

Let's get started: Freedom-to-Operate (FTO)

Your new product or service integrates new ideas with old ones. You're excited about the new ones, but you probably haven't given much thought to the old. They are just the pieces that you need to complete the puzzle. But what if some of those ideas - old or new - are already patented by someone?

Even if you have your own patent, you don't have the right to infringe other patents. And even if IP doesn't seem important to your business, you could still infringe someone's patent.

A freedom-to-operate (FTO) review helps you find and avoid possible trouble, before it finds you.

Types of FTOs.

Searching is imperfect by nature, so your FTO should use each type to be robust:

1. **Competitor-focused:** looks for patents filed by a particular competitor. Your competitors will be watching you closely, so you should know their patents.
Pros: usually easy to find a particular company's patents.
Cons: won't find anyone else's patents that might be a risk.
2. **Feature-focused:** keyword searching around an important new feature of your product or service. If your product or service has more than one important new feature, it's best to search each feature individually.
Pros: more likely to find patents relevant to a target feature.
Cons: more difficult to do than a competitor search.
3. **Brand-focused:** searching trademarks databases in countries where you want to do business helps you find and avoid brand problems.

Search tips.

A few things can help reduce the chance you will miss relevant patents:

- ❖ **Variations in terminology.** Search all relevant industry terminology, including regional variations. The Boolean OR is your friend.
- ❖ **Avoid tunnel vision.** When using a microscope, you start with a low magnification and then zoom in. It's the same here - start with a broad search (i.e. less search terms, or less specific terms). That will usually provide a large result set, so narrow it progressively adding one term at a time. But if your search has few or no hits, try removing search terms one at a time to reduce your "magnification".
- ❖ **Be non-linear.** Not all patents are written the same way. Use a variety of search terms and strategies, and take a branched approach trying different options. Don't just follow one strategy.
- ❖ **Patent fields.** Patents have lots of words, but it's only the patent "claims" that matter for infringement. But searching the claims is difficult because they use legalese. One way to improve your search without adding more terms is to use the option to search only the Claims, Abstract and Title fields of the patent.
- ❖ **Patents last only 20 years.** Those older than 20 years are probably expired, and not possible to infringe anymore. You can feel comfortable ignoring them in an FTO.
- ❖ **Patents are national.** Each country has its own patents. But it's hard to search everywhere. The US has the most patents and the biggest market, so it's essential your FTO considers US patents. You can search only the US, then check to see if any you find are also in other countries. It is best to search all countries, but it's also reasonable to focus first on the US to help control costs.
- ❖ **Patents versus published applications.** Patent applications are published before the patent is granted. The patent is published again when it is granted. Patent databases have both documents, and the main difference is in the claims. The two documents may have the same or different publication numbers.
- ❖ **Mind the gap.** Patent applications only publish 18 months after filing, making it impossible to find those filed in the last 18 months. The only way to address this blind spot is to re-run your searches, preferably 3-4 times per year.

- ❖ **Document your searches.** Keeping a record of your search strategies makes it easier to re-run them. It also allows your IP professional to assess and spot gaps.
- ❖ **It's all about the claims.** Patents are written very broadly at their start, so you have to read more than the first few lines. Actually, it's only the patent "claims" (numbered paragraphs at the end) that define the legal scope. So, for an FTO, you really only need to read the claims.
- ❖ **Claims are like a recipe.** Patent infringement occurs when someone copies the entire "recipe" of at least one claim. But the claims use legalese that's hard to read, so the description and drawings can help you understand the claims. But infringement is a legal question, and you definitely also need the help of a qualified IP professional.

Seek professional help.

If you find any patents that seem close, it's time to get advice from an IP professional on the possible legal consequences. They will also be able to help you decide if your search was robust enough.

You know your technology well, but you're not a patent search expert. Reviewing your search with the IP professional will allow them to spot gaps. They may suggest to have a professional do additional searching – which may make sense if your searches did not turn up many relevant patents.

For the patents found, if the IP professional confirms that they are close to your technology, the IP professional may suggest one or more of the following options:

- ❖ **Monitor the patent application:** if it's not yet a granted patent, it's possible that the patent office will force the claims to be narrowed, meaning that you might avoid the patent without doing anything;
- ❖ **Non-infringement legal analysis:** confirm (if possible) that you will avoid the patent or patent application because you don't have all the elements of any claim;
- ❖ **Modify your product or service:** make changes so you don't have all the elements of any claim;
- ❖ **Negotiate a license:** if the patent owner isn't your competitor, they may agree to allow you to use the patent, for a fee; or
- ❖ **Challenge the patent:** courts can declare patents invalid if the claims cover something that already existed or was published before the patent filing date. But this is expensive and not an option for most startups.

No one is perfect. Not even your FTO.

The term "freedom to operate" is a little misleading because no FTO is perfect, meaning that you'll never know if you have complete "freedom" to use your technology. FTOs can never be perfect because:

- (1) You can't find everything: more searching could always find more patents, and new patents are publishing all the time; and
- (2) The world is full of gray: patents describe technology in words, which often leaves room for interpretation. The risk a patent poses won't always be clear.

But a well-done FTO will usually find the biggest and most obvious risks, and provide enough information to allow you to assess your risks and respond appropriately.

Not time to cut corners.

If there's a patent out there blocking your business, the sooner you know about it the more time you have to react. Yes, cash is probably tight. But spending it on other things without knowing if your business has any hope of survival isn't wise either. This is an essential expense.

Doing your own robust searching and attempting to analyze the results before you engage your IP professional is the best thing you can do to help control costs.

Depending on the complexity of your technology, the IP professional you choose, and the number of close patents you find, a startup can often accomplish a basic FTO on its core business concept (i.e. one feature) for US patents for under \$15,000. Even if you don't have that much to spend now, you can start on the process and complete steps in phases. Certainly, you can start your own searching right now.

Your professional might recommend more comprehensive searching – either more searching on the feature(s) you already searched, or searching different aspects of your technology or business. In the early stages of your business, you probably only need something simple and focused on your core idea(s). Not everyone needs the Ferrari option.

Completing your FTO with an IP professional review also shows investors you have a savvy business strategy.

Free search tools:

Patents (each allow search patents in many countries)

- ❖ Espacenet: (<https://worldwide.espacenet.com>) operated by European Patent Office.
- ❖ Patentscope: (<https://patentscope.wipo.int/>) operated by the World IP Organization.
- ❖ Google Patents: (<https://patents.google.com>) **Note:** if Google is a potential competitor for you, it may be better to use one of the other search tools.

Trademarks

- ❖ US Patent and Trademark Office (<https://www.uspto.gov/trademarks/search>)
- ❖ Canadian IP Office (<https://www.ic.gc.ca/app/opic-cipo/trdmrks/srch/home>)