

## **PATENTS**

### **Q1. What is a patent?**

Patent is a techno-legal document granted by the government that provides legal protection to an invention. Patents are territorial in nature and granted in return of the full disclosure of the invention by the inventor. Upon the expiry of the term of the patent, the information given in the patent document becomes public to enable other users to benefit typically carrying out R&D. A patent confers limited monopoly to the inventor which ensures that the invention is not used, sold, and/ or otherwise commercialized by anyone without consent of the owner of the patent.

### **Q2. What is the distinction between patented inventions and know how?**

Often, information/data disclosed in the patent application that is made public as patent specification may not be sufficient for ‘working the invention’ or commercial exploit of the invention to make a product or use as a process to make a product. Typically, in the patent document, inventors disclose only the most relevant/minimal data/information for substantiating the claims mentioned in the patent. In other words, the patent granting authority only needs to be satisfied that the claims made in the patent application are substantiated by the data provided. Knowhow, on the other hand, covers all the critical data/information necessary to execute the implement to commercialize the invention such as; exact operating conditions, details of the production methods, setting up a production plant, plant layout designs and drawings etc. This knowhow that is available only with the inventor(s) as only they are familiar with the invention. Know-how is critical for making a product or using a process and is critical in the licensing of technology to a commercial entity. Know how is usually kept as a trade secret and is neither shared with public (disclosure in the patent application) nor protected through patents as it means disclosure of critical data/knowledge available only with the inventor(s). Knowhow developed around an existing patent is made available to the licensee while the process of up scaling and manufacturing of a product during the commercialization of an invention. Knowhow is therefore required to successfully work the invention to bring out a product or use the new process by a company.

### **Q3. Who is an inventor for a Patent?**

All the people who have significantly contributed for achieving the result(s) reported in the invention are eligible to be called as the inventor(s) of a patent. They could be scientists or technical personnel who have contributed to the development of the patent. The sequence of inventors is decided collectively or as per the institutional IP policy. Typically, those who have contributed significantly feature in the beginning as primary inventors. Their role as inventors will decide their share of the royalty received by the selling/renting of the invention.

### **Q4. Is a patent granted in one country automatically enforceable in other countries?**

Patent rights are essentially territorial in nature and are granted only for a country (or countries), where it has been applied for and granted. There is nothing like a global patent or a world patent. For obtaining patent rights in several countries, the applicant has to file patent application in each of the country of interest for grant of a patent separately. This would entail payment of official fees and all associated expenses, like the attorney fees, essential for obtaining patent in each country.

#### **Q5. Does grant of a patent in one country affect its grant or refusal in another country?**

Each country has its own patent system and law accordingly each country is free to grant or refuse a patent on the basis of scrutiny by its patent office as each country has clear-cut legal provisions under its patent law. Thus, granting of a patent in one country does not necessarily mean that other countries have to grant the patent for the same invention. Similarly, the refusal of the patent in one country does not mean that granting of patent will be denied by other countries.

#### **Q6. What is expected from patentee as an obligation to the State?**

Patents are granted by the Government, for a limited period for potential commercial exploitation of an invention in consideration of the disclosure of the invention. A patentee must disclose the invention in enough detail in the patent document for person skilled in the art can practice it after the expiry of the term of the patent or after the patent has lapsed due to nonpayment of maintenance fee or practice it with the consent of the patent holder during the life of the patent. Disclosure of an invention is a legal requirement for obtaining patent. As the right is conferred by the State, it can be revoked by the State under very special circumstances in public interest even if the said patent has been sold, licensed, manufactured, or marketed in the meantime.

#### **Q7. Where to submit patent application?**

Application for the patent has to be filed in the respective patent office of a country from where the applicants belong. The territorial jurisdiction of the applicant is decided based on whether any of the following occurrences falls within the territory

- a) Place of residence, domicile or business of the applicant (first mentioned applicant in the case of joint applicants).
- b) Place from where the invention actually originated.
- c) Address for service in India given by the applicant when he has no place of business or domicile in India. A foreign applicant should give an address for service in India and the jurisdiction will be decided upon that. An applicant (Indian or foreigner) also can give his Patent Agent's address as address for serving documents if he/she wishes.

