

FORM 02-IPR

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Indian Institute of Space Science and Technology
 Thiruvananthapuram

Invention Disclosure Form

This form is to be filled by IIST faculty, students, technical staff and external collaborators who have made an invention or created a knowledge or technology, which can be used for the benefit of society through commercialization or other means. These disclosures will be advertised in IIST website and other recognized platforms to enable those interested to approach the institute for technology transfer or for licensing. Inventions worth protecting will be patented by IIST (and organizations of external inventors), with the inventor-ship assigned based on this disclosure.

1. Title of the invention or knowledge/technology:
2. A brief description of the invention or the created knowledge/technology (this will be included in the website; do not disclose details which could enable someone else to use it without the help of the inventors/creators; rather, stress on the possible uses):
3. Inventors or creators of the knowledge/technology. Include all inventors (see appendix for definition), including those from outside IIST (add more rows as required):

Sl No.	Name, designation, affiliation, and contact details (phone numbers and email addresses)	Percentage contribution*
1.		
2.		
3.		

* In case the invention/knowledge/technology leads to revenue, the inventors' share will be divided in proportion to the above percentages (if there are external inventors, this will be dealt with based on MoUs with their organizations). This distribution can be changed at any time later with the agreement of all inventors/creators.

4. From above list of inventors/creators, list the names of those who can be shared with external people interested in technology transfer or licensing. (Please note that inventors/creators should not make any commercial commitments without involving the Technology Transfer Cell of IIST).
5. Briefly describe the context in which the invention or knowledge/technology creation took place (example - in the course of a student project, or during the execution of a funded project, etc), and the approximate period during which the invention was made or knowledge/technology created.
6. List the names and contact details of colleagues of the inventors who know about the invention or generated knowledge/technology, but are not inventors/creators, and can be contacted to verify the completeness of the inventorship list.

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7. If the work during which this arose was funded by IIST or an external agency, please give details, including the clauses related to patenting and commercialization in any MoU signed.

8. Is the invention worth patenting? (See appendix for eligibility for patenting, and the process involved)

9. If yes,

(a) Briefly describe the “prior art” and how it indicates the invention is novel. Also include the results of the prior art search (PAS) as a separate attachment (IIST library facility must be used and detailed report with key words should be included as PAS summary in the attachment) – include the details of the software packages or web based services used for PAS, databases searched, all the key words used, and list the titles and numbers of relevant patents, and references of technical papers, articles, etc which are relevant. Also include as attachment, the answered questionnaire of our patent attorneys (if applicable).

(b) List possible entities who might be interested in licensing the patent, including any of the inventors.

(c) List of countries in which it would be useful to file the patent. (include justification also)

10. The above information is true to the best of our knowledge. We take full responsibility for the completeness and correctness of the claim of inventor-ship, and also for the completeness of information given in item 5.

Name:	Name:	Name:	Signature:
Signature:	Signature:	Date:	Date:
Date:			

(All inventors have to sign)

11. Forwarded by Heads of the Departments of all inventors and also the appropriate Heads of all external inventors – to Dean (R&D) & IPR.

Designation:	Designation:
Affiliation:	Affiliation:
Name:	Name:
Signature:	Signature:

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Date:
Official seal:

Date:
Official seal:

(Add more if required)

For office use:

12. Action to be taken:

Name:
Signature:
Date:
Dean (R&D) & IPR.

FORM 02-IPR**IPR CELL**
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Prospective applicants may kindly refer to the Indian Patents Act, 1970 for the eligibility for patenting and patentable and non-patentable inventions. For knowing periodic amendments in the Patents Act, visit (<http://www.ipindia.gov.in>).

A general guideline to understand the criteria that determine what can be patented in India is summarized below:

1. Patentable subject matter

The foremost consideration is to determine whether your invention relates to a patentable subject-matter. *Sections 3 and 4 of the Patents Act* list out non-patentable subject matter. If your invention on which you are planning to file a patent does not fall under any provision of *Sections 3 or 4*, it means it has patentable subject matter (subject to the satisfaction of the other criteria).

2. Novelty

Novelty is an important criterion in determining patentability of an invention. Novelty or new invention is defined under *Section 2(l) of the Patents Act* as "any invention or technology which has not been anticipated by publication in any document or used in the country or elsewhere in the world before the date of filing of patent application with complete specification, i.e., the subject matter has not fallen in public domain or that it does not form part of the state of the art".

