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Patent Prosecution Intelligence Report

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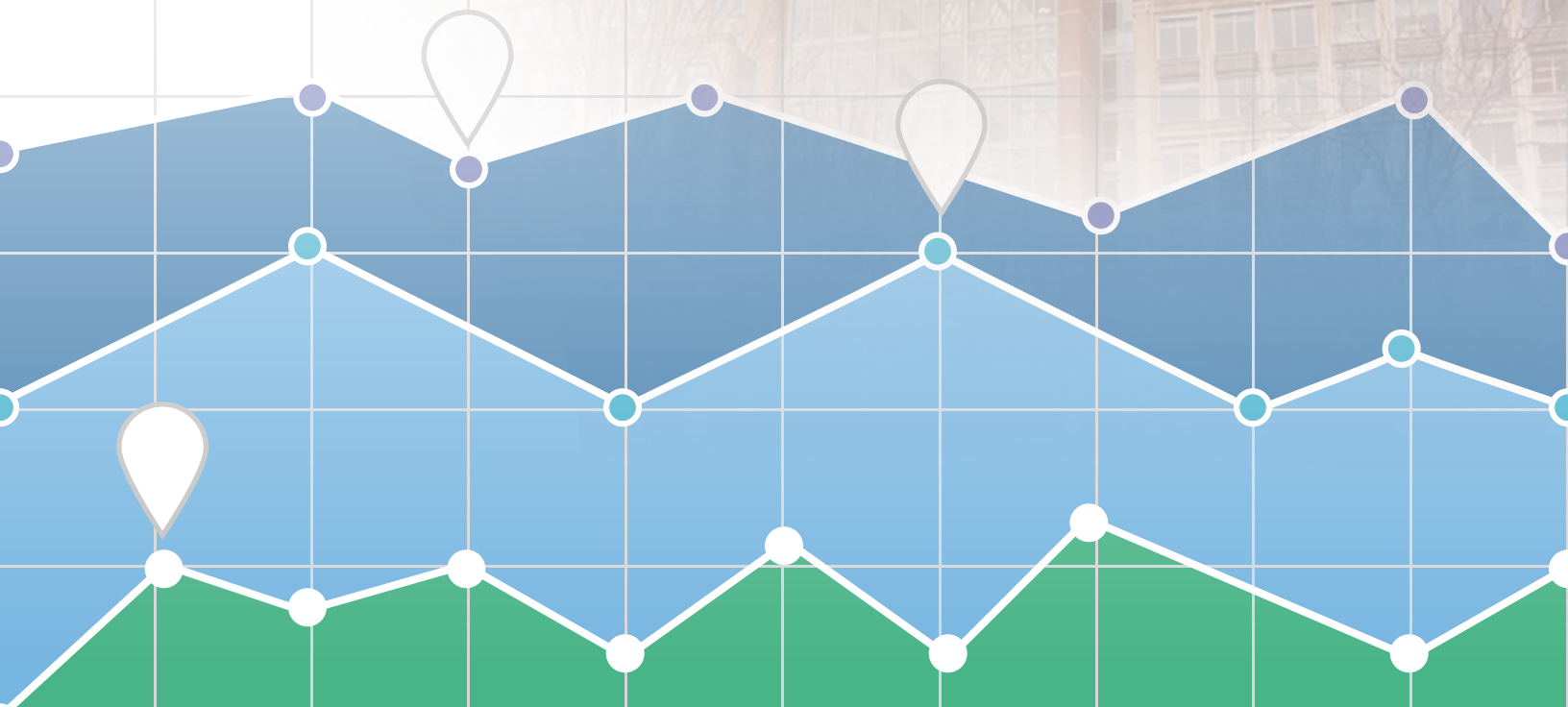
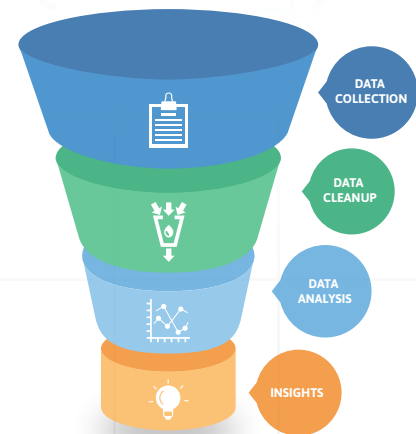


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Introduction



This year, marks the second year, Patexia is publishing its *Patent Prosecution Intelligence Report*, as part of its popular IP Insight series. We are glad to learn that many companies have adapted and integrated our [IP Insight Reports](#) as an integral part of their decision making.