## **Q8.How are the jurisdictions divided territorially in India?**

The Indian patent office operates from four regional offices situated at Mumbai, Kolkata, Delhi and Chennai with its headquarters at Kolkata. Each patent office manages its separate territorial jurisdiction as follows:

**Mumbai:** Gujarat, Maharashtra, Madhya Pradesh, Goa, Chhattisgarh, the Union Territories of Daman & Diu and Dadra & Nagar Haveli.

**Delhi:** Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand, National Capital Territory of Delhi and the Union Territory of Chandigarh.

**Chennai:** Andhra Pradesh, Karnataka, Kerala, Tamil Nadu and the Union Territories of Puducherry and Lakshadweep.

**Kolkata:** States of Bihar, Orissa, West Bengal, Sikkim, Assam, Meghalaya, Manipur, Tripura, Nagaland, Arunachal Pradesh and Union Territory of Andaman and Nicobar Islands

## **Q9. When should an application for a patent be filed?**

A patent application should be filed as soon as possible after the completion of the invention without any public disclosure. Applications can also be filed with provisional specification disclosing the essence of the nature of the invention without detailed claims of a patent. This will help in claiming of priority of an invention.

## **Q10. Can a published or disclosed invention be patented?**

Publication or any other public disclosure of an invention anywhere or in any form by the inventor before filing of a patent application would disqualify the invention to be patentable. It is therefore very important to file a patent application before publicly disclosing the details of the invention. In general, any invention which is made public before an application is filed would be considered ‘prior art’ (generally disclosure made available to the public anywhere in the world by written or oral disclosure). Hence, inventors should not disclose their inventions in any form before filing of a patent application in India.

## **Q11. Is there a possibility to file a patent after publication of an invention?**

Indian Patent Act under sections 29, 30, 31 & 32 gives provisions under which patent application can be filed despite public disclosure, and such public disclosure will not be considered to have been anticipated. Indian patent act, section 29 entitled “Anticipation by previous publication” provides filing for a disclosed invention if applicant or the patentee proves that matter published was obtained from him or any person from whom he derives title without his consent or the consent of any such person. Section 30 entitled “Anticipation by previous communication to the government” gives

provision for patent filing if invention has been communicated to the government or any person authorized by the government for the purpose of investigation of the invention. Under section 31, entitled “Anticipation by public display” a complete specification shall not be deemed to have been anticipated if, invention has been displayed in an exhibition to which the provisions of the instant section has been extended by the Central Government; or invention is described in a publication in consequence of display of the invention in such an exhibition; or invention has been used by any person without the consent of the true and first inventor or a person deriving title from him after it has been displayed in such an exhibition; or disclosing the invention before a learned society or publishing the invention in the transaction of such society; provided the application is filed within 12 months from aforementioned public display. Under section 32 entitled Anticipation by public working, a complete specification shall not be deemed to have been anticipated if the invention has been filed within 12 months after the invention has been publicly worked for the purpose of reasonable trial considering the nature of the invention.

However, in some countries like the USA allow for a grace period of one year which permits patenting of an invention within a year after disclosure of the invention.

#### **Q12. What are the responsibilities of a patentee?**

A patentee must disclose the invention in patent document for anyone to practice it after the expiry of the patent or practice it with the consent of the patent holder during the life of the patent. The Complete Specification describing the invention is a techno-legal document. It should disclose the invention adequately/ completely to meet the requirement of the Indian Patents Act (for patent applications filed in India) and should also enable a person possess average skill in the art to work the invention without assistance of the patentee. This is possible only when the complete specification describes the invention fully particularly its operation and/or method by which it is to be performed. It is also essential that the best method for performing the invention, which is known to the applicant, is disclosed in the Complete Specification.

#### **Q13. What are the documents to be filed with the patent application?**

Application for patent (Form 1) in duplicate should be accompanied with the -

- i. Prescribed fee (need to be paid within one month)
- ii. Provisional or complete specification in Form 2 and drawings (if any) in duplicate. If provisional specification is filed it must be followed by complete specification within 12 months.

- iii. Statement and undertakings regarding foreign filing details in respect of the same invention in Form
- iv. Declaration as to inventorship in Form 5 (In the case of a convention application and PCT national phase application and filing complete after provisional); and abstract of invention in duplicate.
- v. Priority document (if it is a convention application)
- vi. Power of attorney (Authorization of patent agent or any other person) in Form 26 and
- vii. Proof of right if the application is made by the assignee.
- viii. If the Application pertains to a biological material obtained from India, the applicant is required to submit the permission from the National Biodiversity Authority any time before the grant of the patent indicating clearly the source of geographical origin of the biological material used in the Specification, wherever applicable.

