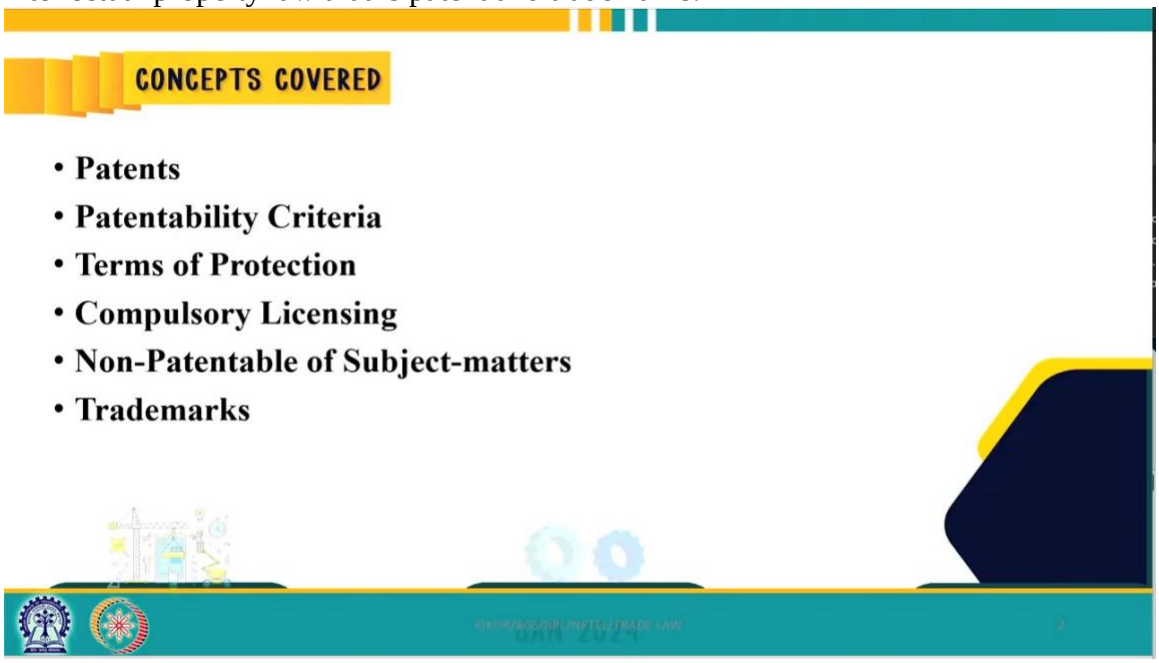
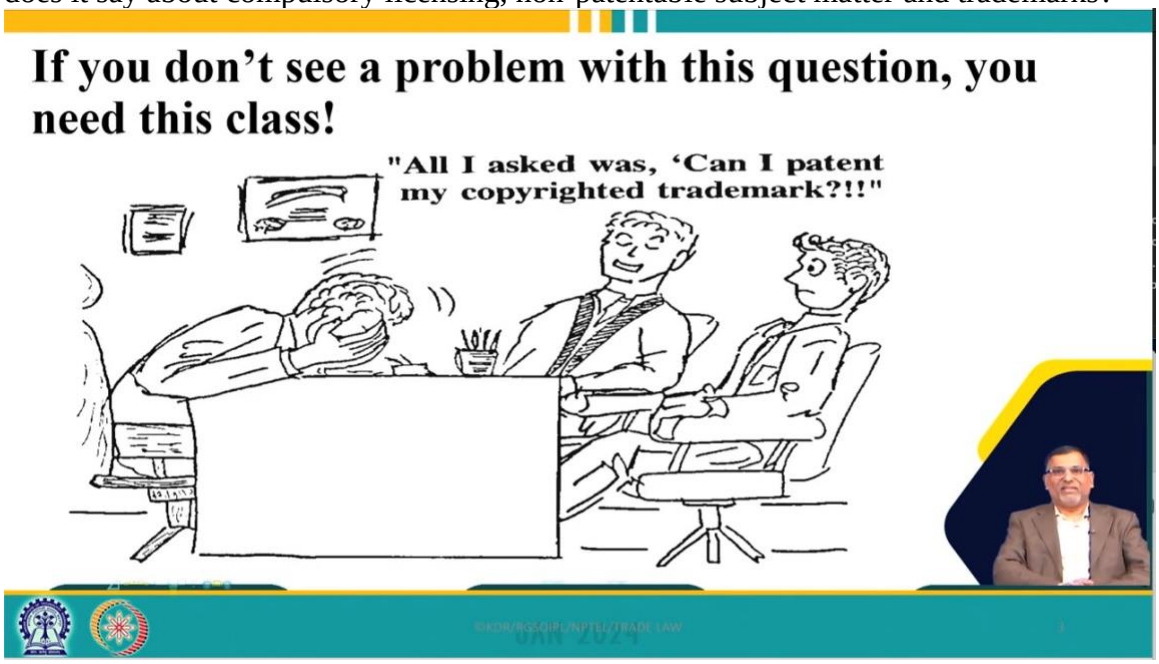
Lecture 23: Patents and Trademarks

Dear students, in this class we are going to specifically look into two categories of intellectual property law that is patent and trademarks.

