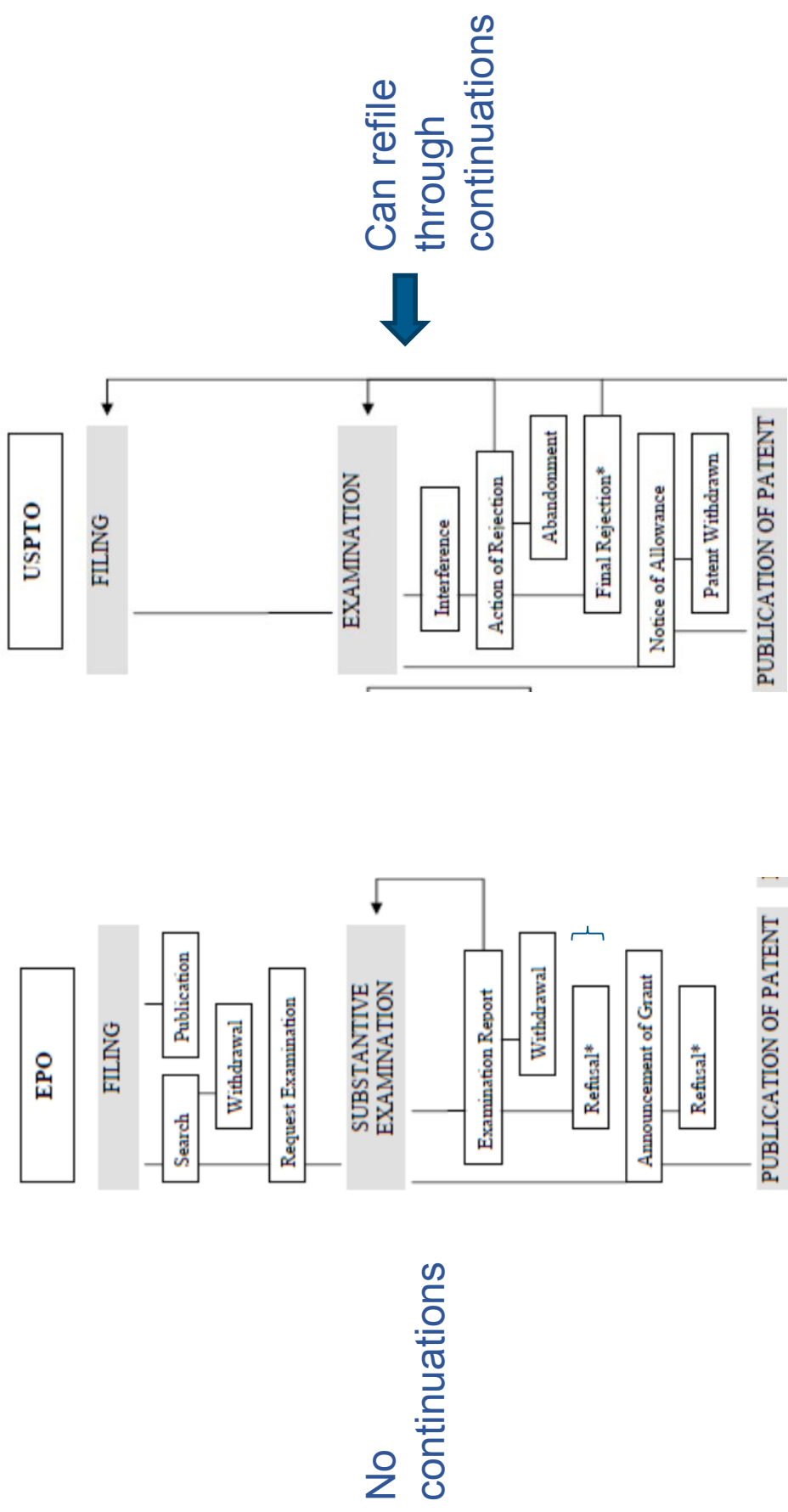
What makes EPO applicants withdraw?

“In the EPO, patents are granted in 49% of total filings, with 22% of applications abandoned after the search report and 29% abandoned after examination.”

