



PATENT SEARCH & ANALYTICS



RECONNAISSANCE

Topics Covered

- Relevance and importance of patent searches
- Types of patent searches, examples
- Search engines
- Q & A

RELEVANCE AND IMPORTANCE OF PATENT SEARCH

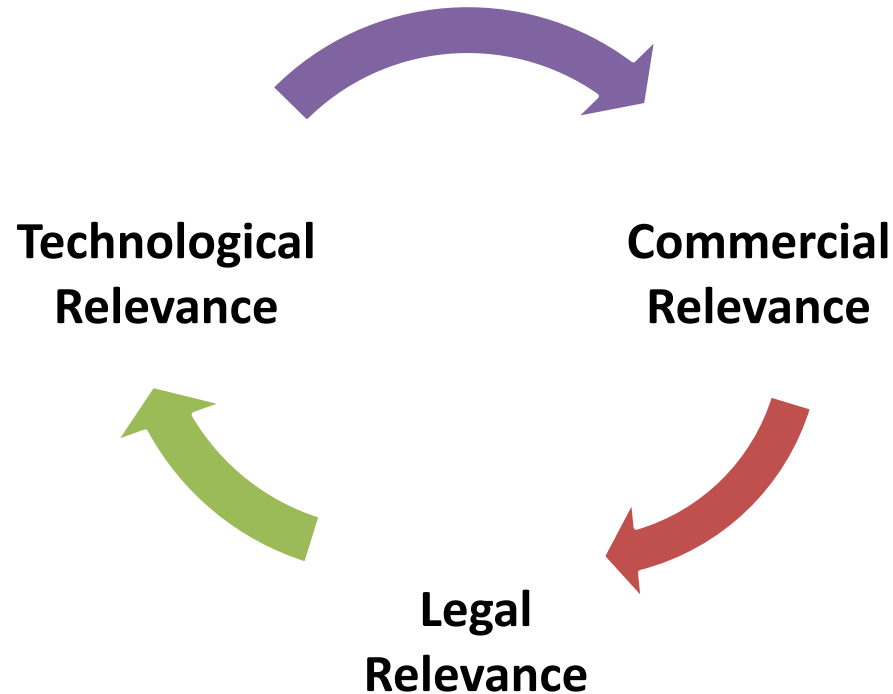


Patent Information

According to WIPO Statistics:

- There are over 100 million patent documents
- Over 5 million patent applications are filed every year, resulting in the grant of more than half a million patents
- Two-thirds of the technical information revealed in patents is never published elsewhere

Relevance of Patent Information & Importance of Patent Search (1)



Technological Relevance

- Keep abreast with latest technologies in your field -understand the state of the art technology
- Minimize research time & expense
- Avoid duplication of R&D work
- Identify find research problems
- Identify alternative technology & develop new technical solutions, products or processes
- Get ideas for further innovation

Commercial Relevance

- Monitor competitors' activities - Monitor the research and development of competitors in the market
- Find niche markets
- Locate business partners
- Identify suppliers and materials

Importance of Patent Search (2)

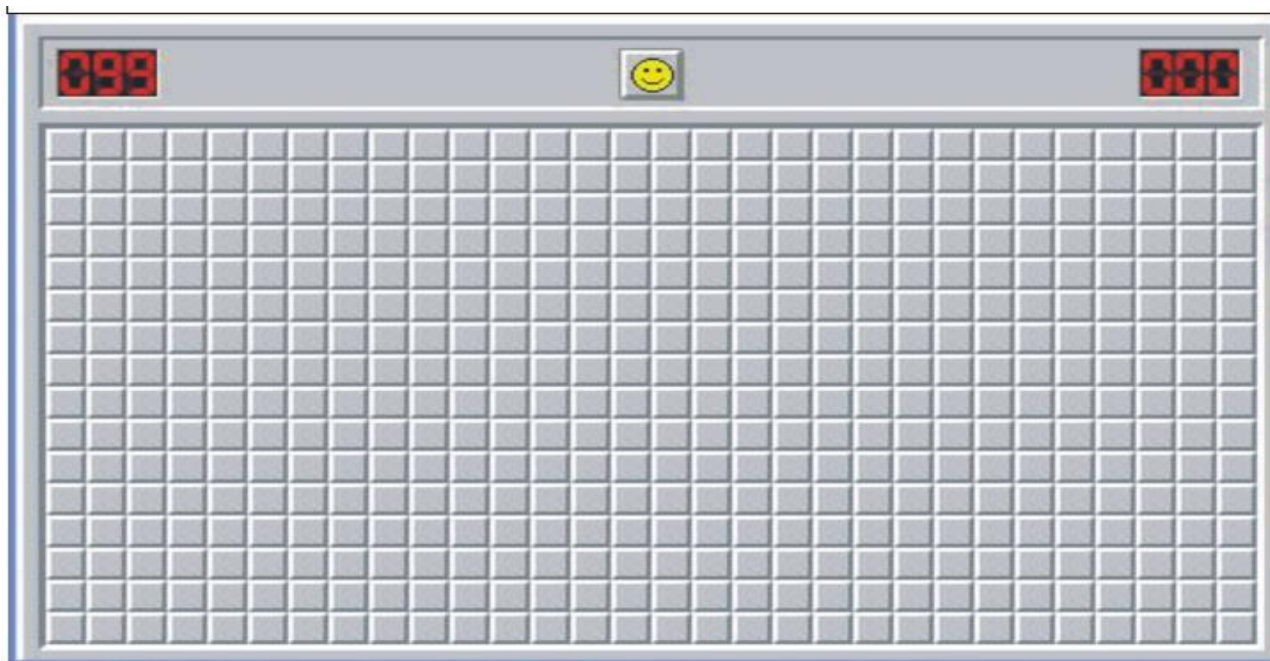
For patent filing and prosecution:

