Protecting yourself against future patent litigation

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Summary

If you are reading this, it's likely you are now involved in a patent litigation. It may be that this is your first patent litigation, and everything is new territory for you. Worse, it could be that this is another patent litigation and you're frustrated, as you know it takes away valuable time, it's disruptive to the business, and takes money. You may have fewer options than others in your same situation because the plaintiff is an NPE (Non-practicing entity), in which case, a countersuit is not possible. It is also very likely, if you're reading this paper, that you have already engaged a law firm to help you with your case. This paper deals with companies in this predicament and how to enhance their position through various approaches to reduce risk.

The first thing to understand is "how did you get in this patent litigation situation?" Then, determine which actions to approach. We review many ways to reduce risk, including:

- Use financial analysis's sizing of the "patent litigation risk"
- Perform a "low cost" initial Freedom to Operate (FTO) analysis of your products or services
- Install a "low cost" Freedom to Operate "Robot" that continually analyzes your new products or services
- If FTO is a risk, be systematic and invent around the patents(s) and change the product or service to mitigate damages going forward
- If FTO is a risk, evaluate, find, and purchase counter assertion patents (if applicable – non-NPE Case)
- If FTO is a risk, perform an "invent on top of" the potential plaintiff and file new patents to be used for counter assertion (if applicable – non-NPE Case)
- Check out your website and make it patent litigation proof
- Check out your marketing presentations that are easy to search and find and make them patent litigation proof
- Implement a low cost Trade Secret Program to stop potential plaintiffs
- If there is FTO risk, engage a litigation defense "Guru" to help you manage the business, legal, product, CEO, Board functions – minimize disruption in business

Background

If you are reading this, it's likely you are now involved in a patent litigation. It may be that this is your first patent litigation, and everything is new territory for you. Worse, it could be that this is another patent litigation and you're frustrated, as you know it takes away valuable time, it's disruptive to the business, and takes money. You may have fewer options than others in your same situation because the plaintiff is an NPE (Non-practicing entity), so a countersuit is not possible. It is also very likely, if you're reading this paper, that you have already engaged a law firm to help you with your case. ***This paper discusses our twenty plus years of experience supporting companies in this predicament, to answer the questions, "how did you get in this situation?" and "how can you make sure it doesn't happen again***?"

How did you get in this patent litigation situation?

If you read the assertions made by the plaintiff, you can see that the plaintiff has done a damages analysis of how your products or services overlap with their patent claims. You may also see that the plaintiff has knowledge of your product or service and the sales you are doing. It's important to realize that no plaintiff will spend the time and money required for patent litigation unless they have sized up the "evidence of use" and the "damages" possible. However, what you don't know is how much in damages the plaintiff is expecting as a return. On the "low end exposure," this could be a nuisance suit to extract only small sums of money, where the plaintiff seeks to settle early and never expects to pay large fees. On the other hand, on the "high end exposure," the opposite could be the case, where the plaintiff is expecting to extract the largest amounts possible and they have calculated the probability of success and have gotten significant financial backing to stay in the game to seek this probabilistic success. Whether you are facing the "low end exposure" or the "high end exposure" or somewhere in between, you should take the time to ask the question, how did you get in the patent litigation situation? Here are some areas you can check out and fix, which will minimize the exposure to another patent litigation, and could help the current litigation.

Use financial analysis's sizing of the "patent litigation risk"

As we have discussed, any plaintiff will assess the damages available to them in the overlap to your product or service to their claims. In doing so, they assess your top line sales in the past, then they assume your revenue growth to estimate future sales. They then find the cost of capital in your industry and then use this to find the Net Present Value of your product or service. Next, they attempt to find a reasonable

apportionment of their claims in the product or service; for instance, a display of a cell phone is likely to compose 20% of the cost of the cell phone, and let's say the gorilla glass used is essentially 10% the cost of the display. If the plaintiff has a patent on the gorilla glass on a display used on your cell phone product, they will assume an apportionment of 20% times 10% or 2% apportionment. After the apportionment, the plaintiff is likely to evaluate average royalty rates of licenses, for example, royalty rates for licenses of protection materials for displays is 5%. **Now, we have a calculator to determine risk**.