In simple terms, the novelty requirement basically states that an invention should never have been published in the public domain. It must be **new with no same or similar prior arts**.

3. Inventive step or Non-Obviousness:

Inventive step is defined under *Section 2(ja) of the Patents Act* as "a feature of an invention that involves technical advance as compared to the existing knowledge or having economic significance or both and that makes the invention not obvious to a person skilled in the art". This means that the invention must not be obvious to a person skilled in the same field as the invention relates to. It must be inventive and not obvious to a person skilled in the same field.

4. Capable of Industrial Application:

Industrial applicability is defined under *Section 2(ac) of the Patents Act* as "the invention is capable of being made or used in an industry". This essentially means that the invention cannot exist in abstract. It must be capable of being applied in any industry, which means that the invention must have practical utility in order to be patentable.

These are the statutory criterion for the patentability of an invention. Apart from this, another important criterion for getting a patent is disclosure of an enabling patent. An enabling patent disclosure means a patent draft specification must disclose the invention sufficiently, so as to enable a person skilled in the same field as the invention relates to, to carry out the invention without undue effort. If the patent specification does not disclose an enabling patent then a patent will most definitely not be granted.

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IPR Cell IIST will facilitate filing an application for Indian Patent. The following steps will guide you understand the processes and the anticipated timelines.

Considering the number of deadlines and the impact of these deadlines, IIST has engaged a patent professional / firm to assist its inventors with patent filing (once the application gets recommended by the IIST IPR Committee for filing a patent).

Step 1 – Preparing your application for submission to IPR Cell, IIST.

To start the process, Check the Patentability of the invention by performing a search for similar technologies. A detailed Prior Art Search (using IIST library facilities is mandatory) will help in identifying the patentability along with the definitions for patentable subject matter as endorsed in The Patents Act 1970. The search should ideally be performed for both patent and non-patent references. The advantage of a search is it provides a good idea of the merit of the invention and helps in deciding if there are good chances of ultimately getting a patent granted. Furthermore, based on the references (prior art) discovered during the search, you have the option of fine-tuning your patent application to ensure that you don't end up filing a patent for something which already existed.

Step 2 – Drafting a patent application (Provisional or Complete)

Once, you have made up your mind to go forward with the patent application process, the next step is to prepare an application. If the invention is still in the development mode and tests are underway, you may file a provisional application to block the priority date. Filing of the provisional application gives you 12 months of time to test and finalize your invention and file the complete application. However, IIST IPR Cell will not bear the expenditure for a provisional application. The expenditure may be met by the inventor/s and the incurred charges will be reimbursed only after the complete specifications are filed and assigned an application number by the Indian Patent Office.

Whether filing a provisional or a complete application, extra special attention should be paid to the patent draft included along with the application. Ideally, refer to the patents in the related domains and understand how the claims are put forth. It is important to understand that the patent language, drafting style and the presentation of claims are entirely different from the demands for a journal publication. The patent draft is your representation in front of the patent office and the decision of the patent office on the grant of the patent will be made based on the draft itself. Hence, not doing a patent draft properly may lead to a patent application which doesn't get a grant or if granted doesn't help you stop competitors effectively.

Step 3 – Submission of Invention disclosure form

Once you complete the prior arts search and are ready with your set of claims, submit the applications to IPR Cell. A checklist for submission is available in the IIST website to help you identify the requirements during the submission of an application. The IPR Cell will assign an application number with the date of receipt of application only after preliminary scrutiny of the application by the IPR Committee for its completeness (submitting an application at IPR office should not to be mistaken/claimed as the date of submission). Once the unique application number is assigned (within

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1-3 weeks of submission of the application), the inventors will be invited for a technical presentation to highlight the significance of the invention and to justify why it should get patented. If the committee recommends for the next step, double blind peer-review will be conducted (after NDA is signed by the reviewers) for assessing the technical aspects of the claims and need for patenting. Based on the recommendations by peer-experts and IPR Committee recommendations, IPR Cell may proceed with the steps for filing the application (1-2 months within the date of receipt of the application). The service of identified patent professionals is being utilized by IIST to help its inventors protect their inventions/designs etc.

In case of applications not recommended for patent filing, IPR cell may recommend to display the technology in its website so that interested parties can come forward for licensing.