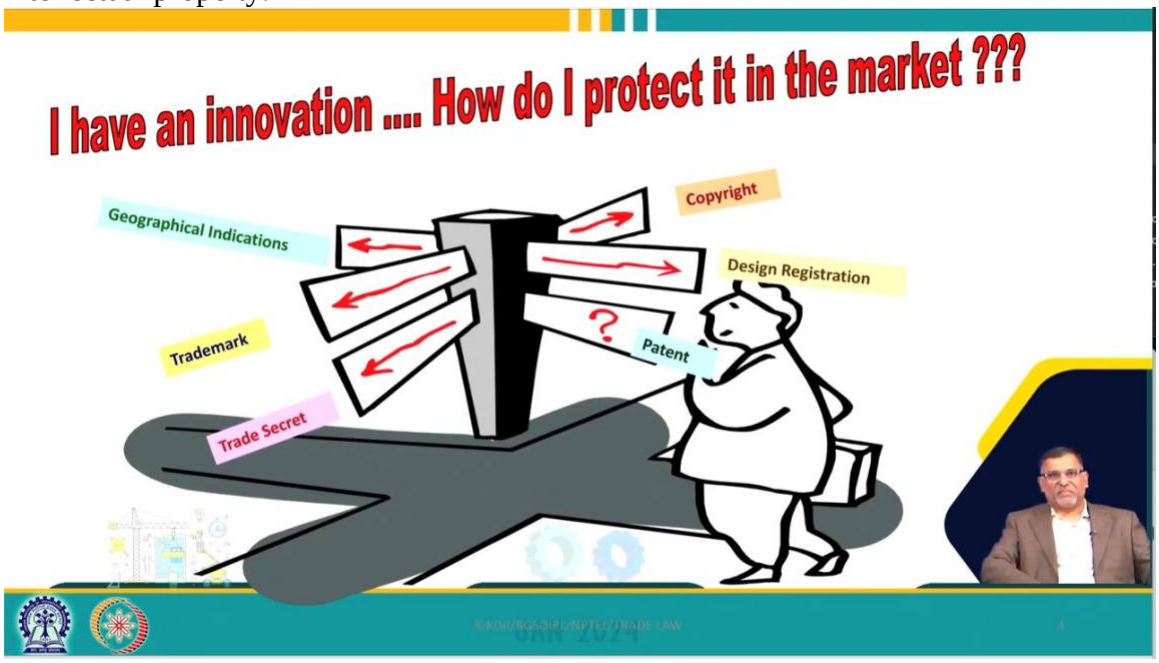


Specifically, we are going to look into the philosophy of this category of intellectual property. If you look into the patents, what is a patent and what are the patentability criteria mentioned in the TRIPS agreement, the minimum terms of protection, and what does it say about compulsory licensing, non-patentable subject matter and trademarks?

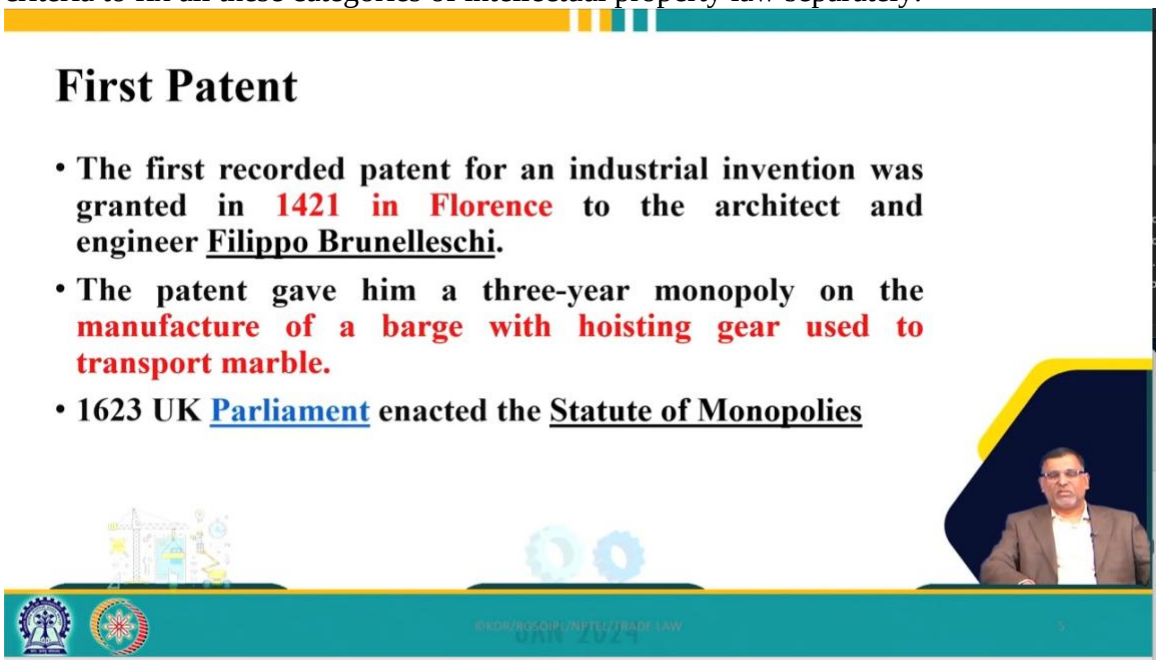


And here you can see a picture, and they are all saying that all I asked was can I patent my copyrighted trademark. So, there is common confusion about what can be patented, what can be copyrighted, what can be trademarked, and what the difference between these is. So, if you are finding no problem with this statement, it means that you do not

know the intellectual property; you require an intellectual property law class. So, you have to understand more about intellectual property and different categories of intellectual property.

