

EMPOWERING INTELLECTUAL PROPERTY

STEP 3 - SURVEY

If you really want to know where your company stands, then *survey* its intellectual assets, customers' needs, market and technology trends, innovation opportunities, competitors' threatening activities, and potential relationships.

What you'll learn

- ▶ What is the best way to inventory your company's know-how and trade secrets?
- ▶ What 7 basic practices for performing an IP Audit can identify and help correct protections that are faulty, agreements that are flawed, and procedures that are dysfunctional?
- ▶ How can customer feedback lead to valuable innovations?
- ▶ What are the most profitable things your company can learn from analyzing the patent landscape?
- ▶ How can your company identify which patents, companies, and technologies are most important in a particular field?
- ▶ How can your company readily spot potential strategic relationships, licensees, and infringers?
- ▶ How can your company continuously detect competitors that are attempting to set infringement traps, legally steal its markets, or thwart its future profitability?





EMPOWERING INTELLECTUAL PROPERTY

STEP 3 - SURVEY

To truly empower your company's IP, you need to know several things, including:

- what intellectual assets and properties you have, their vulnerabilities, their value, and how to improve it;
- what your customers, prospects, and potential business partners need;
- where you stand versus your competitors;
- what trends are shaping the relevant technical, business, and legal landscapes; and
- where you have freedom to operate and where you don't.

We'll start by exploring how to learn what your company already has, how to track and manage it better, and how to continually improve it.

Knowing What You Know

The Value of Information

You undoubtedly realize that information (including knowledge and data) can be very valuable when handled correctly. Often, value can be inherent merely from aggregating otherwise discrete pieces of information. At other times, value can arise simply by virtue of certain information being kept secret from competitors while being exploited by its holder. And sometimes, the most valuable information is the knowledge of what simply doesn't work.

Thus, to facilitate understanding, I define "know-how" to include any information that provides actual or potential competitive advantage, such as, but not limited to, economic value. For example, even though its content is made available to the public, a rapidly-accessible database of current telephone numbers and addresses enables telephone companies to extract \$0.50, \$0.99, or more from telephone callers who dial "411". Consequently, such a rapidly searchable aggregation of information can net tremendous revenues and profits.





EMPOWERING INTELLECTUAL PROPERTY

STEP 3 - SURVEY

Likewise, I define "trade secrets" to be know-how that has economic value, is not generally known, and is maintained via reasonable measures of security. Trade secrets derive their economic value primarily from their secrecy with respect to competitors.

Trade secrets can include many commonly encountered types of information, such as:

- 1. laboratory test results
- 2. innovative concepts
- 3. materials, compositions, and formulas
- 4. manufacturing processes, procedures, and parameters
- 5. supplier information
- 6. customer lists and data
- 7. marketing information, plans, and methods
- 8. business strategies and tactics
- 9. financial budgets, projections, and statements
- 10. computer architectures, algorithms, and code

Know-how and trade secrets also can extend to knowledge of what does not work, since avoiding the experiments needed to obtain this knowledge, and the costs associated with those experiments, can be very valuable to certain competitors.

Trade secret protection in the U.S. is governed primarily by state law. Generally, every state treats theft or unauthorized dissemination of a trade secret as an unlawful act. Theft of trade secrets also can result in criminal penalties under the federal Economic Espionage Act and/or the Computer Fraud and Abuse Act.

There is no limitation on the length of time that a trade secret can be protected. For example, the formula for Coca-Cola® allegedly has been kept secret for over 125 years!

Note that absent an enforceable contract, however, you have no right to exclude others from using "proper means" to obtain what you consider to be your trade secret (or your know-





EMPOWERING INTELLECTUAL PROPERTY

STEP 3 - SURVEY

how). Proper means can include independent development, reverse engineering, obtaining from a third party who has a right to provide, or obtaining from you without breaching a contractual or other duty, such as when you have failed to exert reasonable efforts to maintain secrecy. Improper means can involve breach of contract, espionage, theft, fraud, bribery, coercion, etc.

Know-how and trade secrets are often protected by formal written agreements (e.g., Non-Disclosure Agreements, Employment Agreements, etc.), employee training, physical security, computer security, and/or other well-managed access control practices.