- EPO President Battistelli at the 30th Annual US Bar- EPO Liaison Council Meeting, 10/30/2014



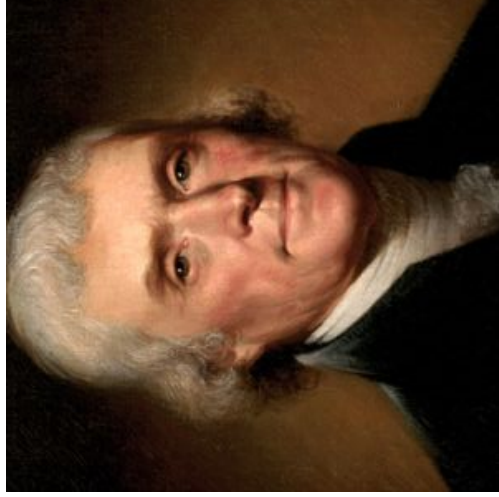
EPO conducts a single search, invests in quality upfront. PTO is more tolerant, allows refilings



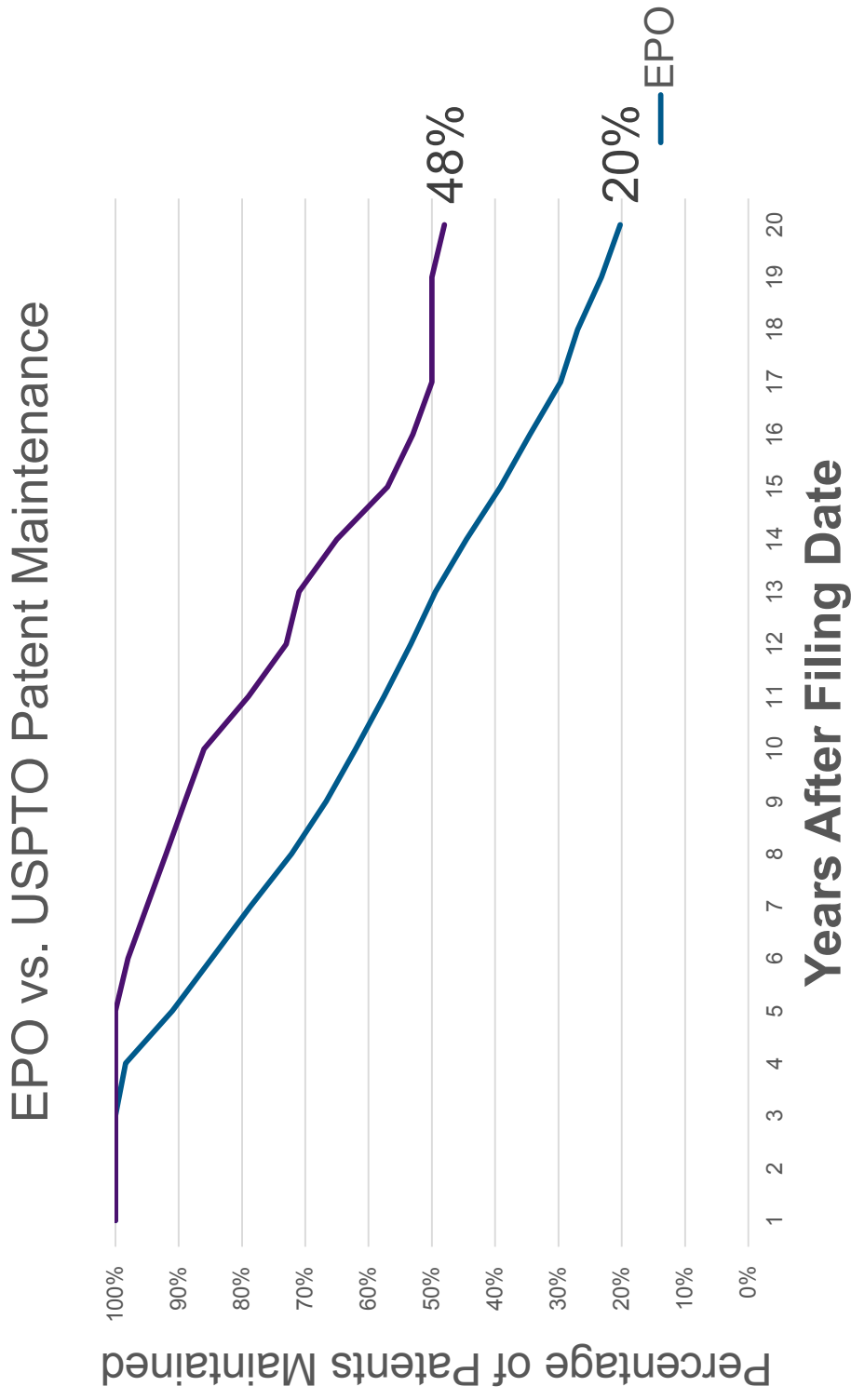
While time for searching prior art varies, EP prior art searching take ~8-12 avg., vs. ~2 hours on average at the PTO (van Pottelsberghe de la Potterie (2011), EPO)

