



Building a Competitive Edge: Protecting Inventions by Patents and Utility Models

Training of Trainers Program on Management of Intellectual Property Asset for Small and Medium-sized Enterprises (SMEs)

Addis Ababa, July 21 to 23, 2015

Anil Sinha, Head
Small and Medium-sized Enterprises (SMEs) Section, WIPO

What is an Invention?

- An invention is generally defined as a new and inventive solution to a technical problem.
- It may relate to the creation of an entirely new device, product, method or process, or may simply be an incremental improvement to a known product or process.
- Merely finding something that already exists in nature generally does not qualify as an invention; an adequate amount of human ingenuity, creativity and inventiveness must be involved.

What is an Invention?

- While most inventions nowadays are the result of considerable efforts and long-term investments in Research and Development (R&D), many simple and inexpensive technical improvements, of great market value, have yielded significant income and profits to their inventors or companies.

Simple Inventions



- Paperclips
- Post-Its
- Rubber bands
- Stapler
- Sticky Tape
- Lego
- Fruit Juicers / Citrus Juicers



What is a Patent?

- A patent is a **powerful business tool** for companies to gain exclusivity over a new product or process, develop a strong market position and earn additional revenues through licensing.
- It gives its owner the **exclusive right** to prevent or stop others from making, using, offering for sale, selling or importing a product or a process, based on the patented invention, without the owner's prior permission.
- A patent is an exclusive right granted by the State for an **invention** that is **new, involves an inventive step** and is **capable of industrial application**.

What is a Patent?

- A patent is granted by the **national patent office** of a country or a **regional patent office** for a group of countries.
- It is valid for a limited period of time, generally for **20 years** from the date of filing of the patent application.
- A patent is a **territorial right**, limited to the geographical boundary of the relevant country or region.
- In return for the exclusive right provided by a patent, the applicant is required to **disclose the invention** to the public

What can be patented?

- An invention may be patented provided it:
 - Consists of patentable subject matter
 - Is new (novelty requirement)
 - Involves an inventive step (non-obviousness requirement)
 - Is capable of industrial application (utility requirement)
 - Is disclosed in a clear and complete manner in the patent application (disclosure requirement)

What cannot be patented ?

- Examples of some of the subjects that may be excluded from patentability (depending on national laws):
 - Discovery, scientific theory or mathematical method
 - Diagnostic, therapeutic and surgical methods of treatment for humans or animals
 - Plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes.
 - Literary, dramatic, musical or artistic work, or any aesthetic creation
 - Mere discoveries of substances as they naturally occur in the world
 - Inventions that may affect public order, good morals or human, animal, plant life or health
 - Scheme, rule or method for performing any mental act, playing a game or doing business, or a program for computer

Exceptions to rights conferred

- Patent rights shall be enjoyable without discrimination as to the field of technology, and whether products are imported or locally produced (TRIPS Article 27).
- However, compulsory licensing and government use without the authorization of the right holder are allowed in order (TRIPS Article 31):
 - To deal with national emergency or other circumstances of extreme urgency or in cases of public non-commercial use
 - To correct anti-competitive practices
 - Subject to conditions aimed at protecting the legitimate interests of the right holder.

Why should you consider patenting?

- Strong market position and competitive advantage.
- Higher profit or returns on investment.
- Additional income from licensing or assigning the patent.
- Access to technology through cross-licensing.
- Access to new markets.
- Diminished risks of infringement.
- Enhanced ability to obtain grants and/or raise funds at a reasonable rate of interest.
- A powerful tool to take action against imitators and free riders.
- Positive image for your enterprise.

Is it wise to apply for patent protection?

- Not always
- A patentable invention does not necessarily mean commercial success
- A patent may be expensive and difficult to obtain, maintain and enforce.
- To file or not to file a patent application is strictly a business decision.
- Does the patent result in a significant commercial advantage?

Patentability Criteria

New or Novel

- An invention is new or novel if it does not form part of the **prior art**.
 - Prior art refers to all the relevant technical knowledge available to the public anywhere in the world prior to the first filing date of the relevant patent application, including patents, patent applications and non-patent literature of all kinds.
 - In principle, the publication of the invention in a scientific journal, its presentation in a conference, its use in commerce or its display in a company's catalogue would all constitute acts that could destroy the novelty of the invention.
 - Prevent accidental disclosure of inventions prior to filing the patent application.

Inventive step

- When taking into account the prior art, the invention would not have been obvious to a person skilled in the particular field of technology.
- Ensure patents are not granted to developments that a person with ordinary skill in the field could easily deduce from what already exist.
- Example: mere change of size, making a product portable, the reversal of parts, the change of materials, mere substitution by an equivalent part of function

Industrial application

- To be patentable, an invention must be capable of being used for an industrial or business purpose.
- An invention cannot be a mere theoretical phenomenon; it must be useful and provide some practical benefit.

Disclosure requirement

- The invention must be **disclosed** in a manner sufficiently clear and complete for the invention to be carried out by a person skilled in the specific technical field.
- In some countries, patent law requires that the inventor discloses the “**best mode**” for practicing the invention.

Obtaining a Patent

First do a Prior Art Search

- Perform a prior art search in order to find out
 - Whether our invention is new
 - Whether we will be wasting our time and money
 - Who are our current and future competitors
 - What are the current trends in a given field of technology
 - Any relevant technology for licensing
 - Who are potential suppliers, business partners or sources of researchers
 - Relevant patents of others to ensure that your products do not infringe them
 - Relevant patents that have expired and technology that has come into the public domain
 - Possible new developments based on existing technologies

How to apply for patent protection

- Patent application has to be prepared and submitted to the relevant national or regional patent office.

- Patent application
 - Description
 - claims
 - drawings
 - abstract

Processing an application

- Filing
- Formal Examination
- Publication of Application
- Search and Substantive Examination
- Grant and Publication
- Opposition Proceedings

How much does it cost ?

- Prior art search fee
- Official filing fees
- Patent agent/attorney fees
- Maintenance or renewal fees
- Translation costs

Patenting abroad

Why and When apply for patent abroad?

- Patent protection in foreign countries will enable your company to enjoy exclusive rights over the patented invention in those countries. In addition, patenting abroad may enable your company to license the invention to foreign firms, develop outsourcing relationship, and access those markets in partnership with others.
- Patents are **territorial rights**
- File your foreign application within 12 months of the first filing

Where should you protect your invention?

- In the main markets for similar products
- Depends on the budget and the costs of patenting in each target market
- Where the main competitors are based
- Where the product will be manufactured

How do you apply for patent protection abroad?

- The national route
- The regional route (ARIPO, OAPI)
- The International route (The Patent Cooperation Treaty)

Patent Right

- A patent grants its owner the **right to exclude** others from commercially using the invention.

- This includes the right to prevent or stop others from
 - making
 - using
 - offering for sale
 - selling or
 - importing

Utility Model

- Utility models are also known as short-term patents, petty patents or innovation patents
- Incremental inventions or small adaptations to existing products are protectable as utility models
- Conditions for granting utility models are less stringent, as the “inventive step” requirement may be lower or absent altogether
- Procedures for granting utility models are generally faster and simpler than for patents

Utility Model

- Acquisition and maintenance fees are generally lower than those applicable to patents
- Duration of utility models is usually shorter than it is for patents
- Utility models may, in some countries, be limited to certain fields of technology and may only be available for products (not for processes)
- Usually, a utility model application or a granted utility model may be converted into a regular patent application.



Thank you for your attention

Anil Sinha

anil.sinha@wipo.int