#### **Q14. What is the term of a patent?**

The term of the patent in India is 20 years from the date of filing for all types of inventions.

#### **Q15. How does one keep a patent enforced to full patent term?**

To keep a patent live, it has to be renewed regularly by paying the prescribed renewal (maintenance) fees as prescribed under the Indian patent office. If the patent is not renewed, it will cease to remain in force and the invention becomes open to public. Anyone can then utilize the patent without the danger of infringing the patent.

#### **Q16. How is evergreening achieved?**

Evergreening is a strategy through which a patent owner tries to seek patent protection beyond the stipulated period of 20 years. This is attempted through seeking ownership through filing of another patent based on trivial or minor modifications on the original patent. Examples could be minor variations like new dosages, new combinations, new forms of release, or new forms for patenting of drugs. These variations however must satisfy the essential criteria of patentability for the independent patent filed.

#### **Q17. What is the working of a Patent?**

Under Section 146 of the Indian Patents Act 1970, the Controller of Patents requires patentees to submit annual “Statements of Working” vide “Form 27”. The Controller would like to ensure that a patent filed/granted is being used / commercialized in India. It is to be submitted at the Indian Patent office within three months of the end of each year (i.e. 31<sup>st</sup> March of each year). This is essentially to ensure that someone buys/rents a patent and does not exploit the same with a clear motive to kill the invention from being exploited. This is often part of a strategy of some companies to minimize competition.

### **Q18.What is the purpose of seeking working of a patent?**

Working of a patent vide form 27 is published annually along with list of granted patents. This system facilitates the dissemination of information on patented inventions for promoting research and competition. Such information is used by competing companies to apply for a compulsory license of the invention.

### **Q19.How is a patent disclosed in a patent application?**

The disclosure of an invention is done in the form of a write-up (Specification) in a prescribed format in such a way that a person skilled in the art may be able to work the invention. The specification as given earlier is a techno-legal document containing full scientific details of the invention and claims to the patent rights. The specification, thus, forms a crucial part of the Patent Application. The specification may be filed either as a Provisional or as a complete specification.

The specification (provisional or complete) is to be submitted in Form-2 along with the Application in Form-1 and other documents, in duplicate, along with the prescribed fee. The first page of the Form 2 contains:

- a) Title of the invention
- b) Name, address and nationality of each of the applicants for the Patent
- c) Preamble to the description
- d) Description (from 2<sup>nd</sup> page)
- e) Claims (On a separate page; for complete specification only).
- f) Abstract of the invention

### **Q20. What is a Provisional Specification (PS)?**

A patent application with Provisional Specification is usually filed to establish priority of the invention in case the disclosed invention is only at an early stage and a delay is expected in giving final shape to the invention. A patent application with provisional specification does not however confer any legal patent rights to the applicants. Filing of a Provisional patent application is, however, a very important strategy to establish the earliest ownership of an invention as ensure priority of an invention through blocking priority date. No patent is granted on the basis of a provisional specification. Under the Indian Patent Act it has to be followed by a complete specification within 12 months (extendable by 3 months) for obtaining a patent for the said invention. However, one can also directly file a complete specification without filing a Provisional Specification application.

## **Q21.What is Complete Specification (CS)?**

The Complete Specification is a techno-legal document which fully and completely describes the invention and discloses the best method of performing the invention. Submission of complete specification is essential to obtain a patent. Every complete specification shall:

- a) Fully and particularly describe the invention and its operation or use and the method by which it is performed;
- b) Disclose the best method of performing the invention which is known to the applicant for which he is entitled to claim protection;
- c) End with a claim or set of claims defining the scope of the invention for which the protection is claimed;
- d) Make reference to deposit of the biological material in the international depository authority, if applicable; and
- e) Be accompanied by an abstract.

## **Q22.What are the criteria to be used for naming inventors in an application for patent?**

The naming of inventors is normally decided on the basis of the following criteria:

- (i) All persons who have contributed towards development of patentable features of an invention.
- (ii) Persons who have made intellectual contribution in achieving the final results of the research work leading to a grant of patent.
- (iii) Persons who have helped in conducting the experiments, constructing apparatus or making the drawings or models without providing any intellectual inputs are generally not entitled to be named as inventors.
- (iv) Form 5 is required for Declaration of Inventorship
  - To avoid difficulties in deciding the names of inventors it is essential that all scientists/other personnel engaged in research should keep factual, clear and accurate record of daily work done by them.
  - Typically, most R&D institutions and companies have a clear policy on inventorship and their rights and responsibilities.

