

What is freedom to operate?

To put it simply, freedom to operate (FTO) is a risk assessment to help businesses understand IP risk and evaluate competitor's patents.

Businesses conduct FTO searches to understand whether other companies have patented similar technologies and, if so, how they can amend theirs to get to market with a valid patent.

There are different ways companies can conduct FTO searches including:

- Use patent search tools
- Work with in-house counsel
- Outsource to law firms

The method chosen depends on which stage of the product development process a product is in; FTO searches can – and most certainly *should* – be conducted throughout all stages of the product development cycle, including the ideation, product development and commercialisation phases.

Great move downloading this eBook – even better, find out how the PatSnap platform enhances innovation ROI (once you're done reading).

Request a demo

Why should I do a patent search?

The earlier you search for patents, the fewer problems later when you have developed the product. By doing a simple search at the ideation stage, you can identify possible gaps in the market and track competitors.

Often inventors will have an application pending but may not have taken their product to market, so it can be difficult to know about these technologies without a patent search. Inventors need to search for all possible patents whether they have been applied, pending or granted.

Most companies are aware of their direct competitors yet other companies may be innovating in a space that isn't necessarily their primary market. Goodyear, for example, a company known for manufacturing tyres, license their technology to the food packaging and medical industries¹.

Similarly, if your competitors are moving into a different technology space, by searching for their patents you can identify technology trends and potentially predict a new, lucrative adjacent market.

Considering litigation around those patents is important as it indicates the factors that you should be aware of when filing a patent. If a patent has been denied, it is important to understand why to avoid making the same mistake.

If a patent has been denied, it is important to understand why to avoid making the same mistake.



Where should I search?

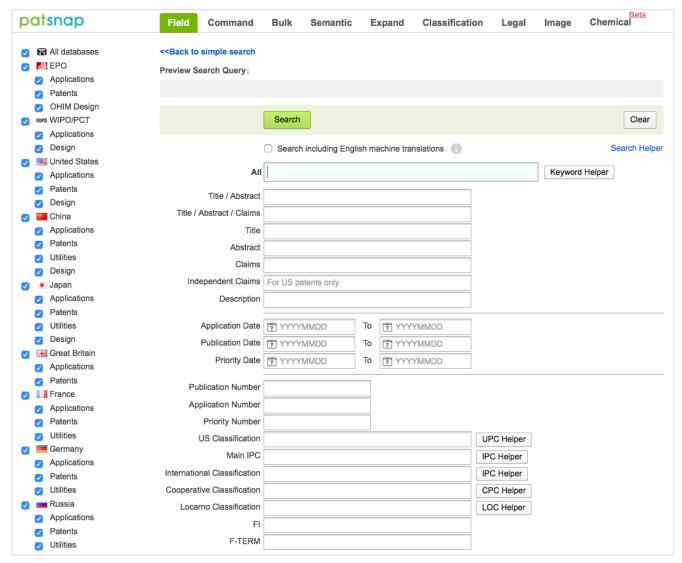
You need to consider where you are filing a patent - patents are only valid in the countries you file them in. Therefore, if you are considering patenting in more than one country, it is important to check each country's patent database to ensure you are not infringing on another patent. If you do come across a patent in a jurisdiction that you potentially might be infringing on, it would be a good idea to patent in another jurisdiction if there is a gap in the market for it.

What do I search?

Search criteria should include assignees, licenses and the international classification codes. By searching assignees, you can identify all the patents that a company and its subsidiaries own.

License agreements indicate how beneficial a market is; if there are many licensing opportunities, the technology is in demand.

If you can further develop a product with a unique advantage, it may be a lucrative licensing opportunity.



(Example of patent search criteria: Source - PatSnap)

FTO is also important after commercialisation. If you find someone else developing a similar technology, for example by citing your patent, there may be an opportunity for licensing.

By knowing the international classification code of your technology, you can search for other technology in that space and for technologies in alternative markets.

When should I do a patent search?

