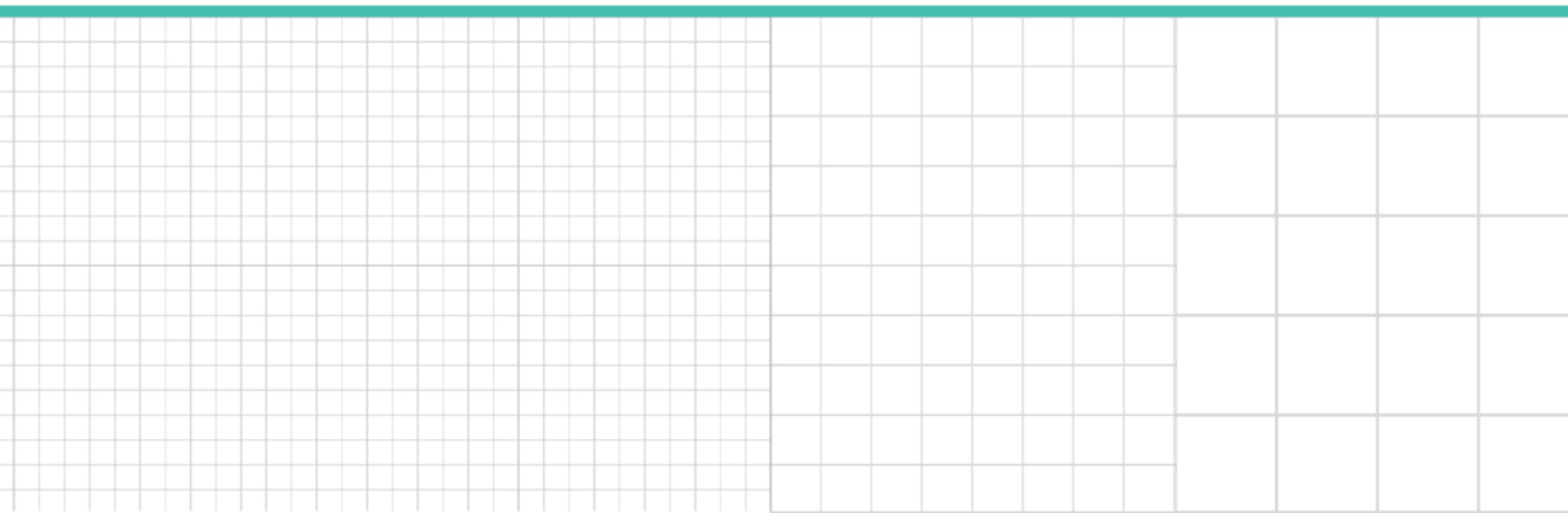


Professional Perspective

The Next Generation of Patent Operations: Pressures on Modern Patent Departments

*Matthew R. Harvey and Michael L. Drapkin,
Holland & Hart*

Reproduced with permission. Published June 2019. Copyright © 2019 The Bureau of National Affairs, Inc.
800.372.1033. For further use, please visit: <http://bna.com/copyright-permission-request/>



The Next Generation of Patent Operations: Pressures on Modern Patent Departments

Contributed by [Matthew R. Harvey](#) and [Michael L. Drapkin](#), *Holland & Hart*

Introduction

As the number, complexity, and range of legal services that companies require have increased, so too have the pressures on corporate legal departments to provide these services quickly and in a cost-effective manner. These developments have led to a rising emphasis on legal operations—the optimization of people, processes, and technology—to maximize the efficiency and effectiveness of substantive legal services.

Patent departments within corporate legal departments are no exception. They are now asked to protect more assets faster—often with flatlined or reduced budgets—while maintaining quality. Thus, just like legal operations as a whole, the need for efficient and effective patent operations has never been greater.

This three-article series analyzes pressures, trends, and future developments for patent operations, with a focus on large portfolio patent operations and the interplay between in-house and outside counsel. This first article focuses on the pressures that corporate patent departments currently face and will continue to face in coming years. These dynamics will continue to shape patent operations for both corporate patent departments and the outside firms that support them. The second article will provide an overview of recent developments in patent operations, driven by the pressures described in this first installment. The third article will describe future developments in patent operations as envisioned for both corporate patent departments and the outside firms that support them.

Pressures on Modern Patent Departments

Legal departments—including patent departments—often react and innovate based on internal and external pressures, and for at least the past decade, corporate patent departments have faced a wide range. They are now expected to manage growing portfolios of high-quality patents under significant budget and timing requirements, while also facing a shortage of qualified practitioners. These influences, many of which are financial in nature, have driven wholesale changes in patent operations for both patent departments and outside firms alike. An understanding of these pressures helps not only to explain the evolution of patent operations to date (as explained in the second installment), but also to forecast changes to come (as explored in the third installment).

