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## Patent Intelligence Needs

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### ***This chapter will help you learn:***

- How to determine who should be responsible for keeping abreast of intellectual property (IP) issues
- How an understanding of the industry can aid in developing an IP strategy
- How an understanding of business goals can aid in developing an IP strategy
- The different types of patent searches, including a freedom-to-operate (FTO) study
- How to budget for an FTO study
- When to perform an FTO study yourself or hire an outside firm

### **3.1 Responsibility**

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Because IP involves complex topics intertwined with many facets of law and business, it is important to determine who is responsible for recognizing and handling IP issues before they arise. In a large corporation, this determination becomes difficult because such issues may involve many departments within the company. In a small business, the responsibility to keep abreast of IP issues, and solve issues that arise, lies with one or a select number of individuals who must decide how to address these issues, even if their primary expertise is not in IP. In either large or small businesses, there remain questions about either handling a problem in-house or looking to others, such as an outside patent attorney, for help.

Although there is no wrong approach to determining which department or personnel should be responsible, some departments or personnel are better suited for recognizing and solving problems regarding IP. A legal department may be best suited because it is likely responsible for defending against IP lawsuits and for the offensive use of the company's IP through the sending of demand letters, negotiating licenses, and bringing lawsuits for infringement or other claims. The legal department may also be well-suited for keeping up-to-date with newly published patent applications and issued patents and conveying that information to the relevant scientists and engineers, although if the legal department is small or lacks IP specialists this task might instead fall to engineering/scientific personnel. If the legal department includes one or a number of IP specialists, the legal department is probably the best suited to handle most IP issues. However, many companies do not include an IP specialist on staff.

The marketing and sales department is another option because it will be most aware if the company is losing sales and revenue to competitors who are copying products and services by misappropriating a company's IP. Also, the marketing and sales department may have the most direct contact with actual or potential customers who can offer useful information on such matters. Additionally, the marketing and sales department may be most affected if the company faces an injunction forbidding the sale of a product or service under its responsibility because of patent issues. The research and development (R&D) department may also be a likely choice. Because the R&D department is tasked with developing new technology, it may be the most knowledgeable and in the best position to know and analyze what competitors are doing from a technical perspective as well as to grasp the general landscape of the relevant technological field (i.e., the state of the art). Also, the R&D department has the technological background needed to evaluate aspects of a third-party patent application or issued patent. This background is something that most departments do not commonly possess—for instance, salespeople often do not know or understand in detail the patented technology behind products they sell. The responsibility for keeping abreast of IP could also reside with the company's leadership because they are the ones who decide whether to expand into another technology field or develop a new product or service, although corporate executives may have the most demands on their time and therefore are able to devote only minimal time to dealing with the company's IP issues.

While IP (i.e., patent) concerns can be the responsibility of any department, the most comprehensive approach is to share responsibility between many (or all) departments. Patent information should ideally be communicated between all major departments: the legal

department should communicate relevant patent applications and issued patents to the R&D department, educate other departments on what to look for, and explain why patents (and other IP) are important; the marketing and sales department should communicate the discovery of copied products or services to the legal department; the R&D department should communicate knowledge of relevant technology to the legal department, identify new inventions, and identify infringing aspects of competitor products; and all departments should communicate their knowledge to the company's leadership so those leaders can make informed decisions. Communication can be facilitated by holding regular meetings between the heads of each department or creating a new position within the company, such as an IP liaison, who is tasked with bridging the gaps between departments. Such liaisons should be knowledgeable in both legal and technological areas, and can be expected to maintain regular R&D meetings so that the burden of identifying relevant IP issues falls more on the liaisons than on other departments. By utilizing IP liaisons, engineers and scientists focused on R&D activities are not pulled in multiple directions or expected to retrace their steps to try to explain new innovations to legal staff, creating risks that important aspects are forgotten or simply not passed along. This approach creates a culture within the company in which IP is taken into consideration at every step so as to ensure that nothing falls through the cracks.

## **3.2 Understanding the Industry**

Knowing the industry in which a company operates is the first step to determining how competitors' patent portfolios influence the company and how its patents can be relied upon and developed to increase the company's position within that industry. If the company is involved in a variety of different industries/technology fields, each one should be evaluated.