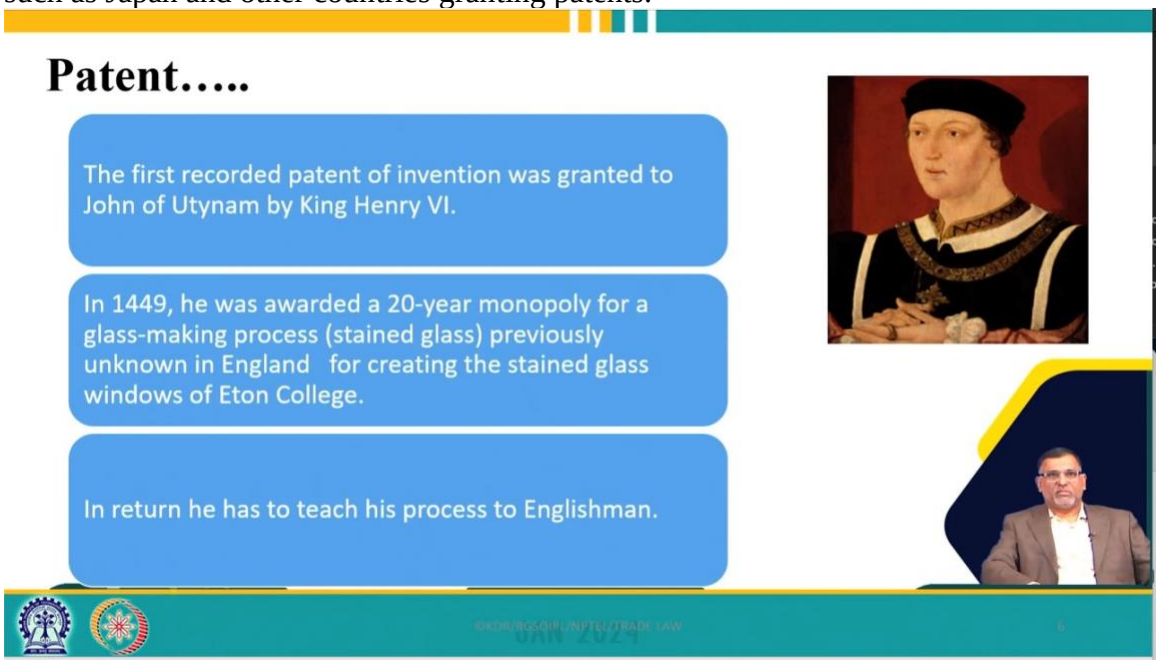


So, then you will see where I should go. So, I have an innovation, what are the type of protection that I should adopt, whether I should go for a copyright registration or whether I should go for patent registration or whether I should go for a trademark registration. So, this confusion also always exists for the inventor or the innovator. So, we must know the criteria to fix all these categories of intellectual property law separately.

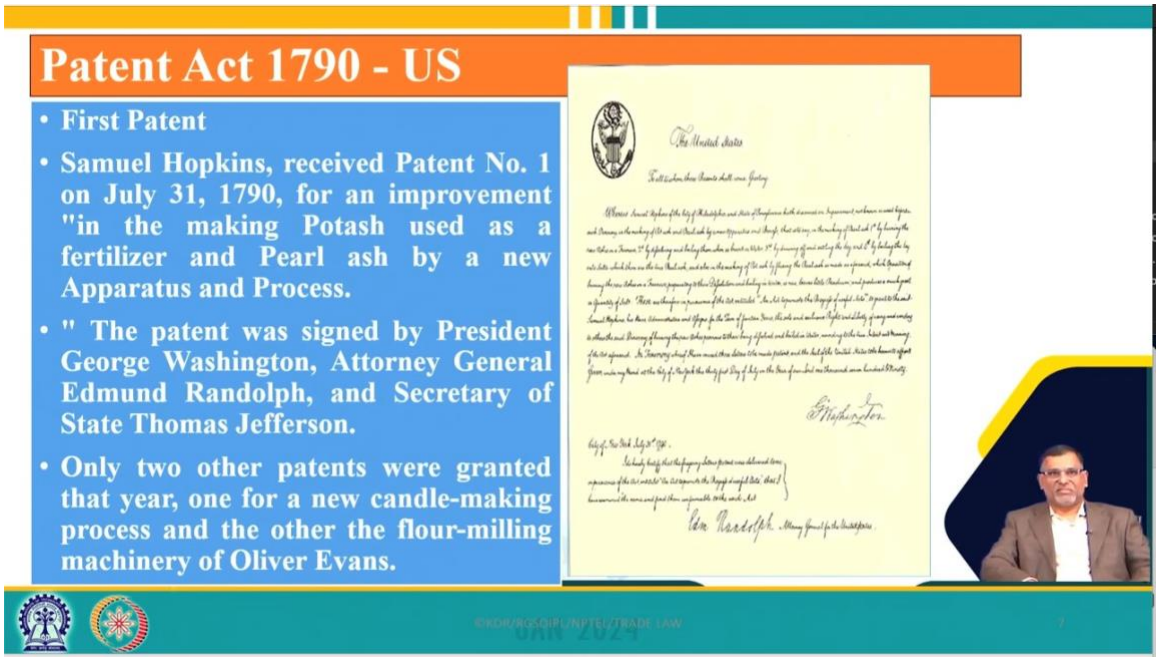


So, as we already said in the earlier class that it is not the first time the intellectual property came to the TRIPS Agreement. Intellectual property is protected from time immemorial period. And, you can see some of the inventions in the 15th century, 1421 in

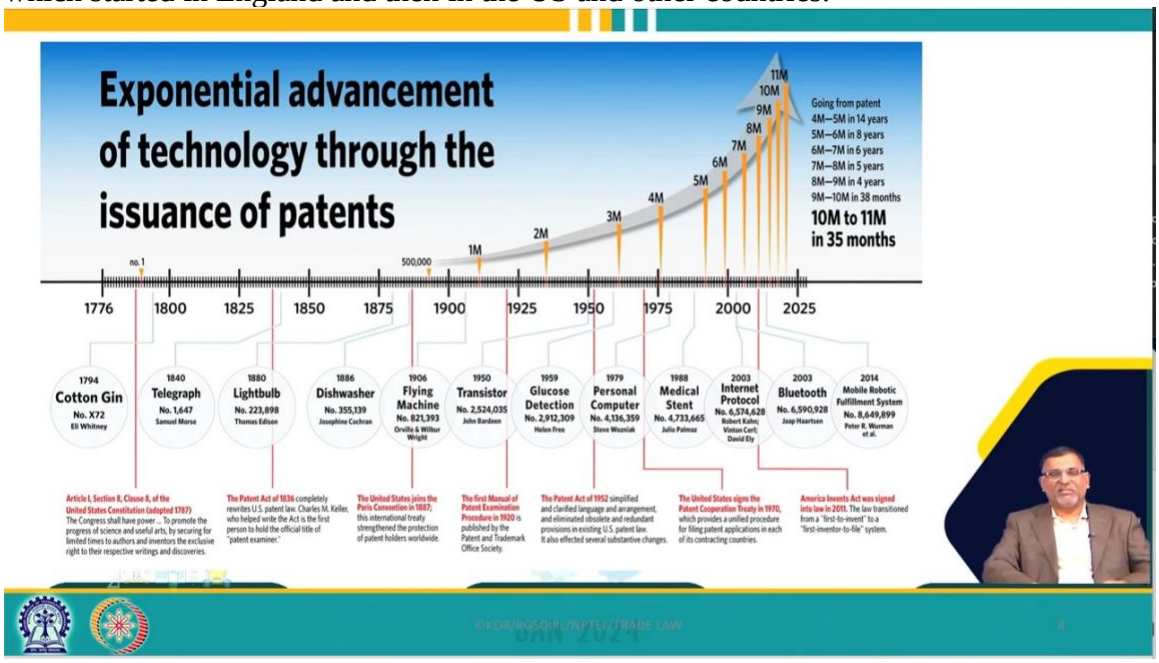
Florence. So, he was given a patent and 3-year monopoly. So, the patent was granted for the manufacture of a barge with a hoisting gear used to transport marble. So, we saw many countries like the UK parliament followed by the US followed by other countries such as Japan and other countries granting patents.



