



# Patent Guidelines

October 2014

**Lembaga Penjaminan Mutu, Pengelolaan  
dan Perlindungan Kekayaan Intelektual  
(LPMP2KI), ITS**

in cooperation with

**PREDICT-ITS Phase 2**

Technical Cooperation Project for Research and Education Development  
on ICT in Institut Teknologi Sepuluh Nopember Phase 2

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## **Chapter 1: Let's Research with Patent Strategy (STEP 1)**

Patenting outputs of your research, namely your invention, is important. Creation of such intellectual property rights would contribute to development of industries as well as accelerate possible acquirement of financial resources for your research and education in the future.

In order to obtain patents in a timely manner and utilize them for the next research and development, most organizations including private enterprises have their own "patent strategy" to follow. Similarly, making a good patent strategy is indispensable for ITS and its researchers because:

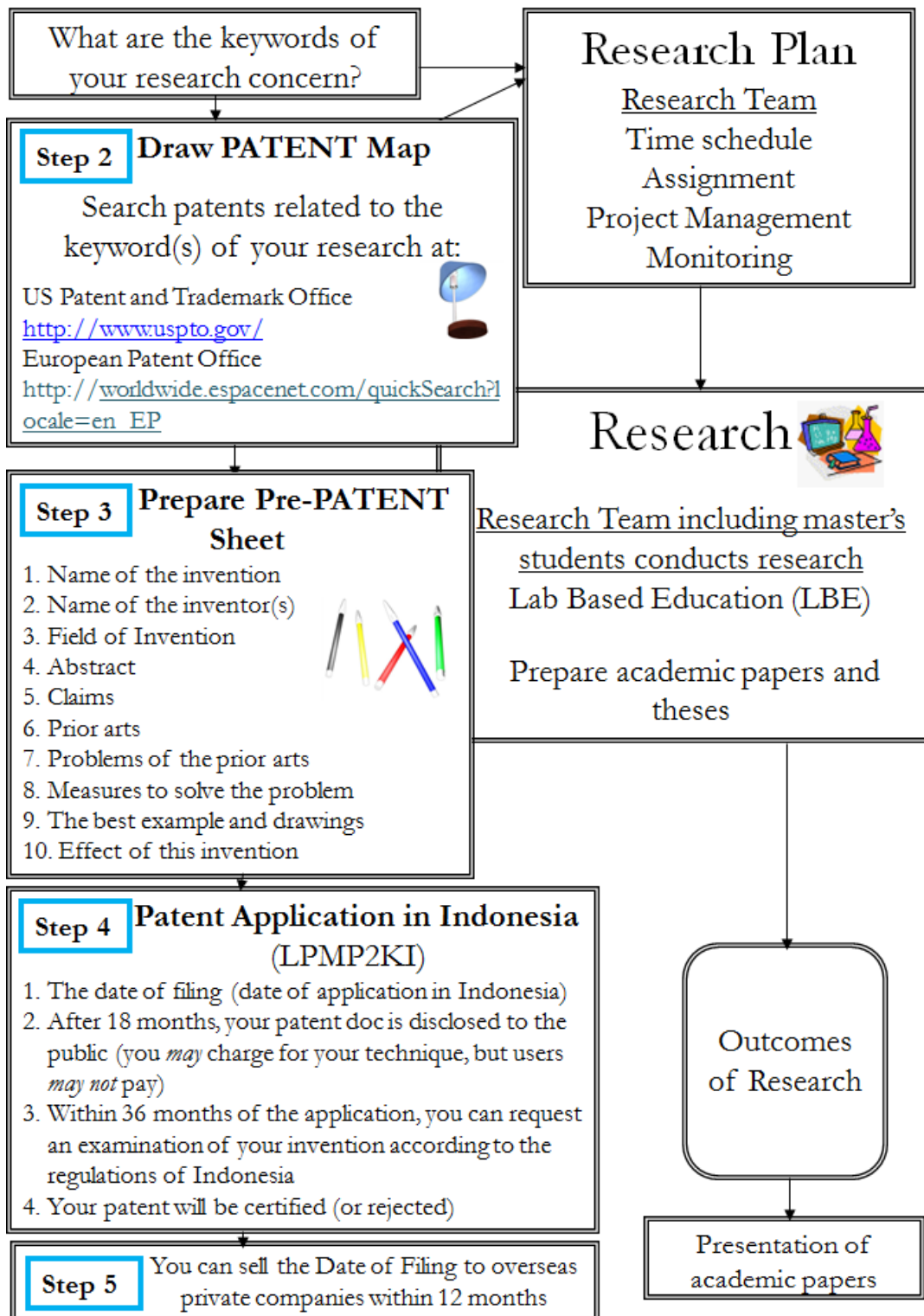
- A good patent strategy protects researcher's invention and further development of the technology.
- Patents help researchers and his/her research team acquire licensing opportunities (and consequently increase financial resources for further research and education)
- Patenting helps to nurture technological advances of humanity.