### **3.2.1 What Is the Patent Landscape within the Industry?**

Knowing the landscape of the industry includes having a grasp on the number of competitors/participants in the market and whether those participants are constantly changing (i.e., new participants are continuously entering or exiting the industry). When there are only a few competitors in the industry, those competitors may be more aggressive in trying to block new entrants into the industry and more willing to act to maintain the status quo. If there are a large number of competitors, current participants may be less willing (or able) to block new entrants

because such activity would be continuous and time-consuming, while those competitors are accustomed to surviving in an industry that is ever-changing—this describes some software markets. A company should assess whether the industry is one that is conducive to independent inventors or start-up companies who can enter the market, become the “new big thing,” and immediately affect the market.

Another important characteristic to understand about the landscape of the industry is how aggressive its participants are in litigation and enforcing patents. A related characteristic is whether participants are more willing to collaborate on joint development projects and whether licensing of IP between competitors is more likely over filing a lawsuit. This can affect your company’s strategy for developing new products and services and determine whether to pursue a joint development project, a licensing agreement, or an infringement lawsuit. A meaningful, data-driven assessment of these characteristics should mean investigating what competitors really believe, rather than merely projecting personal or company attitudes onto others.

Likely, the most important characteristic of the industry is how active participants within the industry are in pursuing patent protection. Are the participants active in pursuing protection of their inventions (i.e., vigorously filing patent applications) or are the participants less likely to protect their inventions and more likely to favor an approach that allows open and free use of inventions, or do they favor maintaining trade secrets when possible? An industry can be placed in one of three categories depending upon how vigorously patent IP is protected: a patent desert, a patent forest, or a patent thicket (also referred to as a jungle).<sup>1</sup>

**Patent Desert**

- Small number of patents
- Lower (or different) barriers to enter industry

**Patent Forest**

- Moderate number of patents
- Basic technology likely available

**Patent Thicket**

- Extensive number of patents
- Difficult to enter industry

<sup>1</sup>Ronald P. Taylor & Paul Germeraad, *Visualize Your Intellectual Property*, 51 RES. TECH. MGMT. 21, 23 (2008).

In an industry that is a patent desert, there are only a marginal number of patent applications and issued patents. Further, an industry that is fairly mature, with relatively few recent patented technological developments, is also a patent desert because most of the patents in that industry have expired. A patent desert is present when patenting is generally not pursued, perhaps in favor of trade secret protection—this can be a function of the type of technology, because trade secret protection better suits inventions that are not discernible or detectable in commercial products, such as for manufacturing process inventions and certain chemical inventions. An industry that is a patent desert can be advantageous because its participants can develop without great concerns of infringement. However, the participants likely will not be able to rely on prior public knowledge from patent disclosures in a defensive capacity, such as to assert invalidity or to initiate countersuits based on their own patents.

In an industry classified as a patent forest, there are a moderate number of patent applications and issued patents. Participants in the industry will be able to obtain a basic understanding of the technology upon which to build and innovate through publicly available patent applications and issued patents. Further, participants will likely have the option to work cooperatively with other participants in the industry to develop technology and/or buy or license patented technology upon which they can innovate and expand. While there are some barriers, an industry that is a patent forest still presents ample opportunity to develop around others' patents and capture distinctive and desirable innovations. A participant in a patent forest has to be careful about infringing another's patent but can likely develop around others' patents in an effort to avoid litigation.

The last category is a patent thicket, where there are a vast number of patent applications and issued patents. In such an industry, entrants may have a relatively difficult time breaking into the market because they have relatively little opportunity to develop new technology that is not already protected by another.<sup>2</sup> In some instances, every commercially practical technology might already be protected by a patent held by an industry participant. If not already well entrenched in a patent thicket, a company may have to purchase or license others' patents—or affirmatively challenge the validity of some of those patents—to proceed because it is nearly impossible

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<sup>2</sup>BRONWYN HALL ET AL., NAT'L INST. OF ECON. & SOC. RESEARCH, A STUDY OF PATENT THICKETS (Oct. 29, 2012), [http://eml.berkeley.edu/~bhhall/papers/HHvGR\\_Patent\\_Thickets\\_FIN\\_29Oct12.pdf](http://eml.berkeley.edu/~bhhall/papers/HHvGR_Patent_Thickets_FIN_29Oct12.pdf) ("Econometric analysis . . . shows that the density of a patent thicket is associated with reduced entry into patenting in the technology area.").

