

Unit 5

1. Patent Law-

A **patent** is a set of [exclusive rights](#) granted by a [sovereign state](#) or [intergovernmental organization](#) to an inventor or assignee for a limited period of time in exchange for detailed public disclosure of an [invention](#). An invention is a solution to a specific technological problem and is a product or a process.^[1] Patents are a form of [intellectual property](#).

The procedure for granting patents, requirements placed on the patentee, and the extent of the exclusive rights vary widely between countries according to national laws and international agreements. Typically, however, a granted patent application must include one or more [claims](#) that define the invention. A patent may include many claims, each of which defines a specific property right. These claims must meet relevant [patentability](#) requirements, such as [novelty](#), [usefulness](#), and [non-obviousness](#). The exclusive right granted to a patentee in most countries is the right to prevent others, or at least to try to prevent others, from commercially making, using, selling, importing, or distributing a patented invention without permission.^{[2][3]}

Under the [World Trade Organization's](#) (WTO) [TRIPS Agreement](#), patents should be available in WTO member states for any invention, in all fields of technology, provided they are new, involve an inventive step, and are capable of industrial application.^[4] Nevertheless, there are variations on what is [patentable subject matter](#) from country to country, also among WTO member states. TRIPS also provides that the [term of protection](#) available should be a minimum of twenty years.^[5]

Definition

The word *patent* originates from the [Latin](#) *patere*, which means "to lay open" (i.e., to make available for public inspection). More directly, it is a shortened version of the term [letters patent](#), which was an open document or instrument issued by a monarch or government granting exclusive rights to a person, predating the modern patent system. Similar grants included [land patents](#), which were land grants by early state governments in the USA, and [printing patents](#), a precursor of modern copyright.

In modern usage, the term *patent* usually refers to the right granted to anyone who invents any new, useful, and non-obvious process, machine, article of manufacture, or composition of matter. Some other types of intellectual property rights are also called *patents* in some jurisdictions: [industrial design rights](#) are called [design patents](#) in the US,^[6] [plant breeders' rights](#) are sometimes called [plant patents](#),^[7] and [utility models](#) and [Gebrauchsmuster](#) are sometimes called *petty patents* or *innovation patents*.

The additional qualification *utility patent* is sometimes used (primarily in the US) to distinguish the primary meaning from these other types of patents. Particular species of patents for inventions include [biological patents](#), [business method patents](#), [chemical patents](#) and [software patents](#).

Patent laws in India : Meaning of patent

A patent is an exclusive right granted by the Government to the inventor to exclude others to use, make and sell an invention is a specific period of time. A patent is also available for improvement in their previous Invention. The main motto to enact patent law is to encourage inventors to contribute more in their field by awarding them exclusive rights for their inventions. In modern terms, the patent is usually referred to as the right granted to an inventor for his Invention of any new, useful, non-obvious process, machine, article of manufacture, or composition of matter. The word “patent” is referred from a Latin term “patere” which means “to lay open,” i.e. to make available for public inspection. There are three basic tests for any invention to be patentable:

- Firstly, the invention must be novel, meaning thereby that the Invention must not be in existence.
- Secondly, the Invention must be non- obvious, i.e. the Invention must be a significant improvement to the previous one; mere change in technology will not give the right of the patent to the inventor.
- Thirdly, the invention must be useful in a bonafide manner, meaning thereby that the Invention must not be solely used in any illegal work and is useful to the world in a bonafide manner.

An invention considered as new if, on the date of filing the application, any such invention is not known to the public in any form, i.e. oral, writing, or any other form. Anything shall not be termed as inventive if such a thing is already known to the public domain. The patent has a limited term of 20 years, which is counted from the date of filing of the patent application. A patent is a territorial right. Thus it can only be applied in the country where it has been granted. A patent is a territorial right. Thus it can only be applied in the country where it has been granted. Therefore, any legal action against infringement or infringement of patent rights can only be taken in that country. To obtain patent protection in different countries, each country must apply for a patent. The Patent Cooperation Treaty (PCT) provides a way to file an international patent application in which a patent can be filed through a single patent application in a large number of countries. However, the PCT of a patent remains discretionary of the individual patent office only after the application is filed.

Under the Indian patent law, a patent can be obtained only for an invention which is new and useful. The invention must relate to the machine, article or substance produced by a manufacturer, or the process of manufacture of an article. A patent may also be obtained for innovation of an article or of a process of manufacture. In respect to medicine or drug and certain classes of chemicals, no patent is granted for the substance itself even if it is new, but the process of manufacturing and substance is patentable. The application for a patent must be true and the first inventor or the person who has derived title from him, the right to apply for a patent being assignable.

Some inventions cannot be patented. In the European Patent Convention (EPC) law there is the list of non-patentable subject-matter which includes methods of medical treatment or diagnosis, and new plant or animal varieties. Further information on such fields can be obtained from a patent attorney. Nor many patents be granted for inventions whose exploitation would be contrary to public order or morality (obvious examples being land-mines or letter-bombs).The following are not regarded as inventions, discoveries, innovations, scientific theories and mathematical methods,

aesthetic creations, such as art or literature works or art of writing, schemes, rules and methods for performing mental acts, playing games or doing business, presentations of information, computer software.

History of Patent

The first step of the patent in India was Act VI of 1856. The main objective of the legislation was to encourage the respective inventions of new and useful manufactures and to induce inventors to reveal their inventions and make available for public. The Act was repealed by Act IX of 1857 as it had been enacted without the approval of the British Crown. Fresh legislation was enacted for granting 'exclusive privileges' was introduced in 1859 as Act XV of 1859. This legislation undergoes specific modifications of the previous legislation, namely, grant of exclusive privileges to useful inventions only, an extension of priority period from 6 months to 12 months. The Act excluded importers from the definition of an inventor. The Act was then amended in 1872, 1883 and 1888.

The Indian Patent and Design Act, 1911 repealed all previous acts. The Patents Act 1970, along with the Patent Rules 1972, came into force on 20 April 1972, replacing the Indian Patent and Design Act 1911. The Patent Act is basically based on the recommendations of the report Justice Ann. The Ayyangar Committee headed by Rajagopala Iyengar. One of the recommendations was the allowance of process patents in relation to inventions related to drugs, drugs, food and chemicals. Again The Patents Act, 1970 was amended by the Patents (Amendment) Act, 2005 regarding extending product patents in all areas of technology including food, medicine, chemicals and microorganisms. Following the amendment, provisions relating to exclusive marketing rights (EMR) have been repealed, and a provision has been introduced to enable the grant of compulsory licenses. Provisions related to pre-grant and anti-post protests have also been introduced.

What can be patented?

[Sections 3 and 4 of the Indian Patents Act, 1970](#) clearly mentioned the exclusions regarding what can be patented in India. There are certain criteria which have to be fulfilled to obtain a patent in India. They are:

- Patent subject:

The most important consideration is to determine whether the Invention relates to a patent subject matter. Sections 3 and 4 of the Patents Act list non-patentable subject matter. Unless the Invention comes under any provision of Section 3 or 4, it means that it consists of a subject for a patent.

- Novelty:

Innovation is an important criterion in determining the patent potential of an invention. Under [Section 2\(1\) of the Patent Act](#), a novelty or new Invention is defined as "no invention or technology published in any document before the date of filing of a patent application, anywhere in the country or the world". The complete specification, that is, the subject matter has not fallen into the public domain or is not part of state of the art".

Simply, the novelty requirement basically states that an invention that should never have been published in the public domain. It must be the newest which have no same or similar prior arts.

- Inventive steps or non-clarity:

Under [Section 2\(ja\) of the Patents Act](#), an inventive step is defined as “the characteristic of an invention that involves technological advancement or is of economic importance or both, as compared to existing knowledge, and invention not obvious to a person skilled in the art.” This means that the invention should not be obvious to a person skilled in the same field where the invention is concerned. It should not be inventive and obvious for a person skilled in the same field.

- Capable of industrial application:

Industrial applicability is defined in [Section 2 \(ac\) of the Patents Act](#) as “the invention is capable of being made or used in an industry”. This basically means that the Invention cannot exist in the abstract. It must be capable of being applied in any industry, which means that it must have practical utility in respect of patent.

These are statutory criteria for the patent of an invention. In addition, other important criteria for obtaining a patent is the disclosure of a competent patent. A competent patent disclosure means a patent draft specification must adequately disclose the Invention, so as to enable a person skilled in the same field related to carrying out the Invention with undue efforts.

Rights and obligations of the patentee

Rights of Patentee

- Right to exploit patent: A patentee has the exclusive right to make use, exercise, sell or distribute the patented article or substance in India, or to use or exercise the method or process if the patent is for a person. This right can be exercised either by the patentee himself or by his agent or licensees. The patentee’s rights are exercisable only during the term of the patent.
- Right to grant license: The patentee has the discretion to transfer rights or grant licenses or enter into some other arrangement for a consideration. A license or an assignment must be in writing and registered with the Controller of Patents, for it to be legitimate and valid. The document assigning a patent is not admitted as evidence of title of any person to a patent unless registered and this is applicable to assignee not to the assignor.
- Right to Surrender: A patentee has the right to surrender his patent, but before accepting the offer of surrender, a notice of surrender is given to persons whose name is entered in the register as having an interest in the patent and their objections, if any, considered. The application for surrender is also published in the Official Gazette to enable interested persons to oppose.
- Right to sue for infringement: The patentee has a right to institute proceedings for infringement of the patent in a District Court having jurisdiction to try the suit.

Obligations of patentee

- Government use of patents: A patented invention may be used or even acquired by the Government, for its use only; it is to be understood that the Government may also restrict or prohibit the usage of the patent under specific circumstances. In case of a patent in respect of any medicine or drug, it may be imported by the Government for its own use or for distribution in any dispensary, hospital or other medical institution run by or on behalf of the Government. The aforesaid use can be made without the consent of the patentee or payment of any royalties. Apart from this, the Government may also sell the article manufactured by patented process on royalties or may also require a patent on paying suitable compensation.
- Compulsory licenses: If the patent is not worked satisfactorily to meet the reasonable requirements of the public, at a reasonable price, the Controller may grant compulsory licenses to any applicant to work the patent. A compulsory license is a provision under the Indian Patent Act which grants power to the Government to mandate a generic drug maker to manufacture inexpensive medicine in public interest even as a patent in the product is valid. Compulsory licenses may also be obtained in respect of related patents where one patent cannot be worked without using the related patent.
- Revocation of patent: A patent may be revoked in cases where there has been no work or unsatisfactory result to the demand of the public in respect of the patented invention.
- Invention for defence purposes: Such patents may be subject to certain secrecy provisions, i.e. publication of the Invention may be restricted or prohibited by directions of Controller. Upon continuance of such order or prohibition of publication or communication of patented Invention, the application is debarred for using it, and the Central Government might use it on payment of royalties to the applicant.
- Restored Patents: Once lapsed, a patent may be restored, provided that few limitations are imposed on the right of the patentee. When the infringement was made between the period of the date of infringement and the date of the advertisement of the application for reinstatement, the patent has no authority to take action for infringement.

Procedure of Patent

- Step 1: Write about inventions (idea or concept) with each and every detail.

Collect all information about your Invention such as:

1. Field of Invention
2. What does the Invention describe
3. How does it work
4. Benefits of Invention

If you worked on the Invention and during the research and development phase, you should have some call lab records which are duly signed with the date by you and the concerned authority.

- Step 2: It must involve a diagram, drawing and sketch explains the Invention

Drawings and drawings should be designed so that the visual work can be better explained with the invention work. They play an important role in patent applications.

- Step 3: To check whether the Invention is patentable subject or not.

Not all inventions can be patentable, as per the Indian Patent Act there are some inventions which have not been declared patentable (inventions are not patentable).

- Step 4: Patent Discovery

The next step will be to find out if your Invention meets all patent criteria as per the Indian Patent Act-

1. The invention must be novel.
2. The Invention must be non- obvious.
3. The Invention must have industrial applications.