Budget

Budget pressures have perhaps been the greatest—and most impactful—strains on corporate patent departments. In recent years, however, many patent departments have experienced either flatlined or even reduced budgets, despite inflationary or other cost pressures. For example, in the [AIPLA 2017 Report of the Economic Survey](#), roughly 50 percent of intellectual property department heads reported that their annual IP budgets were unlikely to change, and another 20 percent reported that their annual budgets had recently decreased.

Volume

Despite stagnated or even reduced budgets, corporate patent departments are being asked to pursue and manage more assets than ever before. The overall number of patents and patent filings rose dramatically over the past decade. According to the National Science Board, after flat growth for most of the 2000s, the number of USPTO patents grew more than 80% between 2009 and 2016, led by growth of patents in information and communications technologies.

These increases in patent numbers have held true for individual high-volume assignees as well. For example, the top 20 assignees of U.S. patent grants in 2018 who were also in the top 50 in 2011 saw, on average, a 76% increase in grants in 2018 compared to 2011, to say nothing of the new entrants into the 2018 top 20. Further, many companies are pursuing more international filings, and in more countries. These filings can exponentially compound the costs associated with

protecting a given invention due to translation costs and fees charged by foreign patent offices, as well as the cost of foreign counsel in each relevant jurisdiction.

Cost and Staffing

Compounding budget and volume pressures on corporate patent departments is a shortage of qualified patent practitioners, with the number of newly registered patent attorneys generally on a downward trajectory. For example, while 1,259 new patent attorneys [were registered](#) in 2009, this number dropped to only 532 in 2016, a decrease of 58%. And help is not on the way—the number of law students qualified to sit for the patent bar has also been decreasing year over year, from about 7,700 patent bar-eligible LSAT takers in 2009 to only 4,100 in 2015, a comparable decrease of 47%.

Thus, despite the increased demand for patents, the number of qualified practitioners—both already practicing and in the pipeline—is declining. Some speculate that this downward trend stems in part from increased competition and opportunities for technologically qualified individuals outside of the legal field. Regardless of the cause, the shortage of qualified patent practitioners leads to cost and staffing pressures for corporate patent departments and outside firms alike. Not only do these cost and staffing pressures exacerbate the above-described budget and volume pressures, but they also show no signs of abating any time soon.

Timing

In 2012, the [America Invents Act](#) went into effect. By changing the U.S. from a first-to-invent to a first-to-file patent system, the AIA added to the pressures on corporate patent departments by placing an increased emphasis on harvesting inventions and filing related applications quickly and before any outside disclosure. Thus, the need for corporate patent departments to obtain prompt filing dates has never been greater.

Quality

As of 2015, an estimated 84% of the S&P 500's total market value was attributed to intangible assets, with intellectual property a chief component. Thus, despite the other pressures mentioned above, corporate patent departments remain responsible for protecting some of their companies' most valuable assets. And while the relative value of any one patent likely decreases as the number of patents in a company's portfolio grows, a corporate patent department is tasked with growing and managing the portfolio in its entirety. Even patents that are relatively commoditized individually may be "bet-the-company" in aggregate.

Thus, the quality of patent work remains essential, though it may be measured across numerous dimensions. For example, quality may be considered on a per-application basis or more globally (e.g., across technology area or across an entire portfolio).

Conclusion

These competing pressures mean that many leading corporate patent departments are now being asked to do more work in a faster and more cost-efficient manner than ever before, without sacrificing quality and despite staffing constraints. It is thus no surprise that patent operations have evolved drastically in recent years in response to these pressures.

The authors thank Sylvia Chen, Head of Patent Operations at Google, and Aaron J. Kraft, Patent Counsel at Micron, for their helpful comments and insights.

