

## Unit 2

### 1. Are patents useful to society? Give reasons for your answer

Yes, patents are useful to society in various ways. Patents promote innovation through the grant of limited monopolies, as a reward to inventors for the time, effort, ingenuity, invested in creating new products and processes.

When a Technology or invention comes onto the market, the whole society stands to benefit both directly and indirectly, because it may enable us to do something that was not possible and indirectly in terms of the economic opportunities that can flow from it.

### 2. Can a mobile application be patented? Give reasons for your answer

Answer:

Yes, mobile app can be patented.

Inventions in field of software and mobile app can be patented in India under category of computer related inventions.

The app should satisfy the following criterias:

1- It should meet novelty

2-it should be different from existing products (Non Obviousness).

If the app is not likely to make enough money or if it has a short life span , a patent is not needed.

Reasons

1- patenting a mobile app idea is important to protect from replicating it

2- it safeguards the invention.

3- it protects product design or process that meets certain specifications of the app

### 3. Does an employee's invention belong to the inventor or the organization at which he/she works? Give reasons for your answer

- Patents for inventions created by the employee can in fact belong to the employee himself as the true and first inventor of the invention.
- Unless you either: signed an employment agreement assigning invention rights, or were specifically hired (even without a written agreement) for your inventing skills or to create the invention.

### 4. Can a patentable invention be protected across countries? Give reasons for your answer

- No, the exclusive rights are applicable only in the country or that particular region. If an inventor wishes patent protection in other countries, must apply for patent in each country he wishes to have protection.
- We can protect patents across countries in these ways:
  1. Find out where the product is manufactured and commercialized.

2. Find out where competitors are located and what are their main markets for similar products.
  3. Find out how much income is expected to be received in which country.
- 4a. Differentiate between product patent and process patent

Ans: developed countries follow product patent system. In case of product patent system it is an exclusive right given to the original inventor of a product. This means no other manufacturer can provide the same product by saving any other process. The implication is that there will not be a competitor for producer as it is the product which is patented. Product patent gives a higher level of protection to inventor and there will not be any other patent holder. On the other hand, process patent system is preferred by developing countries. Under this patent, the patent is granted for a particular manufacturing process and not for the product itself; any other person can produce the same product through some other process by modifying various parameters. The implication is that more than one producer for the same product because of the possibility of different processes for the manufacturing product. Weakness is it gives less protection for the inventor. Benefit is that it is an element of monopoly.

5. List out the rights of patent holder in India

Rights of a patent holder

Exclusive rights according to Article 28 of the TRIPS agreement

Article 28 of the TRIPS agreement provides the following rights:

A patent shall confer on its owner the following exclusive rights:

where the subject matter of a patent is a product, to prevent third parties not having the owner's consent from the acts of making, using, offering for sale, selling, or importing for these purposes that product;

where the subject matter of a patent is a process, to prevent third parties not having the owner's consent from the act of using the process, and from the acts of using, offering for sale, selling, or importing for these purposes at least the product obtained directly by that process.

Patent owners shall also have the right to assign, or transfer by succession, the patent and to conclude licensing contracts.

Right to exploit the patent

In India, the patent holder is provided with the right to manufacture, use, sell and distribute the patented product. In case the invention is a process of production, the owner of the patent has the right to direct the procedure to the other person who has been authorised by the patentee. This right can be enforced by the agent of the patent holder.

Right to assign and license

The patent holder is granted with the rights of assigning or granting licenses for manufacture and distribution of the patented products to others. In case there are co-owners of the patented product, the permission to grant license to the other person shall be sought from the co-owners. The license would be considered to be granted when the request has been duly authorised by the controller.

#### Right to surrender the patent

The owner of the patent has the right to surrender his patent after seeking permission from the controller. The controller then advertises about this surrender as per the procedure laid down in the Indian Patents Act. The parties interested in getting the ownership of the patent can then approach the controller. The controller examines the party's claims and surrenders the ownership respectively.

#### Right before sealing

Section 24 of the Indian Patents Act implies that a patent is sealed from the date of notification for acceptance to the date of acceptance of the notification. The right of the patentee begins after the notification for acceptance has been presented.

#### Right to apply for the patent of addition

This provision is provided in Section 54 to 56 of the Indian Patents Act. This provision provides for the modifications in the existing invention. In such a case, the patent holder is granted the right to the modified invention after the notification of the acceptance comes out. Once the notification is presented, the owner is provided with the same rights as provided to the previous patent.