- Step 5: File Patent Application

If you are at a very early stage in research and development for your Invention, then you can go for a provisional application. It offers the following benefits:

1. Filing date.
2. 12 months time for filing full specification.
3. Lesser cost.

After filing a provisional application, you secure the filing date, which is very important in the patent world. You get 12 months to come up with the complete specification; your patent application will be removed at the end of 12 months.

When you have completed the required documents and your research work is at a level where you can have prototypes and experimental results to prove your inventive move; you can file the complete specification with the patent application.

Filing the provisional specification is an optional step if you are in the stage where you have complete knowledge about your Invention you can go straight to the full specification.

- Step 6: Publication of the application

Upon filing the complete specification along with the application for the patent, the application is published 18 months after the first filing.

If you do not wish to wait until the expiration of 18 months from the filing date to publish your patent application, an initial publication request may be made with the prescribed fee. The patent application is usually published early as a one-month form request.

- Step 7: Request for Examination

The patent application is scrutinized only after receiving a request for an RFE examination. After receiving this request, the Controller gives your patent application to a patent examiner who examines the patent application such as the various patent eligibility criteria:

1. Patent subject
2. Newness
3. Lack of clarity
4. Inventory steps
5. Industrial application
6. By enabling

The examiner makes the first examination report of the patent application upon a review for the above conditions. This is called patent prosecution. Everything that happens for a patent application before the grant of a patent is usually called patent prosecution.

The first examination report submitted to the Controller by the examiner usually includes prior art (existing documents prior to the filing date) that are similar to the claimed invention and is also reported to the patent applicant.

- Step 8: Answer the objections

Most patent applicants will receive some type of objections based on the examination report. The best thing is to analyze the examination report with the patent professional (patent agent) and react to the objections in the examination report.

This is an opportunity for an inventor to communicate his novelty over the prior art in examination reports. Inventors and patent agents create and send a test response that tries to prove that their Invention is indeed patentable and meets all patent criteria.

- Step 9: clearance of objections

The Controller and the patent applicant is connected for ensuring that all objections raised regarding the invention or application is resolved and the inventor has a fair chance to prove his point and establish novelty and inventive steps on other existing arts.

Upon receiving a patent application in order for grant, it is the first grant for a patent applicant.

- Step 10:

Once all patent requirements are met, the application will be placed for the grant. The grant of a patent is notified in the Patent Journal, which is published periodically.

Grounds for opposition

An application for a patent may be opposed by either a prior grant or a subsequent grant by any person on the grounds specified in s 25 (1) and 25 (2) of the former Act. No other grounds stated in

the Act can be taken to oppose the patent. Some major opposition grounds, common to both pre-grant and post-grant opposition, are mentioned below:

1. The Invention was published previously in India or elsewhere or was claimed previously in India.
2. The Invention is the formation of a part of the prior public knowledge or prior public use or traditional knowledge of any community.
3. The Invention is obvious and lacks an inventive step.
4. The Invention does not constitute an invention within the meaning of the Act, or the Invention is not patentable under the Act.
5. Failure to disclose information or furnishing false information relating to foreign by the applicant.

Pre-Grant Protest: [Section 25 \(1\) of the Patent Act](#) and [Rule 55 of the Patent Rules, 2003](#) provide the procedure to be followed for pre-grant opposition. Pre-grant opposition can be initiated by anyone after the application is published and before the patent is granted. If a request for examination is filed to oppose the application, the Controller considers representation only. If a request for examination has not been made by the applicant, it is possible for the opponent as an interested person to first file a request for examination under Section 11B, and then file a pre-grant **opposition**.

Post-grant opposition: The procedure is followed to oppose the grant under [Section 25 \(2\) of the Patents Act, 1970](#) and [Rule 55A to 70 of the Patent Rules, 2003](#). A Post-grant opposition can be filed by any person interested in any of the specific grounds before a period of one year from the date of publication of the grant of the patent. Unlike a pre-grant protest, a pre-grant protest must be filed by an individual and not by a person. The expression (people interested) is defined under section [2\(t\) of the Patents Act, 1970](#) wherein a person/party is engaged, or is conducting research in the same field with which the Invention (which is to be opposed) is concerned.

What are the Authorities concerning patent

The Controller of Patents is considered as the principal officer responsible for administering the patent system in India. The Controller is regarded as the overall supervisor of the four Patent Offices in Chennai, Delhi, Mumbai and Kolkata. Since the Controller also acts as the Registrar of Trademarks with the Head Office of the Trade Office in Mumbai, the Controller acts as a patent from his office in Mumbai. Officially, the patent has its head office in Kolkata (Calcutta). Patents granted under the Patents Act and other officers of the Patent Office discharge their functions under the direction or regulation of the Controller.

Patent Infringement

Patent infringement is a violation which involves the unauthorized use, production, sale, or offer of sale of the subject matter or Invention of another's patent. There are many different types of patents, such as utility patents, design patents, and plant patents. The basic idea behind patent infringement is that unauthorized parties are not allowed to use patents without the owner's permission.

When there is infringement of patent, the court generally compares the subject matter covered under the patent with the used subject matter by the “infringer”, infringement occurs when the infringer Uses patent material from in the exact form. Patent infringement is an act of any unauthorized manufacture, sale, or use of a patented invention. Patent infringement occurs directly or indirectly.

Direct patent infringement: The most common form of infringement is direct infringement, where the Invention that infringes patent claims is actually described, or the Invention performs substantially the same function.

Indirect patent infringement: Another form of patent infringement is indirect infringement, which is divided into two types:

- Infringement by inducement is any activity by any third party that causes another person to infringe the patent directly. This may include selling parts that can only be used realistically for a patented invention, selling an invention with instructions to use in a certain method that infringes on a method patent or licenses an invention that is covered by the patent of another. The inducer must assist intentional infringement, but does not require intent to infringe on the patent.
- Contributory infringement is the sale of components of material that are made for use in a patented invention and have no other commercial use. There is a significant overlap with indications, but contributor violations require a high level of delay. Violations of the seller must have direct infringement intent. To be an obligation for indirect violations, a direct violation must also be an indirect act.

Doctrine of Equivalents And Doctrine of Colourable Variation

Patent infringement generally categorized into two, i.e. literal infringement and infringement in the doctrine of equivalents. The term “literal infringement” means that each element heard in a claim has the same correspondence in the alleged infringement device or process. However, even if there are no literal violations, a claim can be infringed under the doctrine of equivalents if the accused device or some other element of the process performs the same function, in substantially the same way to obtain substantially the same result. The principle of equivalence is a legal rule in most patent systems in the world that allows a court to hold a party liable for patent infringement, even though the infringing instrument or process does not fall within the literal scope of the patent claim, but Still equal to the claimed Invention.

This is not an expansion of coverage of a claim permitted by the principle of equivalence. Rather, the scope of coverage given to the patent owner is limited by

(i) the “prosecution history estoppel” and

(ii) the principle of the prior art.

The analysis of infringement determines whether a claim claimed in a patent “literally reads on the accused infringer’s instrument or process”, or covers the allegedly infringing device in the doctrine of equivalents.

The steps in the analysis are:

- Oppose the scope of the “literal” language of claims.
- Comparing claims with the accused device or process to determine if there is a literal violation.
- If there is no literal violation, reduce the scope of claims under the principle of equality.

The doctrine of equivalents is considered as an equitable doctrine which effectively expands the scope of the claims beyond their literal language to the true scope of the inventor’s contribution to the art. However, there are limitations in the scope of equivalents to which the patent owner is entitled.

Remedies for Patent Infringement

Patent infringement lawsuits can result in significantly higher losses than other types of lawsuits. Some laws, such as the Patent Act, allow plaintiffs to recover damages. Patent infringement is the illegal manufacture or usage of an invention or improvement of someone else’s invention or subject matter who owns a patent issued by the Government, without taking the owner’s consent either by consent, license or waiver. Several remedies are available to patent owners in the event of an infringement. Measures available in patent infringement litigation may include monetary relief, equal relief and costs, and attorneys’ fees.

Monetary Relief: Monetary relief in the form of compensatory damages is available to prevent patent infringement:

1. Indemnity compensation – A patent owner may have lost profits for infringement when they established the value of the patent.
2. Increased damage – Up to three times, compensation charges can be charged in cases of will or violation of will.
3. The time period for damages – The right to damages can be claimed only after the date when the patent was issued and only 6 years before the infringement claim is filed.

Equitable relief: Orders are issued by the court to prevent a person from doing anything or Act. Injunctions are available in two forms:

1. Preliminary injunction – Orders made in the initial stage of lawsuits or lawsuits that prevent parties from doing an act that is in dispute (such as making a patent product)
2. Permanent injunction – A final order of a court which permanently ceases certain activities or takes various other actions.

Conclusion

Patents can provide great value and increased returns to individuals and companies on the investment made in developing new technology. Patenting should be done with an intelligent strategy that aligns business interests to implement the technology with a wide range of options in

the search for how, where and when to patent. As an example, with a focus on international considerations and regulations in specific countries, it is possible for a company to achieve significant savings and improve the rights gained using patents.

Patent Requirements

the U.S. Patent Act sets forth the general requirements for patent protection in a single sentence:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvements thereof, may obtain a patent, subject to the conditions and requirements of this title.

Unfortunately, the actual test for patentability is a bit more complicated than this sentence suggests. Under U.S. patent law, an invention is patentable only if it meets the following four requirements, which are discussed in more detail below:

- The invention must [be statutory \(subject matter eligible\)](#)
 - The invention must [be new](#)
 - The invention must [be useful](#)
 - The invention must [be non-obvious](#)
- [Patent Index](#) | [Patent Applications](#)

Subject Matter Eligibility

[Section 101](#) of the Patent Act states that processes, machines, articles of manufacture, and compositions of matter are patentable. At first blush, this wording appears to cover every conceivable type of invention. To a large extent, this is true. Under this statute, the United States has one of the broadest standards for what constitutes patentable subject matter in the entire world. Inventors of physical devices generally do not have to worry about whether their inventions are non-statutory. However, there are certain inventions that are more likely to be challenged as to whether they fall within [Section 101](#), including software inventions and inventions relating to certain types of medical tests and diagnostics. Inventions that do not meet the requirements of [Section 101](#) are considered to fail the "subject matter eligibility" requirement for patent protection, and cannot receive a valid US patent even if they meet the other requirements for patentability (i.e., even if the invention is new, useful, and non-obvious).

Sections [2104](#) and [2106](#)

The language of [Section 101](#) identifies four types of inventions that are patentable, namely processes, machines, articles of manufacture, and compositions of matter. If an invention does not fall within one of these four categories, the invention is not patentable. For example, data structures that are not claimed in combination with a computer or some type of computer-readable media are clearly outside of these four categories. So is nonfunctional descriptive material, such as music, literary works, and compilations or arrangements of data. It is also clear that electromagnetic waves or signals do not fit into any of these categories, and therefore are not patentable. Finally, a claim to "software" that is not tied to a process or a physical machine (such as a computer or mobile device) would also fall outside the four statutory categories and therefore would not be patentable. In order to avoid this problem, most experienced patent attorneys will take care never to claim software in the abstract, but will only claim software in the context of a computing machine or a process. See

MPEP Section [2106](#)

In addition to falling within one of these four statutory classes, an invention must also avoid a judicially created "exception" to patentable subject matter if it is to be considered a patentable type

of invention. Recent case law has identified three different exceptions, namely abstract ideas, laws of nature, and natural phenomenon. The Supreme Court in [Alice Corp. v. CLS Bank International](#) analyzed these three exceptions in some detail. The "abstract idea" exception to patentable subject matter is particularly important for patents relating to software, mobile-device apps, and the Internet. Many observers are of the opinion that a large percentage of software-related inventions are no longer patentable after the Supreme Court's explanation of the abstract idea exception.

