



## BORANG PERMOHONAN PATEN

### PATENT APPLICATION FORM

#### BAHAGIAN A : MAKLUMAT PEMOHON (Ketua Projek) PART A : APPLICANT INFORMATION (Project Leader)

- a) Nama  
*Name* : \_\_\_\_\_
- b) No. Tel  
*Phone no* : \_\_\_\_\_ (Pejabat)  
*(Office)* \_\_\_\_\_ (Bimbit)  
*(Mobile)* \_\_\_\_\_
- c) No. Faks  
*Fax no* : \_\_\_\_\_
- d) Emel  
*Email* : \_\_\_\_\_

#### BAHAGIAN B : MAKLUMAT PENYELIDIKAN

##### PART B : RESEARCH INFORMATION

- a) Tajuk Reka cipta :  
*Title of Invention* \_\_\_\_\_
- b) Tajuk Projek Penyelidikan :  
*Title of Research Project* \_\_\_\_\_
- c) PTJ Projek Penyelidikan :  
*Research Project PTJ* \_\_\_\_\_
- d) Sumber Kewangan :  
*Source of fund* \_\_\_\_\_
- IRPA  
*IRPA*       Asas / RUGS  
*Fundamental/RUGS*       Sciencefund  
*Sciencefund*
- Technofund       Lain-lain :  
*Others* \_\_\_\_\_
- e) Kod Projek :  
*Project Code* \_\_\_\_\_
- f) Nilai Geran(RM) :  
*Grant Value* \_\_\_\_\_
- g) Kluster Penyelidikan :  
*Research Cluster* \_\_\_\_\_
- Pertanian  
*Agriculture*       Makanan  
*Food*       Perhutanan & Alam Sekitar  
*Forestry & Environment*
- Sains Sosial  
*Social Science*       Kesihatan  
*Health*       Sains,Teknologi & Kejuruteraan  
*Science, Technology & Engineering*

**BAHAGIAN C : PEMILIKAN**  
**PART C : OWNERSHIP**

a) **Institusi**  
*Institution:*

<b>Pemilik &amp; Rakan Kerjasama</b> <i>Owner &amp; Co-Owner</i>	<b>*Pembahagian (%)</b> <i>*Distribution (%)</i>
i) Universiti Malaysia Kelantan	
ii)	
iii)	
Jumlah/ <i>Total</i>	100%

\* Berdasarkan perjanjian yang telah ditandatangani (sila lampirkan)

*Based on agreement (provide reference)*

b) **Pereka cipta**  
*Inventors:*

<b>* Pereka cipta/Penyelidik</b> <i>Inventor/Researcher(s)</i>	<b>No.KP/Pasport</b> <i>Passport / IC No.</i>	<b>Kerakyatan</b> <i>Nationality</i>	<b>Pembahagian incentif (%)</b> <i>Incentive distribution</i>	<b>Tandatangan</b> <i>Signature</i>
i)				
ii)				
iii)				
iv)				
v)				
Jumlah/ <i>Total</i>			100%	

\* Termasuk nama ketua projek

*Should include a project leader's name.*

Pemilikan dan hak peratusan reka cipta tidak menentukan pengagihan pendapatan yang sama yang dihasilkan melalui pengkomersilan produk/teknologi

*The ownership and inventors percentage right does not necessarily reflect the same income distribution generated through commercialization of the product/technology.*

**BAHAGIAN D : MAKLUMAT REKA CIPTA**  
**PART D : INVENTION INFORMATION**

**Sila layari laman web berikut untuk carian pendedahan awal yang berkaitan dengan reka cipta. Nyatakan kata kunci yang digunakan. Keputusan reka cipta yang berkaitan perlu dilampirkan bersama dengan borang ini. Rujuk Lampiran 1.**

*Please visit the following websites to search for prior art related to your invention. Indicate the keywords used for the patents search in the column below. The result of relevant patents should be attached together with this form. Please refer to Appendix 1.*

<b>1. Senarai laman web [✓]</b> <i>List of website [✓]</i>	<b>Kata kunci yang digunakan untuk carian</b> <i>Keywords used for search</i>
a) United States Patent and Trademark Office (USPTO) <a href="http://www.uspto.gov/patft/index.html">http://www.uspto.gov/patft/index.html</a>	<input type="checkbox"/>
b) European Patent Office (EPO) <a href="http://ep.espacenet.com/">http://ep.espacenet.com/</a>	<input type="checkbox"/>
c) Intellectual Property Office of Singapore <a href="http://www.surfpip.gov.sg/">http://www.surfpip.gov.sg/</a>	<input type="checkbox"/>
d) The Industrial Property Digital Library (IPDL, JPO) <a href="http://www19.ipdl.inpit.go.jp/PA1/cgi-bin/PA1INIT?1175476102765">http://www19.ipdl.inpit.go.jp/PA1/cgi-bin/PA1INIT?1175476102765</a>	<input type="checkbox"/>
e) PatentScope, (WIPO) <a href="http://www.wipo.int/pctdb/en/">http://www.wipo.int/pctdb/en/</a>	<input type="checkbox"/>
f) Lain-lain/others:	<input type="checkbox"/>

