What is a patent?

A patent is a right granted by a national or regional intellectual property authority for any device, substance, method, process or system that is new, inventive and useful. Patents will not be granted for artistic creations, discoveries, mathematical models, plans, schemes or purely mental processes.

The traditional rationale behind the granting of patents is that they serve as an incentive for innovation. Patents require disclosure of the means for production of the protected invention, which is rewarded by the granting of a time-limited monopoly. A key challenge for the patent system is to ensure that the grant of such monopolies fosters research and development while at the same time enabling patent holders to benefit from their innovation and investment.

The rights granted by a patent are not automatic. You must apply for a patent grant, which can be expensive and annual fees are payable for maintenance of the rights granted. Patents are limited monopoly rights that subsist up to the maximum period of protection granted under law, which in most countries is 20 years.

Patent rights are territorially limited to the nation in which they are granted. There is no such thing as a single world-wide patent. Whilst there are administrative processes for applying for patents throughout the world, you must apply for and have granted a patent in each country where you want to exercise exclusive rights in the invention.

After the patent has expired any person can use the invention, and can benefit from the disclosures that you have made in your patent application. Furthermore, anyone can access the disclosed information and produce and market the protected invention in any country in which a patent has not been sought or granted, without restriction.

This means that it is important for inventors to decide whether patenting is the best option. An inventor may prefer to protect the invention as a trade secret. If they decide to maintain that secrecy, they will be able to prevent any person from gaining an advantage for as long as the secret is kept. Protection of trade secrets is not limited to 20 years.

Another alternative is to openly use and publish details about an invention. This will prevent someone else obtaining a patent for the same thing, but will also allow others to freely use that invention for their own purposes.

Criteria for patent protection

To successfully register a patent, an invention must satisfy a number of criteria. The most important are:

- Novelty
- Inventive step
- Utility (usefulness or industrial applicability)

An invention is novel if the invention has not been publicly disclosed prior to the date of the patent application anywhere in the world, whether by doing an act or in a document. This means that it is very important that if inventors talk to employees, business partners or advisers about your invention before a patent application is filed and published, they do so only on a confidential basis. Written confidentiality agreements with these people are strongly recommended.

You can conduct “reasonable trial or experiment” on your invention prior to filing a patent application without destroying novelty, but care needs to be taken in doing so. It is strongly recommended that inventors obtain specific advice about any research trial, particularly if the trial is taking place in public (for example, in a privately owned, but publicly accessible, pasture).

In some countries there is a “grace period” that can assist in maintaining novelty, even if there has been public disclosure. However, a grace period is not a general strategy for publicly disclosing an invention before filing a patent application. The lack of uniform grace period requirements around the world may mean a patent application that relies on a grace period in one country may be invalid in other countries. Third parties who use an invention in the grace period and before a patent application is made will retain their rights to use the invention.

Even if the invention is novel, it will not be valid unless it is also “inventive”. This means that the
invention must not be an obvious step to take or thing to try in order to solve a known problem. This is judged according to what a non-inventive skilled person in that field would try if faced with that problem. For example, the combination of two things that have known properties, and are known to act in a particular way, may be novel if that combination has never been tried before, but it will not be novel if the result only produces something that acts in the same known ways but in combination.

**Patent holder’s rights**

The owner of a patent has the exclusive right to commercialise the invention in the country in which patents are held for the life of the patent (ie usually 20 years). In return, you are required to fully disclose the invention to the public, so that others can learn from your invention (and use it when the patent expires).

**Defences**

A patent is only infringed if it is valid (see above) and the infringement takes all of the essential features or integers of the invention as claimed. For example, if a patent claims 5 essential features (which gives it its novelty and inventiveness), another product or process that takes 4 of those 5 features will not infringe the patent.

Patent laws in many countries includes a ‘research exemption’ that allows researchers to carry out experiments on a patented invention without infringing.

In many countries, use of an invention by a government, a government authority or a person authorised in writing by the government will not infringe a patent (although compensation is sometimes payable to the patent owner).

**Patents and plant breeder’s rights**

In some countries it is possible to protect plant varieties under both patent law and plant breeders’ rights. However, there are important differences between the two regimes. For example, there are defences available under the plant breeder’s rights scheme (eg farmers privilege to collect and use farm-saved seed) that are often not available under patent law.

There are a number of different types of intellectual property professionals who can offer advice and assistance, including registered patent attorneys or agents, patent lawyers and search firms. The services they provide vary from professional searches of intellectual property databases, to advice on protecting or commercialising your patent rights.

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This fact sheet was produced as part of a collaboration between the CGIAR Consortium and the Australian Centre for Intellectual Property in Agriculture (ACIPA) to research international intellectual property issues relating to agriculture.

This fact sheet is for information purposes only. It is designed to assist in general understanding of legal rights and obligations: It is not tailored to any particular fact, situation or requirements and should not be relied upon for legal advice.