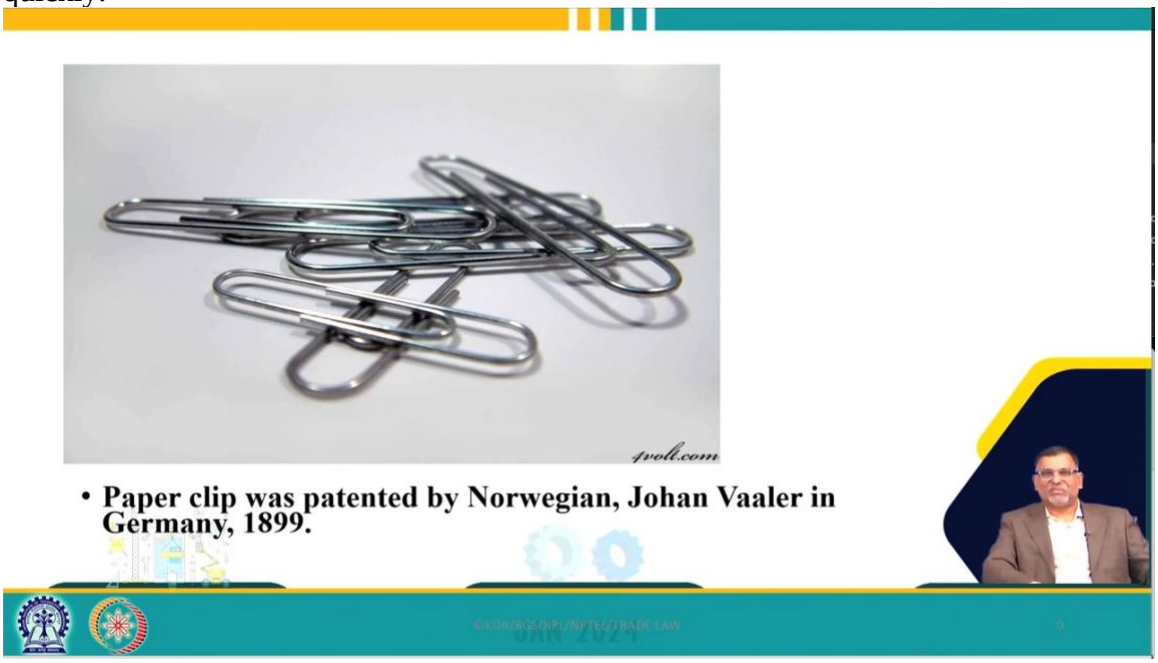
And the first recorded patent was granted to John of Union by King Henry VI. So, this was in 1449. So, you can see the coincidence: this was the first patent that was granted for 20 years for the glass-making process, stained glass, which was unknown in England and not heard of. And he made a stained glass window at Eton College. So, the king granted a patent for 20 years. Under the present TRIPS agreement, a 20-year term is also the minimum time of protection that is provided. So, in 1449, a 20-year monopoly was granted; in the 21st century, it is also granted a 20-year monopoly. So, in doing so, the king asked him to teach this particular process to the Englishman. So, after 20 years, the Englishman can use this particular technology for making stained glasses. So, in 1449, the first patent was granted in England.



If you look into the US, the first patent was granted in 1790, which was granted for improvement in making potash. So, you can see that this improvement in making potash and potash: what is potash, it is a chemical or a fertiliser basically fertilizer. Potash and pale ash by a new apparatus and process. Still, potash is used in agriculture as a fertiliser mostly for agriculture purposes. So, you can see on the right side the patent certificate, which was signed by the president of the United States at that point in time, George Washington and the secretary of the state, Thomas Jefferson, attorney general. It was signed by all these people, and only two other patents were granted in that particular year. So, what I want to say is that the granting of a patent is not new. So, it was a process which started in England and then in the US and other countries.

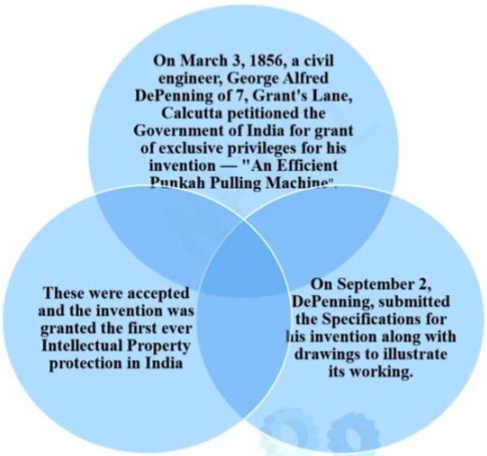


So, now, you see the panoramic view of the innovations from 1776 to the projections from 2025. We are in 2023, and you can see around 9 million patents or innovations. Starting with this history in 1776, it has reached to the level of millions. And it is going to be 10 million to 11 million in the coming years. So, it is crossing 10 million innovations. So, you can see these innovations or famous or path-breaking innovations like the telegraph in 1840, and you can see flying machines in 1906. You can see transistors, personal computer which entirely changed the world in 1979. The treatment, for example, heart treatment with the invention of the stents, medical stents and Bluetooth devices, are of very recent origin; in 2003, mobile networks, mobiles, telecommunication technologies, and thousands and millions of technologies you can find from this particular period, 1800 to 2025. So, this gives a panoramic view of innovations. So, innovation has been going at a very fast mode since the 1950s. I would say that, in 1995 it was 5 million and within a period of 20 years - 25 years or it is going to be 28 years, it has doubled to 10 million. That means, innovations are happening in the world very quickly.



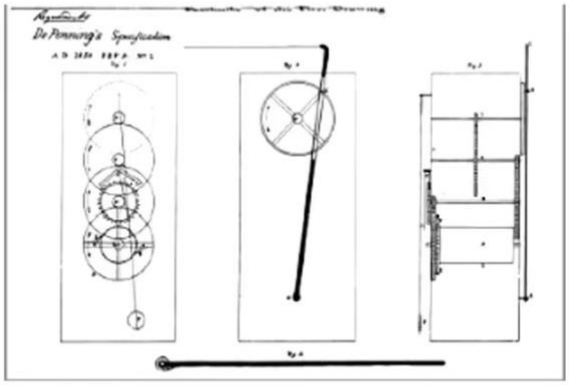
And we will quickly see some of the very simple innovations. Paperclip, we call it the gem clip. The paperclip was patented in 1899. It was a patented product; it was an innovation. We still use it, and we did not know that it was a patented product once upon a time.