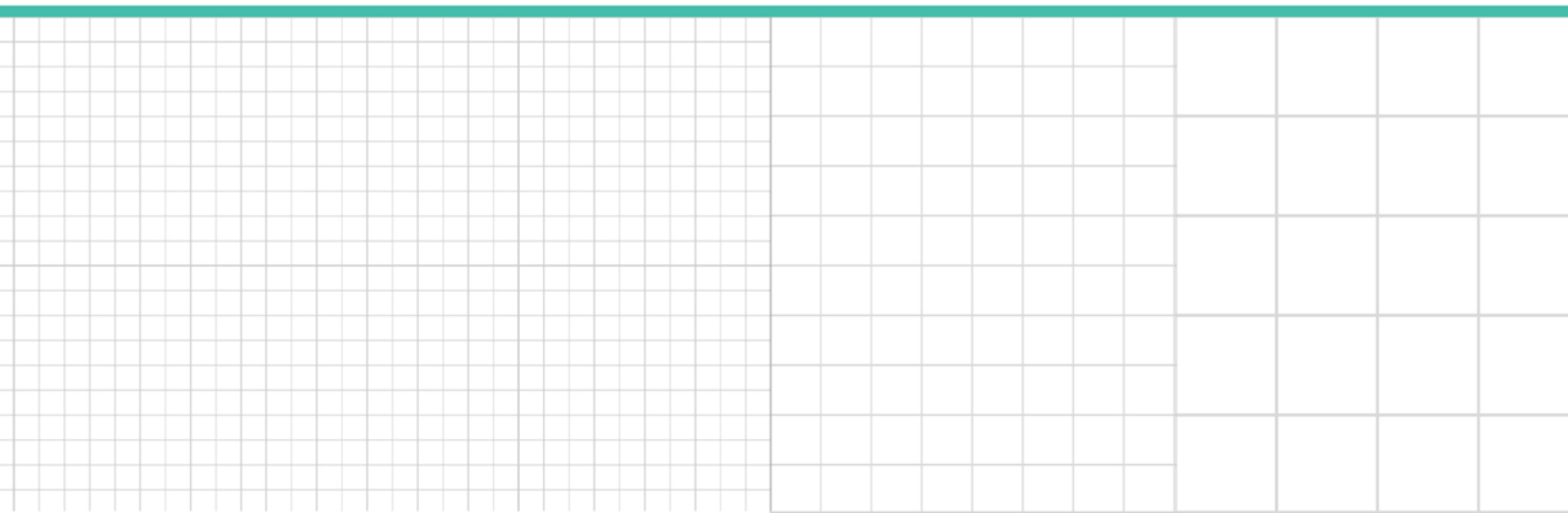


Professional Perspective

The Next Generation of Patent Operations: Tools and Trends

*Matthew R. Harvey and Michael L. Drapkin,
Holland & Hart*

Reproduced with permission. Published June 2019. Copyright © 2019 The Bureau of National Affairs, Inc.
800.372.1033. For further use, please visit: <http://bna.com/copyright-permission-request/>



The Next Generation of Patent Operations: Tools and Trends

Contributed by [Matthew R. Harvey](#) and [Michael L. Drapkin](#), Holland & Hart

Patent operations have evolved rapidly in recent years, with a profound impact on both corporate patent departments and the outside firms that support them. Corporate patent departments have responded to the pressures described in the first article of this series—especially the need to control costs despite increasing volume—by seeking new fee arrangements with outside counsel, tracking operational metrics to focus on efficiency and quality, and by leveraging technology and lower-cost providers, where practicable. Corporate patent departments and outside firms have also focused on increasing diversity of their teams, in pursuit of higher performance and other benefits. Understanding the developments of the past decade, along with their motivations, is essential to predicting the solutions and trends of the next decade.

Historical Solutions and Ongoing Trends

Alternative Fee Arrangements

One significant change in recent years has been a rapid shift from the traditional billable hour to AFAs, particularly in the form of flat fees for patent preparation and prosecution. From [2010](#) to [2016](#), the use of flat fees increased by over 50% for both original utility applications and office action responses. This movement to flat fees is logical given the budget and cost pressures impacting departments. Along with reducing administrative overhead while providing budgetary predictability and control, flat fees help shift the onus for operational efficiency to the outside provider.

Although the types of fees charged for patent services have been changing over the past decade, the amounts charged have not. For example, median fees for original utility applications and office action responses have been stagnant over the past decade, at [\\$10,000](#) and [\\$3,000](#) respectively. This stagnation is largely explained by budget pressures, which have impacted not only overall departmental budgets, but also budgets for individual projects.

These flatlined fees are, however, in tension with cost and staffing pressures. Also, when considering these budget pressures in conjunction with competing volume pressures, it is clear that overall corporate patent budgets must increase, per-project budgets must decrease, or the trend of increased per-company filings must come to an end (or even reverse). If per-project budgets decrease or remain flat, then outside firms will be under even more pressure to improve their operational efficiency to meet client demands while maintaining low fee structures.

Tracking Metrics

Under ongoing pressure to do more with less, corporate patent departments, including intellectual property divisions, have turned to data tracking to monitor and improve operational efficiency. Among other areas, metrics may broadly relate to cost, timeliness, and quality.

For example, cost metrics may include metrics related to the alignment of patent-related spend and R&D spend (on a global or technology-specific basis), and timeliness metrics may include metrics related to various stages of the patent process, such as latencies between assignment of a case to an outside firm and the holding of a disclosure meeting, between assignment of the case and a first draft, or between assignment of the case and filing of the application. As another example, quality metrics may be objective (e.g., metrics related to repeated rejections under 35 U.S.C. §§112, 101, or 102, or the number of later patents that cite a patent, or “forward citations”) or subjective (e.g., based on inventor or other stakeholder survey data, or based on value rankings across a portfolio). Thus, unsurprisingly, the metrics increasingly tracked by corporate patent departments directly correlate with the pressures they face.