## **Q23.What is the cost of filing a patent application in India?**

Some important fees\* required for filing a patent are given below:

No.	Action	Natural person or startup or small entity or educational institution		Other(s), alone or with natural person or startup or small entity or educational institution	
		E-filing	Physical filing	E-filing	Physical filing
1.	Filing of patent application along with complete/ provisional specification	1,600/-	1,750/-	8,000/-	8,800/-
1.a	Each sheet of specification in addition to 30	160/-	180/-	800/-	880/-
1.b	Each claim in addition to 10	320/-	350/-	1,600/-	1750/-
2.	Request for publication of a patent	2,500/-	2,750/-	12,500/-	13,750/-
3.	Request for examination patent u/s 11B	4,000/-	4,400/-	20,000/-	22,000/-
4.					
	2 <sup>nd</sup> year to 6 <sup>th</sup> year	800/-	880/-	4000/-	4,400/-
	7 <sup>th</sup> year to 10 <sup>th</sup> year	2,400/-	2,650/-	12,000/-	13,200/-
	11 <sup>th</sup> year to 15 <sup>th</sup> year	4,800/-	5,300/-	24,000/-	26,400/-
	16 <sup>th</sup> year to 20 <sup>th</sup> year	8,000/-	8,800/-	40,000/-	44,000/-
5.	Application for restoration of a patent	2,400/-	2,650/-	12,000/-	13,200/-

\*Note: As per the **Indian Patent Act, 1970** and may subject to change. Additionally, there are several other fee requirements depending on the requisite of Inventor.

#### **Q24. What is the difference between an Indian Patent and a US patent?**

A patent granted by a patent office is applicable within the geographical boundaries of that country only. A US patent is granted by the United States Patent Office to an inventor, who has filed his application within the USA, whereas an Indian Patent is granted by the Indian Patent Office to an inventor, who has filed his application with Indian Patent office. A US Patent is applicable within the geographical limits of USA only and enjoys no IP protection in India, if the same US patent has not been filed in India for the grant of a patent.

## **Q25. When does a patent expire?**

A patent can expire in the following ways:

1. The patent has lived its full term i.e. the term specified by the patent act of the country typically 20 years from the date of filing.
2. The patentee has failed to pay the renewal fee. A patent once granted by the Government has to be maintained by paying annual renewal fee.
3. The validity of the patent has been successfully challenged by an opponent by filing an opposition either with the patent office or with the courts.