Nevertheless, public disclosure to even one person can destroy the secret if it then becomes more generally known. For this reason, trade secrets too frequently lose their secrecy and therefore fall into the public domain. Consequently, when feasible, many holders of valuable concepts consider patent protection as a complement and/or supplement to trade secrecy.

With that brief background, you probably recognize that know-how and trade secrets are pervasive, not just in your company, but in all profit-seeking businesses. Surprisingly, just as pervasive among most companies is their lack of knowledge of the status of their know-how and trade secrets. Of course, you can't reasonably manage something until you know it exists, yet most companies have no definitive record of their know-how or trade secrets, and thus manage them rather poorly. Fortunately, the solution to this problem is simple to understand, and rather easy to implement.

Taking Stock

One of the challenges with inventorying trade secrets (and know-how) is that they often have little or no physical presence. Instead, they tend to reside in the minds of employees, hide in documents, or sometimes, are embodied in products, machines, and/or software.

Typically, trade secrets are inventoried on a departmental or functional basis. That is, each department or function of the company is responsible for listing all of its trade secrets.



© 2011-2013 Michael Haynes PLC All Rights Reserved www.MichaelHaynes.com Updated 14 February 2013 Page 4 of 17



EMPOWERING INTELLECTUAL PROPERTY

STEP 3 - SURVEY

Then, each trade secret is described and categorized. Feel free to contact me to learn an easy approach to tackling this task.

Assigning Value

Once categorized, know-how and trade secrets can be further characterized to better understand their potential value to your company and/or others.

For the more cherished know-how and trade secrets, further analysis can be undertaken to try to determine their fair market value and/or useful life. Such information can provide even more guidance on how much should be expended to protect the know-how or trade secret. I typically encourage a valuation approach that relies on a risk-adjusted return on investment or a net present value of future cash flows.

Know-how and trade secrets can hold a tremendous amount of value, and even can represent a majority of the value of your company's intellectual assets. But chances are that your company has other very valuable intellectual assets, some of which might be protected by intellectual property rights. And just as it can be worthwhile to inventory your know-how and trade secrets, it also can be very beneficial to tally your company's other intellectual assets, including its intellectual property. So let's briefly explore how that's done, which is via a professional IP audit.

Auditing Your IP

Upon completing my professional IP audit, your company will thoroughly learn the status of its IP (and potentially, all of its intellectual assets). In particular, my professional IP audit will systematically review how well your company has been respecting its own, and other's, IP by:

- 1. Reviewing your company's IP-related practices, records and documents;
- 2. Inventorying IP controlled and/or used by your company;
- 3. Prioritizing your company's mission-critical IP;
- 4. Analyzing the scope, ownership, and vulnerabilities of that mission-critical IP;





EMPOWERING INTELLECTUAL PROPERTY

STEP 3 - SURVEY

- 5. Verifying that appropriate strategies, policies, and procedures are in place to optimize returns;
- 6. Identifying how you can mitigate liability for possible third party claims of IP infringement against your company; and
- 7. Recommending changes needed to optimize returns from your company's missioncritical IP.

My IP audits can help optimize your company's IP power by:

- 1. Identifying unrecognized or emergent IP;
- 2. Increasing the value of existing IP;
- 3. Reducing the costs and risks of third-party IP claims;
- 4. Building the value of products that reply on IP;
- 5. Identifying potential non-core revenue streams;
- 6. Inspiring additional revenue through core business licensing;
- 7. Increasing the value of corporate transactions;
- 8. Reducing costs of unused IP;
- 9. Suggesting tax deductions for IP donations;
- 10. Reducing new product development costs (product clearance);
- 11. Evaluating the IP of an acquisition or investment target (due diligence);
- 12. Assessing business direction and strength;
- 13. Revealing unappreciated business possibilities; and/or
- 14. Discovering business expansion opportunities.