Novelty (Newness) Requirement

In order for an invention to be patentable, the invention must be considered to be new or novel. This novelty requirement states that an invention cannot be patented if certain public disclosures of the invention have been made. The statute that explains when a public disclosure has been made ([35 U.S.C. Section 102](#)) is complicated and often requires a detailed analysis of the facts and the law. The most important rule, however, is that an invention will not normally be patentable if:

- the invention was known to the public before the applicant filed for patent protection;
- the invention was described in a printed publication before the applicant filed for patent protection; or
- the invention was described in a published patent application or issued patent that was filed before the applicant filed for patent protection.

There is an exception to these requirements for disclosures made by the inventor less than one year before the patent application was filed. This means that there is a one year period after the first public disclosure or offer for sale of an invention by an inventor during which a patent application must be filed. This "statutory bar" is unforgiving, which means that an inventor who does not file for patent protection on her new invention within this one year grace period will lose all right to obtain patent protection on the invention. In fact, it is possible that this one-year clock may start "ticking" by something as innocuous as showing the invention to friends without any obligation of confidentiality.

Although the United States grants the one year grace period described above, most other countries do not grant such a period. Therefore, it is almost always preferable to file a patent application before any public disclosure of the invention. Most patent attorneys will try diligently to file a patent application prior to any public release or announcement in order to allow international patent filings.

The statute that describes this novelty requirement under U.S. law was significantly revised by the [America Invents Act](#). Patent applications that were filed on or before March 16, 2013 fall under the earlier version of the statute. Under this earlier version, public disclosures made by another less than one year before the patent application was filed may not bar an application if the disclosure was made after the applicant's "invention" date.

Useful Requirement

The patent law specifies that the subject matter must be "useful." This means that the invention must have a useful purpose. In most cases, the usefulness requirement is easily met in the context of computer and electronic technologies. The requirement is more important when attempting to patent a pharmaceutical or chemical compound, as it is necessary to specify a practical or specific utility for the new compound. See [MPEP Section 2107](#)

Nonobviousness Requirement

If an invention is not exactly the same as prior products or processes (which are referred to as the "prior art"), then it is considered novel. However, in order for an invention to be patentable, the

patent statute also requires that the invention be a non-obvious improvement over the prior art ([35 U.S.C. Section 103](#)). This determination is made by deciding whether the invention sought to be patented would have been obvious "to a person having ordinary skill in the art to which the claimed invention pertains." In other words, the invention is compared to the prior art and a determination is made whether the differences in the new invention would have been obvious to a person having ordinary skill in the type of technology used in the invention. The statute requires that the invention be obvious at a time before the application was filed.

As can be imagined, the determination of whether a particular change or improvement is "obvious" is one of the most difficult determinations in patent law. In order to make such a determination, an examiner in the patent office will normally review previous patent documents to find those patents and published patent applications that are closest to the invention for which patent protection is sought. If all the features of the invention can be found in a single patent, the examiner will reject the patent as lacking novelty (that is, it is exactly the same as what was previously known and therefore is not new). If no patent contains all of the features, the examiner will attempt to combine two or more prior patents, and attempt to find all of the features in a combination of those prior patents. If the examiner is successful in finding such a combination, the examiner will generally reject the invention as an obvious combination of items known in the prior art.

Rejections made by combining prior art references are very common in patent applications (see BitLaw's discussion on [patent prosecution](#)). For a combination of references to be successfully used to reject a patent application as obvious, the patent examiner must provide some reason to combine the references. In the past, patent attorneys could successfully argue against a rejection by proving that the inventors of the prior art references would not have looked to combine their invention with the other invention(s). The Supreme Court's 2007 decision in *KSR International Co. v. Teleflex Inc.* made it easier for an examiner to successfully combine two references together in an obviousness rejection. In particular, the Supreme Court said if the combination of two references yields only predictable results, it would be obvious to combine those two references--even if neither reference contained an explicit reference that it could have been combined with the other reference.

Introduction to patents

Product patent and Process Patent

Patents, amongst all assets that fall under intellectual property rights, are mostly sought by industrialists and inventors. The reason is, it gives them a right that restrains others from making, using or manufacturing a product using the same formula or technique. This generally leads to a monopoly right over the product or over the process used to make the product. Such a right lasts for a specified period of time.

In India, the Act which deals with patents is The Patents Act, 1970. The Act specifically lays down the categories that do not fall within its ambit under Sec 3 and Sec 4 of the Act. It also specifies the period for which a right over Patent is protected which is 25 years.

As per the Act, there are two types of Patents that can be acquired in India, namely, product patent and process patent. The Indian legislature implemented these patent regimes as a part of the Patent Amendment 2005.

So in short, we can say that The Patents Act, 1970 gives a statutory right to the inventor for a fixed period of time. This right is granted by the government. Once this patent protection is acquired by

the inventor, he is granted the right to stop others from making, using, selling his patented process or product.

Product patent vs process patent

The Indian Patents Act, 1970 provides for two types of patents, they are process and product patents. Let's discuss each of these types.

Product patent

As the name suggests, this type of patent protects the product. It offers the inventor higher protection for his invention by decreasing the level of competition of the same product. On the other hand, a process patent protects the manufacturing process of a product but not the product. The product patent maximises the level of monopoly and minimizes the competition. So, we can conclude that a product patent has the following features that eventually benefits the inventor or the patent owner:

1. It provides a higher level of monopoly rights to the inventor of the patent owner.
2. Such a grant prevents others from manufacturing the same product using the same process or a different process.
3. Since the end product is given protection, the level of protection is considered higher in comparison with process patents.

Process patent

In this type, patent protection is granted only to a particular process used in manufacturing a product but not the end product. A process patent is often considered to provide limited protection. The reason is, it does not bar or prevent others from manufacturing or creating the same product by using a distinct process. Hence, it is possible that there are multiple process patents granted for a single product. This eventually reduces the monopoly that the inventor enjoys, thereby increasing the level of competition.

How are product and process patents different from each other?

Sr.No	Basis	Product Patent	Process Patent
1	Definition	Patent protection is provided to the 'End Result' or 'the product'.	Process patent protection is provided to only the process, and not the resulting 'End Product'.

2	Competition	Once protection is granted, less competition	Competition shall remain
3	Monopoly	A higher level of monopoly is enjoyed by the inventor	Inventors do not enjoy a monopoly since other persons can still manufacture the same product using a different process.
4	Implementation	Product Patents were introduced as part of the Patents (Amendment) Act, 2005.	Process Patents have been recognised in India ever since the Indian Patent Act, 1970 was enforced.
5	Example	The altered DNA will be provided protection and not just the process involved.	The patent will be provided to the process involved in altering the DNA as recognised by the Indian Patents Act.

Take of developed and developing countries on product and process patents

When it comes to product vs process patents, developed countries and developing countries have been shown to possess varied opinions. Whereas developed countries recognise the importance of product patents as complete protection, developing countries have not yet recognised the importance of product patents. This dichotomy has led to hindrance in product protection on a global level as both product and process protection gives protection to patents at different levels. Since India is a part of WTO, it has agreed to bound itself and to comply with the TRIPS Agreement which came into effect in the year 1999. India adopted the concept of product patent through the 2005 Amendment of the Indian Patents Act. This Amendment made in 2005 brought two important sections in the Indian Patents Act, namely, Section 2 and 3. Even the definition of 'Patents' under Section 2(j) of the Act changed to an invention means a new product or process involving an inventive step and capable of industrial applications.

WTO's stand on product and process patents

During the Uruguay Round of Talks, the World Trade Organization (WTO) codified an agreement that intended to create and recognise an equitable system for international trade. It was felt that it was the need of the hour to protect products exported of intangible assets through strong and powerful IP Laws. This led to the TRIPS Agreement which required the ratified countries to comply with terms in order to meet global standards and to resolve hindrances to IP protection that were caused at the global level. One of the requirements specified under the TRIPS Agreement was that all countries that ratified the agreement must follow the Product Patent Regime. In short, we can say that the TRIPS and WTO intended that the countries shift from process to product patents which would maximise the monopoly right over the patent and reduce the competition in the market.

Analysis of product vs process patents

Evidently, a strict divergence appears to exist between product and process patents regimes. Developed countries are inclined towards the product patent system while the developing country prefers the process patent system. Since the process patent is granted for a particular process and not for the product itself, any other person can produce the same product using a different process by simply modifying the parameters used. This would enable multiple producers to produce the same product. It is a disadvantage for the inventor because the multiplicity of producers in the market shall give him less protection for his patented right and eventually, he wouldn't have the monopoly and this will give rise to competition in the market.

However, a process patent is a benefit to the consumer of such a product because the customer can get alternative options and can opt for a product that has all the specifications available at an affordable price. The non-existence of monopoly over a product even pressurises the inventor to market the product at a lower cost which makes it cost-effective to the consumer of such product. In the case of a product patent, the exclusive right is given to the original inventor of a product. Once this type of patent is granted, no other person can make, use or manufacture the same product. Since there would be a monopoly over the product, the inventor would stand to benefit since he can market the product at the price he desires. However, it would be a disadvantage for the consumer since the price of such a product would be high and the consumer who has no other alternative option will now be forced to buy the product at the rate decided by the inventor as his exclusive right.

Conclusion

Now that we have understood the various factors which differentiate product patents from process patents and the advantages and disadvantages of both, we can conclude why the developing countries and developed countries have different stances.

Maybe developing countries have not yet completely shifted to product patents because this will eventually affect their nation and consumers who aren't financially strong on a global level yet. Granting process patents would help such countries to increase innovation in their economy, and would promote healthy and effective pricing of the product. India, being a developing nation is also in favour of granting both process and product patents and is not inclined towards product patents. The reason is, the government at the end of the day needs to implement laws only after analysing and understanding the plight of the country and not by blindly following the developed countries.

Patent Registration in India

The complete patent registration process involves a series of steps which are to be mandatorily followed to get a patent in India. In this post, we will discuss the registration process involved in registering a patent in India and the costs involved.

Checking the patentability of the invention by performing a search

Before filing a patent application in India, one should perform a detailed patentability search to determine whether a patent for it will be available or not. You can use the below link to conduct the patentability search <http://ipindiaservices.gov.in/publicsearch> It is to be noted here that this step in itself is not mandatory.

Drafting of patent application

1. Once the search is complete and through, the next step involved is to prepare an application form in **form 1**.
2. Each application has to be accompanied by a patent specification. This has to be prepared in **form 2** where one has to provide the complete or provisional specification depending upon the state of the invention(Whether its partially completed or completed). In case one files a provisional application, a time gap of 12 months is provided to finalize the invention and file the complete application.
3. A patent draft will also be required to be submitted along with the application. The patent draft is considered a very important document as the same will be used by the patent office in deciding whether or not patent should be granted.

Filing the patent application in India

No	<u>Stages of the patent process</u>
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1.	Application for grant of patent
2.	Provisional/complete specification
3.	Statement and undertaking under section 8 (this is only required where a patent application is already filed than India)
4.	Declaration as to inventorship
5.	Forms submitted only by start-ups and small entities.

Publication of patent application

Patent application filed with the Indian patent office will be published in the official patent journal. This is generally done after 18 months of filing the application. In case one wants to get it published earlier, he can make a request in form 9 for early publication. When a restriction is placed by the Indian patent act with regards to the publishing of the patent, the same will not be published in the journal.

Examining of patent application

Every application filed for protection will be examined before a patent is finally granted. The application has to be made for examination in form 18. The earlier one makes a request, the earlier the application will be examined by the examiner. Once the application is filed, it is transferred to the patent officer who will examine the application to ensure the same is in accordance with the

patent act and rules. A thorough search is conducted by the officer where he/she analyses the relevant technology in depth and the objections, if any, will be communicated. The report issued in this case is called the First Examination Report(FER).

Grant of patent

The patent is granted once all the objections raised by the officer are resolved.