The diagram below (Fig.1.1) shows a simple patent strategy, which is recommendable for research institutions and researchers.

This strategy has been pursued by research teams of ITS since 2006 and increased the number of patent applications.

Patent applications must be completed before publishing papers on the invention that you are to patent.

How to follow the steps from 2 to 5 of the diagram is explained in the following chapters.



(Note) For **Step 3**, you are recommended to show your "Intention of Patent Application" at LPMP2KI by March of each year.

Fig.1.1 Let's Research with Patent Strategy

## **Chapter 2: Draw Your Patent Map before Making Research Plan (STEP 2)**

### **2.1 Patent Mapping**

A “patent map” is a visual expression of a set of information that is selected from a huge database of existing patents.

There are certain ways in which patent maps are created<sup>1</sup>; however, what is most important to understand is that a patent map enables you to find out specific situations of the patents in the field of your interest.

The purpose of patent mapping is to analyze and evaluate a specific technology that you are going to develop. Patent mapping enables you to see your potential competitors, partners, new innovations, and technological environment in the field of your research.

The patent map you have created is used when you make a research plan. In other words, your patent map must be drawn before starting research.

### **2.2 Patent Map First**

Conducting research is a big investment in terms of both human and financial resources. In order not to waste your time and money, you need to find a space in your patent map that is not covered by any existing patents.

Draw your patent map first; then you can start research that produces a novel technology and new values.

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<sup>1</sup>There are two kinds of patent maps depending on the purpose, namely (A) maps for statistical analysis of patent registrations, and (B) those for content analysis of the technologies which are currently protected by patents.

## 2.3 Search Patents and Draw Your Patent Map

### (1) Search patents

Visit the website of the United States Patent and Trademark Office (USPTO) at <http://www.uspto.gov/patents/process/search/index.jsp>, for example, and search patents following the processes below:

1) Go to "Quick Search."



2) Input your keywords.

**USPTO PATENT FULL-TEXT AND IMAGE DATABASE**

[Home](#) [Quick](#) [Advanced](#) [Pat Num](#) [Help](#)

[View Cart](#)

Data current through December 13, 2011.

Query [\[Help\]](#)

Term 1:  in Field 1:

Term 2:  in Field 2:

Select years [\[Help\]](#)

1976 to present [full-text]

Patents from 1790 through 1975 are searchable only by Issue Date, Patent Number, and Current US Classification.  
When searching for specific numbers in the Patent Number field, patent numbers must be seven characters in length, excluding commas, which are optional.

3) Find your competitors.

**USPTO PATENT FULL-TEXT AND IMAGE DATABASE**

[Home](#) [Quick](#) [Advanced](#) [Pat Num](#) [Help](#)

[Next List](#) [Bottom](#) [View Cart](#)

Searching US Patent Collection...

Results of Search in US Patent Collection db for:

PAT.NO	Title
1. *****	.....
2. *****	.....
3. *****	.....

[Click on the title and see if this technology is the same as yours.](#)

4) Change keywords and repeat searching.

Similarly, you can search your competitors on other databases (e.g. European Patent Office):



You can also check your competitors by visiting the website of the European Patent Office at:  
<http://worldwide.espacenet.com/quickSearch?local=en>

Patents applied for in Indonesia are disclosed at  
<http://paten-indonesia.dgip.go.id/>

## (2) Examine your patent map

Fill in the form "My Patent Map" (Appendix 1) based on the results of your search.