It should be clear that my IP audits can offer considerable value to most companies. Drilling down a level, my IP audits also can benefit numerous interested parties, including:





EMPOWERING INTELLECTUAL PROPERTY

STEP 3 - SURVEY

Owners / Managers who are:

- a. Depending upon IP as a principal component of their company's value;
- b. Engaging in domestic or international commerce involving IP-based products;
- c. Considering an acquisition, merger, partnership, and/or joint venture with an IP-based entity;
- d. Managing the IP of a subsidiary or affiliate;
- e. Licensing IP from others;
- f. Licensing IP to others;
- g. Considering changing the tax status or accounting method for their IP;
- h. Experiencing market share erosion from knockoffs or pirated copies;
- i. Facing possible IP litigation;
- j. Selling an IP-based manufacturing or service organization; and/or
- k. Selling IP and/or IP-based assets.

Investors who are:

- a. Considering funding a start-up company;
- b. Financing an existing IP-based business;
- c. Considering accepting a security interest in IP;
- d. Entering a joint venture with an IP-based partner; and/or
- e. Underwriting a public offering of an IP-based company.

Buyers who are:

a. Acquiring IP and/or IP-based assets;





EMPOWERING INTELLECTUAL PROPERTY

STEP 3 - SURVEY

- b. Acquiring an IP-based manufacturing or service organization; and/or
- c. Purchasing a license to make, use, and/or sell a product or process.

The scope and depth of each IP audit typically will depend on its purpose. For example, as hinted above, my audit can be limited to IP, or can encompass intellectual assets more generally, thereby including know-how, trade secrets, and agreements.

As another example, my initial audit might be limited to a few items of particular interest, or might seek to identify and evaluate all of your company's IP, policies, and practices, so that a more comprehensive list of recommendations can be determined, prioritized, and explained. Based on the groundwork already laid, follow-up audits typically will become increasingly streamlined and focused. Occasionally, non-routine audits might be triggered due to changes in technical, market, or financial opportunities or needs, business or management directions, or the legal environment. Likewise, non-routine audits might be prompted by your company's need to train staff, reduce costs, enhance profits, prepare for litigation, or perform due diligence, such as for borrowing, lending, licensing out, licensing in, fund-raising, investing, divestiture, acquisition, or merger.

As you might imagine, I approach auditing with the same thoughtfulness and intensity that underscores all of my work. For example, my professional IP audits rely on my deep legal, business, and technical experience, much of which is reflected in my proprietary database of over 1500 audit checkpoints. As appropriate, I apply the most relevant of these checkpoints to systematically review how well each audited company has been respecting its own, and other's, IP rights.

My recommendations typically will include both general and specific remedial actions to protect and/or maintain your company's IP, increase its value, and/or avoid and/or minimize risks to that value. As warranted, I will suggest and clearly explain needed and easily-implemented improvements to your company's training, policies, procedures, agreements, and/or record-keeping.

Thus, with my professional audit results in hand, your company can thoroughly understand not only the current status of its IP (and potentially, all of its intellectual assets), but what



© 2011-2013 Michael Haynes PLC All Rights Reserved www.MichaelHaynes.com Updated 14 February 2013 Page 8 of 17



EMPOWERING INTELLECTUAL PROPERTY

STEP 3 - SURVEY

can and/or should be done to substantially and cost-effectively improve that status, and thereby add significant value to your IP portfolio.

Knowing where your company's IP stands is critical. But that knowledge simply isn't enough to optimize your intellectual property power. Instead, your company will need to grow, trim, and otherwise manage its IP and intellectual assets. Of course, growing IP requires innovating. But how should your company approach that challenge?

Listening to the Market

Undoubtedly, customers will provide you with feedback, such as questions, complaints, and suggestions, regarding your products and services. You can lean heavily on that feedback to direct your future innovations.

But in some cases, relying on customer feedback, and even certain forms of market research, can turn out to be a huge mistake, leading your company to chase unprofitable goals and/ or miss out on critical opportunities. But how can that be?

Henry Ford is quoted as saying that if he had asked his customers what they needed, they would have said "a faster horse". His perspective seems well-founded, particularly when considering that professional "market research" insisted that the total demand for computers would be 5 units, that copying machines would be unwanted because carbon paper would suffice, and that the Walkman would fizzle. Blatant market research failures such as these suggest a fundamental problem inherent in gathering and interpreting customer and market needs. That is, customers don't always recognize their fundamental needs or know the best ways to fulfill them, so any feedback obtained from customers must be very thoughtfully solicited, analyzed, and interpreted.