Shifts in Providers

The recent decade has seen shifts along many dimensions in the outside providers upon which corporate patent departments rely. While corporate patent departments have traditionally relied on outside counsel working in expensive regions (typically the east or west coast) for patent work, they are now more regularly turning to outside counsel in lower-

cost locations and relying on non-attorney providers (such as patent agents and engineers). In some cases, they have even brought work in house. By and large, these changes are an effort to balance cost and quality where practicable, in direct response to the budget and volume pressures described in the first article of this series.

One significant and cost-motivated development has been an increase in geographic arbitrage, by which corporate patent departments turn to outside providers in lower-cost locations. In some cases, geographic arbitrage can involve international outsourcing, such as using providers based in India or other lower-cost countries. Geographic arbitrage can also be domestic, however, and in the last decade corporate patent departments have increasingly shifted away from more expensive “coastal” firms to domestic providers based in lower-cost areas within the U.S., such as the Rocky Mountains and the Midwest. Such moves need not be in conflict with quality or timing pressures, so long as the right provider is selected.

Corporate legal departments have also consolidated their outside providers, and they typically now rely on fewer outside firms. In the patent and other contexts, this reduction in the number of outside providers used presents opportunities for streamlining processes and communications between the patent department and its providers, thereby reducing administrative overhead and further driving efficiency. This trend may also relate to the increased amount of information made available by tracking metrics—for example, when a patent department is pressured internally to maximize both production and cost-efficiency, only the outside providers most capable of delivering within that framework will do.

Recent years have further seen a rise in the use of non-traditional (i.e., non-attorney) providers. For example, outside patent firms are increasingly leveraging patent agents and technical specialists, whose technical expertise may help drive quality and other efficiencies, and whose salaries may support profitability in the face of reduced or stagnated preparation and prosecution budgets. Along with cost and quality considerations, the increased use of patent agents and technical specialists may also be explained, at least in part, by the shortage of qualified patent attorneys—while the annual count of newly registered patent attorneys has been decreasing in recent years, the annual count of newly registered patent agents has largely held steady. As another example, patent departments and outside firms alike are also more regularly leveraging non-traditional providers (and often in geographically inexpensive locations) for prior art searching tasks.

Along with these changes in external providers, some corporate patent departments have even turned to insourcing by bolstering their own staffing and bringing in house at least some work traditionally handled by outside providers. Internal professionals may be less expensive than outsourced ones. Further, bringing work in house may aid quality in at least some instances (e.g., due to the knowledge of in-house personnel regarding relevant products). But while it may help address certain budget and cost pressures, insourcing is likely at odds with volume and timing pressures (e.g., creating a decreased ability to handle peaks and valleys in a given type of work). Other drawbacks may include an increased risk of over-taxing internal employees, a reduced diversity or depth of expertise available for certain work, and liability issues, not to mention lost efficiency in the division of expertise and roles between in-house personnel and outside providers.

Technology

Flowing directly from the budget, volume, and timing pressures, patent departments have increased their use of technology to drive production- and cost-efficiencies in patent preparation and prosecution. Taking advantage of the uniquely predictable and repetitive nature of some aspects of patent practice, startups, established companies, and even some law firms have begun offering software solutions to automate or otherwise support a host of patent-related tasks.

Supported tasks may include aspects of patent drafting, preparing prosecution responses, preparing information disclosure statements, patent searching, and the use of tracking metrics as described in the first article of this series. Many patent departments and outside firms have even begun adding data analysts, software developers, and other technology-focused employees to their internal staffs.

These emerging technologies complement other tools that firms and legal departments (patent and otherwise) have more traditionally used, such as electronic document management systems, electronic workflow management systems, and electronic docketing/deadline management systems, which also continue to evolve—indeed, according to one recent study, overall investment in legal technology skyrocketed from [\\$233 million in 2017 to \\$1.7 billion in 2018](#).

Emphasis on Diversity

Last—but certainly not least—patent departments and outside firms are increasingly emphasizing on the diversity of their teams, in response to ever-present quality pressures and in recognition that diverse teams perform better. Diversity may be evaluated along many dimensions, including gender, ethnicity/national/cultural background, legal experience (e.g., former examiner, litigation background, licensing background, etc.), and technical experience (advanced degree, industry experience, etc.).

Given the many benefits that team diversity provides, outside firms are increasingly pursuing specific diversity initiatives, such as a group of law firms that recently committed, as part of a Diversity Lab pilot program, to consider women and minority attorneys for at least 30 percent of their candidate pools when hiring. And along with their own internal initiatives, patent departments are more regularly considering the diversity profiles of outside providers when deciding with whom to partner.

