Patent Data, Prior Art, and Operational Transparency at the USPTO

Patent Office Director David Kappos and his management team are slowly pushing the Office toward more transparency in both operations and decision making. This article discusses three interrelated USPTO transparency initiatives and considers their impact on the day-to-day practice of patent law.

The Patent Office was once thought of as a bastion of secrecy. Although issued patents were public documents, pending applications – and therefore the day-to-day activities of patent examiners – were kept secret. The statutory mandate for secrecy was largely eliminated ten years ago, but the Office has been slow to provide meaningful data on its internal operations.[1] The delay could be explained by both the internal cultural shift necessary to become a transparent government agency and the lack of available resources necessary for the transition. Of course, with a more than two billion dollar annual budget at its disposal, delays in operational changes can hardly be viewed as anything other than intentional and deliberate.[2] Perhaps more than anything, the USPTO simply did not set operational transparency as an important goal to be achieved.

USPTO Dashboard

In September 2010, the USPTO released a new set of operational information under the glitzy auspices of its Data Visualization Center and Patent Dashboard.[3] The online Patent Dashboard does a good job of providing a visual overview of the current USPTO state-of-affairs in terms of patent backlog, pendency, and allowance rate. Data downloads on the site provide unprecedented public access to USPTO numbers that were previously either uncalculated or largely kept secret. The USPTO management appears motivated to keep the data presented on the dashboard up-to-date on a monthly basis.

Although attorneys are fond of explaining that each patent application is unique, patent applicants still want to know expected timelines and usual approaches to patent prosecution. The Patent Dashboard provides simple calculations of the timing of first office actions (for both original and continuation applications), average total application pendency, average actions per patent application, patent allowance rate, frequency of RCE filings, pendency of appeals to the BPAI, etc. These baseline figures are important both for our basic understanding of the patenting process as well as for inventors making strategic business decisions. Applicants can use the information that 62% of patent applications eventually issue as a patent (up from 57% in 2009); that the average application pendency is 3 ½ years; and that an appeal to the BPAI pushes that timeline out past 6 ½ years in their patenting decision making process. However, as every patent practitioner understands, the USPTO averages can be misleading – if only because the prosecution varies so dramatically according to the technology center and art unit. However, the Patent Dashboard does not yet include this technology-centric breakdown; that development is apparently on hold until the USPTO implements its end-to-end XML data solution that is described below.

Director Kappos recently indicated his belief that the Patent Dashboard provides accountability as the USPTO publicly faces the challenge of reducing patent pendency. Director Kappos wrote that "an important part of the effort to reduce pendency is better understanding the numerous factors that contribute to examination delays and measuring their impact in a way that makes the USPTO more transparent to the public. By looking at the whole picture, we can more effectively develop ways to increase the efficiency of the examination process."[4]

USPTO Bulk Downloads via Google

In a separate initiative, the USPTO has been allowing Google to collect large sets of bulk data from USPTO computers in accordance with an agreement that Google will then make that data publicly accessible.[5] Freely available data sets include images of all patents granted since 1790; PAIR (Patent Application Information Retrieval) electronic application file wrappers for issued patents; patent assignment documents; and petition decisions. The data is currently in a raw, non-searchable format, but over the next year it will be indexed by Google and others. Patent researchers are having a field day with the data, and as the data becomes more searchable, it will serve as a useful tool for patent litigants, patent applicants, and new attorneys learning the trade.

In a 2006 decision, the Court of Appeals for the Federal Circuit held that a publicly available Canadian file wrapper was a "printed publication" and consisted of prior art under 35 U.S.C. § 102(b) because the Canadian prosecution file was open to the public more than a year before the challenged US patent application had been filed.[6] That decision is somewhat questionable because the file wrappers are not well indexed or easily searchable.[7] However, that critique loses its weight once file wrapper documents are freely searchable. Thus, the Google indexing is helping these file wrapper documents to become important sources of prior art – both legally and practically.[8] File wrappers reference a significant amount of important but hard-to-find prior art. In addition, office action rejections can provide evidence for a motivation to combine various prior art references. In the coming year, a search of indexed PAIR files will likely become a common feature of any prior art search.