So rather than gradually collecting random feedback from your customers, over-reactively responding to whatever feedback emerges, or blindly depending on market research "experts" to tell you what to do, why not systematically and thoughtfully gather and analyze the market's real needs to identify for yourself its true innovation opportunity areas?





EMPOWERING INTELLECTUAL PROPERTY

STEP 3 - SURVEY

Although there are lots of techniques for determining market needs, here's one noteworthy approach ¹ that offers the benefit of identifying what customers are actually trying to get done, rather than focusing attention solely on what they are doing currently:

- 1. Select a particular market and/or product;
- 2. Identify an exemplary customer;
- 3. Identify an important task the customer **wants** to accomplish;
- 4. De-construct that task into a series of discrete process steps or activities;
- 5. Identify the metrics the customer uses to measure success in completing each of those activities;
- 6. Analyze the biggest challenges the customer faces in successfully completing each activity; and
- 7. Innovate solutions to those challenges (note that best practices for innovating are covered in detail in my free Guide, "Empowering Intellectual Property Step 4 Innovate").

Some of these items are self-explanatory, so I won't elaborate on them. But take a closer look at item 3, which tends to set the tone for the entire process. This item encourages a pronounced focus is on the customer's fundamental objective, rather than on what they are actually doing. This is a very meaningful difference from typical market research. What makes this perspective so meaningful is that it creates a climate for stepping back, thinking more abstractly, and considering alternative steps, activities, and approaches that might accomplish the same fundamental objective.

Now take a look at item 4. When de-constructing a task, it can be worthwhile to identify the specific activities (and even sub-activities) that correspond to each of the following generic activities, which tend to apply to all tasks:

- a. Defining what the task requires;
- b. Identifying and locating needed inputs;





EMPOWERING INTELLECTUAL PROPERTY

STEP 3 - SURVEY

- c. Preparing the actors, components, and task environment;
- d. Executing the task;
- e. Monitoring the task environment and the results;
- f. Maintaining, repairing, and making modifications; and
- g. Concluding the task.

To more easily de-construct a task, try starting with the execution step (d), and then identify the corresponding pre-execution and post-execution activities.

For item 7, when assessing a potential solution to the customer's challenge, try to ensure that the solution is worded in a manner that:

- identifies the most fundamental goal the customer is trying to accomplish; and
- applies to other customers performing that task.

Note that innovation opportunities can reside within any of the activities that are comprised by a given customer's task, and can target drawbacks related to efficiency, variability, and/or output quality. Also, keep in mind that throughout the task, problems can arise, requiring trouble-shooting to resolve. Innovations often can target such problems, eliminating them, recognizing them quicker, and/or solving them easier.

In summary, with this powerful market research approach, finding innovation opportunities hinges predominantly on understanding the customer's overall objective and how they will know they have succeeded.

Once you know some potentially fruitful areas for innovating, you are nearly ready to innovate. I outline a proven technique for consistently generating valuable innovations in my free Guide, "<u>Empowering Intellectual Property – Step 4 – Innovate</u>". But before you get started with cranking out the innovations, it can be helpful to know what innovations have already been discovered and published by others, even if those innovations haven't made it to, or survived in, the marketplace. As you might expect, published patent applications





EMPOWERING INTELLECTUAL PROPERTY

STEP 3 - SURVEY

and patents form the single largest and most thorough collection of innovation-describing publications. So that's where we'll turn our attention next.

Analyzing the Patent Landscape

In exchange for describing how to implement an innovative concept, a patent applicant can receive, via a granted patent, the legal rights to exclude others, for a fixed period of time, from actually implementing that concept in the country that granted that patent.

Thus, patent publications (i.e., published patent applications and granted patents) can serve at least 3 primary purposes:

- 1. provide teachings of how to implement new concepts;
- 2. warn others of the bounds of your company's innovative "turf"; and
- 3. guide your company in how to avoid trespassing on a competitor's protected turf.