Conclusion

Many of the above-described solutions and trends are part of an overall stratification of patents, at least in the high-technology field, with different subsets of a company's portfolio serving different functions. This stratification is logical: As a company and its technologies mature, an increased number of its patents may relate to incremental improvements in the company's core technology. These patents may have more of a portfolio-based purpose, such as driving large-scale licensing revenue or providing a defensive war chest.

Other patents may serve other strategic purposes, such as covering more speculative technology or supporting targeted offensive capabilities (e.g., they may read on competitors' or other industry participants' technology, or may be used to deter copying).

A patent department must avoid overpaying for portfolio-based patents on an individual basis but must also maintain sufficient protection for their inventions. Further, because bet-the-company technology is the technology that is most central to a company's business, truly bet-the-company technology for a large company is often covered—not by one or two crown jewel patents—but instead by a significant collection of portfolio-based patents. Thus, quality remains critical even for more portfolio-based patents, just along different dimensions.

Accordingly, many recent developments in patent operations may be characterized as efforts to balance and optimize quality, timeliness, and costs—goals that will similarly drive future developments in patent operations. The third article of this series will examine the forthcoming “next generation” of patent operations, and how this evolution will require significant changes from outside counsel and corporate patent departments alike.

The authors thank Sylvia Chen, Head of Patent Operations at Google, and Aaron J. Kraft, Patent Counsel at Micron, for their helpful comments and insights.

Read more in the [first](#) and [third](#) articles in the series.

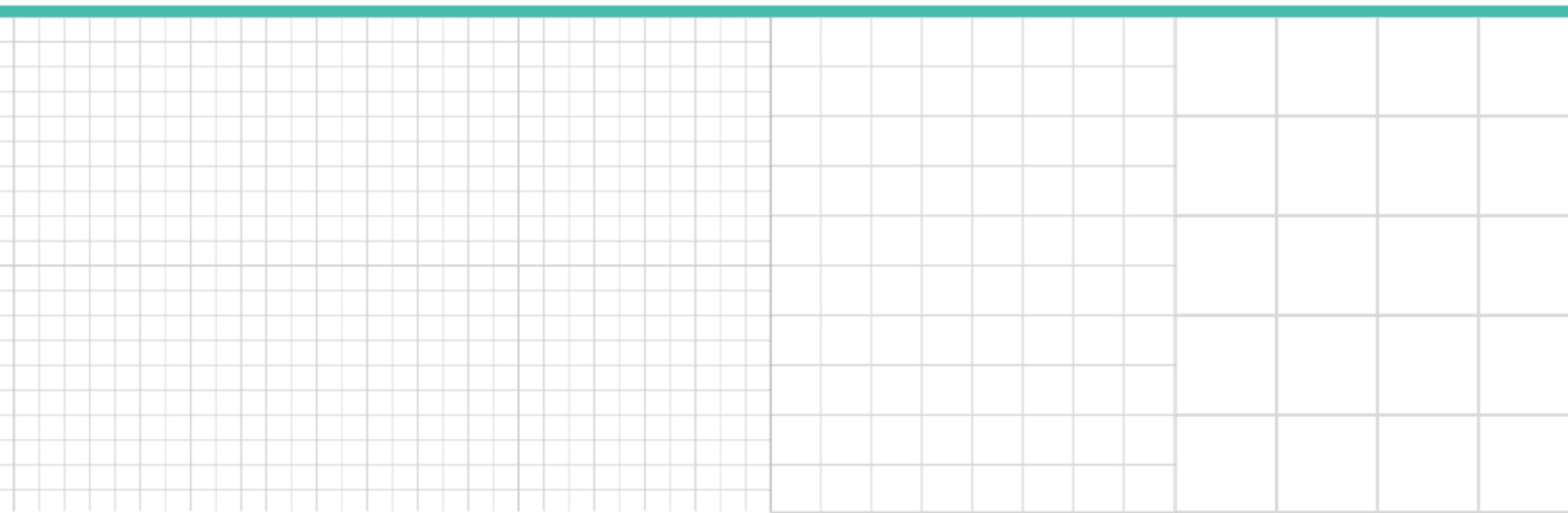


Professional Perspective

The Next Generation of Patent Operations: Future Developments

*Matthew R. Harvey and Michael L. Drapkin,
Holland & Hart*

Reproduced with permission. Published June 2019. Copyright © 2019 The Bureau of National Affairs, Inc.
800.372.1033. For further use, please visit: <http://bna.com/copyright-permission-request/>



The Next Generation of Patent Operations: Future Developments

Contributed by [Matthew R. Harvey](#) and [Michael L. Drapkin](#), *Holland & Hart*

The pressures that have driven the changes in patent operations for the past decade are likely to continue, and intensify, with an increased need for efficient and effective patent operations. Even more sweeping changes are expected in patent operations in the next decade. These changes could include increased coordination between corporate patent departments and outside firms to create true strategic partnerships, which will drive efficiencies by supporting jointly optimized operations and allowing increased specialization in the roles of in-house and outside counsel.