Important Note : The submission of an application with IPR Cell automatically warrants for the declaration from the inventors that the same has not been submitted anywhere else for a publication/patent or the like. Inventors are strictly advised to keep the confidentiality of the invention till they receive the patent filing Application number from IPO. This can usually take anywhere from 2-12 months or more, depending on the claims and the completeness of the application. In case of violations of confidentiality or submission of false/fabricated data for filing, strict actions against the inventors will ensue.

IPR Cell is the only authorized body in IIST to contact the patent agency for clarifications on any applications under processing and the inventors are strictly advised to not interact with the patent agency without prior intimation to IPR Cell. Any expenditure incurred as a result of direct interaction with the inventor and patent agency will not be paid by IIST.

Each application for a patent which is filed with the Indian patent office needs to be accompanied by the forms provided below, for your application IPR Cell will liaise with the identified agency to complete the formalities:

Form 1 – Application for grant of a patent

Form 2 – Provisional/Complete specification

Form 3 – Statement and undertaking regarding foreign application under section 8 (only required if a corresponding patent application is filed in another country)

Form 5 – Declaration as to inventorship (only to be filed along with the complete application)

Form 26 – Form for authorization of a patent agent (only required if you are using a patent agent to help you file the application)

Form 28 – To be submitted by startup or small entity (only required if you are claiming startup or small entity status)

Priority documents – In case you are claiming priority from a foreign patent application and entering India, you may be required to provide the priority document as well.

Step 4 – Publication of patent application

Every patent application which is filed with the Indian patent office is kept as a secret until the time it is published in the official patent journal. Indian patent office will publish patent applications ordinarily after 18 months. This is an automatic event and you need not make any request. However, if you wish to get your application published earlier, you can make a request for early publication (Form 9) and your application will ordinarily be published within 1 month of the request.

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The advantage of publication – The date of publication is important as your privileges and rights start from the date of publication, although you can't enforce your rights by way of any infringement proceedings until your patent is granted.

When not published – It is also important to know that there are a few scenarios under which a patent application may not be published and kept as a secret:

- Secrecy directions have been imposed under the patent act. Secrecy directions are imposed if the invention falls in a category publication of which could be against the interest of the nation.
- A complete application was not filed within 12 months from the date of filing of the provisional application
- A request for withdrawal was made. Such a request has to be made at least 3 months prior to publication. So, for practical purposes, it is 15 months from the date of priority in a standard patent application process.

Step 5 – Examination of the patent application

Every patent application which is filed for protection will be substantively examined before a patent is finally granted. The examination process is where your patent application will finally be examined on merits of the invention as described and claimed in the patent specification.

Request for Examination

The examination process, unlike publication, doesn't happen automatically by way of filing of the Indian patent application. The applicant has to specifically make a request for examining their patent application (Form 18). Only when a Request for Examination (RFE) is received, will the application be queued for examination. So, the earlier you make the RFE request, the earlier your application may be examined by the examiner.

If you wish to fast track your patent application even further and jump the examination queue, you can file a request for expedited examination (Form 18A). However, an expedited examination is only available to the applicant if the applicant is either a startup; or the applicant chose the Indian Patent Office as the International Search Authority (ISA) or International Preliminary Examining Authority (IPEA) during their international application (PCT application).

Examination process (Objections by examiner & responding to objections)

Once, the RFE has been filed, it will eventually land up on the desk of the examiner from the relevant technology background for examination. During the examination process, the examiner will scrutinize the application to ensure that the application is in accordance with the patent act and rules. The examiner also performs a search to understand similar technologies to ascertain if the invention would satisfy the patentability criteria.