## **Q26. What are patentable inventions under the Patents Act, 1970 (as amended in 2005)?**

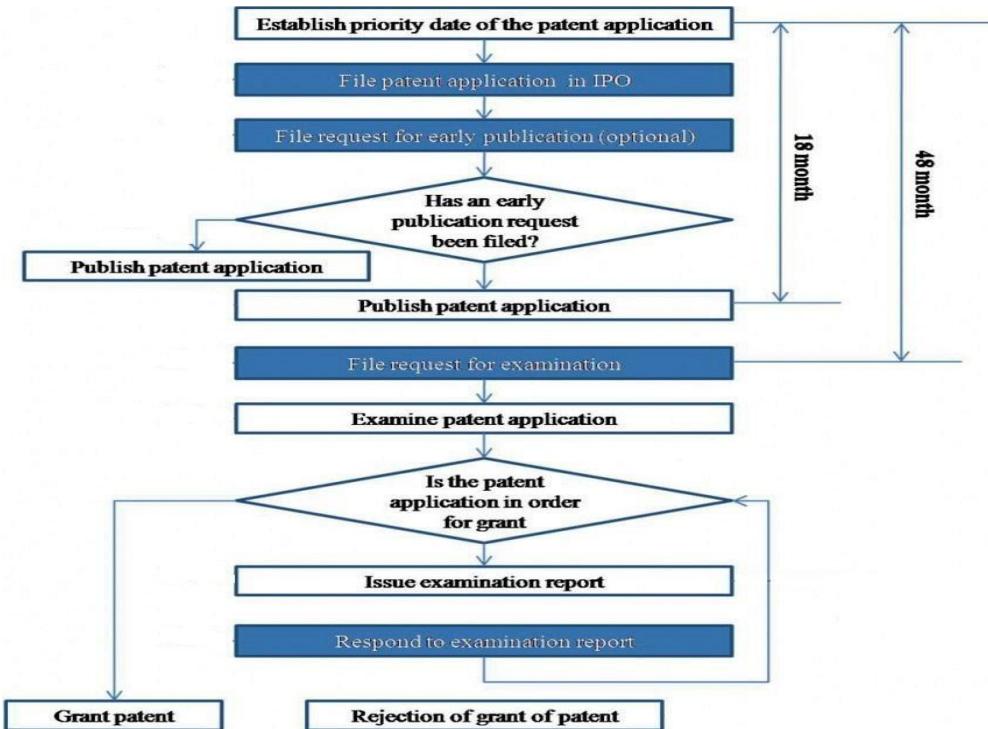
Invention means any new and useful

- i. Art, process, method or manner of manufacture.
- ii. Machine, apparatus or other article.
- iii. Substances produced by manufacturing, and include any new and useful improvements of any of them and an alleged invention.
- iv. New compounds, new compositions
- v. Synergistic composition
- vi. Medical device (improved/new)
- vii. Improvement of an existing process for the production of known compound, known material, known composition.

## **Q27. What is the patenting process in India?**

Patenting in India comprises of filing of the provisional or complete application, or complete specification. If a provisional patent application is filed then complete application needs to be filed within 12 months from date of filing. The patent application (with complete specification) is published after 18 months from date of filing. Subsequently a Request for Examination (RFE) is to be filed within 48 months of the date of filing. The application is then examined which leads to issuance of Examination Reports, and, if the patenting authority is satisfied, grant of a patent. The Patent Examiner issues a First Examination report for the filed applications and seeks response from the applicant and inventor on clarifications as per the Indian Patents act. This response has to be furnished

within 6 months of the issuance of FER. A second examination report may also be published on a case to case basis. The Grant of patent is subjected to the response to queries raised in examination reports and only if the patent granting authority is satisfied with the responses for the clarification sought. The timeline for the process is given as below:



**Fig:** The flowchart illustrates the timelines involved in patenting process. The steps in blue blocks are actions that have to be taken by an applicant and the steps in white block are actions that are taken by the patent Office. (Courtesy: *invntree*)

## Q28. Who grants Patents?

A national patent office of a particular country grants the patent, for example, in India the patent is granted by the Office of the Controller General of Patents, Designs & Trade Marks.

## Q29. How long does it take for a patent to be granted?

The grant of a patent in India currently takes about 3 to 5 years. This does not depend on the complexity of the patent, but more on the field of an invention and how many clarifications have been sought by the examiner.

### **Q30. How soon does a patent give protection?**

In a sense, some protection is granted to the inventors as soon an application is filed, since it allows calling the invention as “patent pending”. However, if there is an infringement, the inventor cannot bring action against an infringer until the patent is actually issued. But the fact that a patent is pending on an invention may keep a potential infringers at bay as they may have to incur financial loss if the original patent applicant manages to prove there has been an infringement of patent rights.

### **Q31. Is renewal of a patent possible after it expires?**

If a patent has expired it means that the invention is now “In the Public Domain,” and anyone can use, make it, produce it, etc. without any risk of infringement. A lapsed patent application cannot be renewed or patented again. There is a possibility of getting extension, for medical related patents with the government approval. In case of drug patents, the testing and approval required by FDA may sometimes take almost all of patent term. In Korea and Japan, extension is possible only due to delay of examination in the patent office.

### **Q32. When should one access the patent literature?**

All inventors should continuously access patent literature - before the start of the research and development project or when they are stuck with some technical problem.

### **Q33. Which are the main sources for patent information?**

National patent offices, International information vendors like Dialog, Orbit, Questel STN, free or charge based patent websites, free databases such as INPASS, patentscope (WIPO), USPTO, Espacenet, free patents online, google patents etc..

### **Q34. Who should draft the patent application?**

Though the inventor himself can draft the application, it is desirable to use a person skilled in legal drafting like a patent attorney/agent.