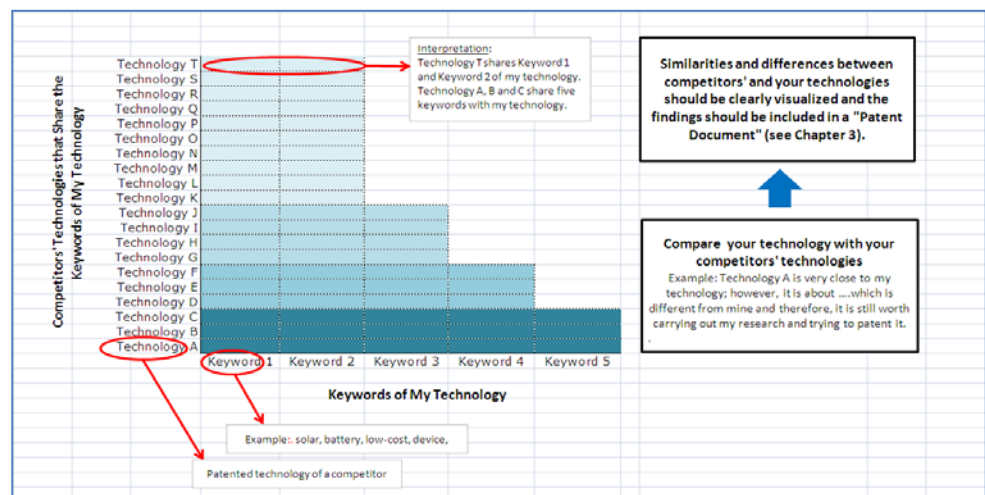
The form is available for download at: <http://lpmp2ki.its.ac.id/>

Information on the patents that you have found nearby your research area is necessary for filling in patent application form.  
 (See 3.2 (3) 1. Latest technologies)

List your competitors and describe the results of your examination on whether your research is worthwhile to be started.

Visualization (such as making tables, charts and graphs) may help you develop a research proposal that is attractive to potential funders of the research.

(Example)



## Chapter 3: Prepare Pre-Patent Sheet (STEP 3)

### 3.1 Pre-Patent Sheet

Consult Lembaga Penjaminan Mutu, Pengelolaan dan Perlindungan Kekayaan Intelektual (LPMP2KI) of ITS, once a leader and his/her team members have confirmed that the research plan is worth implementing. Then, the research team starts preparing a "Pre-Patent Sheet" in a timely manner and submits it to LPMP2KI as soon as possible.

It may take a research team more than one month to prepare a Pre-Patent Sheet and complete the preparatory processes of a patent application at ITS.

The applicant of the patent is ITS. You and your research team members are authors of the patent application, i.e. inventors.

The application fee is borne by ITS, depending on the budget of the year.

A Pre-Patent Sheet is a document prepared by the inventor and submitted to LPMP2KI. The Pre-Patent Sheet provides information necessary for his/her patent application (Appendix 2). The form of "Pre-Patent Sheet" is available for download at <http://lpmp2ki.its.ac.id/>.

### 3.2 Information Necessary for Patent Preparation Sheet

A Pre-Patent Sheet must include the following information (take a look at the patent databases on the website of Indonesia Patent Office at <http://www.dgip.go.id> as examples):

#### (1) Title of invention

The name must be consistent with the description of Claims, Fields, and Abstract

#### (2) Field of invention

The field must be consistent with the title and the description of your invention.



### **(3) Background of invention**

This part must include the following:

1. Prior arts (Latest technologies related to your invention)—Use your patent map and give the information on the latest patents related to your invention based on the My Patent Map.
2. Problems of the latest technologies— Explain the weakness and limitations of latest technologies.
3. Measures to solve the problems stated in 2— Describe all the steps of your method to solve the problems.
4. Effects of your invention- Explain the advantages of your technology; how your invention is different from prior arts.

### **(4) Summary of invention**

Explain the most important claim you are to make, extracting from (3).

### **(5) Drawing**

If available, give a list of drawings necessary for describing your invention. If not available, you can skip this part.

### **(6) Detail description of invention**

### **(7) Claim**

A claim is a definition of the extent of the protection sought in a patent application. You can give one or more claims. Your claim(s) must meet the following points:

- A claim must be one noun clause.
- A claim must be the invention itself, describing all steps of implementing the method of your invention.
- A claim must not be a description of its effect, benefits, nor relations with any other inventions.
- A claim must be extracted from the detailed description of the invention, i.e. (6)–(10).

