

Class 1. The importance of using patent information

1. What is the patent information?

Patent information means all related information arose from a patent system.

In other words, patent information is the result that is investigated retroactively up to now from past about the patent. So, patent information includes all documentations and administrative archives occurred from patent application activity for achieving patent rights. It is the most different thing between patent information and general information to provide the information of rights. The initial patent information comes from patent offices of every country and equipped with world-wide common indication.

2. The characteristics of patent information

1) Special features as technological information

- (1) Easy to obtain and collect
- (2) Unified technology classification (IPC)
- (3) Unified description formats and contents (INID Code)
- (4) Broad technology area (Cover all industry areas)
- (5) Concrete and realizable technology
(One of principle for drawing patent specification)

2) Ambiguousness

- (1) Not all published patent is registered.
- (2) Even registered patent can be invalidated.
- (3) Depend on the country, the claims can be different.

3) Quick open to public (First-to-File Rule)

3. Patent Information vs. General Technology Information

	Patent Information	Other Technology literature
Promptness	<ul style="list-style-type: none"> • Quick open to public 	<ul style="list-style-type: none"> • Generally after filing patent, the draft is submitted
Contents	<ul style="list-style-type: none"> • Very concrete enough to apply directly • Present purpose, construction, and effect, etc. • Most of filed patent is published (including the patent not registered) 	<ul style="list-style-type: none"> • Personal opinion can be expressed • Academic and Theoretical contents • A certain exam is required before publishing • Sometimes, can be exaggerated or be used for advertising
Format	<ul style="list-style-type: none"> • Fixed Format • Clearly categorized by unified technology classification 	<ul style="list-style-type: none"> • Free Format • Classification is applied to limited areas
Main Use	<ul style="list-style-type: none"> • To set up R&D direction • To find technological solution • To understand technology, business trend • To understand research organization • To establish business, R& D, administration strategy 	<ul style="list-style-type: none"> • To choose research subject • To find technological solution • To understand technology trend • To understand research organization

4. The Kinds of Patent Information (Narrow View)

1) Bibliographical Information

Related to Time : Application date, Publication date,
Registration date, etc.

Related to Person : Assignee, Inventor, Attorney, Examiner, etc.

Related to No. : Application No., Publication No., Priority No., etc.

Related to Classification : IPC, UPC, ECLA, F-term, FI, etc.

Related to Reference : Cited patent, Foreign Reference, etc.

2) The contents of technology

Abstract

Back ground of invention

Detailed description

Claims

Drawings, etc.

3) Others

Patent family information, Legal status, Search reports, Any legal documents, etc.

5. The Kinds of Patent Information (Broad View)

Application No. & Date Publication No. & Date Registration No. & Date Priority Information Inventor Applicant Agent Examiners	Patent Classification : IPC, UPC, F- term, etc.	Bibliography	Abstract Literature (Summary)	Number, IPC, Assignee Index
The Title of Invention				
Description (Specification)		Abstracts		
Claims		Exemplary Claim		
Drawings		Representative Drawing		
References cited				
1st Information		2nd Information		3rd Information

6. What benefits can be obtained from patent information?

	What can we get?	What can do with these?	Where we get?
Technological Information	<ul style="list-style-type: none"> • Technology development trend • Core Technology • Basic Patent • Technology relation • Technology Distribution status 	<ul style="list-style-type: none"> • Selection of research theme • Decide R & D direction • Forecast new product 	<ul style="list-style-type: none"> • Description, • Abstracts, • Classification
Administrative Information	<ul style="list-style-type: none"> • Business Technology Trend • Product development trend • Research management Trend • Market share status • Company relationship 	<ul style="list-style-type: none"> • R&D management benchmarking • Establish R&D strategy • Establish patent management strategy • Technology trade strategy 	<ul style="list-style-type: none"> • Assignee, • Inventor, • Period of patent rights, • Patent family, • Cited patents

	<ul style="list-style-type: none"> • Estimate market size • Agency activity status 	<ul style="list-style-type: none"> • Human resource handling 	
Rights Information	<ul style="list-style-type: none"> • Patent Claims • Patent registration • Possibility of Infringement • Legal status • Licensing, buying, selling 	<ul style="list-style-type: none"> • Decide whether a patent applies or not. • Handling claim 	<ul style="list-style-type: none"> • Claims • Core technology contents of patent • File wrapper • Examination process

7. Patent Information in R & D Process

No.	R & D Step	What do we do?	What do we have to do concerning to patent?
1	Set up Subject	<ul style="list-style-type: none"> • Analyze prior art and market information 	<ul style="list-style-type: none"> • Perform patent map regarding to relevant technology
2	Planning	<ul style="list-style-type: none"> • Concretize the contents of the subject and establish targets of R & D 	<ul style="list-style-type: none"> • Check competitors' patents and make a solution to cope with possible problems • Establish patent strategy

3	Research & Development	<ul style="list-style-type: none"> • Solve technological problem for realizing products (self-development, technology collaboration, technology transfer) • Decide manufacturing methods 	<ul style="list-style-type: none"> • Patent Application according to Patent strategy • Cope with competitor's patents causing problems (invalidity judgment, buying patent, cross license)
4	Prototyping	<ul style="list-style-type: none"> • Start to manufacture products according to manufacturing methods • Verify possibility of business success 	<ul style="list-style-type: none"> • Apply patents for relevant technology (manufacturing, experimentation, usage, application) • Complement patent contents (claims)
5	Evaluation	<ul style="list-style-type: none"> • Verify product's quality 	<ul style="list-style-type: none"> • Complement patent claims (re-evaluation of claims) • Evaluate patent strategy
6	Production & Sales	<ul style="list-style-type: none"> • Production & Sales & Marketing • Continuous Improvement 	<ul style="list-style-type: none"> • Confirm patent rights and discard unnecessary patents • Continuous monitoring for competitors' patents • Watch out the infringement of patent and technology sales

8. The practical use of each component of patent information

Component	Use
• Applicant	<ul style="list-style-type: none"> • Research company having specific technology (ranking, portion) • Research competitor's technology
• Inventor	<ul style="list-style-type: none"> • Identify specialist in specific technology area (ranking portion) • Identify the operation of research organization or team (research term, inventor group)
• Patent Date	<ul style="list-style-type: none"> • Time-based statistic research (applicant, IPC, country) • Identify patent rights term

<ul style="list-style-type: none"> • Country 	<ul style="list-style-type: none"> • Country's technology portion and strong and weak areas
<ul style="list-style-type: none"> • Title • Abstract • Detailed description • Drawing 	<ul style="list-style-type: none"> • Prior art Search • The process of development of product and manufacturing method • Extract new idea & Solve technological problems • Select new research theme • Check patentability (novelty, inventive step) • Check infringement • Identify the relationship of each technology
<ul style="list-style-type: none"> • Examination Process • Original patent Registration document 	<ul style="list-style-type: none"> • Recognize patenting process • Check the change of patent rights (License, Transfer, etc.) • Check the expiration of patent with any reasons • Check the extension of patent period • Check the re-examination results • Check the patent's validity
<ul style="list-style-type: none"> • Patent Number 	<ul style="list-style-type: none"> • Search a specific patent • Search patent family • Research patent application related to priority • Research relevant patent (national priority, continuation, re- examination, etc.)