Rules to keep in mind while filing the patent application

- The fees payable with respect to the grant of patents and applications therefor, and in respect of other matters for which fees are required to be payable are specified in the First Schedule.
- An additional fee of 10% is payable when the applications for patent and other documents are filed physically.
- The fees payable under the Act or rules may be paid at the appropriate office either in cash, or through electronic means, or may be sent by bank draft, or banker's cheque. The amount is payable to the Controller of Patents and drawn on a scheduled bank at the place where the appropriate office is situated. If the draft or banker's cheque is sent by post, the fees shall be deemed to have been paid on the date on which the draft or banker's cheque has actually reached the Controller.
- Where a fee is payable with respect to a document, the entire fee shall accompany the document.

- In case of transfer of application from a natural person to other than a natural person, the difference, if any between the fee shall be paid by the new applicant with the request for transfer.

In case an application by a small entity is fully or partly transferred to a person other than a natural person, the difference, if any, between the fee shall be paid by the new applicant with the request for transfer.

- In case an application processed by a start-up is fully or partly transferred to any person other than a natural person or a start-up, the difference, if any, can be charged from a start-up and such person to whom the application is transferred. In short this shall be paid by the new applicant along with the request for transfer:

Explanation: Where the start-up ceases to be a start-up after having filed an application for patent due to lapse of more than five years from the date of its incorporation or registration or the turnover subsequently crosses the financial threshold limit as defined, no such difference in the scale of fees shall be payable.

- Fees once paid in respect of any proceeding shall not ordinarily be refunded irrespective of whether the proceeding has taken place or not:

Exception: If the Controller is satisfied that during the online filing process, the fee was paid more than once for the same, the excess fee shall be refunded.

- A refund is initiated only if an applicant withdraws his request for examination before the first statement of objection is issued. Please note that this refund is only to the extent prescribed in the First Schedule.

- Any person may deposit money in advance and request the Controller to realize any fee payable by him from the said deposit.
- Subject to the approval of the Controller, any person may discontinue the deposit of money in advance and in such case the balance, if any, shall be refunded.

Exclusive Rights

A **patent** is a set of [exclusive rights](#) granted by a [sovereign state](#) or [intergovernmental organization](#) to an inventor or assignee for a limited period of time in exchange for detailed public disclosure of an [invention](#). An invention is a solution to a specific technological problem and is a product or a process.

Patent Limitation :

All limitations rule is a principle applicable to patents law according to which each element of a claim must be present in an allegedly infringing device in order to establish literal infringement. This rule limits the doctrine of equivalents and prevents the doctrine's application to an entire claim, rather than the claim's constituent elements.

The all limitations rule provides that the doctrine of equivalents does not apply if applying the doctrine would vitiate an entire claim limitation. The United States Court of Appeals for the Federal Circuit explains that there is no set formula for determining whether a finding of equivalence would vitiate a claim limitation, and thereby violate the all limitations rule. Rather, courts must consider the totality of the circumstances of each case and determine whether the alleged equivalent can be fairly characterized as an insubstantial change from the claimed subject matter without rendering the pertinent limitation meaningless.

Complete Guide to Revocation of Patents in India

*With the signing of the TRIPS agreement in 2005, the Indian Patent Act, 1970 was amended. The amendment was made in Section 25 of the Indian Patent Act, 1970, and the ability to oppose after or before the grant of Patent was included in the Act. The amendment in the Act ensured proper adoption of Intellectual Property and international harmonization of the Patent regime. The Revocation of Patent is done in the cases where it is deemed to be against the public policy of the Central Government or **Patent Infringement** or Claim by Licensors. In this article, we will discuss the Revocation of Patent in India.*

What is Patent Revocation?

When a Patent is sealed or granted, it is not always the scenario that the Patent would stay unobstructed by any person or third party throughout the life of the Patent. Any person can challenge the Patent on several grounds, and the way by which the Patent can be challenged is by Revocation of Patent. The Patent Act does not assume that the Patents granted to be valid; hence, the rights granted on such granted Patents cannot be absolute.

Who can file a revocation petition?

The Patent Act, 1970, in Section 64 provides for the persons who can file the petition of Revocation of Patent. The persons are as follows:

- any interested person;
- the Central Government;
- the person is making the counter-claim for the infringement of a patent in a suit.

Where can a Revocation of Patent Petition be filed?

A petition for the Revocation of Patent should be filed in the Intellectual Property Appellate Board (IAPB) by any of the persons specified under Section 64 of the Patent Act, 1970.

Section 104 of the Patent Act, 1970, provides for the jurisdiction aspect for filing of the Revocation of Patent petition. It states that the Revocation petition claiming Infringement of Patent should not be filed in any court, which is inferior to District Court having the jurisdiction to try the Infringement suit. On the other hand, in case of a counter-claim is filed for the Revocation of Patent made by the defendant, such counter-claim or suit for Patent Infringement should be transferred to the High Court.

Grounds for Revocation of Patent

The grounds for Revocation are provided under the following sections of the Patent Act, 1970:

1. Section 64 of the Patents Act, 1970
2. Section 65 of the Patents Act, 1970
3. Section 66 of the Patents Act, 1970
4. Section 85 of the Patents Act, 1970

A. Section 64: General grounds for revocation of Patents

The various grounds for Revocation of Patent as per section 64 of the Patent Act, 1970, are as follows:

1. An invention with similar specifications in any other Patent already granted in India with an earlier filing date or priority date;
2. The grant of Patent was done to a person who was not entitled for the same;
3. The Patent was wrongfully obtained by a person from another person who is actually entitled to the same. Another person who is actually entitled to the Patent can apply for Revocation of Patent;
4. The invention which is claimed in the granted Patent is not actual as per Section 2(1)(j) of the Patent Act, 1970;
5. In the Patent the invention claimed lacked in novelty with regard to prior public use or prior knowledge;
6. The invention is not of any usage, means that the Patent is not in operation at all or is not providing the desired results as specified in the specifications of Patent;
7. In the Patent the invention is obvious with regard to prior public use or prior knowledge;
8. The Patent lack any inventive step;
9. The claimed invention does not take account of any personal document or secret use or secret trail;
10. The claimed invention which is imported from abroad is not new in the country India. The invention is publicly known and is in use in India before the date of publication or priority date.
11. The scope of any claim of a Patent is not clearly or sufficiently defined in the specifications of the Patent;
12. The claim of Patent is not fairly based on the matters of the specifications of Patent;

13. The specification of the Patent does not fairly or sufficiently describe the Patent or the methods by which the Patent is invented;
14. The Patent was obtained by false representation or suggestion. The suggestion or representation should relate to any fact or statement made in connection with the grant of Patent or relate to any of the specifications of the Patent;
15. The Patented invention claimed to fall under Section 3 or Section 4 of the Patent Act, 1970. Section 3 states the categories under which the invention if lies are not patentable in India. On the other hand, Section 4 states that any invention related to atomic energy is not patentable in India;
16. The applicant of the Patent has not disclosed all the required information as per Section 8 of the Patent Act, 1970. Furthermore, the applicant has furnished false information related to the invention;
17. The applicant of the Patent has not followed the compliance of the secrecy direction by the Controller as per Section 35 of the Patent Act, 1970;
18. Non-compliance of the secrecy direction by the Controller for filing of Patent application outside India without the prior permission of the Controller;
19. The permission for amendment of complete specifications of Patent under Section 57 or Section 58 of the Patent Act, 1970, is obtained by applicant by fraud;
20. The specification of the Patent does not completely disclose properly the geographical origin or source of the biological material used in the invention;
21. The claimed invention in the specification of Patent is a traditional knowledge available within any local or indigenous community in India or elsewhere.

B. Section 65-Revocation in cases related to Atomic Energy

Section 65 of the Patent Act 1970, provides that under this clause revocation of Patent can be done by the Central Government. The Central Government can revoke the Patent only after establishing that the invention specified in the Patent is related to Atomic Energy. The grant of Patent for an invention on Atomic Energy is restricted as per the provisions of the Atomic Energy Act, 1962. Hence, the Central Government cannot allow the grant of Patent for an invention related to Atomic Energy in India.

C. Section 66-Revocation of Patent in Public Interest

Section 66 of the Patent Act, 1970, states that where the Central Government is of the opinion that the Patent or the manner in which the rights related to Patent are exercised is disadvantageous to the public at large or the State, then such a detrimental Patent should be revoked. The Patent holder should be given proper opportunity with respect to his/her right of being heard. After the opportunity is given to the Patent holder and observing all the circumstances, the decision for the Revocation of Patent will be given accordingly.

D. Section 85-Revocation by Controller for Non-working

As per Section 85 of the Patents Act, 1970, the Patent can be revoked for non-working. Any person interested or the Government can apply for the Revocation of Patent to the Controller with respect to the Patent for which compulsory license is granted. The Patent Revocation should be filed within two years of the grant of the compulsory license.

The grounds for Revocation are:

1. The invention which is patented is not working the territory of India;
2. The reasonable requirements of the common public from the Patent is not being met;
3. The invention which is patented is not available to the common public at a reasonable, affordable price.

Conclusion

It's common for some people to come across to a matter of Patent Revocation with a general concern that 'this has been done earlier' or 'the Patent doesn't operate.' These are certain aspects to

be taken into account when considering the various grounds of Patent Revocation. Several of the grounds for Patent Revocation involve complex scrutiny at a legal and practical level (within the field of the invention defined in the Patent). In the end, it will be the Court that decides whether or not a Patent is liable for Revocation with the support of evidence presented by the parties. If you think that there are sufficient grounds for Revocation of Patent available, then legal advice should be taken from experienced professionals.

Ownership and Forms of Transfer of Patents Rights in India

When a patent for a creation is allowed, it is essential to consider (1) if the patentee/owner of the patent will fabricate, market, sell as well as appropriate the innovation, (2) regardless of whether the patentee/owner of the patent will sell generally freedoms in his/her development to another person for an amount of cash, or (3) if the patentee/owner of the patent will permit another person to deliver and offer the protected item for sale to the public under determined terms by the Patentee that should be met for the licensee. This article examines how one might impact, use or adapt the protected innovation. Here we are going to see Ownership and Forms of Transfer of Patents Rights – **Patent Registration in Coimbatore** to make you understand in a very clear manner.

A patent is considered as a transferrable property that can be moved from the first patentee to some other individual by assignment or by activity of regulation. A **patent registration** can be authorized or allocated simply by the proprietor of the patent. In the event of co-proprietors or joint-proprietors, a co-proprietor can allocate or permit the patent just upon assent of the other owner(s). Necessities for production of any interest in a patent:

Section 68 of the Indian Patents Act 1970 accommodates the home loan of, permit or formation of any interest in the patent.

“Assignments, and so forth, not to be legitimate except if recorded as a hard copy and appropriately executed.¹ – A assignment of a patent or of an offer in a patent, a home loan, permit or the formation of some other interest in a **patent registration** will not be substantial except if the equivalent were recorded as a hard copy and the arrangement between the gatherings concerned is diminished to the type of a report epitomizing every one of the agreements overseeing their privileges and commitments and properly executed”

Requirements:

The assignment, home loan or permit ought to be decreased to writing in an archive exemplifying every one of the agreements administering the freedoms and commitments between the gatherings;

An application for enrollment of such record ought to be documented in the recommended way in Form-16 inside the time endorsed under segment 68. The report when enlisted will have impact from the date of execution.

Forms/Nature of Transfer of Patent Rights:

Award of a **Patent registration** gives to a patentee the option to keep others from making, utilizing, practicing or selling the development without his consent. Coming up next are the manners by which a patentee can manage the patent:

Assignment

Licenses

Transmission of patent by activity of regulation

1. Assignment

The term 'assignment' isn't characterized in the Indian Patents Act. Assignment is a demonstration by which the patentee appoints entire or part of his **patent registration** privileges to the trustee who gains the option to keep others from making, utilizing, practicing or distributing the innovation. There are three sorts of assignments

Legitimate Assignment

Equitable Assignment

Mortgage

Legitimate Assignment:

An assignment (or a consent to allot) of a current **patent registration** is a lawful assignment, where the trustee might enter his name as the patent proprietor. A patent which is made by deed must be statutory by a deed. A legitimate trustee entitled as the owner of the patent gets generally privileges thereof.