#### Examples of a claim

1. A method to synthesize A from B and C by using D.....
2. The method of Claim 1, wherein the temperature of A and B is between.... and .....
3. The method of Claim 1, wherein pH of D is kept between... and ... ..
4. The method of Claim 3, wherein pH is made stable by using....

## **(8) Abstract**

See 3.3. for details.

## **3.3 Abstract**

- “Abstract” is a summary of your invention, not including any drawings, and must be attached to your Pre-Patent Sheet.
- Give a brief explanation on the nature of your invention within 200 words.
- Visit the website of Direktorat Jenderal Hak Kekayaan Intelektual at <http://www.dgip.go.id/>, and take a look at “Pengumuman” for references.
- Database of patents applied for and registered in Indonesia is also available at <http://www.dgip.go.id>.

## **3.4 Submit Patent Preparation Sheet to**

Bring your Pre-Patent Sheet to LPMP2KI:

**Office Address:** Lt.3, LPPM, ITS Kampus Sukolillo

**Contact Person:**

Prof. Dr. Suprpto, DEA (Kepala LPMP2KI)

Prof. Dr.rer.nat. Irmina Kris Murwani

(Koordinator Pusat Pengelola Paten dan Hak Kekayaan Industri)

**E-mail:** [korpus.patenhki@its.ac.id](mailto:korpus.patenhki@its.ac.id)

**URL:** <http://lpmp2ki.its.ac.id/>

LPMP2KI will take proper procedures of patent applications inside ITS and at Direktorat Jenderal Hak Kekayaan Intelektual in Banten.

You can request an examination of your invention, within 36 months of your patent application.

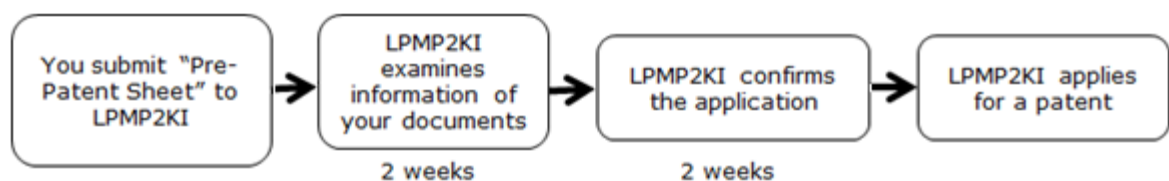
## Chapter 4: Patent Application through Lembaga Penjaminan Mutu, Pengelolaan dan Perlindungan Kekayaan Intelektual (LPMP2KI) (STEP 4)

LPMP2KI will prepare the documents necessary for your patent application (Table 4.1).

Table 4.1 List of Documents to be Prepared by ITS

	Name of the document	Number of the document	Remarks
1	Surat Pernyataan Pengalihan Hak Atas Invenasi	4 original sets (1 with Materai Rp.6,000, 3 without Materai)	Signatures by all inventors and Head of LPPM or LPMP2KI
	(Letter of Agreement must be attached if the invention is jointly made with researchers outside ITS.)	Number of the inventors (including ITS)	For internal ITS. Signatures by all inventors
2	Formulir Permohonan Paten	4 original sets (1 for LPMP2KI, 3 for DGIP <sup>1)</sup> )	Signature by Head of LPPM or LPMP2KI
3	Formulir Permohonan Pemeriksaan Substantif Paten	4 original sets (1 for LPMP2KI, 3 for DGIP <sup>2)</sup> )	Signature by Head of LPPM or LPMP2KI

The flow of the patent application appears in Fig.4.1.



(Note) Time necessary for each process depends on the readiness of the drafts.

Fig.4.1. Flow of Preparation for Patent Application at ITS

## **Chapter 5: Utilizing Intellectual Property Rights (STEP 5)**

License shall mean a permission granted by the Patent Holder to another party by means of an agreement based on the grant of right to enjoy the economic benefit of a Patent that is protected for a certain period of time and certain requirements.

