Patexia. Insights

Patent Prosecution Intelligence Report

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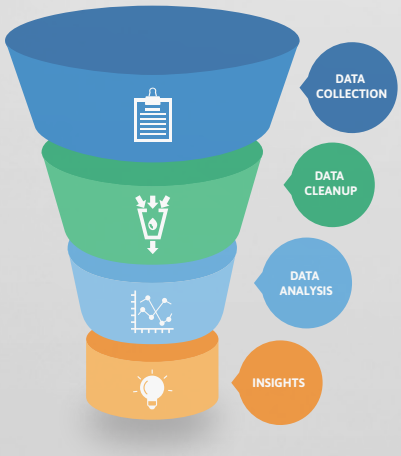

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Introduction

After the successful release of our *IPR Intelligence Reports* in the past two years, many law firms and companies contacted us for *Custom Analytics*, seeking help with analyzing patent prosecution data for a variety of reasons, including business development, portfolio and claim analysis, counsel selection, filing and prosecution strategy with different examiners, etc.

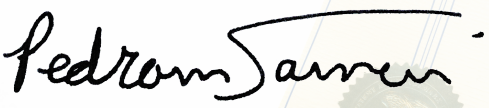
Using data for day to day decision making has become an integral part of any business operation these days. This prompted us to work on a comprehensive report, covering patent prosecution, including high-level stats about the *United States Patent and Trademark Office* (USPTO), its operation under different *Technology Centers* and *Art Units*, as well as coverage and ranking of top law firms and companies.

This was extremely challenging, as the size of data was not comparable to *Patent Trial and Appeal Board* (PTAB), making this analysis quite complex. We looked at more than 10 million patents and publications to extract data related to companies, law firms, examiners, inventors, etc. The most difficult aspect aside from modeling, was related to cleaning the data. We used *Natural Language Processing* (NLP) to find and cluster the same entities or names that appeared in various sources of data with different forms of spelling. In addition, we used multiple sources of data to automatically combine entities that had gone through mergers in order to better calculate their statistics. This was very difficult, as we often had to do significant manual review to ensure the highest possible accuracy of the data.

In addition, we updated our law firm and company pages on www.patexia.com. Profiles of more than 20,000 law firms and more than 600,000 companies are available and accessible for free on Patexia. There is a new tab that provides some details about *Patent Prosecution* work for those organizations. Companies and law firms can claim their own pages and review or update their information.

Our team of dedicated *Data Scientists, Engineers and Analysts* have gathered and analyzed massive amounts of prosecution data over the last few years. Our effort has not only resulted in this condensed report that you are (digitally) holding in your hands, but also, for those organizations interested in more in-depth analysis of their patent data (either law firms or companies), we now provide custom reporting, which is a mix of PDF, Excel and online access to metrics in which they are interested.

We hope our IP community finds this extensive information useful when making critical decisions about their legal partners, IP transactions and new ways to improve their prosecution practice on a day to day basis.



Pedram Sameni
Founder and CEO

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What's in This Report?

We have organized this report under the following five sections:

1. **Methodology:** We explain our method to measure the right signals related to *performance*, *activity*, *success*, *efficiency* and *quality* for all stakeholders in patent prosecution.
2. **Patent Statistics:** We look at the patent prosecution data at a high level, providing statistics related to the *USPTO*, *Technology Centers*, *Art Units*, *Examiners*, *Law Firms* and *Corporations*.
3. **Technology Centers, Art Units and Examiners:** We analyze all active *Technology Centers*, *Art Units* and *Examiners*, measuring the key signals for their activity, efficiency and allowance.
4. **Companies:** We identify the most active *Companies* in *bio-tech*, *high-tech* and *overall* to measure their *success*, *quality* and *performance*.
5. **Law Firms:** We analyze the *performance* and *activity* of law firms, comparing and providing rankings for the top firms representing *bio-tech*, *high-tech* and *overall*.

Similar to our other IP Insights reports, to have a meaningful comparison and also to compensate for the 18-month delay for an application to be published, we compiled the data for this study through a period of five years (e.g., January 1, 2014, through December 31, 2018).

Disclaimer: The data for this report was obtained from public sources, including USPTO, PTAB and PACER, as well as self-reported by law firms and companies on the Patexia website. Patexia has gone to great lengths to provide valid and accurate analysis based on this data. However, Patexia does not guarantee 100 percent accuracy, nor take any responsibility for possible losses caused by use of information provided in this report.

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Executive Summary

Every year, more than 300,000 patents are issued in the United States. From January 1, 2000, to December 31, 2018, USPTO has issued about 4.5 million patents. A lot of companies and law firms have been born or have come to an end during this period. To be pragmatic and have a useful comparison, we limited our analysis to the last five years, from January 1, 2014, through December 31, 2018. During this period, USPTO issued 1,682,342 patents and published 1,896,070 applications. During this period, 2,186,102 applications were either abandoned or allowed. USPTO allowed 25,268,001 claims.

The United States was the most active country, obtaining approximately 49 percent of all new patents from the USPTO, followed by Japan with about 15 percent of patents. China showed the highest growth by absolute number, while Saudi Arabia had the highest growth by percentage among the 169 countries that obtained patents during the last five years. Canada showed a 15 percent decline in the number of patents over this period.

The allowance rate for all patent applications reviewed during this period was about 75 percent. Out of about 1.68 million issued patents, 1,534,003 were *Utility Patents (91.18 percent)*, 139,944 were *Design Patents (8.32 percent)* and 5,898 were *Plant Patents (0.35 percent)*. We categorized 776,044 patents as high-tech and 113,187 patents as bio-tech based on their *Technology Centers*. As of January 2019, 35,516 registered attorneys and 11,565 registered patent agents can practice before the USPTO. During this period, 2,309,633 unique inventors obtained one or more patents from the USPTO.

We further looked at various metrics for 9 *Technology Centers*, 663 *Art Units* as well as 10,184 *Examiners*. We reviewed the performance and activity of 144,121 U.S. and foreign *Assignees* and 5,286 *Law Firms* who represented those assignees. We ranked the top 1,000 law firms and companies based on their *Success*, *Efficiency*, *Activity* and *Quality of Patents*. Similar to our other analysis, we will provide the top 100 in each category with our *Activity* and *Performance* badges..

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