The first of these, explaining implementation details for various concepts, can provide fertile soil for sprouting new innovations. For example, one can study patent documents in a specific field to help keep abreast of its developments, and to discover the limitations and likely problems associated with existing approaches. Via my advanced, patenting-pending, proprietary search tool, and/or using commercially-available search software, I am typically able to locate published patent documents that describe concepts of interest, or at least those patent publications that most closely describe the desired concepts.

The second purpose, warning others of your property rights, can be augmented by emphasizing the "patent pending" nature of your company's concepts in all relevant communications. For example, the moment you have filed any U.S. patent application that describes your innovative concept, you are legally permitted to mark your products that embody that concept with the phrase "patent pending". Moreover, from that moment, you are legally permitted to advertise your products and/or services that implement that concept with the "patent pending" notification. Such markings and notifications not only warn competitors, but also alert suppliers, customers, and potential investors and employees of your innovations and your dedication to protecting them.





EMPOWERING INTELLECTUAL PROPERTY

STEP 3 - SURVEY

The third purpose, helping your company avoid infringing other's patents, while somewhat more challenging, is nevertheless possible via careful monitoring of the patent landscape. I can provide a special "watch" or monitoring service that Guides, such as on a weekly or monthly basis, all patent publications that, for example, include specific keywords, are linked to particular competitors, and/or relate to defined subject matter classifications of interest.

Spotting Trends

Although I just described 3 primary purposes for patent publications, there are several other advanced uses for patent publications. Importantly, patent publications can serve as signals of emergent technologies, companies, and competitors. Fortunately, various analytical and visualization techniques have evolved to help spot those signals relatively easily. For example, similar to that described above, I offer a monitoring service that can provide your company with periodic Guides of new patent publications that mention a specific keyword, are classified within an identified technical field, and/or are associated with a particular company, innovator, or earlier patent publication.

Similarly, I can provide visualizations that compare information from patent publications across different points in time, thereby allowing important changes to be identified, such as trends regarding technologies, innovators, and/or patent owners. For example, by tracking innovators associated with patent documents linked to a given patent owner over time, I can identify not only that company's most prolific innovators, but also its emerging ones. I can even determine who in that company probably knows the most about a given concept. Such insights can be invaluable when seeking to attract the "best and brightest" to join your company or when trying to assess vulnerabilities in a competitor.

As another example, by tracking the concepts described in a competitor's patent publications, I can discern that company's strategic initiatives, including those of greatest threat to your company, often long before those strategies become apparent in the marketplace. Such timely awareness can allow your company to take appropriate counter-measures, such as innovating blocking concepts and filing patent applications that "wall-off" the competitor,



© 2011-2013 Michael Haynes PLC All Rights Reserved www.MichaelHaynes.com Updated 14 February 2013 Page 13 of 17



EMPOWERING INTELLECTUAL PROPERTY

STEP 3 - SURVEY

potentially encouraging them to abandon their threatening research and development efforts.

With that brief introduction, let's take a look at what else can be learned by studying various patent publications.

Discovering Future Relationships

Patent publications can be analyzed to help identify potential competitors, licensees, and/or infringers. For example, patent analysis software can identify parties who are very active in a given technical field, as well as those who are recent entrants, those who have fallen behind (and might need your help to get back in the game), and those who have pursued patents on concepts that are potentially complementary to yours. As hinted previously, analyzing patent documents can highlight prolific innovators, including those who have been willing to change employers in the past, thereby suggesting potential future hires. A careful analysis of patent publications also can suggest potential suppliers, customers, and/or acquisition targets.

For example, by tracking recent entrants to a field of particular interest to your company, I can help you spot innovative start-ups and small competitors that might make good acquisition or investment targets. Partnering with and/or purchasing such businesses, or licensing their innovations, can help you rapidly improve your product and/or service offerings, with much lower risks of R&D failures. Similarly, investing in such firms can provide you with opportunities to guide nascent technologies while earning above-market returns.