The searchable file wrapper database will also be useful for patent applicants and patent attorneys looking for model office action responses, petitions, and appeal briefs. Of course, this development is important even for patent applicants and attorneys who do not use the new database, because their own prior filings are found within the system. We have always known that prosecution history files are eventually accessible to the public, but the ease of searching will make them public in a much more real sense.

End-to-End System and Data Availability

While admirable and important, the Patent Dashboard and bulk-data releases are short term patches to an ailing information technology infrastructure at the USPTO. As a medium term solution, Director Kappos and his Chief Information Officer John Owens are moving the Office toward an end-to-end XML-based information delivery system. The new system would almost wholly replace the USPTO's current IT system that is largely piecemeal and highly disjointed. The new system would also move away from the use of TIFF images which has frustrated almost everyone involved in patent prosecution (both within and outside the Patent Office). The USPTO is replacing the image files with a text-based system using XML (Extensible Markup Language) tags to categorize information. This new approach will allow the public to more easily search and categorize patent prosecution documents and hopefully allow both patent applicants and the general public to better monitor in-process patent applications. In addition, the integrated system should allow searchers to more easily drill down on particular patent information. Thus, a searcher could potentially limit a freedom-to-operate search to capture only still-pending applications and in-force patents.

A critical aspect of the development of the system is the identification of information to be "tagged." The USPTO is already tagging patent biographical information and classification information for each

patent and published application. New global tags may include an application's current status; whether a previously issued patent is still in force; and current assignee information. New tags relating to prosecution could indicate the type of rejections and prior art found in each office action. This focused tagging would make it easy to identify when a particular reference has been asserted as prior art and to access the arguments made for and against the assertion. That additional information has the potential to help patent examiners make more-informed and better-targeted rejections and could also help patent prosecutors more easily understand the nature of the prior art.

The USPTO is still developing the specifics of the XML tagging, and suggestions should be sent to John Owens and the USPTO before the development schema is locked down.

Conclusions

When dealing with the patenting process, applicants have often been frustrated by the lack of solid information on costs, timelines, and the likelihood of success; third parties have been frustrated by the difficulties in locating and tracking potentially problematic pending patent applications; and new patent attorneys have struggled to locate model responses to help them in practice. Bit by bit, the USPTO is addressing these and other issues with its transparency initiatives. Of course, agencies are continually tempted to withhold information from the public – especially when the information reflects poorly on the administration. To that end, patent applicants and others with vested interests in the patent system should continue to push the USPTO to march onward toward its stated goal of transparency and open government.

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Endnotes

1. *See* American Inventors Protection Act of 1999, sec. 4502, § 122(b)(1)(B), 113 Stat. 1501A-552, 1501A-561 (codified at 35 U.S.C. § 122(b)(1)(B) (2006)); *see also* 37 CFR § 1.14 (2010).
2. *See* U.S. Patent & Trademark Office, U.S. Dep't of Commerce, Performance and Accountability Report Fiscal Year 2010 (2010), *available at* http://www.uspto.gov/about/stratplan/ar/2010/USPTOFY2010PAR.pdf.
3. *Patent Dashboard*, U.S. Patent & Trademark Office, http://www.uspto.gov/dashboards/patents/main.dashxml (last visited Feb. 14, 2011).
4. David Kappos, *Greater Transparency: Introducing the USPTO Data Visualization Center and the Patents Dashboard*, Director's Forum: David Kappos' Public Blog (Sept. 7, 2010), http://www.uspto.gov/blog/director/entry/greater_transparency_introducing_the_uspto
5. *United States Patent and Trademark Office Bulk Downloads*, Google, http://www.google.com/googlebooks/uspto.html (last visited Feb. 14, 2011).
6. *Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 1378 (Fed. Cir. 2006).
7. *Id*. at 1380-81 (Linn, J., dissenting); *see also* Joseph Scott Miller, *Something Old, Something New Part 1*, The Fire of Genius (May 13, 2006), http://www.thefireofgenius.com/2006/05/13/something-old-something-new-part-1.
8. *See* Chris Jagalla, *Using USPTO Public PAIR Part 1*, The Intellogist Blog (Aug. 3, 2010), http://intellogist.wordpress.com/2010/08/03/using-uspto-public-pair-part-1.