First Ever Patent in India

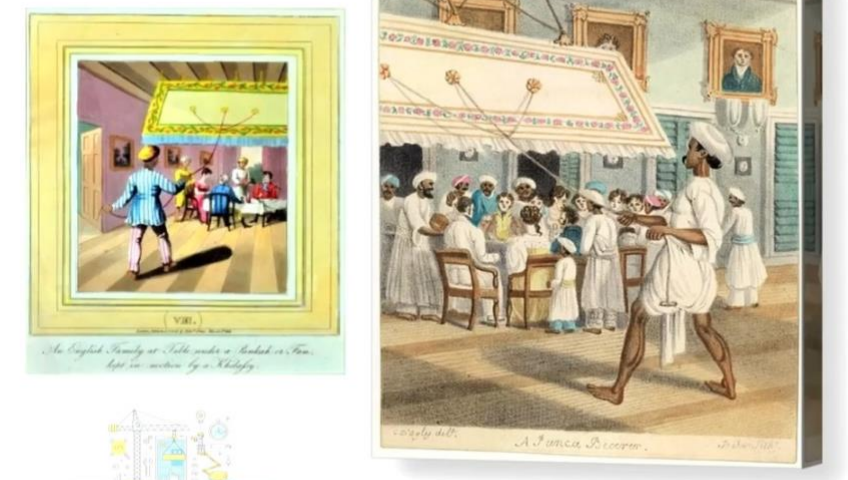


And the first patent was granted in India. So, you ask anybody, and most people do not know about it. So, it happened in 1856 to an English man, an English engineer George Alfred D. Penning. So, he filed the patent application, and he was staying in Kolkata, and he was granted the first patent in India. And this patent was granted for his invention ‘an efficient Punkah pulling machine’. So, to understand this, what is this Punkah pulling machine? You must understand that there was no fan; there was no Punkah, which means a fan and the fan were not there at that point in time.

• George Alfred DePenning

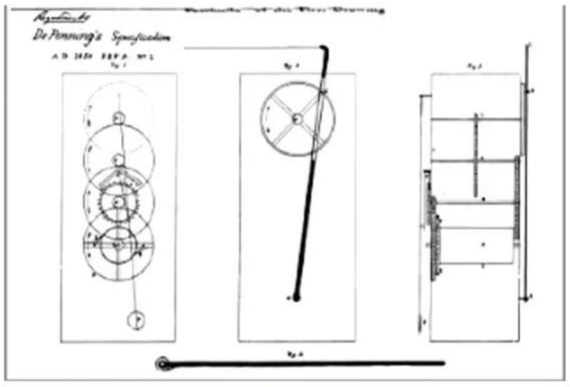


And this was artificially made.



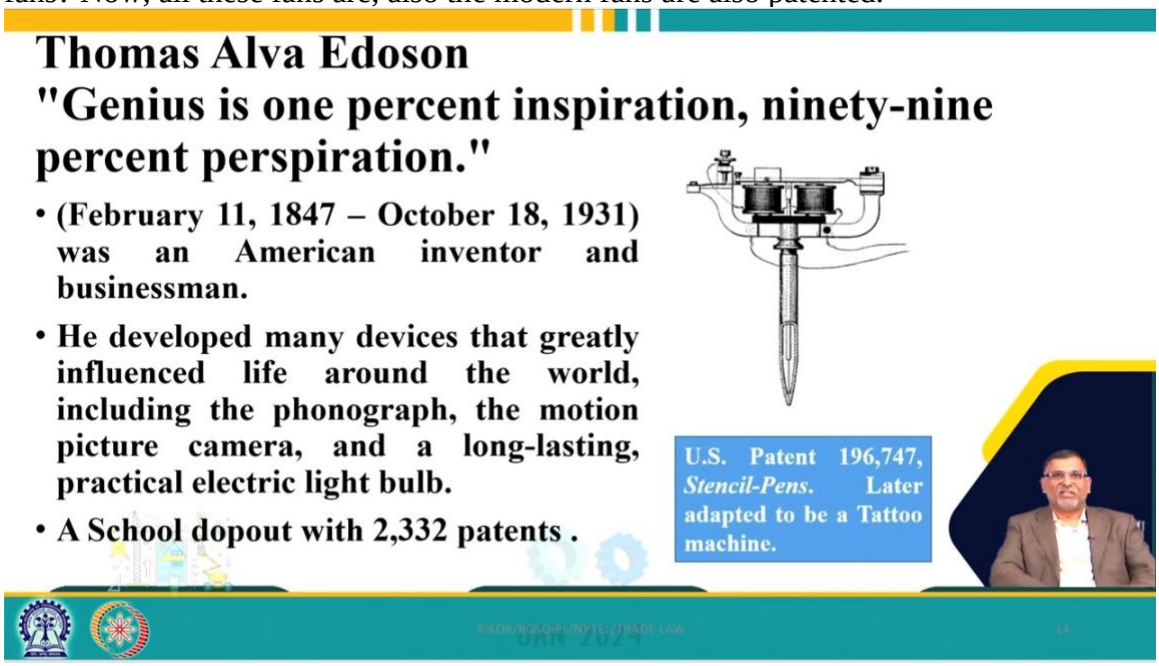
So, you can see that these are the left-side and right-side pictures, which show how it was, the fans were pulled. So, this was the old fan, and some people were manually pulling this equipment. So, that there will be sufficient comfort given to the guest. So, the guest will feel comfortable, pulling is done manually by human beings.