Within these strategic partnerships, corporate patent departments and successful outside firms will align themselves both operationally and culturally while continuing to expand the use of tracking metrics, technology, and non-traditional providers in ways that make sense for each specific client. Further, in response to the ongoing cost pressures on corporate patent departments, cost-saving approaches are likely to continue and evolve, including more targeted filing and prosecution approaches, an increased use of budget and strategy tiers, and an increased use of alternative fee arrangements, including AFAs of expanded scope.

Strategic Operational Partnerships

One key development will likely be much closer strategic partnerships between corporate patent departments and the outside firms that support them, especially regarding operations. Corporate patent departments and outside firms are each limited in the efficiency they can achieve by independently optimizing their respective internal operations. Collaboration between the two—particularly in operations—is necessary to further drive efficiencies while maintaining a desired level of quality.

As this increased collaboration develops, an effective outside firm will provide more than just substantive legal work product to clients—rather, it will become a complete operations partner with the client. To that end, outside and in-house counsel may engage in an ongoing dialogue, with both adjusting and evolving their respective internal operations, organization, and personnel to best accomplish client goals.

By tailoring its operations, an outside firm may essentially create a customized firm within the firm for each large patent client. This customization may require collaborative discussions between the firm and the client along multiple dimensions, including regarding budget expectancies, volume and timing expectancies that the firm has for the client, and quality and timeliness expectancies that the client has for the firm.

With the benefit of these discussions and established two-way expectancies, the most successful firms may be able to implement targeted staffing models to ensure budget and quality expectations are met (e.g., a targeted mix of attorneys, agents, engineers, and other staff who can assist with the client's work) and targeted recruitment practices to best serve the client (e.g., hiring for technical fit and in support of shared diversity goals).

The most successful firms may also be able to develop and implement targeted workflow procedures to ensure they meet timeliness and quality expectations. Further, with the benefit of volume expectancies, the most successful firms may be able to invest in developing or acquiring technologies (e.g., automation technologies) custom-tailored to a client's individualized needs. In some cases, a client and outside counsel may collaboratively determine which technologies to leverage, helping to ensure compatibility and interoperability between the client, outside counsel, and any other relevant parties.

Along with tailoring its own operations for the client, an outside firm may also engage with the client regarding possible changes to the client's patent operations that would best support the firm in meeting the client's needs. Such two-way dialogue may allow both sides to holistically optimize their mutual operations.

In some cases, as a full strategic partner, a forward-thinking outside firm may even assist a corporate patent department in finding and managing, or otherwise working with, third-party providers. For example, if a client wishes to engage in

international outsourcing, the outside firm may assist in vetting, retaining, and supervising a foreign agent. As another example, the outside firm may assist in managing a third-party search firm or other non-traditional provider. In some such cases, the outside firm may be given the freedom to decide whether to handle certain work directly or to delegate to a third-party provider, with the firm ultimately responsible for quality and timeliness and the client dictating relevant parameters (e.g., cost, eligible third-party providers, etc.).

Ultimately, as patent departments are forced to continue advancing their internal patent operations to meet their internal clients' demands, one can expect that effective outside firms will refine and align their operations accordingly, creating true operational partnerships. This is in contrast to the traditional black box model, in which a patent department assigns work and outside counsel completes the assigned work, with the internal operations of each a black box to the other. An effective outside firm will go beyond just doing what it is asked to do, also adjusting how it does the assigned work to fully support the client.

Increased Separation of In-House and Outside Counsel Roles

Though corporate patent departments and outside firms may collaborate more closely on patent operations, strategically partnered in-house and outside counsel may see their respective roles become more specialized and separated with regard to substantive legal work, at least for more portfolio-based patents in the company's portfolio.

As increased collaboration and alignment in the operations arena leads to greater trust in the outside firm, this can free both in-house and outside counsel to focus on their primary roles and respective strengths while avoiding inefficient duplication of efforts. For example, the more a patent department trusts that an outside firm is fully attuned to its technologies, strategies, expectations, and requirements, the less compelled in-house counsel should feel to burden themselves with detailed review of draft applications or other filings, as such efforts may provide little return on investment, especially when amortized over an expansive portfolio. The outside firm may be responsible for knowing the client's technology and being aware of relevant markets and competition, though in-house counsel may help the outside firm by providing relevant insights and guidance on an ongoing basis.