Equitable Assignments:

Any arrangement remembering a letter for which the patentee consents to give a specific characterized portion of the patent to someone else is a fair assignment of the **patent registration**. Anyway an appointee in such a case can't have his name entered in the register as the owner of patent. Be that as it may, the chosen one might have notice of his advantage in the patent entered in the register.

Mortgages:

A home loan is an arrangement wherein the **patent registration** freedoms are entirely or halfway moved to chosen one as a trade-off for an amount of cash. When the assignor reimburses the total to the appointee, the patent freedoms are renewed to assignor/patentee. The individual in whose favour a home loan is made isn't qualified for have his name entered in the register as the owner, yet he can get his name entered in the register as mortgagee.

2. Licenses:

The Patents Act permits a patentee to concede a License by the method of understanding under segment 70 of the Act. A patentee by the approach to conceding a permit might allow a licensee to make, use, or exercise the development. A permit conceded isn't substantial except if it is recorded as a hard copy. The permit is mortgage endorsed by the licensor and the licensee recorded as a hard copy and the terms settled upon by them including the payment of eminences at a rate referenced for all articles made under the **patent registration**. Licenses are of the accompanying kinds,

Voluntary License

Statutory License(such as compulsory License)

Exclusive/Limited License

Express/Implied License

Voluntary licenses:

It is the permit given to some other individual to make, use and sell the protected article as settled upon the terms of permit recorded as a hard copy. Since it is a willful permit, the Controller and the Central government don't play any part to play. The agreements of such arrangement are commonly settled upon by the licensor and licensee. If there should be an occurrence of any conflict, the licensor can drop the authorizing arrangement.

Statutory licenses:

Statutory licenses are conceded by focal government by engaging an outsider to make/utilize the protected article without the assent of the **patent registration** holder considering public interest. Exemplary illustration of such statutory licenses is compulsory licenses. Compulsory licenses are by and large characterized as “approvals allowing an outsider to make, use, or sell a protected creation without the patent proprietor’s consent³.

Compulsory Licenses (CLs)

However CLs neutralizes the interest of the patent holder, it is allowed under specific gave conditions under the Patents Act. Under segment 84 of the Indian Patents Act 1970, any individual can make an application for award of a necessary permit for a **patent registration** following three years, from the date of award of that patent, on any of the accompanying grounds:

(a) The sensible necessities of the general population concerning the protected creation have not been fulfilled; (b) The licensed development isn’t accessible to general society at an actually reasonable cost. (c) The licensed development has a not worked in the section of India.

Under Section 92 An of the Act, CLs can likewise be conceded for sending out drug product(s) to any country unequipped for assembling drug items to serve individuals in that nation, further while working of the patent required one more related patent under Section 88 of the Act or on notice by the Central Government, the regulator can give a permit to an intrigued individual. The Central or State Government can involve the innovation or its process for its own motivation either regardless of eminence.

Indian Tribunal appellate Board:

Intellectual Property Appellate Board (IPAB) is a tribunal, before which the decisions of the Central Government or Controller of Patents, Registrar under the Trade Marks Act, 1999 and the Geographical Indications of Goods (Registration and Protection) Act, 1999 can be appealed.

The IPAB has appellate jurisdiction against the decision of the Controller or Central Government of India in matters pertaining to refusal of application for failure to comply with the requirements of the Act; orders pertaining to divisional application; orders pertaining to dating of application; decisions pertaining to anticipation; decisions and cases of potential infringement; orders regarding substitution of applicants; revocation of patents in public interest; correction of clerical errors, etc.

However, the orders passed by the Central Government of India with respect to inventions pertaining to defence purposes, including directions of secrecy in respect of such inventions, revocation if the patent is contrary or prejudicial to public interest, or pertaining to atomic energy, are exempted from the purview of appeal to IPAB. An order of the Controller, granting an extension of time under any provision of the Patent Act 1970 is also not appealable.

Appeal Procedure

An appeal must be duly filed within the timeline given under the Patents Act along with the required fee. The format must be followed clearly stating the grounds for filing, and the appeal must be signed by the Appellant. The procedure is not at all complicated.

IPAB has its headquarters at Chennai, with circuit sittings also taking place at, Mumbai, Delhi, Kolkata and Ahmedabad. In a much welcomed development, the Delhi registry-cum-bench of the Intellectual Property Appellate Board (IPAB) was officially inaugurated on the 31st of August 2015, by Delhi High Court Chief Justice G Rohini. As a result of this expansion now appeals can be filed at Delhi registry-cum-bench of IPAB for Patent applications and patents filed or granted at the Delhi Patent Office. However, matters based on patent applications or patents

being handled at Mumbai, Kolkata and Chennai Patent Offices are still to be filed at IPAB, Chennai.

Under Section 117A (4) of the Patents Act, 1970 an appeal should be filed within three months from the date of the decision, order or direction, as the case may be, of the Controller or the Central Government. However, recently Bench of IPAB circuit sitting at Delhi passed an order (SR NO.350/2014/PT/DEL) in favor of Microsoft Corporation wherein the issue for consideration was whether the three-month limitation period set out in Section 117A (4) of the Patents Act, 1970, for filing an appeal before the IPAB, challenging the controller's decision should start to run from the date of the order or the date of receipt of the order.

The relevant part of the order is reproduced herein below:-

"period of limitation contemplated under Section 117A (4) namely three months from the date of decision is to be construed as three months from the date of communication or receipt of the order the appeal is not barred by limitation and the same is maintainable. However, we are making it very clear that even in such an event of making the above said interpretation of Section 117A (4), it is the burden of the appellant to produce documents to establish that they have received the impugned order on such and such date."

An extension is also available for filing the appeal by way of a condonation of delay (COD) petition, along with prescribed official fees. However, COD must contain the genuine reasons of delay.

In *Pfizer Products Inc.* case (COD No.16/2014), IPAB allowed a condonation of delay for 33 months and 12 days, on the fact that the delay was due to the filing of the review application and its disposal. Since the delay was neither wilful nor wanton, the said petition was allowed.

The relevant part of the order is reproduced herein below:-

"The fact remains that being aggrieved by the rejection of application claiming for patent by the order dated 09/06/2011 the petitioner preferred the review application and the same was also dismissed on 27/03/2014 which resulted in the delay of 33 months and 12 days. It is also brought to the notice of this Bench that the petitioner obtained the certified copy of the order on 20/08/2014. However, the limitation to file appeal is to commence from the date of decision i.e. on 09/06/2011. We are of the constrained view that the petitioner has not only assigned valid reason but also shown sufficient cause to condone the delay."

In *Flextronics International USA, Inc.* case (C.O.D. No. 1/2014 in S.R. No. 499/2013/PT/DEL), IPAB allowed a condonation of delay for 461 days on the fact that, that on receipt of the impugned order, the applicant contacted the attorneys through their agents; however due to lack of communication between the attorneys and the agents, change of agents and the misimpression of the petitioner that the appeal was already preferred there was a delay of 461 days, a delay which was neither wilful nor wanton.

The relevant part of the order is reproduced herein below:-

"It is seen that there is a change of agents for the petitioner which resulted in delay of communication with the attorneys and it is specifically stated that the petitioner was under the impression that the appeal was already preferred but resulted in some delay. We are of the considered view that the petitioner has assigned valid reasons and shown sufficient cause to condone the delay. Accordingly, the petition is allowed."

Conclusion

From the above, it is evident that IPAB has streamlined the appeal process for applicants. Moreover, opening of Delhi registry-cum-bench of IPAB has provided appellants with a forum to file appeals in matters pertaining to patents, within Delhi jurisdiction. This move will also serve in reducing the backlog of cases before the Board, and especially so in the light of the fact that Delhi has the maximum number of pending cases. The decisions which held that three months will start from the "date of communication or receipt of the order of the appeal" will be helpful to applicants,

as several factors have to be taken into account before filing an appeal. Such evaluation may take up a considerable amount of time and the difference of one or two weeks during the three-month period will give significant relief to applicants.

An overview of the patent infringements and remedies available in India

Patent is a type of intellectual property granted by the patent authority to the inventor for a limited period of time for exercising monopoly over his specific innovation. A patent is considered to be an exclusive monopoly right as it excludes others from using, selling, distributing the invention of innovators. Patent Infringement is illegal as it violates the exclusive right of the patent holder. It is crucial for individuals and companies to be aware of patent laws and the consequences of patent infringement. It is important to take steps to protect one's own patents, as well as to avoid infringement of the same by others. With technology rapidly advancing, it has become increasingly important to understand the complexities of patent infringement and how it affects innovation and progress. This article aims to reflect the same.

types of patent infringement

Classification of patent infringement have been discussed hereunder.

Direct infringement

Direct infringement is a most common and obvious form of patent infringement. When a third party without the permission of the patent holder:

- Commercially uses the invention.
- Reproduces the invention.
- Import a protected idea/ invention in India.
- Selling patented inventions.
- Offer to sell patented inventions.

Direct infringement can either be intentional or unintentional during the term of patent. Only requirement to be fulfilled is the performance of a substantially deceptive function of an invented product without obtaining a legal licence from the owner for the usage. For example, Samsung started using the same manufacturing process as the Apple company for making phones, without taking permission. This is a direct infringement of a patent existing on the product, owned by the Apple company.

Literal infringement

Literal infringement is a type of direct infringement in which each and every element or composition protected by either product or process patent is copied, in other words, a replica of the original product is used, manufactured, sold or imported.

In the case of *Polaroid Corp. vs. Eastman Kodak Co (1986)*, Polaroid claimed that Kodak had violated its patent right related to instant photography. The central dispute revolved around Kodak's instant photography system, which Polaroid argued had utilised its patented technology. Polaroid believed that four of its patents related to instant photography, including the process of developing an instant image and the instant camera itself, were infringed by Kodak. After a prolonged trial, the court ruled in favour of Polaroid, determining that Kodak had indeed infringed upon Polaroid's patents. As a result, Kodak was ordered to stop the production and sale of its instant photography system and Polaroid was awarded substantial damages.

Non-literal infringement

Non-literal infringement is also recognised by the name of Doctrine of Equivalence. In this type of infringement, the alleged invention has to pass through the "Triple Identity Test". This means when an invention is similar to the patented invention hence performing significantly the same function, in the same way and producing the same result, may even differentiate in name, shape or form, that invention will be said to have caused non-literal infringement of the previously patented invention.

In the landmark case of *Ravi Kamal Bali vs. Kala Tech. & Ors (2008)*, the plaintiff was granted patent for 'tamper lock/seals' and the defendant constructed a similar kind of product by the name of 'Seal Tech', which had the similar functional features as the plaintiff's lock. The court of law had applied the Doctrine of Equivalence, and gave the decision in favour of the plaintiff stating that both the products had exactly the same function and also was made up from the same material with the only slight differentiation was of construction which did not constitute an innovation.

Indirect infringement

Indirect infringement occurs when a third party supports, contributes or promotes the direct infringement. The infringement can either be accidentally or knowingly.

Induced infringement

Induced infringement involves wilful aiding of the infringing process, with or without any intention to infringe. In either case, the infringer shall be held liable for infringement. The aiding can be in the form of:

- Assisting in manufacturing of the product.

- Assembling the patented product without proper licence.
- Providing instructions to third parties on production of product.
- Printing the instructions of patented items and selling them.
- Licensing plans or processes.

Contributory infringement

Contributory infringement is a kind of indirect infringement in which the infringer sells or supplies the parts of a product used exclusively to manufacture the patented products. The infringer is held liable even if he doesn't actively participate in the manufacturing process.