- **George Alfred DePenning**



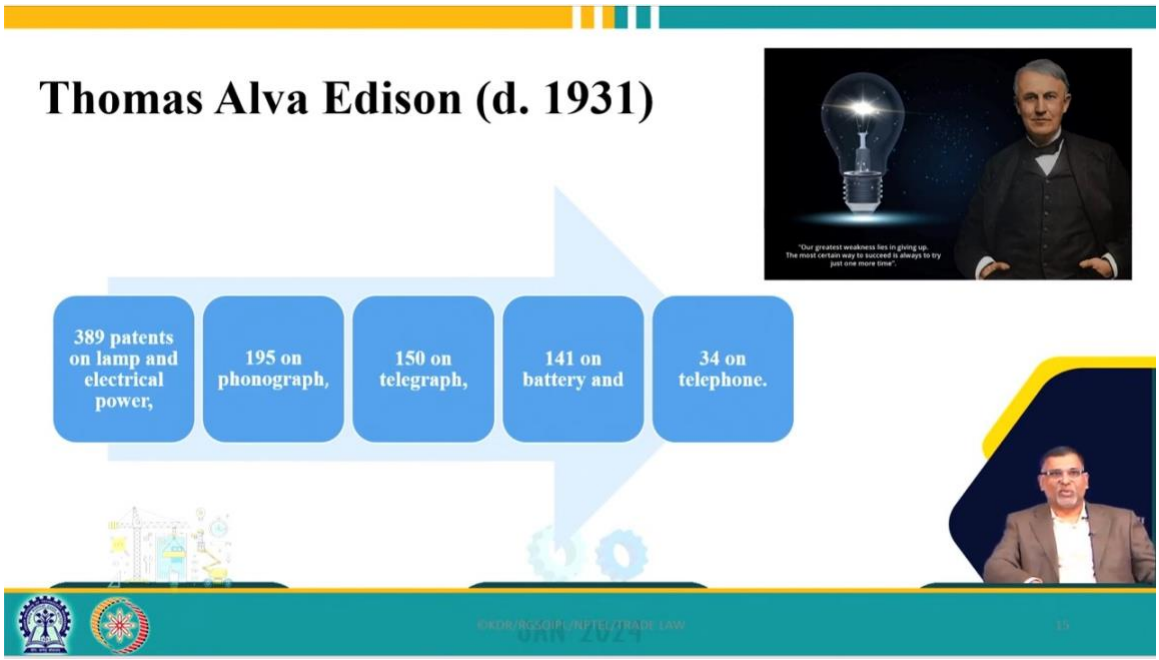
So, he made a machine that automatically pulled this instead of manually pulling, a machine formed a Punkah pulling machine.

Now, you can see beautiful fans. So, how did this Punkah pulling machine transform into fans? Now, all these fans are, also the modern fans are also patented.

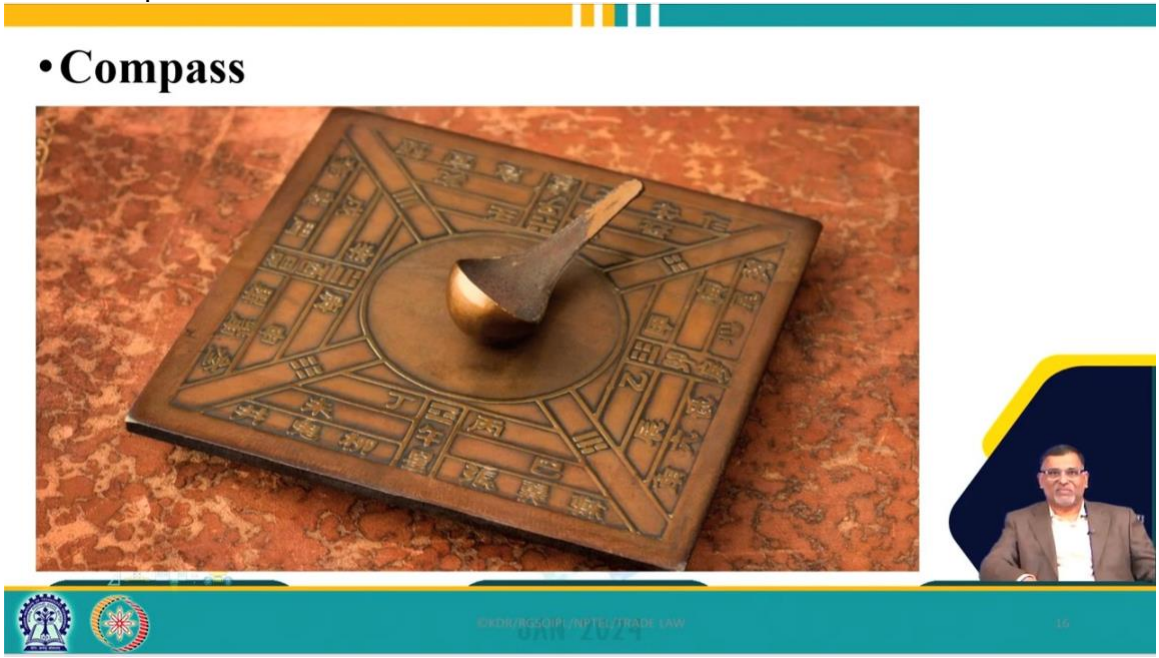


So, the most important innovator is Thomas Alva Edison. So, he was known as a genius, and so you can see that he had thousands of innovations and thousands of inventions. So, Thomas Alva Edison was a school dropout, but he had 2332 patents, all famous patents. So, whether it was a phonograph or motion picture camera and then an electrical bulb, that is one of the most important inventions. So, you think that you now use stencil pens on laptops, but you can see that the US patent was granted many years ago. So, now, you can look at the tattoo machine at that point in time. So, the tattoo machines were the machines made in the US many years back. It was patented by Thomas Alva Edison at

that point in time. So, you tattoo now also, but the machine was patented many years back.



And so, as I told you, there are a variety of patents which you can find whether it is electrical power on phonograph, telegraph, battery, telephone. So, he has patented 'n' number of patents in various areas.



So, you can even see a compass. So, it is very interesting to know how the compass was made at that point in time. Everybody knows about the modern compass, but how the compass was made at that point in time. This was patented at that point in time.

