# Class 4. Patent Map

#### 1. Analyzing Patent Information

#### 1) Quantitative Analysis

The method understanding and analyzing patent through numerical statistic of patent information. Most usable data comes from bibliographical information including the number of patent applications, assignees, inventors, or patent classification codes, etc

Quantity-based Analysis

Time-Based Analysis

Ranking Analysis, etc.

#### 2) Qualitative Analysis

The method understanding and analyzing the content of patent. Generally, this analysis method is performed by the inter-relationship of technology content or patent classification code, assignee, application date, etc

Selection of core patent

Technology development map, etc.

## 2. Patent Map (Technology Road Map)

Patent Map is the visualized expression of total patent analysis results to understand complex and various patent information easily and effectively.

The patent map is produced by gathering related patent information of a target technology field, processing, and analyzing it.

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## 3. The Process of Patent Map

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## 4. What advantages can be taken from Patent Map?

#### 1) Administrating / Planning

**Development Trend** 

Market Research

Relation of Companies

#### 2) Researching/Technology Promoting

**Technology Trend** 

Technology GAP

**Technology Portion** 

**Technology Relation** 

#### 3) Technology Management

Possible Infringement

**Analyze Claims** 

Set up new patent application direction

## 5. The Kinds of Patent Map Results

#### 1) Quantitative Analysis Map (Statistical Analysis Map)

Rate Map

Number Map

Trend Map

Relation Map

Radar Map

Portion Map, etc.

#### 2) Qualitative Analysis Map

List Map

Matrix Map

**TEMSET Map** 

Development Map

Problems Vs. Solutions Map, etc.

## 6. The Examples of Quantitative Analysis

1) Portion rate Map

2) Ranking Map

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3) Trend Map (2D)

4) Trend Map(3D)

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5) Portfolio Map

6) Citation Statistical Analysis

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# 7. The Examples of Quantitative Analysis

#### 1) Matrix Map

Matrix map shows the correlation between technical elements (such as purpose and technical item) obtained from patent information in the form of matrix.

It helps to find important problems affecting the development of a technology field. Moreover, with the addition of a time axis, trends in problems affecting technological development can also be observed.

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#### 2) TEMPST Map (1)

TEMPST Map shows the technology analysis or classification based on different points of analysis views.

(Treatment, Effect, Materials, Process, Products, and Structure)

The point of Analysis view		Examples	
T	Treatment	Temperature, Velocity. Time, Frequency, Pressure, etc	
Е	Effect	Purpose, performance, Efficiency, etc	
M	Material	Material, Component, Compound, Addition, etc.	
P	Process	Manufacturing Methods, System, Procedure, etc.	
P	Product	Product, Parts, Results, Outputs, etc.	
S	Structure	Structure, Form, Device, Component, Circuit, etc.	

## 3) TEMPST Map (2) - Example

Patent	TEMPST				Γ		T 1 1	
No.	T	E	M	P1	P2	S	Technology	
55-				0			METHOD OF MANUFACTURING	
10855				U			COMPOSITE ROTOR	
58-		0		0			PREPARATION OF THIN FILM	
153775		U		U			PREPARATION OF THIN FILM	
60-						PRODUCTION OF COMPOSITE		
				O			SUPERCONDUCTIVE COMPOUND	
89530							WIRE ROD	
60-						PRODUCTION OF THIN FILM OF		
	Ο			Ο			SCHEVREL PHASE COMPOUND BY	
210531							REACTION METHOD ON SUBSTRATE	
60-						0	LEAD-OUT DEVICE FOR	
216592						O	SUPERCONDUCTIVE COIL	

## 4) Technology Development Map

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#### 5) Problems vs. Solutions Map

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#### 8. Patent Analysis Software

Software for practicing and reproducing patent information in many different ways to make user approach to patent information easily and obtain optimized information by sorting / mixing / interconnecting / rearranging raw patent information.

The Examples of Patent Analysis Software								
Software Name	Provider	Website						
PM-Manager	WIPS	www.wips.co.kr						
PIAS		www.kipo.go.kr						
(Patent Information	KIPO							
Analysis System)								
	WISDOMAIN	www.wisdomain.com						
Patent-Lab	(Delphion)	www.delphion.com						

## 9. PM-Manager: Patent Analysis Software

1) Data Download

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2) Data Uploading & Deleting Error! Unknown switch argument.

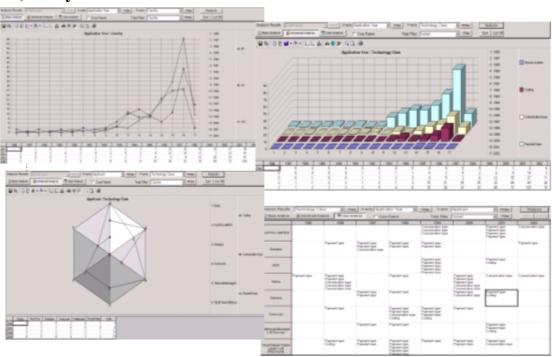
## 3) Normalizing Assignee Name

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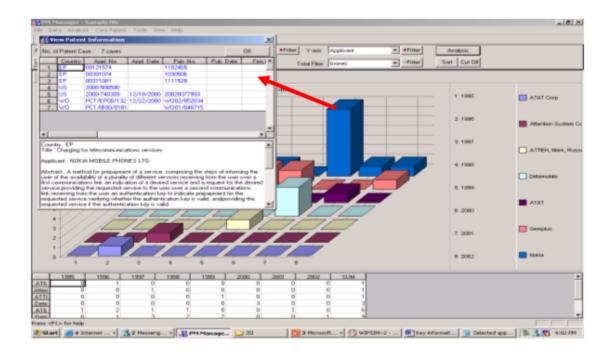
## 4) Classification

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# 5) Analysis



6) Direct link to abstract in analysis graph



#### 7) Automatic report creation for core patents