#### Right in case of infringement

When any of the rights of the patent holder is violated, then it is termed as patent infringement. This is to mean that if the patented invention is used, manufactured or sold for commercial purposes by any person, then it will be accused of patent infringement. In case of violation of patentee's rights, the patentee can approach either the district court or a high court. If the person is proven guilty of infringement, the courts will either grant permanent injunction or damages or both.

6. Are software inventions directly patentable in India? Give reasons for your answer [No 1 to 5]
7. Write short notes on patent validity and how it is bound to change under certain circumstances [No 6 to 10]
8. Write in brief about compulsory licensing with examples. [No 11 to 15]

**Ans:** Compulsory licenses are authorizations given to a third-party by the Controller General to make, use or sell a particular product or use a

particular process which has been patented, without the need of the permission of the patent owner.

Any person, regardless of whether he is the holder of the license of that Patent, can make a request to the Controller for grant of compulsory license on expiry of three years, when any of the following conditions is fulfilled –

1.the reasonable requirements of the public with respect to the patented invention have not been satisfied

2.the patented invention is not available to the public at a reasonably affordable price

3.the patented invention is not worked in the territory of India.

India's first ever compulsory license was granted by the Patent Office on March 9, 2012, to Natco Pharma for the generic production of Bayer Corporation's Nexavar, a life saving medicine used for treating Liver and Kidney Cancer.

Bayers sold this drug at exorbitant rates, with one month's worth of dosage costing around Rs 2.8 Lakh. Natco Pharma offered to sell it around for Rs 9000, making it affordable for people belonging to every stratum.

Need for compulsory licence:

Media reports indicate that the U.S., which is hoarding all drugs found to be useful in combating the pandemic, has bought the entire stock of Remdesivir from Gilead for the next three months.

It will therefore not be available for the rest of the world.

Besides, while the cost of manufacturing Remdesivir for a full course — as worked out by experts — is less than \$10 or ₹750 in the U.S. And about ₹100 in India. Gilead, by virtue of its patent monopoly, is holding the world to ransom by asking a price that is hundreds of times its cost.

9. Compare provisional and complete specification. [No 16 to 20]

In the entire process of securing a patent “specification” is an important document. A ‘specification’ primarily describes an invention which is in the form of a claim which is submitted along with the

application for patent. The 'specification' of a patent is a highly technical legal document which is drafted using the assistance of a patent attorney. The specification may be:

Provisional; or

Complete

A provisional specification provides a general description of the invention whereas, a complete specification gives full and complete details of the invention. When the provisional specifications are submitted with the patent application, the complete specifications must be filed within 12 months from the date of filing the patent application and on failure to do so, the application will be deemed cancelled .6

Therefore, an applicant while filing a patent application need not provide the complete specifications and may file provisional specifications. The main object of providing provisional specifications along with the patent application is to ascertain the "priority date" of the patent. In the period between filing the provisional specifications and complete specifications, it gives an opportunity to the applicant to conduct further research related to his invention and incorporate further developments that may have emerged in the complete specification.

Where an applicant files two or more applications for inventions that are interconnected or where one is a modified version of the other and are accompanied by provisional specifications, in that case, if the Controller is of the opinion that the entire invention constitutes a single invention and can be made part of a single patent, a single complete specification can be filed for all the provisional specifications.<sup>7</sup> However, in such a case the twelve-month period of filing the complete specification shall commence from the date the earliest provisional specification was filed.

10. Analyse how large corporations are creating hurdles to technical advancement by using their patents. [No 21 to 25]

Intellectual property serves as the foundation of innovation in our economy. Government-granted rights incentivize discovery and creativity by providing creators with an opportunity to profit from the value of their innovative work. In exchange, the creative work is made public so that others may build on and benefit from the work of the original creator. Laws protecting intellectual property also reduce the transaction costs between inventors and industry by providing information about the quality of the invention without jeopardizing the ownership of the idea.

For the entrepreneur, intellectual property in the form of patents, trademarks, and copyrights can be especially valuable. Patents, for example, have been shown to increase firm productivity and, more immediately, a firm's market value. Patent applications held by young firms also correlate with higher valuations by investors, provided those applications are not software-based.