**Sila nyatakan mana-mana penerbitan atau pendedahan berkaitan dengan reka cipta [✓]**

*Please indicate any publication or public disclosure on your invention. [✓]*

<b>2. Pendedahan awal</b> <i>Prior Disclosure</i>	<b>*Maklumat lengkap pendedahan awal</b> <i>*Details of earliest prior disclosure</i>
<p>a) <b>Jenis penerbitan/pendedahan awal:</b>  <i>Form of publication/disclosure:</i></p> <ul style="list-style-type: none"> <li>• Abstrak/Abstract</li> <li>• Jurnal/Journal</li> <li>• Artikel/Article</li> <li>• Tajuk buku/Book chapters</li> <li>• Tesis/Thesis</li> <li>• Laman web/Website</li> <li>• Pembentangan/Oral presentation</li> <li>• Perbincangan dengan pihak ke-3 tanpa Non-disclosure Agreement (NDA)/ <i>Discussion with third parties without NDA</i></li> <li>• Pameran/Exhibition</li> <li>• Lain-lain/Other:</li> </ul>	<p>i) Nama/tajuk pendedahan awal  <i>Name/title of disclosure</i></p> <p>1. _____  2. _____</p> <p>ii) Tarikh penerbitan/pendedahan  <i>Date publication/disclosure:</i></p> <p>1. _____ 2. _____</p> <p>iii) Rujukan  <i>References:</i></p> <p>1. _____  2. _____</p>

<p><b>3. Rancangan penerbitan</b> <i>Planned Publication</i></p> <p><b>Adakah anda merancang untuk menerbitkan atau membuat satu pembentangan reka cipta dalam masa 12 bulan yang akan datang?</b> <i>Do you plan to publish or make an oral presentation that discloses your invention in any way in the next 12 months?</i></p> <p>Ya/Yes [ ]</p> <p>Tidak/No [ ]</p>	<p><b>*Perincian rancangan penerbitan</b> <i>Details of planned publication</i></p> <p><b>i) Nama/tajuk pendedahan</b> <i>Name/title of disclosure:</i> -----</p> <p><b>ii) Tarikh tepat/dijangkakan</b> <i>Actual/expected Date:</i> -----</p> <p><b>iii) Pendedahan/ penerbitan tempatan atau antarabangsa</b> <i>Disclosure/publication local or International:</i> -----</p>
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\*Jika berkaitan, sila lampirkan dokumen berkenaan  
If applicable, please attach disclosure documents

**Sila jawab soalan di bawah dan sertakan lampiran untuk maklumat tambahan atau ruangan tidak mencukupi. Sebagai panduan, sila rujuk kepada Lampiran 2 bagi memenuhi piawaian spesifikasi paten.**  
*Please answer the questions below and provide attachments for additional information or insufficient space. As a guide, please refer to Appendix 2 for fulfill the patent standard specification.*

<b>1. Kategori Reka Cipta / Invention Category</b>											
<input type="checkbox"/>	Bahan/ Kandungan komponen <i>Material / Compound composition</i>	<input type="checkbox"/>	Proses/ Kaedah <i>Process/ Method</i>	<input type="checkbox"/>	Produk/ sistem reka bentuk <i>Product/ System/ Design</i>	<input type="checkbox"/>	Gabungan teknologi yang sedia ada <i>Combination of existing technology</i>	<input type="checkbox"/>	Penambahan ke atas teknologi sedia ada <i>Improvement to an existing technology</i>	<input type="checkbox"/>	Lain-lain <i>Others</i>
<b>2. Bidang Reka Cipta / Field of the Invention</b>											
<div style="border: 1px dotted black; height: 100px; width: 100%;"></div>											

**3. Latar Belakang Reka Cipta (Masalah Teknologi Terdahulu)**

*Background of the invention (Problems in prior art)*

**Kenalpasti masalah teknikal dalam teknologi masa ini yang dapat diselesaikan oleh reka cipta ini**

*Identification of the technical problem/s in prior art/current technology that being solved by the invention*

- (a) Apakah produk/proses yang mempunyai persamaan dengan reka cipta berdasarkan hasil carian yang telah dibuat? Sila lampirkan rujukan.