to operate without infringing another's patent. If a company is well established in an industry that is a patent thicket, preventing companies from entering the market may be easier but developing new, noninfringing technology may be more resource-intensive and time-consuming, and require more resources for patent FTO studies than in patent deserts or patent forests. Entities active in patent thickets may devote tremendous resources to defensive patenting just to maintain their position in the market. An example of an industry with many patent thickets is the pharmaceutical industry, where a company may file hundreds of patent applications on a single drug to make it more difficult for new entrants or would-be generic competitors to determine when the drug is no longer protected by a patent and can be produced without the risk of patent infringement. Other examples of patent thickets have been noted in the smartphone, biomedical, semiconductor, and nanotechnology industries.<sup>3</sup>

While the discussion thus far has focused on an industry as a whole being a patent desert, forest, or thicket, such a conceptual framework can apply to discrete technology areas within an industry, too. For instance, complex devices might see patent thickets with respect to discrete subcomponents that are "consumables" or "wear parts" needing periodic replacement, while seeing a patent forest or desert with respect to other subcomponents with little or no aftermarket sales potential.

No matter what type of industry a company is in, knowledge of the industry's patent landscape is important in determining the company's strategy regarding protection of its IP and the freedom to market and sell its products and services.

### 3.2.2 What Are the Industry Norms Regarding Patenting?

Similar to determining the industry's patent landscape, it is also useful to know how the industry's norms affect a company's decisions regarding patent protection. If a company participates in an industry that consists mostly of information and developments that are not patent-eligible, that information may consist of trade secrets that can be reverse engineered or independently developed or knowledge that is freely available in the public domain. These industries can be those

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<sup>3</sup>Jeffrey I.D. Lewis & Ryan M. Mott, *The Sky Is Not Falling: Navigating the Smartphone Patent Thicket*, WIPO MAG., Feb. 2013, [http://www.wipo.int/wipo\\_magazine/en/2013/01/article\\_0002.html](http://www.wipo.int/wipo_magazine/en/2013/01/article_0002.html); Gavin Clarkson & David DeKorte, *The Problem of Patent Thickets in Convergent Technologies*, 1093 ANN. N.Y. ACAD. SCI. 180 (2006).

that are nontechnological or those that provide products or services that have been in use and publicly known for a very long time and are now in the public domain. Similarly, if a company is in an industry that is based upon the open and free use of developed technology, there may be little or no patent activity. It is important to know whether the industry norms include patenting in one technology area while patent protection is not sought in other areas. Additionally, whether companies within the industry patent technology aggressively will help you determine how to adequately protect your own IP. Such information will also be useful when performing R&D and determining what resources to allocate to legal and IP efforts.

### 3.3 Your Company's Approach to IP

Knowing a company's goals and culture is critical to developing and maintaining a successful IP strategy. Without a deep understanding of a particular company's unique goals, policies, products and services, future developments, and sales trends, it will be difficult to provide a consistent and valuable IP strategy that incorporates useful and well-timed risk reduction measures, such as patent FTO studies.

#### 3.3.1 The Company's Position and Goals

A company's approach to IP should reflect its goals and what it wishes to achieve. When the company's goals include the development of technology in an area where it lacks expertise or a basic understanding of the technology (i.e., expansion into a new and unfamiliar product or service line), resources that might otherwise be used to innovate valuable new products in a familiar technological area may first need to be used to establish freedom to operate.

It is also important to know how those who set the company's goals view the value of IP. Is it a person or people who hold IP in high regard and are willing to alter those goals based upon the patent landscape? If so, individuals responsible for IP issues, such as the legal department, may play a larger role in setting or revising those goals and managing expectations on attaining those goals. In a large corporation, the responsibility for setting goals likely rests with the top executives ("C-Suite") with the legal department providing IP information relevant to those goals but having little input on goal-setting in the first instance. In a small business, the responsibility likely rests with the owner or owners (perhaps the founders), who may be entrepreneurial-minded in a way that brackets out considerations like patents that do not fit within their areas of expertise. In medium-sized

corporations, there may be departmental latitude that allows an engineering department, for instance, to be self-directed in goal setting, meaning patent considerations may or may not be foremost in mind depending on the prevailing attitude.