Thus, aligned operations can allow in-house counsel to focus on macro-level strategy, budget allocations, and invention harvesting. In-house counsel can then categorize applications (e.g., assign budget and strategy tiers) or other projects and partner with a trusted outside counsel based on alignment of strengths. For example, in-house counsel may utilize different strategically partnered outside firms for work of different strategic complexity or definition, trusting some firms for open-ended invention harvesting as well as related preparation and prosecution, trusting some firms only for such work within boundaries (e.g., within a defined universe of possible inventions), and trusting other firms only for more discrete and predefined (e.g., traditional disclosure-based) preparation and prosecution tasks.

Ultimately, once in-house and outside counsel have collaborated and agreed upon a common playbook, in-house counsel may function as the coach in charge of strategy and calling the plays, with outside counsel acting as the player trusted with executing the plays called.

Put another way, in-house and outside counsel may collaborate more closely on an operational framework but less closely on the substantive work that occurs within the operational framework. In-house and outside counsel may each be able to focus on their maximum respective value-adds while trusting each other in other areas, thereby maximizing the overall effectiveness and efficiency of their collective and jointly developed patent operations.

Increased Emphasis on Cultural Fit

As corporate patent departments and their outside firms become more intertwined, one can expect that a greater need for compatibility in terms of culture and ethos will arise. This may include a shared emphasis on diversity and other operating philosophies. For example, agreement on diversity issues may include not only dimensions of diversity for evaluation but also shared goals, such as participation in common diversity initiatives.

This compatibility may also include agreement on how information will be shared within a strategic partnership. For example, strategically partnered in-house and outside counsel may want to have mutual expectations and preferences for communications within the partnership, including the timing, volume, and detail with which information is exchanged. This

may also include agreement on preferred means for different types of communications, such as when to use email versus a phone call, when to arrange a videoconference.

Strategically partnered in-house and outside counsel may also agree on specific technology tools to use for certain communications or for sharing certain information (which may obviate the need for some communications). Similarly, compatible communications preferences may include agreement on preferred styles of communications, such as the length, detail, and formality of written communications. These agreements can increase efficiency of communication between the parties—likely limiting the time required to draft more formal correspondence in certain instances, while still effectively communicating the information required.

Increased Use of Tracking Metrics

To support strategic partnerships and two-way dialogues, one can expect that the use of tracking metrics will continue to increase, with both the corporate patent department and the strategically partnered outside firm tracking the firm's performance in serving the company. This may allow the outside firm and the client to share their respective operational data, as part of collaboratively optimizing their joint operations.

Increased use of tracking metrics may also help the corporate patent department establish expectations and thereby steer the performance of the outside provider. For example, one issue a corporate patent department may face is a disconnect between the quality of patent work as perceived by an outside provider (e.g., from the standpoint of a patent practitioner, who may be capable of evaluating quality on a subjective “you know it when you see it” level) with quality as perceived by others within the company (e.g., from a business standpoint, for which objective metrics such as those regarding timeliness, cost, and return on investment may be more compelling).

The most successful outside firms may work with corporate patent departments to develop rubrics and track associated metrics, thereby maximizing quality from multiple perspectives and in alignment with the pressures the corporate patent department faces.

Increased Use of Technology

Because technology may help address all or at least most of the types of pressures that corporate patent departments will continue to face, one can expect that the ongoing trend of using technology to drive production- and cost-efficiencies will only strengthen in the coming years. For example, though perhaps initially driven by budget, volume, and timing pressures, the continued development and use of technological tools as part of patent operations can help address quality, cost, and staffing pressures as well.

Especially for portfolio-based patents, automating certain substantive patent preparation and prosecution tasks will likely become of increased importance. As more and more outside firms adopt such technologies, firms that fall behind technologically may find themselves unable to provide large portfolio clients with acceptable quality at an acceptable price point.

Along with substantive applications, operational applications of technology may also increase in importance. For example, the increased use of non-traditional providers and mixed teams of attorneys and non-attorneys will involve more people in individual projects, giving rise to more complicated workflows both within and across projects. Accordingly, robust and reliable workflow management and docket/deadline management may become more important but also more challenging.

Further, as corporate patent departments and outside firms become more intertwined operationally, the sharing of docket and workflow information, analytics (e.g., quality metrics), and other information efficiently and effectively—and possibly in real time—may become critical. Technology may even be used to assess quality or related metrics, either of individual projects or of portfolios (e.g., machine learning tools may evaluate work provided by outside counsel and compute related metrics, or comparison tools may compare patent claims across a portfolio with language in a set of design documents or relevant industry standards). Thus, technology to automate or otherwise assist with these and other operational issues may also become of increased importance and prevalence.

Increased Use of Non-Traditional Providers

As cost and staffing pressures continue to intensify, the use of non-traditional providers will also likely continue to rise. This may include the increased use of different types of providers within a single outside firm for different portions of a single project, with different rates and expertise matched across aspects of the project in accordance with budget or other client expectancies. For example, attorneys may focus on claims and strategy, while supervising highly trained engineers who focus on the technical description.