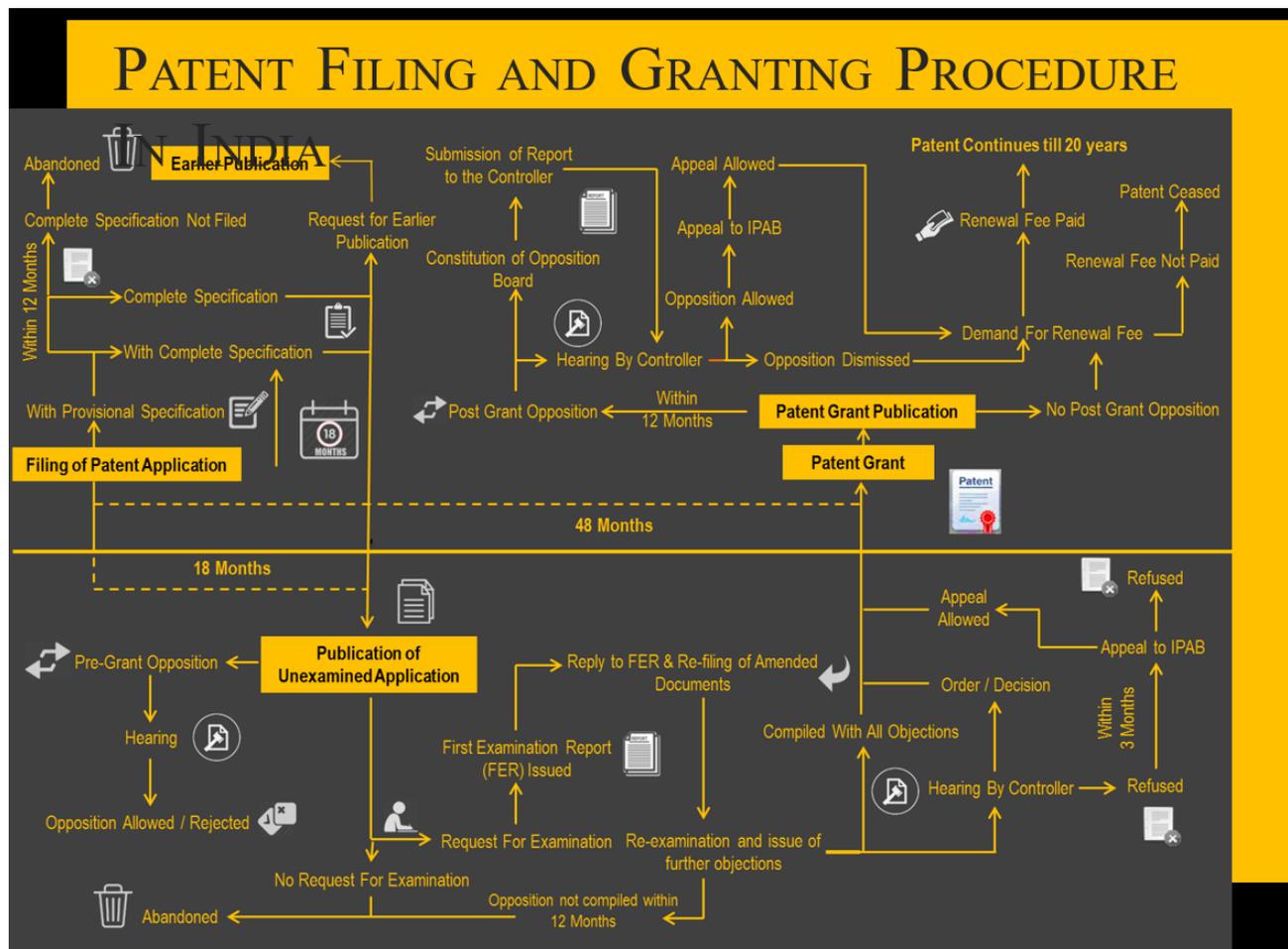
Based on the review of the application, the examiner will issue an Examination Report to the applicant, stating the grounds for objections. The first such examination report is called the First Examination Report (FER). Once, the FER is issued, the patent applicant needs to successfully overcome the objections to receive a patent grant. The whole process may involve responding to examination reports, appearing for hearing, etc. The total time needed to put an application in order for the grant is 6 months from the date on which the FER is issued to the applicant.

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Once, the patent application overcomes all the objections, the patent will be granted and published in the patent gazette.

Step 7 – Renewal

After the patent has been granted, it has to be renewed every year by paying the renewal fee. A patent in India can be renewed for a maximum period of 20 years from the patent filing date.

**Costs involved during the patent process**

Since the patent process can go up to 5 years and involves various options, the pricing may vary based on the actions performed.

For more details visit <http://www.ipindia.gov.in/>

Now you are ready to start patent drafting! Go ahead and submit your application to IPR Cell, IIST. We ensure our whole hearted support for the best returns from your inventions!