*What is the closest product/process to your invention based on prior art search you have conducted? Please provide references.*

- (b) Jelaskan masalah atau kelemahan teknologi sedia ada di No. 3 (a) yang dapat diselesaikan oleh reka cipta anda.

*Describe the problems or disadvantages of the existing technology in No. 3 (a) that will be solved by your invention.*

**4. Ringkasan Reka Cipta**  
*Summary of the Invention*

- (a) Nyatakan keunikan aspek/penemuan terbaru/kelebihan reka cipta dan bagaimana ia dapat menyelesaikan masalah atau kelemahan yang ditemui dalam teknologi terdahulu seperti yang dinyatakan di No. 3(b).  
*Describe the unique aspects/novel features/advantages of your invention, and how it will solved the problems or weaknesses found in prior art technologies as described in No. 3(b).*

- (b) Mengapa anda percaya bahawa reka cipta anda tidak mempunyai persamaan ketara dengan pereka cipta/orang yang berkemahiran dalam bidang dan masalah yang sama?  
*Why do you believe your invention would not have been obvious to another inventor/person skilled in the art working on the same problem?*

**5. Perincian Reka Cipta**  
*Description of Invention*

**Reka cipta yang dijalankan hendaklah dinyatakan dengan jelas dan lengkap bagi membolehkan seseorang yang mahir dalam teknologi menghasilkan semula reka cipta anda.**  
*Disclosed clearly and concisely how your invention works so that it can be reproduced by person skilled in the art or working in the same technical field as your invention.*

- (a) Nyatakan penerangan terperinci bagaimana reka cipta berfungsi bersertakan dengan contoh.  
*Provide detailed description of how does an invention works with the preferred example or embodiment.*

- (b) Sediakan/lampirkan data eksperimen, gambarajah, lukisan, graf, foto, manuskrip, lakaran dan lain-lain yang boleh menjelaskan reka cipta itu berfungsi seperti yang dijelaskan di no.5 (a).  
*Please provide/attach experimental data, flow diagrams, drawings, graphs, photos, manuscripts, sketches, and any other materials to illustrate the working condition of your invention as mentioned in No. 5 (a).*

**(c) Nyatakan aplikasi/kegunaan reka cipta dan potensinya di dalam bidang yang lain.**

*Please indicate the primary uses and applications of your invention and the potential application in other fields*

**6. Tuntutan Reka Cipta**

*Claims of Invention*

**Tuntutan reka cipta menjelaskan skop perlindungan dan bahagian penting dalam spesifikasi paten.**

*The claims of invention define the scope of the protection and the main highlighted of the patent specification.*

**(a) Kenalpasti bentuk/elemen/langkah mereka cipta di dalam prototaip/keputusan pada reka cipta**

*Identify the main feature/element/step that you have invented in your embodiment/ example/ prototype/ result of your invention (independent claims)*

**(b) Senaraikan semua bentuk/elemen/langkah bagi menyokong bentuk/elemen/langkah yang utama di no. 6 (a).**

*List down all other features/ elements/ steps to support the main feature/ element/ step in no. 6 (a)(dependent claims)*

**(c) Nyatakan sebarang julat kritikal (saiz, berat, tekanan, suhu, pH, dll atau persekitaran kerja) yang diperlukan untuk reka cipta itu berfungsi?**

*Indicate any critical ranges (size, weight, pressure, temperature, pH, etc., or working conditions) required for the invention to work?*

**7. Abstrak / Abstract**

**Ringkaskan reka cipta anda (tidak lebih daripada 150 perkataan)**

*Summarize your invention (not more than 150 words).*

**8. Peringkat Pembangunan**

*Stage of Development*

**(a) Tandakan (/) pada ruangan yang berkaitan yang menjelaskan peringkat reka cipta yang terkini.**

*Please tick (/) in the box that most closely describes the current stage of your invention*

Konsep yang lengkap  
*Complete proof  
of concept*

Prototaip Prototype

Sedia dikomersilkan  
*Ready to be  
commercialized*

Lain-lain  
*Others:*  
.....  
.....