Knowing how a company interacts with competitors, its place in the market, and its revenue source(s) will also shape the company's IP strategy. It is important to know if the company is one that is often actively looking for partners, investors, and/or distributors to share costs and work together to develop new technology or ensure the technology is able to be used without fear of infringement. If so, the company should have a strategy in place to govern (and ultimately memorialize by written agreement) who owns any resulting IP and to ensure any resulting IP is not mistakenly disclosed to those who should not possess such information. Similarly, the industry landscape and the company's place in it may be such that competitors might try to discourage growth. This situation could occur if the company is new to the industry and competitors are active in erecting barriers to entry to new participants.

Other considerations are the revenue sources for the company and the geographical markets in which the company intends to participate. If it is a small company that only does local business, its IP strategy will be very different than that of a multinational corporation that does business in many countries around the world. Because IP rights are generally national, the question of which markets to participate in must be taken seriously. The number of product/service lines and the ways in which the company creates revenue are also important. If the company is diversified and offers many different products and services, it may not be critical if one is shut down due to a competitor's patent. If this is the case, the company's IP strategy might be to minimize FTO studies because there is no incentive to search out IP problems or incur additional overhead costs. Additionally, if the company is large with a great deal of revenue, it likely can handle the litigation costs that would otherwise sink a smaller company and therefore might be more aggressive when it comes to risking possible patent infringement.

The culture of a company with regard to IP (i.e., whether the company has a culture that rejects or incorrectly values IP) can influence how the company handles its IP and will shape which precautions should be taken when dealing with a competitor's patents. The company may be one that believes IP is not very valuable, and likewise believes that patent infringement is not a concern. In contrast, the company may have suffered through a prior negative experience, such as contentious litigation or a loss, and have become overly



cautious. More likely, though, the company suffers from a form of “actor–observer bias” in believing that its IP is more valuable than it actually is while believing that a competitor’s IP is less valuable than it is.<sup>4</sup> This is a culture that must be recognized and corrected because such a view can lead to numerous issues. Overvaluing its IP may lead a company to believe its patent portfolio is broader and covers more technology than it actually does. This view may also cause those within the company to take the attitude that a competitor’s IP covers technology that has been around for a long time or is not innovative, so therefore does not block the company’s own development.

Another challenge is determining if there are any patents owned by the company that are of particular importance. Important patents give the company a critical market advantage, cover the company’s most profitable products, cover products that produce a disproportionately large share of the company’s revenue, bring in revenue independently through licensing or other ventures, are perceived by customers to be the aspects of products or services that are much better than the competitor’s products or services, or are necessary for raising funds and investment.

One strategy when considering FTO studies is to categorize product lines or individual products according to some type of taxonomy. Examples would be to classify technologies as core or peripheral; as of high, medium, or low significance; as high-margin or low-margin; and as being in production/on sale, being in development, being strictly used for defensive/blocking purposes, etc. Such taxonomy can be easily developed by personnel unfamiliar with patent law, yet still aid in formulating patent strategies both defensively and offensively. Developing a taxonomy and undertaking an effort to map out product lines can be very useful when planning a first FTO study or when reorienting a company’s IP strategies to align with new corporate goals. Once implemented, such a taxonomy can also aid in other efforts, such as portfolio “pruning” to limit maintenance fee/annuity costs for maintaining the company’s own IP portfolio.

### 3.3.2 What Risk Is a Company Willing to Accept?

A significant influence on a company’s IP strategy and whether it will take risk-reducing measures, such as performing patent FTO studies and other prior art searches, is the amount of risk it is willing to take.

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<sup>4</sup>See generally Wikipedia, *Actor-Observer Asymmetry*, [https://en.wikipedia.org/wiki/Actor%E2%80%93observer\\_asymmetry](https://en.wikipedia.org/wiki/Actor%E2%80%93observer_asymmetry) (last modified Nov. 14, 2016).

The level of risk that is acceptable to the company is dependent on a variety of factors.

The first factor is the culture of the company. Does the company (or its key employees or managers) have a “cowboy attitude” in which it will proceed with a particular project in the face of high risk, is it fairly conservative and prone to keeping a wide berth from anything remotely risky, or is the company somewhere in the middle when it comes to risk aversion? If a company has a culture of taking risks, it may not be overly concerned about competitors’ patents and may proceed with projects without doing any type of FTO study. If the company has a conservative attitude, it may be willing to walk away from a potentially lucrative new product, service, or acquisition because there is a chance such ventures will result in litigation. No matter what the culture of a company is, it should be taken into consideration when forming an IP strategy and, particularly, when deciding whether to perform a patent FTO study.