### **Q35. Who is entitled to file a patent application?**

Application for patent can be made individually or jointly by the true and first inventor (who has made intellectual contribution in development and achieving the final results of the research work leading to a patent) or by his assignee or legal representative of the deceased person entitled to make such an application. Whether the invention made by an employer belongs to the employee depends on the terms and conditions of the employment contract. Therefore, it is necessary for the employer to take

enough care in drafting the terms of the service contract, in order to ensure that he has a right over any inventions made by the employee

**Q36. Who owns the invention?**

The ownership of an invention depends upon the terms and conditions of the employment contract. Typically, all inventions made by research and development staff usually belong to the employer.

**Q37. When is patent application published?**

Patent application is published after 18 months from date of filing or priority date. There is provision of early publication on filing a request on form 9 and payment of prescribed fees and patent application is published by the patent office within a prescribed period of one month after receiving such request.

**Q38. What is a Request for Examination (RFE)?**

Examination for examination of an application is done only upon a request made by the applicant or interested person within forty-eight months from the date of application in India. If the request is not made within forty-eight months, the application of patent is deemed to be withdrawn by the applicant. Once a request for examination is made, the Controller of patents assigns the application to a patent examiner to examine the specification given in the patent and other related documents submitted along with the patent application. Report by the patent examiner is to be submitted within such period as may be prescribed from the date of reference.

**Q39. What is revocation of a patent?**

Revocation of patents as defined in Section 64 of the Indian Patents Act, 1970 (as amended) is to claim invalidity of existing patents on pre-defined grounds vide petition by any person or Central Government or on a counter-claim in a suit for infringement of the patent by the High Court.

**Q40. What are the grounds for Patent revocation?**

As per the Section 64 of the Indian Patents Act, 1970 (as amended), following are the major grounds for patent revocation:

1. Invention as claimed in any claim of the complete specification was claimed in patent granted with an earlier priority date in India.
2. Subject of any claim of the complete specification is not an invention

3. invention so far as claimed in any claim of the complete specification lacks novelty and/ or inventiveness, having regard to what was publicly known or publicly used in India before the priority date of the claim or to what was published in India or elsewhere in any of the documents.
4. Invention, so far as claimed in any claim of the complete specification, is not useful.
5. The complete specification does not sufficiently and fairly describe the invention and/or the method by which it is to be performed, and/ or the source or geographical origin of biological materials and/ or the any of the claims is not sufficiently and clearly defined or based on the matter disclosed in the specification.
6. Applicant for the patent has failed to disclose any required information to the Controller or has furnished information which in any material particular was false to his knowledge.
7. The claimed invention was known as a traditional knowledge.
8. By the government (including a person authorized by the Government or a Government undertaking) as a consequence when the invention has been communicated or disclosed directly or indirectly to the Government or is considered mischievous to the State or generally prejudicial to the public.
9. By the High Court on the petition of the Central Government or any person, if the High Court is satisfied that the patentee has without reasonable cause failed to comply with the request of the Central Government to make, use or exercise the patented invention for the purposes of Government.
10. By Controller for non-working; when a compulsory license has been granted, the Central Government or any person interested may, apply to the Controller for an order revoking the patent, if the patented invention has not been worked in the territory of India, or the reasonable requirements of the public have not been satisfied, or if the patented invention is not available to the public at a reasonably affordable price.

#### **Q41. What is right of priority of an invention and its significance in PCT?**

If an inventor files a patent application in one country, he can file applications in other countries of interest within one year from the date of first filing. Those other applications are then treated as if they were filed on the date of the first application. This is called the “right of priority” and was introduced by the Paris Convention. The period of priority is usually 6 months for industrial designs and trademarks and 12 months for patents and utility models. The basic purpose of the right of priority is to safeguard, for a limited period, the interests of a patent applicant in his endeavour to obtain complete and/or international protection for his invention, thereby removing the negative consequences of the principle of territoriality in patent law.

#### **Q42. Can it be exemplified?**

Suppose Mr. A has invented an improved tyre and has filed a patent application on it in the USA on April 15, 2003. Starting from April 16, 2003, Mr. A has then one year to file patent applications in other countries. If Mr. A files a patent application on April 15, 2004 in India for his tyre, and if he claims the priority of the earliest patent application filed one year before, then the date for examining the novelty and inventive step requirements in India will be April 15, 2003, not April 15, 2004. However, the actual date of filing in the selected country remains April 15, 2004, and this is the date from which the 20-year duration of any ensuing patent is calculated. The example applies to all countries which are parties to the Paris Convention.