Total past and future sales

Find the cost of capital

Calculate the NPV

Multiply the NPV by the product or service component apportionment

Multiply by the royalty rate

Result is the litigation exposure

It is fairly straightforward for a CFO to set up litigation risks by product or service component apportionments to identify the largest litigation risks. This analysis is used to determine areas of litigation risks on product or service components in order to determine where the subsequent Freedom to Operate analysis should be done.

Perform a "low cost " initial Freedom to Operate analysis of your products or services.

Initial "Freedom to Operate" (FTO) studies, done by an experienced professional, will take a product or service description and turn the important "components" (and likely novel components) elements or steps of the product or service into key words and run patent searches to find where the combination of the important elements or steps are found within patent claims. From this, a map or graph is made of each claim element or claim step to the related product or service "components." The more components of the product or service that map to claim elements or steps, the more likely the chance of infringement. However, many times, in our experience of doing numerous "freedom to operate" studies, it is fairly straightforward to know the FTO risks. Usually when there is significant overlap between claims and products or services, involvement of a patent attorney would make sense to provide a legal opinion.

FTO risk analysis should also be expanded to review the potential infringing patent owner's risk of a lawsuit. If they are an NPE with a litigation history, chances are they are a high risk. If the patent owner is a small university, there is likely no patent litigation risk. If the patent owner is a deep-pocketed competitor that is fighting in the market against your product, chances of patent litigation are likely. There

are many scenarios possible, so expertise is needed to assess the patent owner's proclivity for becoming a plaintiff.

In order to do an initial FTO at low cost, it should be understood that the initial FTO process above does not require legal analysis unless significant overlap is found. What is not usually know is that most FTO studies done by law firms use non-legal consultative expertise, at low cost, to perform an initial FTO study. The law firms then provide detailed legal analysis on the initial FTO results. So it is possible to lower your risk, at low cost, to do an initial FTO analysis, especially on products you feel are important to your company and are considered unique.

Install a "low cost" Freedom to Operate "Robot" that continually analyzes your new products or services.

Taking the results of the FTO above, use software applications available today to embed the FTO searches in an "FTO Robot" that searches the patent office weekly to find and then communicate to you, via email, any new patents that may have laid opened that could have predated your product launch. The reason why this works for new products or services released in the last eighteen months is because if your product or service was launched more than eighteen months ago, it becomes prior art to newly laid open patents (patents filed within eighteen months are held secret until laid opened). The FTO Robot can be programmed to email its finding(s) based upon (1) frequency, (2) closeness of the new patents claims laid opened to your product or service, (3) assessment of patent owner risk of becoming a plaintiff, etc.

If FTO is a risk, be systematic and invent around the patents(s) and change the product or service to mitigate damages going forward

If FTO risks are found, one proactive solution is to perform an "invent around" of the patent claims. If the claims are invented around, it would make sense to change the product or service going forward. Also, if the product or service is changed, it should immediately be changed in the website and marketing materials, as discussed below.

We have found that a best practice is to use professionals to assist in the invent around. For instance, we use an 18-point invent around checklist that usually creates a hundred or so invent arounds, within which we usually find some invent arounds that can be employed at a very low cost to modify the product or service. As an aside, not only may some invent arounds be used to modify the product or service at a low cost, they may actually produce better results and may even be patentable. Below is an example of several invent arounds when FTO risk is found.