In the 21st century, data and business intelligence have become inseparable components of the decision making process at any successful and growing organization. In the past, companies made numerous assumptions and used market research and consulting firms to help design their roadmap and come up with a growth strategy for their organization or optimize their cost and make their operations more efficient. Now with access to *Big Data* in many cases the decisions can be made not based on hypothesis and assumptions but based on insights and trends obtained from real data.

To improve our last year's analysis and statistics, this year, we decided to also reach out to our community and those directly involved in the patent sector and gather direct feedback through a carefully designed survey. Thanks to our active IP community, we collected lots of valuable statistics from more than 50 law firms including costs of filing and prosecution, impact of geographical locations on cost and process, application review method at different firms, etc. This has resulted in invaluable data and charts that we have presented in this report. The content is not just useful for top law firms but also for any practicing patent firms who have the desire

to make their operation more efficient and profitable.

In addition, companies who are looking to work with a new law firm or interested in gaining insights about the cost structure and patent prosecution process overall, can read and use the data to guide their current counsel or find and negotiate with their future patent counsel.

In an effort to make these more accessible and real time, we are now offering a set of online tools that provides access to real time data, many charts and stats 24/7 to our partners. We track all the USPTO filings and update our charts on a daily and weekly basis. This includes business insights such as top clients of a firm or top law firms representing a company before the USPTO as well as information about top technology sectors and areas (e.g., IPC codes) used by companies or law firms.

We also model and chart the behavior of more than 15,000 USPTO examiners based on their historical activities. Using that, companies and their patent counsel can answer many questions and based on that change their strategy before responding to an office action or take a different action. For example, what a company should expect if their counsel has an interview with a particular examiner or if they appeal a decision? Would an interview with the examiner increase the likelihood of issuance or has no effect? How about filing an appeal? Is the examiner's allowance rate in general lower than that of his/her *Art Unit* or *Technology Center*?

Companies can also learn about their patent counsel and compare their efficiency, performance and success to other law firms or compare themselves with their competitors. They can answer many questions such as where a particular law firm stands compared to other patent firms when it comes to filing bio-tech patents? Do their patent counsels have an efficient process and respond to office actions on time or do they request time extensions regularly? Which law firms are working for their competitors? Are their competitors changing their filing activities and looking into filing in new areas?

Data clean up and entity name resolution is still the biggest challenge for putting this report together. Extracting patent owners, attorney/agents, examiners, ... from more than several million applications still creates many duplicates and inaccuracies that our sophisticated natural language processing algorithms designed by our engineers, combined with analysis and manual review, performed by our data analysis team has reduced and minimized the errors.

We are offering a large part of this for free to our valued community members. IP professionals can join our community for free and access our law firm and company pages on www.patexia.com for free. Profiles of more than [20,000 law firms](#) and more than [600,000 companies](#) are available and accessible for free on Patexia.

Similar to last year, the content for this year's report is condensed in two files: this PDF document which covers the statistics, survey results, and the rankings for the top 100 law firms and companies in six categories and an accompanying Excel file which includes more statistics for technology centers, art units and the top 1000 most active law firms and companies.

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



Pedram Sameni
Founder and CEO

Report Contents

We have organized this report under the following six 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. Best Practices for Patent Prosecution:** We look at the cost of filing for different types of patent applications and filing procedures.
- 4. Technology Centers and Art Units:** We analyze all active *Technology Centers*, and *Art Units*, measuring the key signals for their activity, efficiency and allowance.
- 5. Companies:** We identify the most active *Companies* in *bio-tech, high-tech* and *overall* to measure their *success, quality* and *performance*.
- 6. 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, 2015 through December 31, 2019).

Disclaimer: The data for this report was obtained from public sources, including USPTO, EDIS, 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.

Executive Summary

This Patent Prosecution Intelligence report is the second annual report in our effort to map the patent prosecution landscape and offer insights into levels of activity and patenting trends, most active entities and the practices of patent law firms, among other important topics. Our analysis covers the past five years, from January 1, 2015 through December 31, 2019. During this time period, USPTO issued 1,749,597 patents and published 2,038,463 applications. In total, 2,314,449 applications were either abandoned or allowed. At an aggregate level, the patent office allowed 25,892,338 claims.

US-based entities have been the most active patentees before the USPTO, obtaining almost 49 percent of all new patents from this patent authority. Japanese entities followed with slightly more than 16 percent of patents. China showed the highest growth by absolute numbers, taking over – as we predicted in our 2019 report – the third position as the most important foreign assignee (position previously occupied by Germany). Saudi Arabia had the highest growth by percentage among more than 200 countries reported by assignees in their patent

applications during this time period. Countries such as Finland, France and Canada have practically remained stable without changing the number of patents obtained by year over the five-year period.