Wilful infringement

Wilful infringement occurs when someone disregards the patent invention voluntarily. The burden of proof in this case lies on the patent holder. The infringer can take the defence of legal opinion thoroughly in writing. Three step process for willful infringement are:

- Knowledge about the patented invention,
- Good faith belief that the infringer wouldn't be liable for patented invention,
- Infringer's belief is reasonable.

If the wilful infringement is proved, the court can order strong deterrents (3 to 4 times of actual damage), inclusive of court costs, lawyer's fees etc.

Burden of proof

The burden of proof in patent infringement originally lies upon the patentee (the plaintiff). However, [TRIPS](#) amended the [Patents Act, 1970](#) by insertion of [Section 104A](#) thereby introducing the concept of "*reversed burden of proof*". This signifies that if the subject matter of patent is a process and results to;

1. A new product, and
2. There is substantial likelihood that an identical product is made by the same process and the patentee, despite reasonable efforts, failed to determine the process.

Then the burden of proof is on the defendant to prove the non-infringement.

Doctrines related to patent infringement

Doctrine of equivalents

Doctrine of equivalents is a legal rule that is applied to find out the patent infringement. The doctrine classifies even a minor change to the product as an infringement. In simple words, if the infringed product performs significantly the same function, in the same way and produces the same result, then it shall lead to patent Infringement under the doctrine of equivalents.

Limitations to the doctrine of equivalents

1. **All elements rule:** All the elements of a patented product should be present in the infringed product.
2. **Doctrine of public dedication:** This doctrine is applicable when a patentee discloses publically the subject matter of patent but does not claim it. Anyone can then use it without fear of infringement.
3. **Existence of prior art:** Invention already publicly available and known, before filing of the patent application signifies existence of prior art. In other words, the invention is not unique or exists already in some form.
4. **Prosecution of history estoppel:** Also known as File-Wrapper Estoppel, it arises as a legal defence to infringement. It applies where a patent application amends or cancels a claim rejected by the Patent Office as unpatentable based upon prior art.

In the landmark case of *Graver Tank vs. Linde Air* (1950), the disputed patented formulation was a mixture of alkaline earth metal silicate (using magnesium) and calcium. The accused used manganese, and silicate but not any alkaline earth metal. Experts stated that manganese served the purpose of magnesium and was equivalent to it. In this case, the court had opined that “*a person reasonably skilled in his work would have known of the replaceable element*”. Interchanging of magnesium with manganese was obvious to anyone working in the same field and was an insubstantial change. Therefore the court upheld the finding of patent infringement under the doctrine of equivalents.

Doctrine of colourable variation

The doctrine is derived from a latin maxim, “*Quando aliquid prohibetur ex directo, prohibetur et per obliquum*” which means “*what cannot be done directly, should also not be done indirectly*”. According to this doctrine, the practice of making minor changes to a patented invention in order to invade the patent infringement claims, is substantially considered to be the same as the patented invention, even though it may have some apparent differences. This means that an infringer cannot neglect liability by making minute changes to the patented invention. Some

of the factors considered by court in order to decide whether a variation is colorable or not are provided hereunder:

1. The extent of resemblance between the alleged invention and the accused product or process.
2. The degree of distinction between the two products or processes.
3. The aim or intended usage of the accused product or process.
4. The competency level of the relevant industry at the time the patent was in use.
5. The level of difficulty involved in creating the accused product or process
6. The level of certainty in the relevant industry.
7. The degree of self-creation or prior knowledge.
8. Proof of Copying or other methods of direct violation of patent infringement.

The case of *Pfizer Inc. vs. Cadila Healthcare Ltd* (2020), involves a dispute over the patent for the anti-inflammatory drug Celecoxib. Pfizer alleged that Cadila's generic version of the drug infringed Pfizer's patent, but Cadila argued that its product was different from Pfizer's product and therefore did not infringe the patent. The Supreme Court of India found that Cadila's product was a colorable variation of Pfizer's product, and amounted to infringement.

What acts do not amount to patent infringement

There are several acts that does not amount to infringement-

1. **Independent invention:** The impugned product or process was independently developed by the accused party, without any reference to or use of the claimed invention of the patent. To prove independent invention, the accused party typically needs to provide evidence of their invention, such as records of their development activities, laboratory notebooks, or testimony from witnesses. This evidence should demonstrate that the accused party was working on the same problem as the patent holder and arrived at the same solution independently and without reference to the claimed invention of the patent.
2. **Patent expiration:** When a patent expires, the inventor's exclusive rights to the invention are no longer in effect and anyone may use the invention without infringing the patent. The term of a patent is typically set by law and is typically 20 years from the filing date of the patent application. After the patent has expired, the claimed invention becomes part of the public domain and can be freely used by anyone without fear of infringing the patent. To prove that the patent has expired, the accused party can typically provide evidence of the filing date of the patent and the relevant patent law to demonstrate that the patent has reached the end of its term.
3. **Research and experimentation:** Experimental use of a patented invention for the purpose of testing or evaluating it is not considered infringement. In other words, the accused party is claiming that they were using the claimed invention to test and evaluate

its performance, and that they did not intend to sell or otherwise commercially exploit the invention.

4. **Government use:** In many countries, the government has the right to use a patented invention without infringing the patent for the purpose of fulfilling its responsibilities and providing services to the public. The accused product or process is used by or on behalf of the government and is therefore not subject to the patent. This defence is based on the idea that the government should have the right to use patented inventions for various public purposes, such as for national security or for the provision of essential services, without being subject to infringement claims.
5. **Prior use:** If a person has been using a patented invention before the patent was granted, they may be able to continue using it without infringing the patent, depending on the laws of the relevant jurisdiction. To prove prior use, the accused party typically needs to provide evidence of their use of the accused product or process before the filing date of the patent.
6. **Fair use:** The concept of fair use allows for limited use of a patented invention for purposes such as criticism, commentary, news reporting, teaching, scholarship, or research. The defence is based on the idea that certain uses of a patented invention should be allowed without infringing the patent, even if they would otherwise be considered infringing, in order to promote the public good and encourage creative and intellectual activity. To prove fair use, the accused party typically needs to show that their use of the patented invention was for a permissible purpose under copyright law and that it was reasonable in scope and impact.
7. **First sale doctrine:** The first sale doctrine, also known as the exhaustion doctrine, provides that the sale of a patented item by the patent holder or with their authorization exhausts their patent rights and allows the buyer to use or resell the item without infringing the patent. The doctrine is based on the idea that the patent holder's exclusive rights to the patented invention are limited and that the rights of others to use, sell, or distribute a patented product should not be unduly restricted. The first sale doctrine is often invoked in cases involving the resale of patented products, such as used books, CDs, or other products that were legally obtained through a sale or transfer. By applying the first sale doctrine, these products can be resold or otherwise distributed without infringing the patent, provided that the product was not altered or modified in a way that would give rise to a new patent infringement.
8. **Invalidity or unenforceability of the patent:** If a patent is found to be invalid or unenforceable, any act that would have otherwise constituted infringement would not be considered infringing.

Defences available against patent infringement

1. **Estoppel:** Estoppel is a legal principle that can be used as a defence against a claim of patent infringement. The principle of estoppel states that a person cannot assert a right that they have previously renounced or abandoned. In the context of patent infringement, estoppel can be used as a defence when the patent holder has made statements or taken actions that indicate that they do not believe the accused party is infringing their patent. For example, if the patent holder has licensed the accused party to use the patented invention or has allowed the accused party to use the patented invention for a significant

period of time without asserting their patent rights, the patent holder may be stopped from later claiming that the accused party is infringing their patent.

2. **Licence:** A licence is a legally binding agreement between the patent owner and another party, in which the patent owner grants the other party permission to use the patented invention in exchange for some form of compensation. In the context of a patent infringement claim, a licence defence argues that the accused product or process is being used under a licence or other agreement with the patent owner that permits the use. This means that the accused party has a right to use the patented invention, and therefore cannot be held liable for infringing the patent.
3. **Plaintiff is not entitled to sue:** The plaintiff who is claiming patent infringement does not have the legal right to bring a lawsuit for the infringement. This defence can be raised for a variety of reasons, such as lack of standing, assignment of the patent, invalidity of the patent, statute of limitations, or a settlement or licensing agreement. For example, if the patent has been assigned to someone else, the original owner is no longer entitled to sue for infringement and the new owner must bring the lawsuit instead. Similarly, if the patent is found to be invalid, the plaintiff is not entitled to sue for infringement as they do not have a valid patent to enforce.

Remedies for patent infringement

[Section 108](#) of Patent Act, 1970 deals with the “Reliefs in suit for infringement”. The remedies for a suit filed in the infringement of a patent can be classified into three types, they are:

1. **Injunction:** In the context of patent infringement, an injunction is a court order that requires the infringing party to stop making, using, selling, or importing the infringing product. It is a preventative measure that aims to preserve the value of the patent and prevent further harm to the patent holder. To obtain an injunction, the patent holder must prove that their patent is valid and that it has been infringed upon by the defendant. Injunction is of three kinds:
 - **Temporary Injunction:** It is a kind of temporary remedy that is provided before the final verdict of the case. It is used to preserve the status quo of the patent holder. Moreover, they are likely to succeed in their lawsuit and will suffer irreparable harm if the infringing activity is allowed to continue. The court should consider three factors before granting temporary injunction to the patent holder-

I. Prime facie case.

II. Balance of inconvenience.

III. Irreparable loss

- **Permanent injunction:** It is a kind of permanent remedy that is granted when the case is finally decided by the court. It requires the infringing party to stop the infringing activity permanently. The court may also award monetary damages, such as compensation for any profits that the infringing party has made as a result of the infringing activity. To obtain a permanent injunction, the patent holder must file a lawsuit and prove that their patent is valid and that it has been infringed upon by the defendant. However, obtaining a

permanent injunction can be a complex and time-consuming process, and the patent holder must have strong evidence to support their claim.

- **Ex-parte injunction:** An ex-parte injunction is a provisional remedy that is used in urgent situations and is granted without a hearing. It is a powerful remedy for patent infringement, but it must be used with caution, as it may result in harm to the defendant if it is later found to be unjustified. It is typically used in urgent situations where the plaintiff needs immediate relief and there is not enough time for a full hearing.
- 2. **Damages:** Damages is a remedy for patent infringement that compensates the patent holder for any harm that they have suffered as a result of the infringing activity. Damages may be awarded in the form of monetary compensation, such as compensation for any lost profits or other financial losses that the patent holder has suffered. The main objective of damages is to compensate for the loss or injury that happened to the plaintiff.
- 3. **Seizure, forfeiture or destruction:** Courts may decree that the items determined to be infringing should be taken into custody, forfeited, or disposed of as deemed appropriate.

Landmark judgments

1. [*Novartis AG vs. Union of India* \(2013\)](#)

The highly significant legal dispute in India concerning the principle of patent infringement. Swiss pharmaceutical company Novartis AG brought the case to the Supreme Court of India after its application for a patent for its anti-cancer drug “Glivec” was denied by the Indian Patent Office. The central issue of the case was the concept of “evergreening”, where companies try to prolong the life of their patents by making minor modifications to their products. Novartis claimed that its product was a new invention and thus deserving of patent protection. However, the Patent Office rejected the patent, stating that it was just a modification of an existing drug and not a new invention.

The Supreme Court eventually ruled against Novartis, determining that its product was not a novel invention and therefore did not qualify for a patent. This ruling was seen as a positive outcome for public health and access to medicine as it prevented the evergreening of patents and ensured that generic versions of the drug would be available at more affordable prices.

2. [*Pfizer Inc vs. Dr. Reddy's Laboratories Ltd.* \(2004\)](#)

Pfizer, a pharmaceutical company, sued Dr. Reddy's Laboratories, a fellow pharmaceutical company in India, for violating their patent on the anti-inflammatory drug “Celebrex”. The central issue in the case was the interpretation of the Indian Patent Act's provisions on compulsory licensing of patented drugs. Dr. Reddy's Laboratories sought a compulsory licence to manufacture a generic version of the drug, claiming that it was necessary to ensure access to affordable medicines for the Indian population.