(Article 1, Law of the Republic of Indonesia Number 14 Year 2001 Regarding Patents)

### **5.1 Presenting Research Paper after Acquiring “the Date of Filing”**

Once of ITS applies for a patent on your invention at Direktorat Jenderal Hak Kekayaan Intelektual in Banten, you receive a certificate of “the date of filing”.

Under the Paris Convention, the benefits of “the date of filing” can be enjoyed in any foreign countries, provided that the patent applications in these foreign countries were filed within 12 months of the filing date of the patent application in Indonesia.

Now, it’s time for you to present a paper on your research in a conference/seminar that is open to the public.

Do not disclose any important parts of your invention before you confirm with that Direktorat Jenderal Hak Kekayaan Intelektual has accepted all the documents of your patent application and filed them.

The situation is as follows:

- 1) No one can henceforth apply for a patent on the same invention as disclosed in your presentation.
- 2) You can disclose and promote the contents of the presentation to any domestic and/or foreign enterprises at any time.

Therefore, you can take actions to utilize the intellectual property right of ITS, which is derived from your invention!

Keep in close touch with LPMP2KI when you plan to utilize your invention.

## 5.2 Promotion of Your Invention

You can promote and sell or license your invention to business enterprises. Consult Badan Inovasi dan Bisnis Ventura (BIBV), before you start promoting your invention.

(1) If a **domestic enterprise** is interested in your invention, make a contract to **sell or license** your invention to the enterprise in either of the following ways:

- 1) At a low price under the condition that you do not need to refund the money when your invention is not patented.
- 2) At a high price under the condition that you shall refund the money when your invention is not patented.

(2) You can also **sell “the date of filing”** of your patent to a **foreign enterprise**, by taking the following steps:

(You can promote your invention to overseas business enterprises without paying the application fee abroad)

- 1) Search potential customers of your invention on the Internet.
- 2) Write a letter or send e-mail to the potential customers, informing that you have applied for a patent on your invention in Indonesia.
- 3) Find out whether the enterprise is interested in applying for a patent on your invention in the country of its registration.
- 4) Sell the date of filing of your patent to the customer you have found. The company will include your name as one of the inventors.

You can proceed to (1) and (2) even before the examination of your patent application is completed by the Indonesian authority. Businesses could buy the probability that your invention is patented.

If your invention becomes successfully patented, it becomes the intellectual property of the businesses who bought the probability earlier. On the contrary, if your invention fails to be patented, it results in the businesses losing the money invested in buying the probability.

## Chapter 6: Summary of Patent Application and Utilization

The following diagram (Fig.6.1) summarizes how to apply for and utilize a patent on your invention.