- Examine similar patents/applications filed earlier
- Modify the invention to meet the patentability criteria
- Evaluate the strength of the invention/patent
- Facilitate patent examiners to determine patentability of the invention
- Reduce cost and save time in the patent prosecution process - from filing of an application till grant

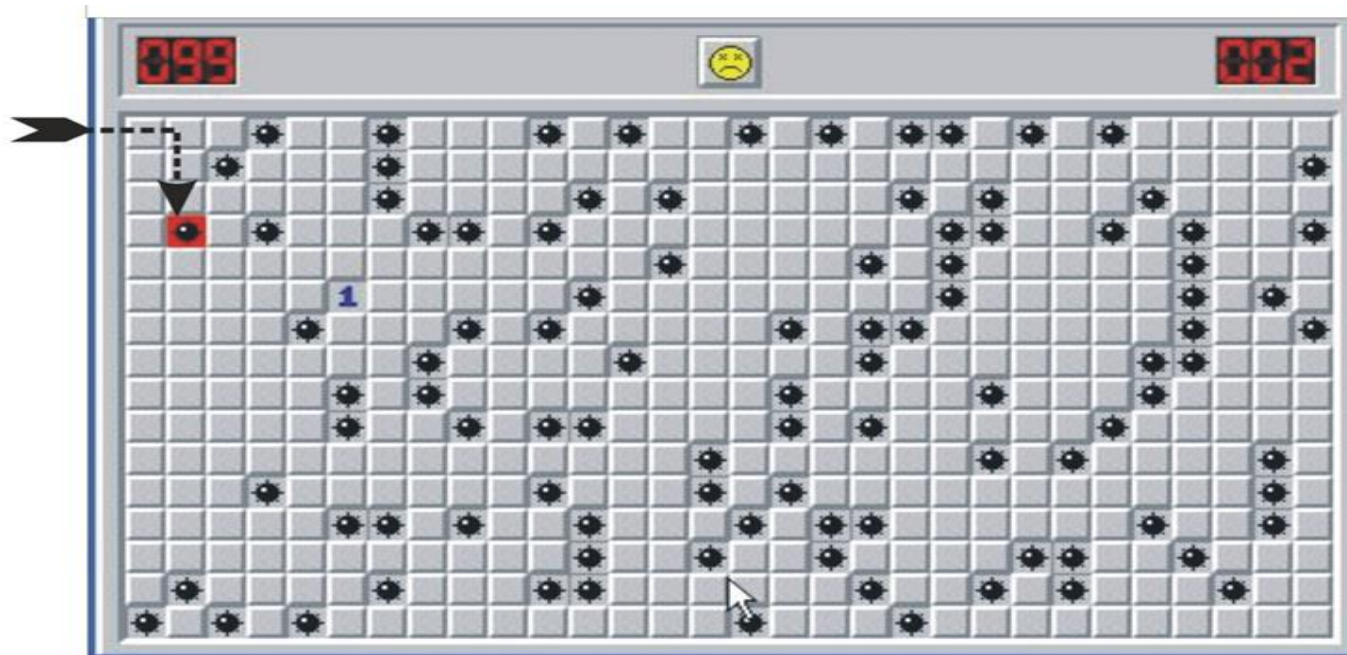
Legal Relevance

- Avoid possible infringement problems - Facilitate infringement-free product development
- Assess patentability of your own inventions
- Oppose grant of patents found to be conflicting with your own patent(s)