The Delhi High Court ultimately ruled in favour of Dr. Reddy's Laboratories and granted the compulsory licence, allowing the company to produce a generic version of the drug. This ruling was considered a significant victory for public health and access to medicine in India, as it established key legal principles related to compulsory licensing of patented drugs.

3. *Ericsson vs. Intex Technologies (2014)*

The case is related to patent infringement in the mobile technology industry. The case was brought before the Delhi High Court by Swedish telecommunications company Ericsson, against Indian consumer electronics company Intex Technologies, for infringement of Ericsson's standard-essential patents (SEPs) related to mobile technology.

SEPs are patents that are considered essential for the implementation of a technical standard and are required for the manufacture of certain products. The issue at the heart of the case was the principle of fair, reasonable and non-discriminatory (FRAND) licensing for SEPs. Ericsson claimed that Intex had used its SEPs without obtaining a licence from Ericsson and that the licence fees demanded by Ericsson were fair and reasonable.

The Delhi High Court ruled in favour of Ericsson and ordered Intex to stop using Ericsson's SEPs and to pay a reasonable royalty to Ericsson. The court also ruled that SEP holders have an obligation to licence their patents on FRAND terms and that licensees have the right to seek a judicial determination of the terms of a FRAND licence.

4. *BAJAJ Auto Limited vs. TVS Motor Company Limited JT (2009)*

The Supreme Court of India held that TVS had infringed BAJAJ's patent, as the design of the three-wheeler produced by TVS was found to be substantially similar to that of BAJAJ. The court held that the patent granted to BAJAJ was for a new and useful invention and that the design of the three-wheeler produced by TVS was a reproduction of the patented design.

In its decision, the court emphasised the importance of treating patents as a form of property, with infringement being a violation of the patent holder's rights. The decision in this case highlighted the need for companies to respect the patents of others in order to maintain a fair and competitive business environment. Overall, the case reinforced the importance of protecting patents and intellectual property rights in India.

Conclusion

In conclusion, patent infringement refers to the unauthorised use or manufacture of a patented invention without the consent of the patent owner. The Indian Patent Act, 1970 provides several remedies to address patent infringement, including injunctions, damages, and seizure, forfeiture or destruction. However, the enforcement of these remedies remains a challenge due to the complexity of the Indian legal system and the length of time it takes to resolve a patent dispute. To protect their patented inventions, businesses in India must be proactive in monitoring for infringement and pursuing appropriate legal action when necessary. Additionally, it is important for businesses to have a thorough understanding of the Indian patent law and the remedies available to them in case of infringement. This will help ensure that their intellectual property rights are adequately protected and that they receive fair compensation for any unauthorised use of their patented inventions. It is crucial for businesses to conduct proper due diligence and research before filing for a patent to ensure that their invention is novel and non-obvious. This will help to minimise the risk of infringement and ensure that the patent is enforceable.

Compulsory Licences patent

Compulsory licensing in the context of Patent laws are granted by countries to deal with monopolies acquired in Intellectual Property Rights. The compulsory license is an authorization which permits the third party to use, make or sell an invention for which a patent has been granted, without the consent of the owner of the patent as opposed to the exclusive rights that are conferred on a patentee to use, make or sell a patented invention and prevent unauthorised and illegal use by third parties.

Compulsory license prevents the abuse and monopolization of a patent thereby, allowing the commercial exploitation of a patented invention by those interested in it. Under the Patents Act, 1970 the provisions concerning 'compulsory licenses' are prescribed under Chapter XVI. A compulsory license is granted by the Government and not by private entities or third parties.

However, the grant of compulsory license operates against the patent owner but compulsory licenses are generally considered in the field of pharmaceuticals to protect public health and health crisis and also in cases of national emergency.

For the grant of a compulsory license by the Government, certain essential conditions must be fulfilled. Section 84-92 of the Patents Act, 1970 prescribes the conditions which must be fulfilled and the Patents Rules, 2003, rules 96-102 incorporates compulsory licensing. It is crucial for the Controller to be convinced that a *prima facie* case exists before granting a compulsory license for a patent, sought by the applicant.

Grounds for Granting Compulsory Licence

Section 84(1) of the Patents Act, 1970 prescribes the conditions for grant of compulsory license. After 3 years have elapsed from the date of grant of the patent, an application can be made to the Controller by any person interested for the grant of compulsory license on the following grounds:¹

- the reasonable requirements of the public with respect to the patented invention have not been satisfied; or
- the patented invention is not available to the public at a reasonably affordable price; or
- the patented invention has not been operational in the territory of India.

An application for the grant of a compulsory licence can be made to the Controller by any person interested and even he who is already the holder of a licence under the patent, when the aforesaid conditions are satisfied. The application must describe the nature of the applicant's interest and the facts which form the basis of the application.² If the Controller is satisfied that any of the above-mentioned grounds subsists, he may grant a licence upon such terms as he deems fit.³

The Controller should take the following aspects into account while considering an application:⁴

- the nature of the invention;
- the time which has elapsed since the sealing of the patent;
- the measures that are taken by the patentee or licensee to make full use of the invention;
- the ability of the applicant to work the invention to the public advantage;
- where the application is granted, the capacity of the applicant to undertake the risk in providing capital and working the invention;
- whether a licence has been obtained by the applicant from the patentee on reasonable terms and conditions and the efforts to obtain a licence has been made within a reasonable period, as the Controller may deem fit. The 'reasonable period' shall not exceed a period of 6 months.

However, the Controller shall not take the aforementioned details of the application into account under the following situations:

- in case of national emergency; or
- in circumstances of extreme urgency; or
- in case of public non-commercial use; or
- on the adoption of anti-competitive practices by the patentee.

Revocation of non-working Patents

Where a compulsory licence has been granted to a patent, after 2 years have elapsed from the date of the grant of the first compulsory licence, the Central Government or any person interested can apply to the Controller for an order to revoke the patent. The application for revocation should be based on the following grounds:⁵

- that the patented invention has not been worked in the territory of India; or
- that reasonable requirements of the public with respect to the patented invention have not been satisfied; or
- the patented invention is not available to the public at an affordable price.

An application made to the Controller should clearly state the facts on the basis of which the application is made and where an application is made by any person interested other than the Central Government, it should specify the nature of the applicant's interest.⁶ Furthermore, every application should be decided within 1 year from the date of presenting it to the Controller. The Controller can make an **order revoking the patent** if he is satisfied:⁷

- that the reasonable requirements of the public with respect to the patented invention have not been satisfied; or
- that patented invention has not been worked in the territory of India; or
- that the patented invention is not available to the public at an affordable price.

Where, after considering the evidence the Controller is satisfied that a *prima facie* case is not present to make an order under Section 84 and 85, the applicant should be notified accordingly and the Controller should refuse the application within one month from the date of such notification. However, the applicant can request for a hearing and based on the hearing the Controller can decide whether to proceed with the application or refuse it.⁸

Powers of the Controller

Under **Section 86** in certain cases, the Controller has the power to adjourn applications for compulsory licences. An application made under section 84 and 85 on the ground:

- that the patented invention has not been worked in the territory of India; or
- the patented invention is not being worked on a commercial scale to an adequate extent or to its fullest practicable extent within the territory of India and the Controller is satisfied that insufficient time has elapsed since the sealing of the patent to enable the invention to be worked on a commercial scale to an adequate extent or to enable the invention to be worked to its fullest practicable extent, the Controller by order may adjourn further hearing of the application for a period not exceeding 12 months, for an invention to be worked.

Only when the Controller is satisfied that the patentee has taken prompt, adequate and reasonable steps to start the working of the invention on a commercial scale and to an adequate extent can he order an adjournment.

Section 88 of the Patents Act confers certain powers on the Controller in granting compulsory licences, which are as follows:

- where the manufacture, use or sale of materials are not protected by the patent and is prejudiced due to the conditions imposed by the patentee on the grant of licences under the patent, or the purchase, hire or use of the article or process which has been patented, the Controller on being satisfied, can order the grant of licences under the patent to the applicant or to customers of the applicant;
- the controller can cancel an existing licence or instead of making an order for the grant of a licence to the applicant, he may order the amendment of the existing licence, when an application is made under Section 84 by a person who is the holder of a licence under the patent;

- when the same patentee holds two or more patents and an applicant for a compulsory licence establishes that the reasonable requirements of the public have not been satisfied with respect to some of the patents, if the Controller is satisfied that the applicant is unable to efficiently or satisfactorily work the licence granted to him under the patents without infringing the other patents of the patentee and if the patents involve technical advancement or are of an economic significance in relation to the other patents, the Controller by order may direct the grant of a licence in respect of the other patents to enable the licensee to work the patents with respect to which a patent is granted under section 84;
- where the Controller settles the terms and conditions of a licence, the licensee after having worked the invention on a commercial scale for a period of at least 12 months can make an application to the Controller to revise the terms and conditions on the pretext that the terms and conditions that were settled have proved to be more onerous than what was expected originally, as a result of which the licensee is unable to work the invention and thereby incurring losses.

Procedure for Dealing with Applications under Section 84 and 85

Section 87 of the Act prescribes the procedure for dealing with applications under Section 84 and 85. Where an application is submitted under section 84 or 85 and the Controller is satisfied that a *prima facie* case exists to make an order, the applicant is directed to provide copies of the application to the patentee and any other person interested in the patent and the application is published in the official journal.

A **notice of opposition** to the application can be presented by the patentee or any other person to the Controller, within a prescribed time period or within such time which the Controller may allow. The notice of opposition should be sent to the Controller within 2 months from the date of publication of the application.⁹ The terms and conditions of the licence which the opponent is prepared to grant to the applicant should be included in the notice of opposition along with the evidence in support of the opposition.¹⁰

The grounds on which an application is opposed must be mentioned in the notice of opposition.¹¹ Furthermore, the opponent must give the applicant a copy of the opposition notice and evidence and notify the same to the Controller. Any further statement or evidence can be made only with the leave of or on the requisition of the Controller.¹² The Controller shall fix a date and time for the hearing of the case and give at least 10 days notice of such hearing to the parties.

Purpose for Granting Compulsory Licences

The Controller shall exercise his powers upon receiving an application under section 84 to secure the following general purposes:

- the inventions that have been granted a patent are worked on a commercial scale without unnecessary delay and to its fullest extent that is reasonably practicable;
- ensure that the interests of any person working or developing an invention that is protected by a patent is not unfairly prejudiced.

Terms and Conditions of Compulsory Licences¹³

The Controller while settling the terms and conditions of a licence under section 84 should seek to secure the following:

- the royalty and remuneration for the patentee or other person who is entitled to benefit from the patent is reasonable;
- the person to whom the licence is granted is to work the patented invention to the fullest extent and with a reasonable profit;
- the public has access to the patented articles at affordable prices;
- a non-exclusive licence is granted;
- the right of the licensee is non-assignable;
- the licence is granted for the remaining term of the patent;

- the licence is granted with the purpose of supply in the Indian market and if required the licensee may export the patented product;
- the licence granted in case of semiconductor technology is to work the invention for public non-commercial use;
- where the licence is granted to remedy a practice which is anti-competitive, if required the licensee is allowed to export the patented product.

However, a licensee is not authorised by the grant of licence to import from abroad patented articles or products which are made by a patented process, where importing such articles or substances constitutes an infringement of the patentee's rights unless it is authorised.¹⁴

Furthermore, if in the opinion of the Central Government, it is necessary for the public interest, it may direct the Controller to authorise any licensee in respect of a patent to import from abroad the patented article or a substance or article made by a patented process. The Controller may impose such conditions that relate to royalty and remuneration payable to the patentee, quantum of import, the sale price of the imported article and the period of importation.

