



Freedom to Operate

"Freedom to operate", or "FTO", is usually used to determine whether a particular action, such as testing or commercialising a product, can be done without infringing valid intellectual property rights of others.

Clearly an implication is whether the patents covering a specific technology do not infringe others' technology but less obvious is whether the patents covering the technology in question allows you freedom to exploit the technology for a given application or in a given market.

NuAge Vision's approach is holistic in as much it covers more than just patent infringements but includes the ability to exploit the claims of the patent for value creation.

Just because a technology is covered by an array of impressive patents does not mean that the technology can be commercialised and exploited in a useful way.

Dr Pete Hotten, founder of NuAge Vision Ltd explains this with a series of articles. In the first (below) he covers FTO from a purely IP standpoint and will be following this up with an article which looks at the market and applications of the technology in terms of FTO.

Freedom to Operate (Intellectual Property Aspects)

A commentary on aspects of intellectual property that should be considered before investing in an activity that tests or commercially exploits assets that could be subject to intellectual property rights

This commentary is limited to intellectual property aspects and does not address 'market' considerations. Clearly for a business to be successful there has to be a market for its products and/or services. So even where it can be established that there is freedom to operate from an intellectual property perspective it has to be the case that one also understands the market need for the proposed products or services before it is sensible to invest.

Intellectual property

Technical inventions can be patented, plants and seeds can be subject to plant variety rights, written works can be copyrighted, the look and design of an object may be subject to design rights; all of these examples, and there are others, e.g. trademarks, indicate the scope of things that can be covered by intellectual property rights (IPR).

IPR are legally enforceable rights of ownership. They are typically owned by the person or organisation (could be a company or university for example) that first 'invented' or developed the asset being protected.

This article focuses on patents. A patent is a form of IPR that has been developed to cover inventions. Typically inventions that can be patented are technical in nature. To obtain a patent, which is a government authority or licence conferring a right or title for a set period, the applicant has to show the invention meets certain criteria, e.g. it is novel, i.e. not previously known, and has utility, i.e. a use.

A **Freedom to Operate (FTO)** search is an activity usually designed to determine whether a particular action, such as testing or commercialising a product, can be done without infringing valid intellectual property rights of others.

[Because one has a patent it doesn't automatically mean you have the right to use the patented invention!](#)

The above statement is sometimes a surprise to patent owners. It is true because owning a granted¹ patent provides a right to exclude others from making, using, or selling an invention; it does not provide a right to use the invention.

The rights that come with owning a granted patent are directly related to the claims² set out in the patent and if a third party uses or commercialises the patented invention in a way that that has been 'claimed' then they will be infringing and the patent owner will have a right to stop them or request

¹ There are several stages involved in applying for a patent before it may become a granted patent, i.e. one assumed to be valid. Only granted patents can be legally asserted.

² The claim set of a granted patent comprise one element of the complete patent document and they will relate to those elements of the claimed invention that the patent examiner considers to be novel and protectable.

a that the third party agrees to a licence, i.e. a contract through which the patent owner will get consideration, to continue to use the invention.

How is a freedom to operate search done and what will the information gained tell you?

Patents are public documents and are recorded on publicly accessible databases. However there are literally millions of patents that are either currently in force or which have expired³. To initiate a patent FTO search one needs to:

1. Know what the relevant databases are and how to access them
2. Understand how to interrogate the patent databases
3. Understand how to interpret the results gained from FTO activity
4. Have a good understanding of what precisely the nature of the invention is that one is seeking

NuAge Vision has expertise in the first three of the above. The fourth point will be specific to any given search. The key to starting an FTO search is to create a set of key words that describe the invention of interest and to then interrogate the patent databases to see what patents exist that map against these key words.

Key word searches need not just be based on technical aspects but can also be based on, for example, names of companies and/or inventors that may be active in the field of interest. Patents can be searched by several different search patterns.

A typical FTO search normally requires several search patterns to be used in order to identify the most relevant patents of interest. A key component of the FTO activity is a thorough analysis of the claim sets in these patents. As each claim set analysis can be complex it is important to limit the number of such analyses to only the most relevant documents otherwise the time taken for an FTO project will become excessive. It is only if all the aspects of a single claim, in any current and granted patent, correspond to the invention that the FTO search is analysing is there then a possibility that infringement is an issue that needs careful consideration.

Importantly it must always be remembered that IP rights are specific to different jurisdictions. Therefore only patents granted in the particular countries or regions where you want to operate may be relevant. It may well be the case that commercialising a product, e.g. a new form of heater, in one country has no freedom to operate issues BUT this may not be true in another country.

If through an FTO search one discovers a patent document that seems to relate to the action for which you are seeking FTO, you can't immediately conclude that there isn't FTO. It is a skilled job to fully interpret the scope of a specific patent and how, if at all, your proposed activities may infringe.

An FTO search is never complete! Patents are complex and new ones are continually being applied for or granted. There are, as said above, literally millions of patents and there is always a chance that the key word search patterns one uses fail to pick up some relevant patent documents. A FTO search

³ Knowing about expired patents can be important because although they cannot be asserted it means that the inventions they cover are in the public domain and therefore cannot be the subject of new patents, i.e. the inventions in expired patents can be freely used by anyone.

can be done in one day or more complete searching can take weeks. In designing the search and committing a certain amount of time and effort one needs to appreciate the value of the data that will be obtained. There is always useful data gleaned from an FTO search that can be used to help take decisions and therefore they are recommended as standard practice when commercialising technology.

NuAge Vision can advise on what can be expected from any given FTO activity and can also do FTO searches for clients. It will always be an essential precursor to any FTO project to be absolutely clear what the objectives of the FTO search are so that all FTO activity is properly focussed.

Typically a FTO report would look a lot like this example of an FTO performed for one of our clients:
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