Example of a claim element or method step	How description – easy to find "evidence of use" on your website	Invent Around
…a **wireless communication** device that detects the weakness of a **signal strength** in order to determine when to **alert** the **user** as a pending call failure, …	..our DetectWave applications first uses **WiFi**, and a detection algorithm monitors **signal strength,** when the signal goes below a threshold, the application sends a "**user alert**" …	Invent Around check list 1. Change the technology ..measure "**latency**" of a pulsed test signal (as a proxy to signal strength) and use this to alert user.
Acquiring from a stream of data of the **temperature** of the gas flow **inlet manifold**, and **measuring** in real-time the slope of the data, and send an alert when the slope of the data is **positive** and above a predetermined, …	..our SmartGasFlow device, that constantly **measures temperature** in the **inlet** gas **manifold**, and using a simple **slope** algorithm of the temperature data to create **alerts** when there is dangerous **positive** increases, …	Invent Around check list 5. Break into parts Use idea gas law (NV=PRT), determine for the manifold and gas the **pressure** that relates to the temperature and measure change of pressure to determine alert.

If FTO is a Risk, evaluate, find, and purchase counter assertion patents (if applicable – non-NPE Case)

If FTO risk is found and the potential plaintiff (patent owner) is not an NPE company, then it may make sense to be proactive and evaluate and find and purchase counter patent(s), if available. You may be able to do a deal to provide, for a smaller amount of money, a right of first refusal to buy the patent(s) at a pre-arranged price, exercised if you get into a patent litigation.

The first step in the process is to evaluate and find patents that can be purchased to counter assert against your *potential plaintiffs* (that is, the FTO risk you found). This is done by using the same FTO process, but we are assessing FTO with respect to the potential plaintiff's products or services against the patents that could provide the potential plaintiff's risk of being infringed. Luckily, the FTO process enables the finding patents on any of the products or services of the potential plaintiff, so there usually is a larger likelihood of finding patents that provide the potential plaintiff's FTO risk. Also, there are likely many patents that would be available from many types of companies.

Once these patent(s) are found, the best next step is to find third party experts to approach the patent owners to negotiate a purchase or first right of refusal, without divulging your company's identity. If successful, the next determination is to consider buying the patents and quickly re-assigning these

patents to your company's name. This is a strategy to lower risk so that the potential plaintiff may not assert, as they see your company has the ability to counter assert.

If FTO is a Risk, perform an "invent on top of" the potential plaintiff and file new patents to be used for counter assertion (if applicable – non-NPE Case)

If FTO risk is found and the potential plaintiff (patent owner) is not an NPE company, then it may make sense to be proactive and perform an "**invent on top of**" the potential plaintiff product and services and then file new patents to be used for counter assertion.

In order to perform an "invent of top of," it is many times best to find expertise to facilitate. The "invent on top of" process is used to create those needed inventions that the potential plaintiff may need in the future. This is done by doing research on the problems of the current products or services of the potential plaintiffs and also doing research as to the type of technologies that can be integrated as solutions.

As in the invent around, it's best to have hundreds of ideas from which to select the best quality new inventions that can be enabled and documented as patents. As before, quickly filing these patents and laying them open to your company's name is important to get immediate benefits. This is a strategy to lower risk so that the potential plaintiff may not assert, as they see your company has the ability to counter assert.

Check out your website and make it patent litigation proof

Many patent litigations start with patent owners doing systematic searches on the internet. We know this as we do many "evidence of use" (EOU) studies to find infringers. The "evidence of use" process takes each claim element or method step and links it to evidence, e.g., a hyperlink of a website, where that element or method step is described in the website. Within five minutes of work, you might likely find that your company has **specifically described a product or service** in a lot of detail. Many web designers and marketers think describing details of "how" your product or service works helps sell the product or service, but this is really not the case. You can describe your product or service "functionally" to get the point across and eliminate the teachings of "how" the product or service works. Below is an example of taking a "how" to a "function" making it nearly impossible to have found "evidence of use."