As mentioned earlier, FTO is important at every stage of development. It is better to identify gaps and possible competitors during the early stages of development to avoid needing to redesign everything a few weeks before product launch if the patent will infringe.

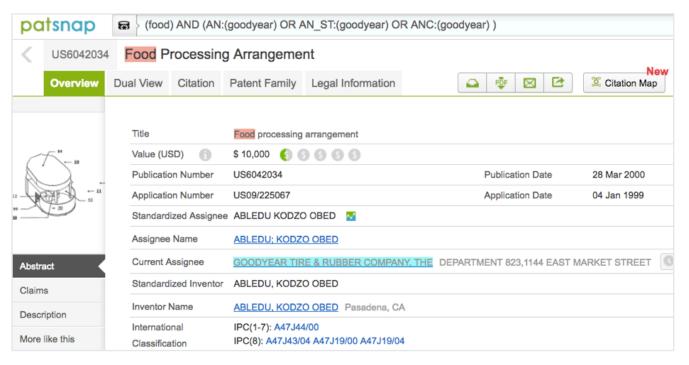
FTO is important at every stage of development.

Throughout the process, keep track of the patents in your space.

If there is a technology that you cannot patent, think how you could use that technology in another market.

This patent would be granted for new uses and could even prove more profitable thanks to less competition.

The Goodyear example mentioned above is obviously far removed from their own industry yet allows the company to generate revenue in secondary industries of food processing and medicine and is even cited in a third, personal care manufacturing.



(Goodyear patent in the food industry: Source- PatSnap)

How do I find a relevant search result?

Consider the key features of the product, what gives your product a competitive advantage? Which aspect of your product differentiates you from your competitors?

It is this key difference which needs protecting.

Once you have identified the valuable component, conduct a freedom to operate search on that component to see whether any competitors are also using that technology and if you can patent that within the process. If there aren't, great, now you need to understand if it will add value to your customers. Spending a huge amount of money on FTO to develop a product which provides no value for your customers doesn't make sense.

If a competitor does have similar technology, you will need to redesign the product and consider how the process or the method can be changed in the claims to avoid infringement and ensure freedom to operate.

In-house vs outsource

All companies must decide whether to use in-house tools, in-house legal counsel, an external legal firm or a combination.

There is no universal answer.

Some companies prefer R&D teams to personally use patent search and analysis tools as their in-depth knowledge of the technology allows them to search for the most relevant results.

It can be time consuming – and frustrating – for inventors to have to ping pong between R&D and legal departments for each and every FTO search. By empowering inventors to search for patents, it allows them to identify exactly which patents are relevant and filter out the patents that are not.

By empowering inventors to search for patents, it allows them to identify exactly which patents are relevant and filter out the patents that aren't.

Other companies have specialised legal counsel who work with inventors during early stages of development. This is a great way to conduct FTO searches as when legal teams are involved during the early stages they can give more insight on how to protect technology effectively throughout the ideation and product development phases rather than after the product has been developed when it may be too late.

Some companies outsource all their patent searches to specialist IP firms who can regularly conduct searches and send reports on new patents in a technology area.

Using a combination of these can become very costly. It's important to consider which aspects are more valuable at each stage during development. Some companies may find it is better to use a tool or involve the legal team at the early stages of ideation and only involve an IP firm when patents are ready to be filed.

Hope you're enjoying reading – if you want to learn how to apply this knowledge on the PatSnap platform, request a personalised demo.

Request a demo

Consider legal fees

Legal fees can quickly become an issue when it comes to patent searching, an issue obviously more perilous to smaller businesses with tighter budgets. Despite the tighter budgets with more crucial outgoings, correct and regular FTO searches are even more important for smaller businesses who could be forced out of business from one lawsuit.

According to IP Watchdog², attorney fees for filing patents are (typically):

- \$5,000 (£4036) for extremely simple patents
- \$16,000 (£12,913) for highly complex patents; filing fees for software related patents are considerably more.

For a patent search opinion:

- The simplest patent can cost \$1,000 (£807)
- A complex patent can cost \$2,500 (£2018)
- A software related patent can cost \$3,000 (£2421).