Another factor is driven by the structure of a company: does the company have investors or shareholders that must be satisfied? In a company that has investors or shareholders who expect a large return on their investment (this is common with start-ups and companies funded by venture capital), the company might be willing (or forced) to take more risks with the hopes of “striking it big” and experiencing major success. Such stakeholders might drive taking “bet the company” risks. In a company that has investors who prioritize steady returns and the company’s continued operation (this is more common in closely held and privately held companies), the company is likely to be more conservative and more concerned about possible litigation, such as a patent infringement lawsuit.

A third factor is whether a company is affected by public opinion and whether an infringement lawsuit or other possible litigation would negatively influence its clients’ and customers’ views of the company. If the company is in an industry that is driven by goodwill and public perception, avoiding risk and the possibility of an infringement lawsuit may be of greater importance. This might be the case if new product development is peripheral to a nontechnological service business, or if a marketing strategy emphasizes trustworthiness, reliability, and the like. If the company is in an industry in which public perception does not matter or if a company is already involved in a number of IP battles, additional risk and the possibility of a patent lawsuit may not be a concern.

Another factor to consider when determining the amount of risk that is acceptable is whether the company is in an industry where its IP is regularly stolen or otherwise discovered by competitors.

Such disclosure could result from former employees that are now employed by competitors (especially if turnover is frequent), leaks in the company's information system (e.g., a major data security breach), or wrongdoing (e.g., corporate espionage) by competitors. The industries that tend to experience the most IP theft are the health care, pharmaceutical, and biotech industries.<sup>5</sup> To reduce this risk, a company may contemplate frequent prior art searches so that the disclosure of this IP is discovered as soon as possible to allow the company to react to mitigate the problem, and such a search can be incorporated into an FTO study.

Whether your company has indemnified anyone (e.g., customers, distributors, or joint development partners) from any losses that may occur as a result of selling your product or service will also affect the associated risk and how much could be lost if something goes awry. If so, there may be an incentive to ensure that indemnified products and services are not infringing another's IP so that the indemnified party does not drive up the indemnifying party's losses. The more parties an entity indemnifies, the riskier an associated endeavor becomes. Therefore, FTO studies may be utilized to reduce this risk by giving the company a sense of how competitors' IP affects its products and services. In a sense, an FTO study allows the company to assess the true cost of the indemnification. Although sometimes there may be cross-indemnification, in-house counsel typically suggest that each company perform its own FTO study, even if a partner claims to have done such an FTO study. If the stakes are high (e.g., an injunction against a single part in a large, complicated project blocks sales of the entire product), it may be risky to trust the FTO efforts of the other party, especially if little is known about such party's FTO methodology and the rigorosity of its efforts—the other party may have a “cowboy” attitude that is not shared by others who are more risk averse.

With all of these factors to consider, it is important to know who makes the decision regarding the amount of risk to accept (and, unfortunately, who takes the blame if a problem occurs). This is mostly driven by the structure of a company. Is it a small, privately owned company with one or a few owners? Is it a large, public company with many shareholders who vote on most decisions, board members who are elected, or corporate officers who are chosen by a board or another body? Whether the decision lies with one or many individuals, it is important that those who make the decision are able to access

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<sup>5</sup> See GARY MATUSZAK ET AL., KPMG LLP, THE CHANGING LANDSCAPE OF DISRUPTIVE TECHNOLOGIES, GLOBAL TECHNOLOGY INNOVATION INSIGHTS—FALL 2014, available at <http://www.eurocloud.fr/doc/kpmg-Global-Technology-Innovation-Insights-2014.pdf>.

all relevant information and assess the risks associated with each option. Ideally, responsibility for final outcomes should rest with the same personnel empowered to make major decisions that influence those outcomes. But disconnects are possible, and negative outcomes might even lead, however unfairly, to one or more people being made scapegoats in the aftermath. Employees at lower or middle levels of a company may wish to seek (and document) approval at higher levels before proceeding with a course of action that may jeopardize the business or that employee's job if there is an unfavorable outcome (e.g., a patent lawsuit, an injunction) later on.

### 3.3.3 Considerations for Subsidiaries

In large companies, it is not uncommon to have many divisions or subsidiaries that operate independently (or semi-independently) from one another but are interconnected by their leadership and the type of business they conduct. When dealing with this type of company, it is important to look at each division or subsidiary separately and assess each one's goals, culture, leadership structure, industry, product and service development, and other aspects to formulate an IP strategy that best suits its needs.

