

Industrial Property Protection Strategies

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Objectives and criteria for choosing particular forms of protection:

<i>Objectives</i>	<i>Means</i>	<i>Advantage/Disadvantage</i>
Freedom to use	Publish	Competitor free to use
Exclusive use and freedom	Apply for patent	Costly and competitor informed
Protection	Keep secret	Independent discovery by competitor might block own use

Methods of appropriation

1. Publication

When to publish

- Prepared to share the results with competitors (environmental & safety)
- Desire to demonstrate scientific competence
- Minor improvement / second-best alternative to earlier patent

Why not to publish

- Give away valuable know-how
- Describe an invention which has not yet been patented

2. Maintenance of secrecy

Suitable when:

- Invention not patentable (i.e. Software)
- Competitors must not use the results of R&D

Disadvantages:

- Independent discovery by competitor might block own use.
- Difficult to maintain

3. Patenting

A patent is a grant of a property right by the government to the inventor to exclude others from making, using or selling the invention.

- **Commercial value**

Depends on:

- The likelihood of technical success
- Whether the invention is basic/best or an alternative.
- Breadth of scope – scope of valid claims but also geographic scope
- Validity – how well does it block the competitor
- Market – size and profitability
- Competitors' activity – same area, better, advantages?
- Detectability – can you detect copying?

Other considerations (maybe not the right ones)

- Inventor remuneration
- Motivation of researchers
- Internal company relationships

- **Defensive value** – prevents competitor of using invention
- **Cost of patenting** (\$ 50.000 - \$ 150.000 ignoring research costs)
 - The cost of professional staff
 - Official fees
 - Research costs (some extra experiments are needed)
- **Danger of disclosure** (this should not be underestimated)
 - Necessitating publication
 - Alerting competitors
 - Gaining intelligence on competitors' activities

Two possible problems:

- Descriptions (a very specific description is needed)
- What is patentable?

Patent strategies in practice

Similarities in different industrial sectors

- **Identification of a potentially patentable invention** – This is usually the responsibility of the research worker
- **Filing first patent** – Most Patent Departments receive more ideas than they have the capacity to patent. There are two procedures:
 - Study first – the Patent Department does research and the Patent Attorney drafts a patent application
 - File first – the research worker himself make the first draft of the patent specification, which is then checked by a Patent Attorney and filed
- **Foreign-filing** – The decision of whether to file the case further in foreign countries is usually taken in consultation with the principal business units, and before one year of filing the first application.
- **Maintenance** – Companies need to decide whether to continue to pay the maintenance fees required.

Differences in different industrial sectors

- **Technological and market aspects**
 - Rate of change of technology: Technology in an area which seems mature can suddenly give rise to rapid developments.
 - The commercial effectiveness of patenting. It involves these questions:
 - Easily copyable? When the invention relates to the product itself rather than the process by which it is manufactured.
 - Patents available to cover the advances concerned? In some of the new areas, patent protection is more difficult, and secrecy is in many cases the most effective way.
- **Management choice** – The patenting activity of a firm vary according to the degree or encouragement that management gives for increased patent filings.
- **Competitor's patents** – In most companies the largest proportion of the effort of the Patent Department is directed towards building up that company's own patent portfolio. (EPO = European Patent Office)