Best practice for all businesses is to conduct a preliminary search during the early stages of development either using free online tools or subscription tools. This way you have the freedom to search unlimited data without worrying about how much you will be charged for each FTO search and gain an effective understanding of competitors and gaps in the market. Once you start developing a product, ensure you liaise with your legal team or external counsel to do an in-depth freedom to operate search.

Best practice for all businesses is to conduct a preliminary search during the early stages of development.

Free tools vs paid

Free tools usually provide basic patent searching with limited analysis but they can be a great way to begin a new development cycle. With subscription tools, the ability of analysis offers greater insight for targeted development such as searching for similar patents in your technology space or finding alternative markets for that technology. Some subscription tools can send alerts and reports every time there is a new technology in the field you have an interest in. This cuts down the legal costs of an external attorney sending reports.

How do I maintain my freedom to operate?

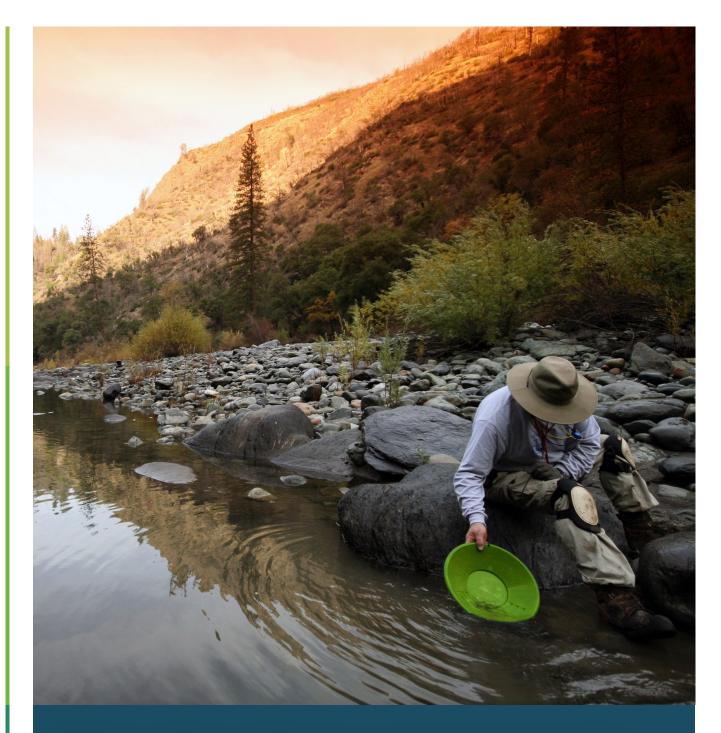
Once you know you have freedom to operate, file the patent application as soon as possible – first to file will often prove the most crucial factor in any potential disputes. There may still be some changes in your development, a provisional patent will provide initial protection with the final version forming part of an amended application for a non-provisional patent.

In both the UK and the US, there is a grace period which is intended to prevent others from filing patents for similar technologies. The earlier you become aware of changes in technology, the more time you have to develop your position and create a stronger patent.

If you do find that you don't have freedom to operate, IP analysis can help you identify potential partners and open doors for licensing technology or acquisitions.

Summary

- Search for patents throughout development
- Work with legal counsel to support the application process
- Identify the competitive feature of your technology and search for that
- File as early as possible
- If you don't have FTO, redesign the product



Where will you find your next opportunity?

About PatSnap

PatSnap is the leading provider of Intellectual Property Analytics, for analysing tech trends, driving innovation, market planning, competitor intelligence and maximising return on IP assets. Founded in 2007, PatSnap is used by R&D, business and IP professionals in thousands of commercial and not-for-profit organisations globally, including NASA, the Department of Defense, China Mobile, Goodyear and Vodafone. With a database of over 121 million patents, augmented by economic, legal and company data, we use proprietary machine learning technology to make IP work for all, including those with no IP experience. We have offices in London, Los Angeles, Singapore and China.

Find out more: patsnap.com