Example of a claim element or method step	How description – easy to find "evidence of use" on your website	Functional description making it difficult to find "evidence of use"
…a **wireless communication** device that detects the weakness of a **signal strength** in order to determine when to **alert** the **user** as a pending call failure, …	..our DetectWave applications first uses **WiFi**, and a detection algorithm monitors **signal strength,** when the signal goes below a threshold, the application sends a "**user alert**" …	…our DetectWave application that ensures the user will always be able to manage potential call failures in the many situations where calls get impacted from disconnecting…
Acquiring from a stream of data of the **temperature** of the gas flow **inlet manifold**, and **measuring** in real-time the slope of the data, and send an alert when the slope of the data is **positive** and above a predetermined, …	..our SmartGasFlow device, that constantly **measures temperature** in the **inlet** gas **manifold**, and using a simple **slope** algorithm of the temperature data to create **alerts** when there is dangerous **positive** increases, …	..our SmartGasFlow device that ensures safety of the gas delivery systems, ensuring overheating doesn't occur, as the user will always be informed of such potential situations…

Fixing your website requires expertise that can (1) find "how" language, and then (2) translate the "how" language to "functional" language. **This will allow you to stop "advertising" to potential plaintiffs.**

Check out your marketing presentations that are easy to search and find and make them patent litigation proof

Many patent litigations also start with the patent owner's doing systematic searches on the internet of marketing information (e.g., press announcements, technical presentations by engineers and business leaders, etc.). We know this, as above, as we do many "evidence of use" (EOU) studies to find infringers. The "evidence of use" process is similar to website analysis in that the potential plaintiff will link each claim element or method step and relate it to find evidence, e.g., a marketing announcement or technical presentations, where that element or method step is described in the marketing material. Within a short period of time, you might likely find that your company has specifically described a product or service in a lot of detail in marketing materials. As above, most marketing materials show details of "how" your product or service works to help sell the product or service. However, as above, you can describe your product or service "functionally" to get the point across and eliminate the teachings of "how" the product or service works.

Protecting yourself against future patent litigation

Implement a low cost Trade Secret Program to stop potential plaintiffs.

One powerful Intellectual Property (IP) process, trade secrets, is usually not well understood and in most cases never installed in a company. However, we have seen, over the last five years, more and more companies wanting a trade secret audit and then an installation of trade secret processes. Although there is not enough time to describe a low cost "best practice" trade secret process, one thing that a trade secret process does is that it finds the key "how things run" elements or method steps of your product or service and hides them, that is, it ensures these secret "hows" are not on any website or marketing material and even stops employees from discussing them outside the company. By doing this, you are lowering your risk of being brought into a patent litigation.

Another key aspect of a trade secret process is redesigning (if possible) a product or service to take the specific "how" of a product or service and hide it from reverse engineering. The table below is an example of redesigning a trade secret so it is hidden from a potential plaintiff.

Example of a claim element or method step	How description – easy to find "evidence of use" on your website	Recommendation to redesign the product or service to by trade secret.
…a **wireless communication** device that detects the weakness of a **signal strength** in order to determine when to **alert** the **user** as a pending call failure, …	..our DetectWave applications first uses **WiFi**, and a detection algorithm monitors **signal strength,** when the signal goes below a threshold, the application sends a "**user alert**" …	For the DetectWave application provide a "proprietary analysis" (and encrypt the algorithms analysis of signal strength) for caller communications.
Acquiring from a stream of data of the **temperature** of the gas flow **inlet manifold**, and **measuring** in real-time the slope of the data, and send an alert when the slope of the data is **positive** and above a predetermined, …	..our SmartGasFlow device, that constantly **measures temperature** in the **inlet** gas **manifold**, and using a simple **slope** algorithm of the temperature data to create **alerts** when there is dangerous **positive** increases, …	For the SmartGasFlow device send the temperature sensor data to a "proprietary analysis" module in the cloud, where the algorithms analysis of slope are encrypted.

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If there is FTO risk, engage a litigation defense "Guru" to help you manage the business, legal, product, CEO, Board functions – minimize disruption in business.

Given the complexities of the many areas of expertise, if FTO risk is found or you are involved in a patent litigation or you have been in a patent litigation, it may be useful to engage expertise (i.e., a Guru) to assist in many of the opportunities to lower the risks discussed above. Almost all the opportunities to reduce risk we have reviewed are non-legal actions that can ride along and be enhanced with legal advice.