What's Protected	Type of IP Protection	What it Means
Inventions	Patents	The owner has the exclusive right to use, sell or license the invention. Patents also allow the owner to stop others from manufacturing, using, copying and/or selling the device or process.
Letters, numbers, words, colours, a phrase, sound, smell, logo, shape, picture, aspect of packaging or any combination of these	Trade Marks	A trade mark identifies the particular goods or services of a trader as distinct from those of other traders. The owner has the exclusive right to use, sell or license the trade mark.
Two and three dimensional product designs, for example, a fabric pattern and the shape of a chair	Registered designs	The visual appearance of a manufactured product is protected, but not the way it works. The owner has the exclusive right to use, sell or license the registered design.
New plant varieties	Plant Breeder's Rights (PBR)	Plant Breeder's Rights are used to protect new varieties of plants by giving exclusive commercial rights to market a new variety or its reproductive material.
Art, literature, music, film, broadcasts and computer programs	Copyright	The owner's original expression of ideas is protected, though not the ideas themselves. The owner has the exclusive right to use, sell or license the copyright work.
Trade secrets, confidential information, circuit layouts	Other	These types of IP give creators certain rights and privileges depending on the type of IP protection, but in general, the owner has the exclusive right to use, sell or license the IP.

So, we can see that the owner of the patent gets exclusive rights for a limited time, now 20 years, to use, to sell it, to license that particular invention. And also, it is known as the negative right because the patent owner gets exclusive rights for a period of time and excludes all others, from manufacturing, using, copying and selling the device or the process. So, it is a negative right which is implemented by the patent owner.

Whether Patent have World wide enforcement??

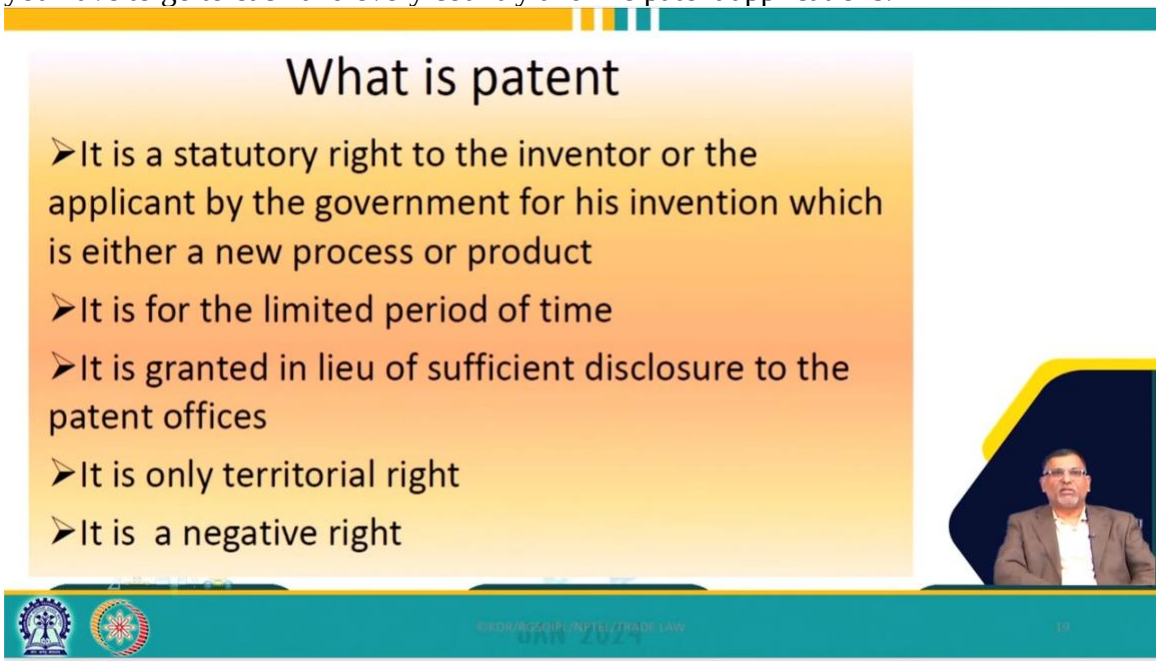
No. Patent protection is a territorial right and therefore it is effective only within the territory of India. There is no concept of global patent.

However, filing an application in India enables the applicant to file a corresponding application for the same invention in convention countries or under PCT, within or before the expiry of twelve months from the filing date in India.

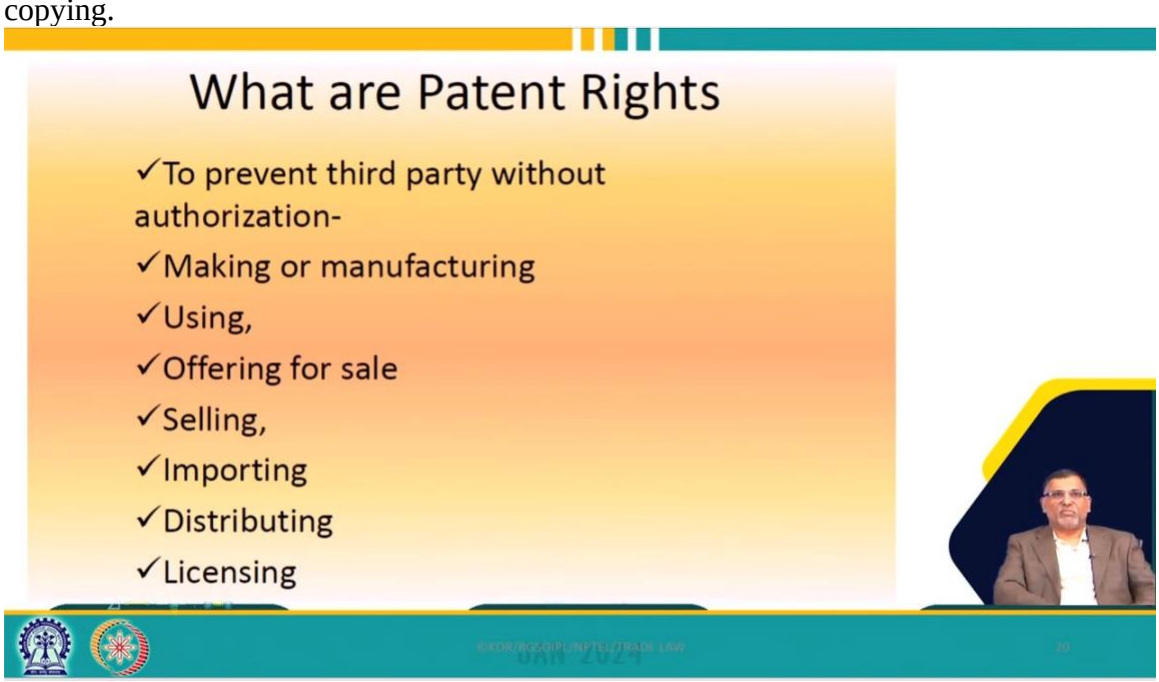
Patents should be obtained in each country where the applicant requires protection of his invention.