But firms can also use patents and other forms of intellectual property in inefficient and anti-competitive ways. Firms may use patents as a strategic deterrent by building up "patent thickets," which make incremental or follow-on innovation by other firms a more challenging and costly process. Non-Practicing Entities (NPEs) also have been identified by many policymakers as a costly impediment to innovation and economic growth.

Sufficient intellectual property protection is key to promoting innovation. However, tweaks to intellectual property rights can shift incentives in ways that either encourage more or less innovation, depending on how strong or weak the existing intellectual property rights are.

11. "Knowledge on patents can contribute to the upliftment of the graduating engineers." Comment on the above statement. [No 26 to 30]

Ans: With the increasing focus on innovation, research and cross-border collaborations, need to learn about intellectual property rights (IPRs) to safeguard their inventions has increased among the students. As countries turn to innovation and creativity for sustainable development, need to understand the importance of IPRs has increased. The demand for IP is increasing, especially in developing countries.

In contemporary times, the research is translational and transforms into services or products. IPRs help in protecting as well as commercialising the inventions. If the innovations are patented and taken up for commercialisation by the startups, it will give a competitive advantage to the inventors and entrepreneurs.

12. Enumerate different types of patent applications [No 31 to 35]

Types of Patent

The types of patent application are:

Provisional Application

Ordinary or Non-Provisional Application

Convention Application

PCT International Application

PCT National Phase Application

Patent of Addition

Divisional Application

Provisional Application

A provisional application, also known as a temporary application, is filed when an invention is under experimentation and isn't finalized.

Ordinary or Non-Provisional Application

This type of application is filed if the applicant doesn't have any priority to claim or if the application is not filed in pursuance of any preceding convention application.

Convention Application

.A convention application is filed for claiming a priority date based on the same or substantially similar application filed in any of the convention countries.

### PCT International Application

A PCT Application is international application. Though the application does not provide for the grant of an international patent, it paves the way for a streamlined patent application process in many countries at one go. It is governed by the Patent Cooperation Treaty and can be validated in up to 142 countries. Filing this application would protect an invention from being replicated in these designated countries.

13. "Patents hinder or foster research and innovation". Debate. [No 36 to 40]

>Fosters research and innovation -> Protection of flights, generation of revenue, creates competition across developing countries to have upper hand in research and innovation, reading the limitations of patent documents instills new ideas in the minds of innovators in the same domain of research,

14. Write in brief about the significance of priority date in patent applications [No 41 to 45]

- The priority date of a patent is an important aspect in protecting intellectual property. The priority date is the earliest possible filing date that a patent application is entitled to rely on; it is based on the filing dates of any related patent applications that were filed before the application (the priority chain).
- This date determines which prior art can be used by the Patent and Trademark Office to determine patentability of the invention and which prior art can be used by competitors to challenge the patent's validity.
- The priority date must be asserted when the patent application is filed. It is difficult, and sometimes not possible, to correct the priority date if it is not asserted, or improperly asserted, when the application is filed. Thus, patent attorneys must be careful



to make sure that the correct priority date is stated in the application at the time of filing.

15. Do you think COVID-19 pandemic had an impact among inventors filing their patent applications? Give reasons for your answer. [No 46 to 48, 17IS045, 20IS401]

In this unprecedented time, organizations / corporations and the inventors are **mainly focusing on the research and the marketing of the products than filing patent applications**. Innovations made during these times might become a biggest asset to the researches and prove to be valuable aftermath of the catastrophe. For any organization or a company or a researcher, patent applications will prove to be a savior in these times.

However, the new pandemic has been a game-changer for many enterprises. Starting from small scale industries to large scale industries, have adapted to the current business environment, where we can see maximum number of new products being launched ranging from hand sanitizers, surgical masks as well as the tech apps. One well known example is that the textile / fashion industry has adapted to the current situation and started producing protective aprons, face masks, etc.

Protecting an invention may not always mean filing the protection complete invention but acquiring the priority of the invention .

Filing a provisional application would not only provide us with a timeline of 12 months for coming up with the complete specification but might also help in reducing the cost of filing patent for one year i.e. abandoning the application in case of a prior-art, or exploring the commercial viability of the invention.

After we beat the pandemic, we will need these same companies to focus their attention on stimulating the economy and helping us bounce back. For some companies, this will mean utilizing the innovations that they created during the pandemic..

16. What happens to unused patents? Explain. [20IS402, 403, 406, 407]