As another example, analyzing the patent publications of potential suppliers can help your company learn of potential solutions to long-standing market needs long before those suppliers are ready to offer completed solutions to the marketplace, including your competitors. Thus, by joining forces with such suppliers while they are still honing their innovations for the marketplace, you can guide the supplier to providing an optimized solution for your needs and those of your customers. Moreover, by gaining advanced notice of your supplier's innovations, you potentially can secure an exclusive licensing





EMPOWERING INTELLECTUAL PROPERTY

STEP 3 - SURVEY

arrangement with that supplier, possibly locking-out your competitors from accessing that supplier's most important innovations or from competing directly against your solutions that implement those innovations.

There is clearly a tremendous amount of potentially valuable information that can be learned from analyzing patents. Yet we still haven't covered perhaps the most valuable thing that a careful study of patent publications can teach – how to stay out of serious legal trouble.

Avoiding Infringement Traps

A careful and periodic review of the relevant patent landscape can help your company continuously identify those patents that your current and/or potential products and/or services might infringe. With such patents identified, further analysis, such as via my powerful, patent-pending, document analysis tool, can identify whether any patents of concern have sufficient vulnerabilities to allow you to proceed with much reduced infringement liability risk, or whether cost-effective design-arounds, or possibly taking a license, might be the more prudent approach. I also can research the litigation history of a given patent owner, to learn whether they are likely to ignore, negotiate with, or attack perceived infringers, thus informing your tactics for dealing with them.

For example, via my innovative software, I can analyze any of over 100 metrics, including numerous risks and benefits springing from the specifics of how a patent application was written and/or prosecuted (negotiated to issuance) in the USPTO. Simply stated, these metrics can have a huge impact on the value of the resulting patent. But this isn't just my opinion. To factually evidence their impact, I have linked these metrics to some of the many court cases that criticize the corresponding risky drafting and prosecution practices and punish the patents that demonstrate those risks. My ground-breaking tool includes a powerful search engine that can analyze nearly any patent document, such as a patent application or issued patent, for evidence of these metrics, and then grade that document accordingly, thereby providing a meaningful quantitative measure of just how severely the value of the corresponding patent has been compromised by how it was written and/or prosecuted.





EMPOWERING INTELLECTUAL PROPERTY

STEP 3 - SURVEY

Such information can prove invaluable for assessing your ultimate risk of being held liable for infringing that patent, and can greatly help with bracketing the potential damages if liability is found. Moreover, my innovative analytical results can help define the full range of design-around possibilities, helping you identify which are technically feasible and most economical, so that you can identify appropriate ways to compete without substantial risk of infringement liability.

Sometimes, my analysis indicates that a given patent has been written and prosecuted rather well, such that the risks of ignoring or designing-around it are unpalatable. In those cases, the vulnerability feedback provided by my innovative patent-pending software can help you (potentially with my help) negotiate much better licensing terms that if those vulnerabilities had not be systematically determined, documented, and explained.

Hopefully, you now know the importance of surveying your company's IP power, as well as that of others, and you have a greater appreciation for the some of the many valuable uses for that information. With that background understanding, you are ready to learn some best practices for innovating. So let's now take a look at my free Guide, "<u>Empowering Intellectual Property – Step 4 – Innovate</u>".

Free Tips

Like my free Guides? Then <u>click this link</u> to sign-up to periodically receive, via e-mail, my free Tips for empowering your intellectual property.

Disclaimer

This publication is intended for general informational purposes only, and neither the author nor the publisher represent, imply, or warrant that implementing its suggestions will necessarily enhance value, prevent claims, or preserve rights. For specific legal questions, consult experienced legal counsel, such as Michael Haynes PLC, to determine how applicable law relates to your specific facts or situation. Although all information presented here has been carefully researched, neither the author nor the publisher offer any representation or warranty as to its accuracy, completeness, or relevance. The author and publisher disclaim any implied warranties of merchantability or fitness for a particular purpose. Neither the



© 2011-2013 Michael Haynes PLC All Rights Reserved www.MichaelHaynes.com Updated 14 February 2013 Page 16 of 17



EMPOWERING INTELLECTUAL PROPERTY

STEP 3 - SURVEY

author nor the publisher shall be liable for any loss of profit or any other commercial damages, including but not limited to special, incidental, consequential, or other damages.

¹ Adapted from: *The Customer-Centered Innovation Map*, Lance A. Bettencourt and Anthony W. Ulwick, Harvard Business Review, May 2008.