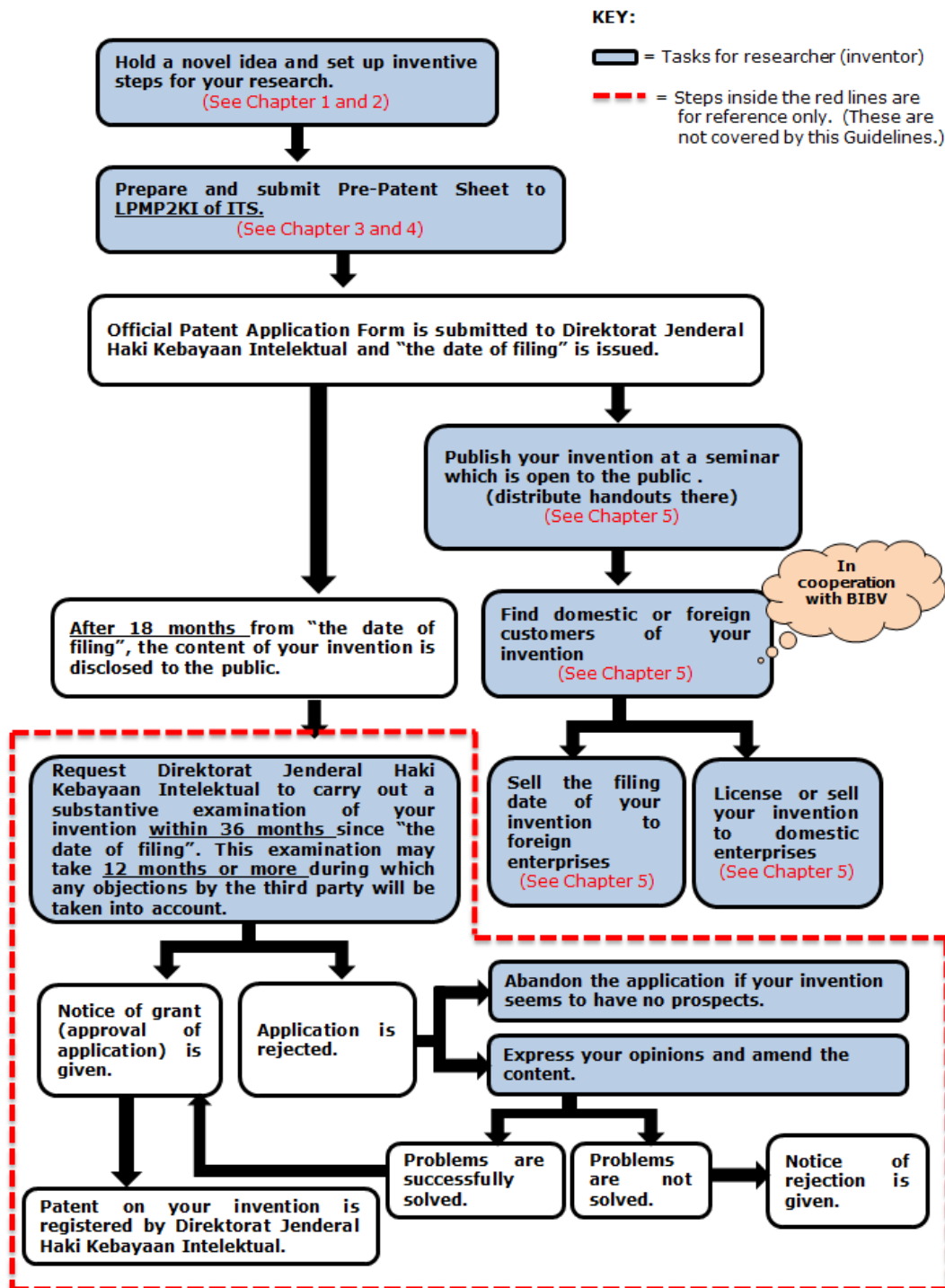


Fig.6.1 Summary of Patent Application and Utilization

## Appendix 1

### My Patent Map

In preparation for your research plan and patent application  
<Submit to LPMP2KI before starting research>

Proposed Research Topic: \_\_\_\_\_

Key Words of this research	(1) (2) ....
Results of patent search in the related field (USA)	US Patent and Trademark Office (USPTO) <a href="http://patft.uspto.gov/">http://patft.uspto.gov/</a> List of issued patents (quick saearch) that are close to my research 1) 2)  Potential research topics/fields
Results of patent search in the related field (EU)	European Patent Office (EPO) <a href="http://worldwide.espacenet.com/quickSearch?local=en">http://worldwide.espacenet.com/quickSearch?local=en</a> List of issued patents (quick saearch) that are close to my research 1) 2)  Potential research topics/fields
Candidate technologies that will be invented through this research	

## APPENDIX 2

### **Pre-Patent Sheet** <Submit to LPMP2KI>

Date: \_\_\_\_\_

Name: \_\_\_\_\_

1	Title of Invention	
2	Name of Inventors (Authors) *: Representative of authors	1) * 2) 3) (List all inventors)
3	Field of Invention	(Make sure that the field is consistent with the title/description)
4	Background of Invention	1. Prior arts (Latest technologies related to your invention) 2. Problems of the conventional technologies 3. Measures to solve the problems stated in 2. 4. Effects of your invention
5	Summary of Invention	(Explain the most important claim)
6	List of Drawings	(List of important graphs/diagrams/flow charts of the whole procedures of your invention, if available)
7	Detail Description of Invention	
8	Claim	
9	Abstract	
10	Drawing	(Attach all the drawings listed in 6.)

Contact: Prof. Dr. Suprpto (Kepala LPMP2KI)  
Prof. Dr.rer.nat. Irmina Kris Murwani  
(Koordinator Pusat Pengelola Paten dan Hak Kekayaan Industri)  
e-mail: korpus.patenhki@its.ac.id