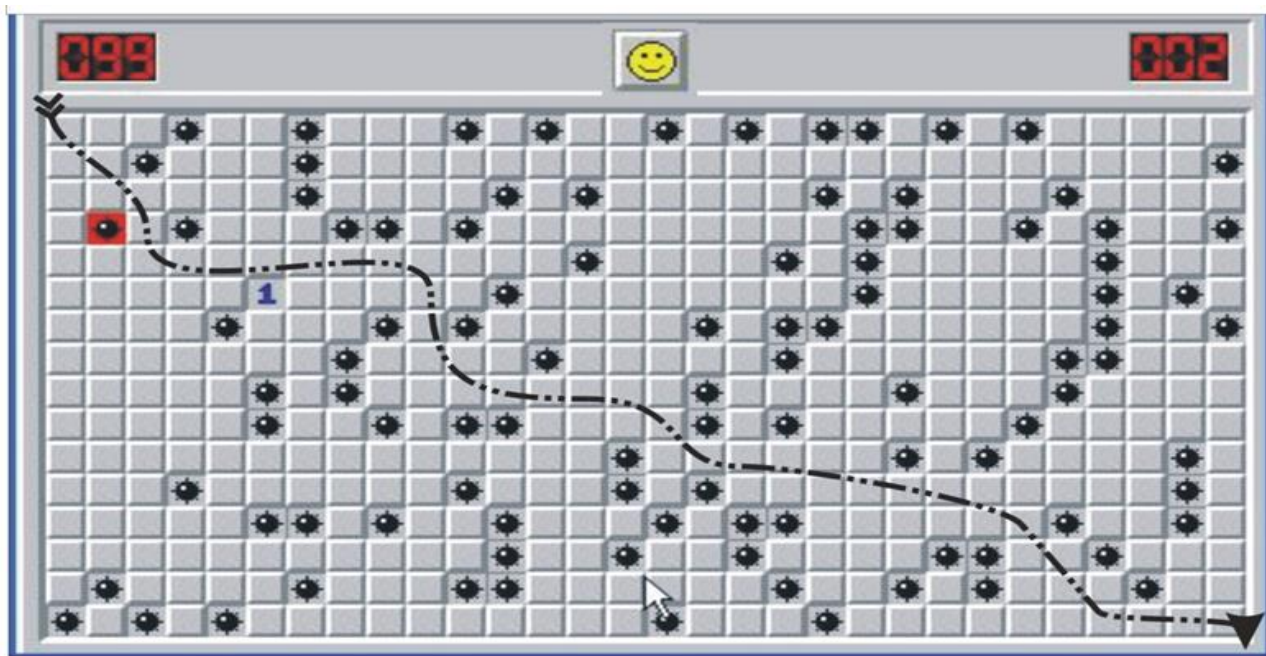
Field with Hidden IP Rights



Working in the Field Without IP Searching and Mapping



Working in the Field Without IP Searching and Mapping



TYPES OF PATENT SEARCHES

Types of Patent Searches

- Novelty Search
- Patentability Search
- Freedom to Operate (FTO)
- Technology Mapping
- Invalidation Search

Novelty Search

Why to do:

- Determine if the invention is new – a requirement of obtaining a patent
- The search locates similar patents or publications which could render the proposed invention not novel
- If the invention is not novel:
 - I. Drop the idea of filing a patent application - saving time & money
 - II. Design around

Why to do:

- When to do:
- Prior to filing a patent application
- Prior to doing further research – to get a fair idea of what has already been done

Novelty Search

Invention: relates to a composition for enhancing corneal healing said composition comprising vitamin A and a sterile buffer administered to the eye.

Prior art: the use of the eye-drops to re-wet contact lenses, wherein said eye-drops comprises Vitamin A , the sterile buffer and other excipients.

Analysis: The invention lacks novelty, as being anticipated by said prior art, which discloses all the features of claimed composition useful for enhancing corneal healing.

Patentability Search

Why to do:

- Assess the chances of obtaining a patent - whether it meets the statutory requirement of novelty & inventive step
- If the invention is not patentable:
- Drop the idea of filing a patent application - saving time & money
- Design around
- Answers the question “Is this idea already taken?” -
- no need to re-invent the wheel
- Gives a fair idea of what has already been done in the art
- Provides a good platform for further research in the area

Patentability Search

Why to do:

- Prior to filing a patent application
- Prior to doing further research – to get a fair idea of what has already been done

Inventive Step – Example

Invention: A process for the preparation of compound 'C' by treating compound 'A' and compound 'B' in the presence of platinum catalyst.

Prior art: Discloses a similar process, but the catalyst mentioned was a noble metal catalysts.