Patent Cooperation Treaty (PCT)

The Patent Cooperation Treaty ([PCT](#)) makes it possible to seek [patent](#) protection for an invention simultaneously in each of a large number of countries by filing an "international" patent application. Such an application may be filed by anyone who is a national or resident of a PCT Contracting State. It may generally be filed with the national patent office of the Contracting State of which the applicant is a national or resident or, at the applicant's option, with the International Bureau of WIPO in Geneva.

New Development Patent means a patent or patent application relating to patentable discoveries, inventions, invention disclosures and/or methods in the Licensed Field conceived, developed or reduced to practice by any Researcher (other than the Ex-Field Researchers) in the performance of Research under the Research Agreement from and after the Effective Date and throughout the Research Term (regardless of whether any patent application * Confidential Treatment Requested 5 is filed or any patent is issued during such Research Term), but not directed to the subject matter or claims of (i) any of the CHB Patent Rights or (ii) any other patent with respect to which WFUHS has granted to Tengion an exclusive, royalty-bearing license in the Licensed Field. New Development Patents do not include any Improvement Patents. For the purposes of clarity, any patent relating to an SRA Invention that is not an Improvement Patent will be deemed to be a New Development Patent.

Patent protection for software-implemented inventions

Technology is the backbone of the digital economy and much of its value lies in software. Indeed, all economic sectors are becoming reliant on software to leverage growth. This has important implications for intellectual property (IP) laws.

Which IP rights are relevant to software protection?

Historically, IP laws have influenced the success of the software industry by providing software developers with a legal mechanism through which to capture at least some of their innovation's market value. Since at least the 1960s, the software industry has relied on three distinct IP protection regimes: trade secrets, copyright and patent law. The scope of protection offered by each has varied significantly over time, as has the software industry's reliance on them.

History shows that patent law offers the most effective framework for protecting an invention's functionality. In many countries, however, a distinction is drawn between inventions implemented in hardware, which are patentable, and inventions implemented in software (i.e. computer

programs), which are protected by copyright law. But in a world in which the Internet – and not hardware such as CDs – is the prime channel for software distribution, this legal distinction makes it difficult for inventors of software-related inventions to effectively protect and leverage the commercial value of their inventions through IP systems.

These innovative contributions are no less significant than hardware-based innovations. Computer programs, including software-related inventions, are products in their own right regardless of how they are distributed. Would it not be reasonable for such inventions to enjoy effective protection under patent law?

The software industry today

Today, many technological innovations rely on software advances. Take the software-related innovations that have revolutionized the smartphone. Between 2009 and 2013, the total aggregate lines of code in the chips – the brains of the smartphone – shipped by Qualcomm increased from 330 million to 3.3 billion. These phenomenal and unprecedented developments were the result of years of high-risk R&D investment.

Software-implemented functionality is making an expanding range of everyday products safer and more efficient with higher performance. It is creating entirely new offerings and capabilities, such as intelligent power grids, digital manufacturing, real-time farm management systems, smart cities powered by interconnected (Internet of Things) platforms, and digital healthcare.

Estimates suggest that the digital economy – which relies heavily on software-related innovations – already represents 22.5 percent of the global economy.

Global R&D spending on software offerings has also grown rapidly, rising from USD 86 billion in 2010 to USD 142 billion in 2015, an increase of 65 percent.

The United States has one of the most software-intensive industries in the world (see Robert J. Shapiro, *The U.S. Software Industry: An Engine for Growth and Employment*, SIIA, 2014). In 2014 alone, the industry directly added an estimated USD 475.3 billion – and USD 1.07 trillion indirectly – to the country's GDP, directly employing 2.5 million people and indirectly supporting some 9.8 million jobs.

The benefits of patent protection

As a general rule, new inventions in any field of technology qualify for patent protection if they are novel, non-obvious and useful (criteria of patentability are set out in national patent laws). Patent protection offers significant benefits to innovators:

- ensuring inventors get a reasonable return on their commercially successful innovations;
- making it easier for innovation-based startups and small businesses to establish fruitful business collaborations;
- promoting the systematic sharing of knowledge through patent disclosure, itself an important driver of innovation; and
- helping attract investment partners and support business expansion.

Yet patent laws generally do not treat software-related inventions in the same way as other novel technology advances. This may be due to a lack of understanding of either the nature of software innovation or of the protection afforded by different IP rights.

Answering the critics of software patents

Some commentators claim that the R&D expenditure associated with developing software-related inventions is not the same as that for other technology fields. Yet many such innovations, for example systems to improve energy efficiency, advanced medical diagnostic tools, smart car safety solutions and surgical robots, take years to research, develop and commercialize.

Others argue that software patents are of low quality or that they effectively grant protection to “mathematics”, and that copyright and trade secrets provide adequate and substantial IP protection for software.

While the advantage of copyright is that protection is automatic and free of charge as long as a work is original, reliance on copyright as a sole protection system only safeguards against the literal copying of the source or object code; it does not protect the underlying invention implemented by the software.

Similarly, trade secrets require no formal registration beyond non-disclosure agreements. But trade secret protection is one of the least developed areas of IP law. Even in jurisdictions that have trade secret law, it does not protect against innovations that are easily ascertainable by the public through independent discovery or reverse engineering. Moreover, trade secret protection is not appropriate for standardized technologies that facilitate interoperability such as smartphone communications technology, because standard-setting organizations require the nonconfidential exchange of technical information. Trade secret protection does not enable such information sharing.

So while copyright and trade secrets are complementary forms of protection, they do not provide the same benefits as patents nor the same incentives to invest in the underlying innovation.

The quality of an invention, rather than its mode of implementation, should be the litmus test for patent protection. The decision to employ an invention using software or hardware is often a design choice that should be left to technical experts, not circumscribed by patent laws. Relying on a distinction between software-related and non-software-related inventions to justify discriminatory treatment frustrates the purpose of patent law and could hamper technological progress.

If quality is the concern, the patent examination process is already designed to ensure that legal protection only extends to inventions that fulfill certain stringent criteria. Would-be inventors must present an idea that is novel, useful and non-obvious to someone “skilled in the art”. Patent examiners are empowered to consider whether the proposed invention represents a technical step forward. The focus should be on ensuring that examiners have the right tools to make that evaluation, not on excluding software-related inventions from patent protection.

As technology continues to evolve at an unprecedented pace, Computer-Related Inventions (CRIs) have become a crucial component of modern innovation. CRIs are inventions that are based on computer software or hardware and are becoming increasingly important in a variety of fields, including finance, healthcare, and telecommunications. The Patents Act, 1970, provides for the protection of CRIs, but there has been significant debate over the years regarding the patentability of such inventions in India. The article delves into the legal framework surrounding CRIs in India, through the lens of case laws and guidelines issued by the Indian Patent Office.

COMPUTER RELATED INVENTIONS

A CRI comprises inventions that involve the use of computers, computer networks, or other programmable apparatus including inventions which have one or more features that are realized by wholly or partially employing a computer program or programs.

We see the use of CRIs in various industries such as medicine, telecommunication and finance. Computer algorithms used to analyze medical imaging data, such as X-rays or MRIs, is one such example, which can help doctors identify potential health issues that might otherwise have been missed. In the finance industry, CRIs have enabled the development of new trading algorithms and financial models that can process vast amounts of data in real time, providing traders with valuable insights and helping them make more informed investment decisions. In the telecommunications

industry, CRIs have led to the development of new networking technologies that can process and transmit data at higher speeds and with greater reliability. These are just a few examples of how CRIs are being used to drive innovation and improve the quality of life in a variety of fields.

Although it is undeniable that the development of such innovations involves intellectual property, the crux of the matter revolves around the manner and degree to which they can be safeguarded.

SCOPE OF PROTECTION UNDER COPYRIGHT LAW

The Copyright Act, of 1957 defines “*literary work*” under section 2(o), to include computer programs, tables and compilations including computer databases. Copyright can protect certain kinds of CRIs, mainly computer software inventions. Specifically, copyright can protect the specific code, software program, or user interface that is created.

However, copyright protection does not extend to the ideas, concepts, or functionality of the CRIs. In other words, copyright does not prevent others from creating a similar software program or user interface, as long as they do not copy the original code or design. As a result, it is apparent that patent law offers a broader scope of protection in contrast to copyright law, which is primarily relied upon by inventors in this field.

PROTECTION UNDER PATENTS ACT, 1970

The protection of CRIs has not been a straightforward journey. Section 3(k) of the Patents Act, of 1970 provides a bar on the patentability of the invention related to a mathematical or business method or a computer program “*per se*” or algorithms. The term “*per se*” was interpreted and reinterpreted to include CRIs, other than computer programs.

In 2002, the Indian Patent Office issued guidelines on the patentability of CRIs. These guidelines provided that computer programs *per se* were not patentable inventions. But, those inventions which involved technical advancements or technical effects and had industrial applicability could be patentable. The revised guidelines of 2004 provided that inventions which involved a novel hardware component or those that produced a technical effect were patentable. However, inventions that were purely software-based and did not produce a technical effect were not patentable. In 2013, the Patent Office issued further guidelines and set forth that inventions involving a technical effect or those which solved a technical problem were patentable.

The existing examination guidelines for CRIs were issued by the Office of Patents on 30th June in the year 2017. These guidelines focus on the “technical contribution” of the invention along with the basic parameters of patentability. For example, a method of encoding and decoding video data may be patentable, while a method of hedging risks in commodity trading may not be patentable. Therefore the level of “technical contribution” remains open to interpretation.

JUDICIAL INTERPRETATIONS

This issue has frequently been brought before the courts of the country, with numerous cases addressing this question – “to what extent is a CRI protected under the Indian patent regime?”

One of the leading cases here is *Ferid Allani v. Union of India (2018)*. In this case, the Petitioner had filed a national phase application for an invention titled “Method and Device for Accessing Information Sources and Services on the Web”. The IPO refused the patent because the method claims made by the applicant were a “computer program *per se*” and did not constitute to be a patentable invention as defined in Section 3(k) of the Patents Act, 1970. The Intellectual Property Appellate Board upheld this decision.

The petitioner then filed a writ petition challenging the exclusion of CRIs from patentability under the Patents Act, 1970. While upholding the validity of Section 3(k), the Court still maintained that “computer-related inventions must have a technical contribution or technical effect to be patentable.” The ruling unambiguously establishes that there is no complete prohibition on granting patents for CRIs, and thus provides a fresh perspective on how the patent office should handle future applications pertaining to claims of CRIs.

In the case of *Yahoo! Inc. v. Controller of Patents & Rediff.com India Ltd. (2012)* the petitioner challenged the Indian Patent Office’s rejection of its patent application for an online advertising invention, which utilized machine learning techniques. The Patent Office had rejected the application on the basis that it was a computer program per se and not an invention eligible for patent protection. Upon appeal, the Delhi High Court overruled the Patent Office’s decision, holding that the invention involved a technical advancement and was not merely a computer program per se.

Data Access Corporation v. Controller of Patents (2020) is a more recent case where Data Access Corporation applied for a patent for a “Method and System for Generating a Database”. The Patent Office rejected the application on the grounds that it related to a “mathematical method” and did not involve any technical effect. The IPAB overturned the rejection, stating that the invention involved a technical effect and solved a technical problem.

Therefore, we can gather that a key factor in determining whether a CRI is patentable or not depends on whether it involves a technical effect, advancement or contribution to already existing innovations. The interpretation of what entails the phrase “computer programs per se” is what determines whether a particular CRI is patentable in India.

CONCLUSION

The interpretation of Indian patent law concerning computer-related inventions remains an evolving area of law, and new cases are likely to arise as technology continues to advance. With the aid of the precedents and the dynamic guidelines of the Indian Patent Office, the patent regime in India is becoming more adaptable to exponential developments in the field. However, there is a long way to go for the intellectual property policymakers in the country to adequately cater to the needs of this swiftly developing industry.