This approach may help the firm provide the client a desired turnaround time (e.g., due to the parallelization of different aspects of a project) and quality at a desired price. Other examples of non-traditional providers likely to be more commonly leveraged include third-party search services, foreign filing services, and annuity payment services, among others.

Allocations to different types of providers—either within or as outsourced by an outside firm—may be jointly discussed and agreed upon as part of strategic partnerships. For example, the firm and the client may collaboratively agree on targeted staffing models and workflows that provide the client with its desired quality at an acceptable price point.

More Targeted Filing and Prosecution

Continued budget pressures, along with competing quality concerns, may cause the general trend of increased filings seen over the past decade to level off or even reverse, at least on a per-company basis. Quality may be measured across portfolios or technology areas. Further, corporate patent departments may be evaluated, or receive budgets, based on objective metrics related not only to quality, but also to cost and return on investment, among other areas.

As these pressures continue to increase, corporate patent departments may pursue more targeted filing strategies, and a trend towards fewer overall filings with a stronger emphasis on and defined criteria for quality may emerge. In some cases, companies may also more commonly engage in strategic pruning of their portfolios by selling or otherwise removing low-quality assets, as this may avoid associated maintenance fees and boost global quality metrics in the absence of budget increases.

Companies need not necessarily forgo protection entirely, however, for lower-priority segments of a portfolio. In at least some cases, because portfolios may be segmented and quality metrics quarantined to individual segments, certain lower-priority segments of a company's portfolio may instead be managed with particular attention to minimizing cost.

For example, lower-priority applications may target narrower initial claim scope, be abandoned more quickly in the face of stalled prosecution, or more heavily leverage automation or non-traditional providers (e.g., international outsourcing). Ultimately, as corporate patent departments must balance the benefit of an asset against the in-house resources (e.g., personnel and budget) required to obtain and manage the asset, some lower-priority applications may no longer be pursued, or may be pursued only in a manner that expends minimal in-house resources.

Increased Use of Budget and Strategy Tiers

A corollary to more targeted filing and prosecution practices may be the increased use of different budget and strategy tiers for different aspects of a company's portfolio. Especially as a greater portion of a company's portfolio relates to mature technologies suitable for a portfolio-based approach, categorizing applications and assigning budgets and strategy tiers accordingly will likely become even more beneficial. This approach may help companies avoid overpaying for portfolio-based patents while maintaining adequate protection for all inventions.

Further, strategy tiers need not be tied to budget tiers. For example, different strategy tiers may correspond to different levels of client review (e.g., more frequent versus less frequent depending on the speed of related product development) or an increased or decreased number of examiner interviews. These and other differences between strategy tiers may impact aggregate spend but need not directly impact budgets (e.g., flat fees) for discrete deliverables.

As discussed above, one can expect outside firms to develop a customized firm-within-the-firm for each large client. By extension, these outside firms may provide different selectable tiers of service that—in collaboration with the client—are aligned in terms of budget, strategy, and other expectancies for different types of the client's work.

Further Movement Towards AFAs

The use of AFAs will also likely continue to increase in the coming years. For example, given their administrative efficiency and budget predictability benefits, flat fee arrangements may help to support the dialogues required to develop the above-described strategic partnerships.

Not only may the use of AFAs support the development of strategic partnerships, but as those strategic partnerships develop, they may support the development of more sophisticated AFAs. Thus, AFAs may begin to progress beyond flat fees for different preparation and prosecutions tasks. For example, more intertwined strategic and operational partnerships between patent departments and outside firms may support second-level pricing discussions such as bulk discounts or more broadly based (e.g., monthly or yearly) flat fees.

Conclusion

As the demands on corporate patent departments—and thus on the outside firms that support them—continue to grow and evolve in the coming decade, one can expect that successful corporate patent departments and firms will evolve their patent operations accordingly. Thus, the next generation of patent operations will likely emerge through strategic partnerships between corporate patent departments and outside firms, as these partnerships allow the parties to jointly optimize their operations, yielding efficiencies beyond what either party could obtain unilaterally, while also allowing the parties to focus on their respective areas of strength.

The importance of cultural alignment between corporate patent departments and outside firms, along with the use of tracking metrics, technology, and non-traditional providers will all likely continue to increase, including in support of such strategic partnerships. Filing and prosecution strategies, along with related budget tiers, strategy tiers, and fee arrangements, will likewise continue to evolve. These developments will allow corporate patent departments and outside firms to continue providing patent services with ever-increasing operational efficiency.

The authors thank Sylvia Chen, Head of Patent Operations at Google, and Aaron J. Kraft, Patent Counsel at Micron, for their helpful comments and insights.

Read more in the [first](#) and [second](#) articles in the series.