Analysis: Prior art generically disclosed platinum as noble element which is also an equivalent element used in the art for similar purposes and obvious to the skilled person. Therefore, it is application of known feature in the prior art into claimed invention in an obvious way. Therefore, there is no inventive step.

Freedom To Operate

Why to do:

- Ascertain the chances infringing an existing patent
- Assess the threat of infringement of a pending patent application
- Answer the question: “What is the probability of getting sued for patent infringement?”
- If there is a threat of infringement, the product/process may be commercialized after assessing & analyzing the following options:
 - I. Invalidation Search
 - II. Revoking the patent
 - III. Purchasing the patent
 - IV. Licensing in
 - V. Cross-licensing
 - VI. Patent pools
 - VII. Designing around

Why to do:

- Prior to commercializing of a product/process

FTO - Example (1)

In *Atlas Powder Co. v. E.I. du Pont De Nemours & Co*, 750 F.2d 1569 (Fed. Cir. 1984), the court expressed the principle in mathematical terms:

- Prior Patent: Atlas patents A + B + C
- New Patent: Du Pont then patents the improvement A + B + C + D
- If Du Pont manufactures/uses/sells A + B + C + D, it would directly infringe Atlas's claims to A + B + C

FTO - Example (2)

Modifications in devices may be separately patented, however, it may infringe the claims of the basic patent.

Prior Patent: For the invention of a “pencil”

1) A device comprising: Prior Patent: Atlas patents A + B + C

- a pencil;
- an eraser attached to one end of said pencil.

New Patent: For the invention of an “improved pencil”

1) A device comprising:

- a pencil;
- an eraser attached to one end of said pencil; and
- a light attached to the proximal center of said pencil

FTO - Example (3)

- **Prior Patent:** A novel, useful and nonobvious product 'X'
- **New Patent:** A novel, useful and nonobvious process for making product 'X'
- The new patent may infringe the prior patent on using the product, or offering to sell or selling the product.

Invalidation Search

Why to do:

- Evaluate the chances of invalidating a specific patent of a competitor
- Invalidation of a competitor's patent may strengthen the client's patent portfolio
- First line of defense in a patent infringement suit

When to do:

- On receiving an infringement notice
- Prior to filing a revocation petition
- Prior to licensing, buying or selling a patent – for a higher negotiating power

Invalidation Search

Example: Broad claiming

- **Prior Patent:** A composition comprising halide ions and
- **New Patent:** A composition comprising chloride ions and
- **Enablement:** A claim for a composition would be void if the specification only identified the substances that were to be combined without stating their relative proportions, or if it stated the proportions ambiguously.
- Enablement requires more than tossing out general ideas that may or may not be workable - need to provide enough information to enable persons skilled in the art to carry out the invention without undue experimentation.

Technology Mapping

Why to do:

- Helps in decision making & in articulating a business strategy
- Identifies areas for future investment & business opportunities
- Patent information can be utilized by companies for:
 - I. Technical information
 - II. Business/economic information
 - III. Legal information

When to do:

- Prior to starting a new project/venture

SEARCH ENGINES - PATENT DATABASES



Patent Databases (1)

What are patent databases?

Services designed to enable various types of patent searches

How to use patent databases?

- Conducting patent search is an art
- Requires effective searching of relevant patents & non-patent literature, using search strings, technical keywords & various operators
- Should ensure accuracy and exhaustiveness
- Search in multiple databases means better search quality and reduced risk of missing results

Patent Databases (2)

Which patent databases can be used?

- Can use free and paid databases
- Various database services differ in:
 - I. Coverages (jurisdictions, historical, non-English language patents)
 - II. Accuracy (frequency of updation of legal status & new applications)
 - III. Document elements that are accessible & searchable (titles, abstracts, description, claims, or other elements)
 - IV. Search tools, functionalities, retrieval of relevant results, and visualization & analysis of results
 - V. Backend methodologies (data processing, management of assignee corporate trees, accurate translations of foreign language patents)

Free Patent Databases

Free commercial databases:

- Google Patents
- Patent Lens
- Freepatentsonline
- PQAI (Patent Quality through Artificial Intelligence)

Free databases provided by WIPO and national & regional offices

- Patentscope by WIPO
- Espacenet
- USPTO Patent Database
- IPO
- Databases of Australia, Canada, China, Germany, Japan, Korea, UK, etc.

Paid Patent Databases

Fee-based commercial databases:

- PatBase
- Patseer
- Questel Orbit
- SciFinder
- STN
- Thomson Innovation (Thomson Reuters)
- Total Patent (LexisNexis)

Thank You!



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