**(b) Nyatakan kelemahan atau kekurangan pada reka cipta anda dan apakah yang perlu dilakukan untuk menjadikan ia lebih baik?**

*Indicate disadvantage or limitations of your invention and what could be done to make it better?*

**(c) Adakah anda sedang melakukan penambahbaikan terhadap reka cipta? Jika ya, sila nyatakan.**

*Are you working for further improvement of invention? If yes please describe.*

**(d) Adakah produk atau proses telah diuji dan menepati piawaian atau peraturan sedia ada?**

*Has the product or process been tested and complies with existing regulations or standards?*

**9. Potensi Pengkomersilan***Commercialization Potential***(a) Senaraikan syarikat/industri utama yang terlibat dalam bidang bagi teknologi ini***List down any main company/industry in the field of this technology***(b) Senaraikan potensi pasaran untuk teknologi ini (negara/kawasan)***List down intended or potential market for this technology (country/region)***10. Lain-Lain Perkhidmatan Diperlukan***Other services that may require*

- Dana untuk naik taraf/prototaip  
*Funds for up scaling/ prototype*
- Dana untuk percubaan klinikal/ujian piawaian  
*Funds for clinical trial/ standard test*
- Rakan kongsi industri untuk pengkomersilan  
*Industrial partner for commercialization*
- Rakan kongsi untuk penyelidikan akan datang  
*Industrial partner for further research*
- Lain-lain  
*Other.....*

**Tandatangan Ketua Penyelidik**

Signature Head Researcher

<b>Nama</b> Name		<b>Tandatangan dan Cop Jawatan</b> Signature and Stamp	
<b>Tarikh</b> Date			

**Pengesahan oleh Timbalan Dekan (P&I)/ Pengarah Pusat**

Declaration from Deputy Dean (R&amp;I)/ Director

<b>Nama</b> Name		<b>Tandatangan dan Cop Jawatan</b> Signature and Stamp	
<b>Tarikh</b> Date			

**Kelulusan Jawatankuasa Harta Intelek dan Pengkomersialan (JHP)**

Approval from Research Intellectual Property and Commercialization Committee

<b>Ulasan Jawatankuasa:</b> Comments from the Committee:       <input type="checkbox"/> <b>Diluluskan</b> Approved <input type="checkbox"/> <b>Tidak Diluluskan</b> Not Approved			
<b>Nama</b> Name		<b>Tandatangan</b> Signature	
<b>Tarikh</b> Date			

## PRIOR ART SEARCH

### 1.0 What is Prior Art?

Prior art refers to scientific and technical information that exists before the effective date of a given patent application

Prior art may include:

- previous patents
- trade journal articles
- publications (including data books and catalogs)
- public discussions (conference and seminar)
- trade shows
- brochures
- products, devices & equipments

### 2.0 Why Search for Prior Art?

Prior art search will help you to:

- understand your competition
- avoid patent infringement
- write your patent application
- learn more about your field of invention
- Save the cost of patenting process

Note:

The results of a good patent search should reveal any identical, similar, or partially similar inventions to the one you might patent.

### 3.0 How to Search for Prior Art?

An on-line prior art search can be done by a keyword search

Keyword search

- list the keywords that you would use to describe the invention
- think of all possible aspects of the invention and choose keyword that describe each aspect

Note:

The quality of a keyword search will depend on the appropriateness of keywords selected

## SPECIFICATION OF PATENT DOCUMENTS

### 1.0 PURPOSE

Study the specification of patent would be help researcher to answer the questions for invention disclosure

### 2.0 THE PARTS OF PATENT SPECIFICATION

#### 2.1 Title

The title of the patent should describe the subject matter in the patent application.

#### 2.2 Field of Invention

The field of invention is a general broad statement describing the art or technology to which the invention relates.

#### 2.3 Background

The background is used to describe the state of the technology, the known prior art, the disadvantages/needs that are being overcome before the invention described in the patent.

The background describes / met by the disclosed invention.

The background frequently identifies prior patents. Key features of the invention compared with the prior art are described and explained. Related patents and other references are usually disclosed here.

#### 2.4 Summary

This section should present the general idea of the claimed invention in summarized form. The summary may point out the advantages of the invention and how it solves previously existing problems, preferably those problems identified in the background of the invention.

#### 2.5 Description

The description starts off with general background information and progresses to more detailed information about the invention (could be product or process and its parts).

The description must be written as complete and thorough as any new information to the patent application cannot be added once it is filed. Changes can only be made to the subject matter that could be reasonably inferred from the original drawings or description.

#### 2.6 Claims

Each claim should be a single sentence, and where a claim sets forth a number of features/elements or steps, each element or step of the claims should be separated by a line indentation.

The claims must particularly point out and distinctly claims the subject matter which is regarded as the invention. The claims define the scope of the protection of the patent and it is the main highlight of the patent specification.

#### 2.7 Abstract

The abstract is a short summary of your invention, how it can be used and should consist the following:

- a. Description of the invention and what it is used for;
- b. Description of the main components and how they work;
- c. Preferably not more than 150 words.

#### 2.8 Drawings

The drawings of a patent application describe the invention visually, using a chemical or mechanical structure, charts and graphs, and detailed relationships of features.

The drawings contain references (numeric and alphabetic) that relate the feature described in the specification to a corresponding feature or portion shown in the drawing/image.