When looking at the interaction between the parent company and its subsidiaries, it is significant to understand whether a subsidiary is acting on behalf of the parent company. If so, the acts of one could be combined with the acts of the other to infringe a competitor's patent. An example of this is when the parent company performs the first few steps of a patent and the subsidiary performs the final steps at the direction of the parent company. The parent company may be liable for inducement of infringement in the United States if it is determined that the parent company directed and controlled the actions of the subsidiary or the nature of the project lends it to being a joint enterprise between the parent company and its subsidiary. Direction and control can be established by traditional agency law principles, a contractual relationship between the two, or when the parent company "conditions participation [by the subsidiary] in an activity or receipt of a benefit upon performance of a step or steps."<sup>6</sup> However, liability for induced infringement is fact-specific and cannot be imposed on a parent company for exercising only basic ownership over a subsidiary, so each situation should be analyzed on a case-by-case basis.

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<sup>6</sup>Akamai Techs. Inc. v. Limelight Networks, Inc., 797 F.3d 1020, 1023 (Fed. Cir. 2015).

### 3.3.4 Developing Communication between Departments

Coordination between departments within a company and within the department itself is essential to keeping abreast of IP issues and confronting those issues as quickly and efficiently as possible. This coordination should include at a minimum the legal department, the marketing and sales department, and the R&D department. Coordination between departments is necessary because one person or department in a large company typically does not have the information or range of skills needed to handle all aspects of IP to ensure a product or service is free from patent infringement issues. Coordination increases transparency so that all departments know what the others are doing and are aware when a patent issue arises. To handle all patent issues, coordination should be between those who know the legal aspects of IP, and patents specifically, are knowledgeable about litigation and licensing risks and opportunities, are knowledgeable about the technology, know how the company's products and services are used and viewed within the industry, are able to understand if investment and development of new products and services would be profitable, and are empowered to make a decision regarding how to proceed. It may be helpful if each department has someone designated to deal with IP issues, if only to communicate and coordinate with other departments like a central legal department.

Coordination between and within departments can aid in avoiding issues such as the investment of resources in the development of a technology that the legal department would view as too risky with regard to the IP landscape or the sales and marketing department would view as not profitable enough to cause a sufficient return on the investment in an FTO study. In many companies, the legal department is disliked by those within the company because it always seems to say "no" to every idea brought to it (regardless of whether saying "no" is in fact legally justified). Up-front coordination between departments could lessen this feeling by working together with others to find creative ways to say "yes" or inform the other departments of the evidence-based approaches, such as an FTO study, used to arrive at that outcome.

To aid in coordination, the company could focus on educating departments on topics and issues that they do not normally encounter. Examples of this would be to educate the scientists and engineers on the legal side of things so they can recognize IP issues when they see them and to educate lawyers on the technological side so they can more easily and fully understand relevant patents and other technical

documents. According to an in-house attorney at a major mobile device company, it is extremely important to educate employees about IP considerations and ensure the decision-makers, no matter what department they are in, have all relevant information, including the risks and rewards, before determining how to handle an IP issue. Whether it is done through the formation of an IP team, regular meetings between department leaders, or another approach, coordination between all departments is important to keep up-to-date with all IP issues. Such efforts also need to be renewed over time, as personnel changeovers occur and as memories fade.

### **3.4 Types of Projects**

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While this book focuses on prior art searches and analyses with regard to a patent FTO study, other searches may be of use when developing an IP strategy and determining how to handle other patent issues.

#### **3.4.1 Determining the Business Intelligence Landscape**

A business intelligence landscape search, also called a patent landscape search, is a synopsis of the technology and publicly available patents in a particular industry. An analysis of the patent landscape can result in the identification of the industry's major participants, its aggressiveness with regard to patenting (i.e., whether the industry is a patent desert, forest, or thicket), and whether there are any barriers to a company's product and service development. Within an industry, a large amount of the technological data may be available only in patent documents, so looking at the patents (and published patent applications) within an industry is a good indicator of the industry's former and current technology and development.

Analyzing the business intelligence landscape presents valuable information to a company and enables it to:

- Determine what products, services, and technology have already been created by a company's competitors
- Avoid misusing resources in redevelopment of existing technology
- Learn about competitors that are active participants in the industry
- Identify any trends and technology gaps (white space/green space)