The allowance rate for all patent applications reviewed during this period was above 75 percent. The total of about 1.75 million issued patents comprises 1,591,416 *Utility Patents* (90.96 percent), 149,631 *Design Patents* (8.55 percent) and 6,081 *Plant Patents* (0.35 percent). We categorized 881,148 patents as high-tech and 122,411 patents as biotech based on their *Technology Centers*. As of January 2020, 35,560 registered attorneys and 12,312 registered patent agents can practice before the USPTO.

This year we also introduce new insights resulting from a survey of law firms covering best practices for patent prosecution. Both general practice and IP boutique firms participated. Most of them focus on high-tech patents and only a small fraction focuses on life sciences. We found, for example, that these firms seek to adapt to client needs in both work organization (e.g. forms of disclosure) and, sometimes, fees

and ways to charge clients. Certainly, the complexity and type of patent applications affect fees as well. We also found that digitization has occurred practically in all firms, with only a small fraction of them still in the process of moving away from a mostly paper-based practice.

We further looked at various metrics for 11 *Technology Centers*, 619 *Art Units* as well as 10,230 *Examiners*.

We reviewed the performance and activity of 114,295 U.S. and foreign *Assignees* and 3,583 *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 compiled ranks of the top-100 firms in each category with our *Activity* and *Performance* badges.

Appendix A – Technology Centers and Art Units Stats

We have provided the following metrics for all 11 *Technology Centers* and 619 *Art Units*. Please check the accompanying Excel file for more details.

1. Technology Center / Art Unit
2. Number of Examiners
3. Number of Applications
4. Number of Issued Patents
5. Number of Claims Applied for
6. Number of Claims Allowed
7. Number of Independent Claims Allowed
8. Allowance Rate (Application Level)
9. Average Number of Office Actions
10. Average Number of Extensions
11. Average Number of Interviews
12. Pendency (Days)



Appendix B – Top 1,000 Best Performing Companies

Please check the accompanying Excel file to view the list of the Top 1,000 Companies. We have provided the following metrics:

1. Company Name
2. Overall Rank
3. Overall Rank (Biotech)
4. Overall Rank (High-Tech)
5. Activity Rank (Overall)
6. Activity Rank (Biotech)
7. Activity Rank (High-Tech)
8. Final Score (%)
9. Final Score (Biotech)
10. Final Score (High-Tech)
11. Success Score (%)
12. Quality Score (%)
13. Total Patents
14. Bio-tech Patents
15. High-tech Patents
16. Allowance Rate (Application Level)
17. Allowance Rate (Claim Level)
18. Average Ratio of Word Count for Independent Claims (Application to Patent)
19. Average Word Count for Independent Claims
20. Pendency (Days)
21. Average Number of Office Actions
22. Average Number of Extensions
23. Average Number of Interviews



Appendix C – Top 1,000 Best Performing Law Firms

Please check the accompanying Excel file to view the list of the Top 1,000 Law Firms. We have provided the following metrics:

1. Law Firm Name
2. Overall Rank
3. Overall Rank (Biotech)
4. Overall Rank (High-Tech)
5. Activity Rank (Overall)
6. Activity Rank (Biotech)
7. Activity Rank (High-Tech)
8. Final Score (%)
9. Final Score (Biotech)
10. Final Score (High-Tech)
11. Success Score (%)
12. Efficiency Score (%)
13. Total Patents
14. Bio-tech Patents
15. High-tech Patents
16. Allowance Rate (Application Level)
17. Allowance Rate (Claim Level)
18. Average Ratio of Word Count for Independent Claims (Application to Patent)
19. Average Word Count for Independent Claims
20. Pendency (Days)
21. Average Number of Office Actions
22. Average Number of Extensions
23. Average Number of Interviews



Appendix D – Best Performing and Most Active Badges

As per our tradition, every year Patexia designs two types of badges for *Best Performing* and *Most Active* law firms as they ranked in different categories (overall, high-tech or bio-tech). Any of our Concierge members or firms purchasing the report, will receive the proper badges based on their rankings.



Contact Us

Founded in 2010 to bring efficiency and transparency to intellectual property by leveraging the power of data, technology and experts, Patexia is the largest network for IP professionals with over 70,000 IP attorney profiles. We offer IP services under four distinct arms: Patexia Connect (recruiting), Patexia Contest (crowdsourcing), Patexia Research (IP databases), and Patexia Insights (IP reports). Contact us today to learn more.



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Disclaimer: The data for this report was obtained from public sources, including USPTO, PTAB and PACER, as well as self-reported by attorneys on Patexia's 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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