Time pressure during examination is nothing new %

Jefferson was “quite favorable to the granting of patents, and granted them with great consideration, the other duties of members of this Board, in view of their high offices, made it impossible for them to devote much time to this work. As a result the law was changed in 1793 to make the granting of patents a clerical function.” – PJ Frederico, 1952

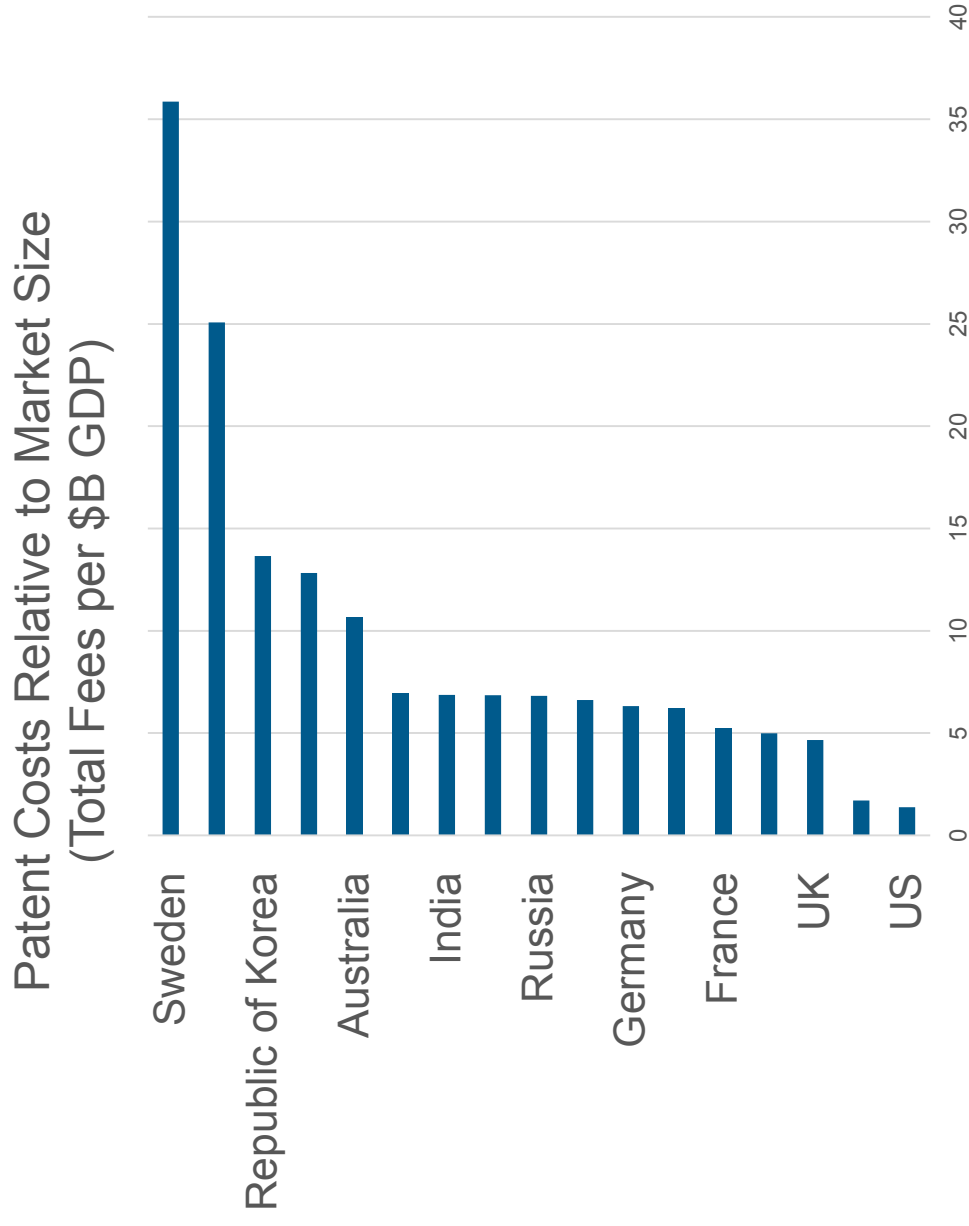


What explains the difference in renewal rates?



Source: IP5 2013 Report

US Patents may be more valuable – they are also cheaper and easier to renew



Source: Park, *On Patenting Costs, 2010*, updated to 2014 data

Stepping back...



Should we worry about quality for every patent? When is the right time?

Sorting between patents that matter and patents that don't

Stage of Patent Lifecycle	Quality Mechanisms
Pre-Application	Legal requirements, fees, quality of submission, third-party submissions
Pre-Grant	Prosecution levers
Post-Grant	Post-Grant Procedures, Reissue, Reexam, Maintenance Fees



Who should decide?

Sorting between patents that are likely to be enforced and those that aren't

Quality Mechanisms	Third Parties	Patentees?
Post Grant	Post Grant Procedures	

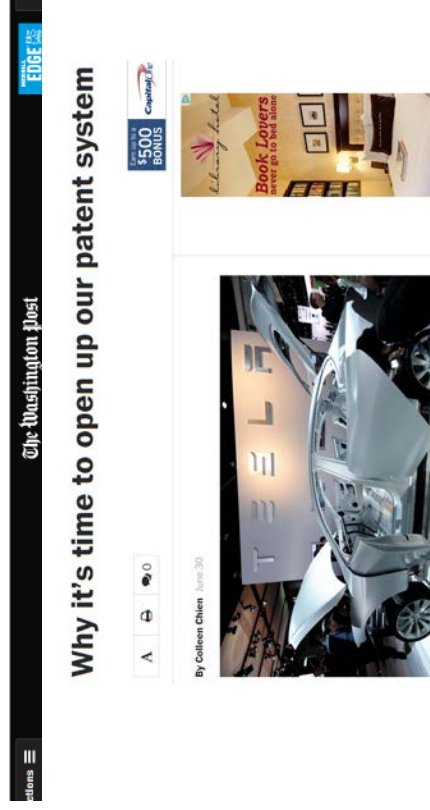
My proposal to enhance quality: reward patentees for designating patents as defensive only or available for FRAND-licensing

Sorting between patents that are likely to be enforced and those that aren't

Quality Mechanisms	Third Parties	Patentees?
Post Grant	Post Grant Procedures	Defensive only/FRAND-friendly patent option

Facilitating “Defensive Only” / “FRAND” friendly patent options

- Patentee can elect at any time to make patent “defensive” or available on FRAND and in return, get a 50% discount on fees
- Once a patent becomes defensive, must remain defensive
- Demand expressed in the marketplace through proliferation of defensive pledges: OIN, DPL, LOT, Tesla, many others
- Companies that go defensive will reduce their own costs and costs of entry/patenting for startups
- Akin to DE/UK License of Right



The screenshot shows a mobile browser view of a Washington Post article. At the top, the Washington Post logo and 'EDGE' branding are visible. The article title is 'Why it's time to open up our patent system' by Colleen Chien, dated March 30. The article features two images: one of a white Tesla car with its trunk open, and another of a book titled 'Book Lovers never go to bed alone' with a '\$500 BONUS' tag. Social media sharing icons for Facebook, Twitter, and Email are present below the article title.

Sources:
Chien, Exclusionary and Diffusionary Levers in Patent Law, 2015
Chien, Why Its Time to Open the Patent System, 2015.

Thank you

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