So, we have a misconception that once it is patented, it has worldwide validity. The answer is no. A patent has only territorial validity; if it is registered in India, it is valid only in India; if it is registered in the US, it is only valid in the US. But in multiple countries, you can register at a time through the PCT regime, which is the Patent Cooperation Treaty of the WIPO. So, around 60 countries are covered under this particular treaty. So, you have to file only one application with these particular countries

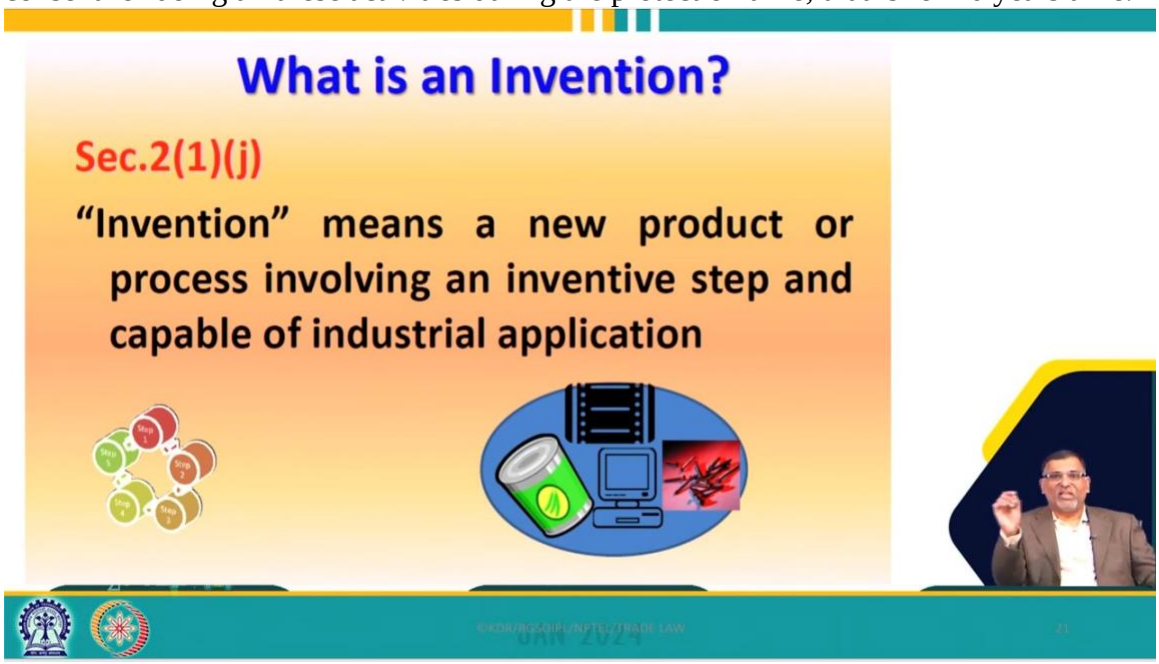
mentioned, but the patent is highly territorial in nature. It is valid only in your country, not in other countries. So, you have to separately take protection in those particular jurisdictions. So, this is considered to be one of the drawbacks of the TRIPS regime. So, you have to go to each and every country and file patent applications.



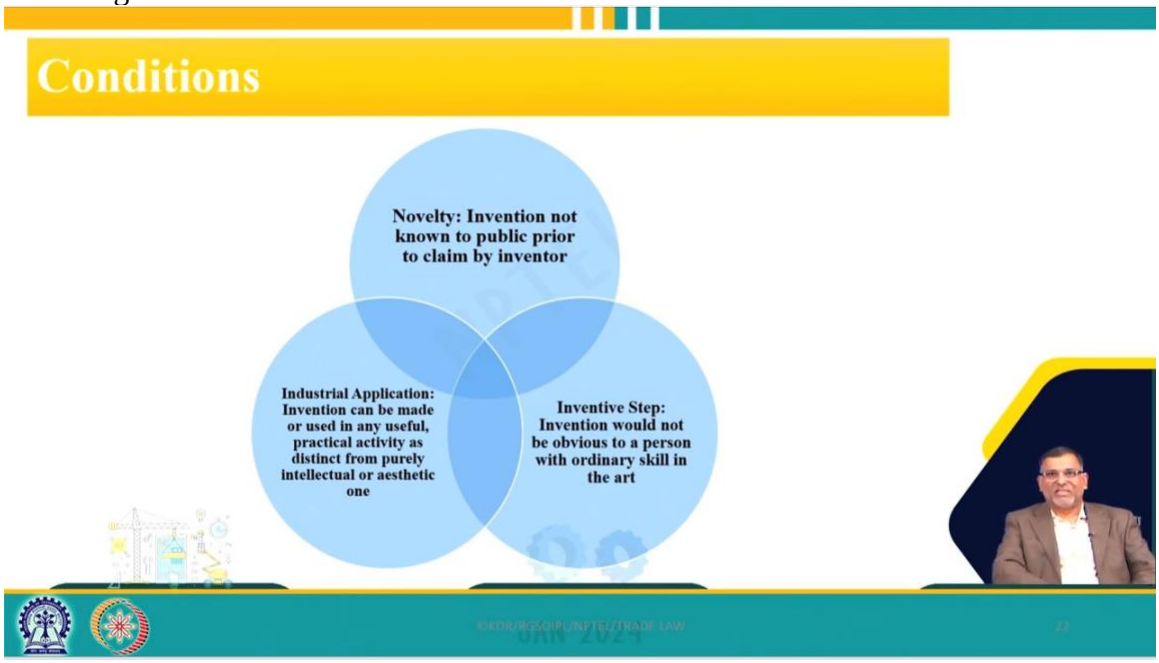
And then patent: as we already said, it is a statutory right given to the inventor. So, this statutory right is for a limited period of time, and it has restricted the patent to 20 years. This is granted with the same philosophy as the one granted by the king. So, disclosure to the public - not only to the patent office, disclosure to the public and it is a territorial right which I already said and it is a negative right. So, preventing others from using or copying.



And also the patent right completely prevents third parties from making, using, offering for sale, licensing, distributing, importing. So, you require, the patent owners written consent for doing all these activities during the protection time, that is for 20 years time.

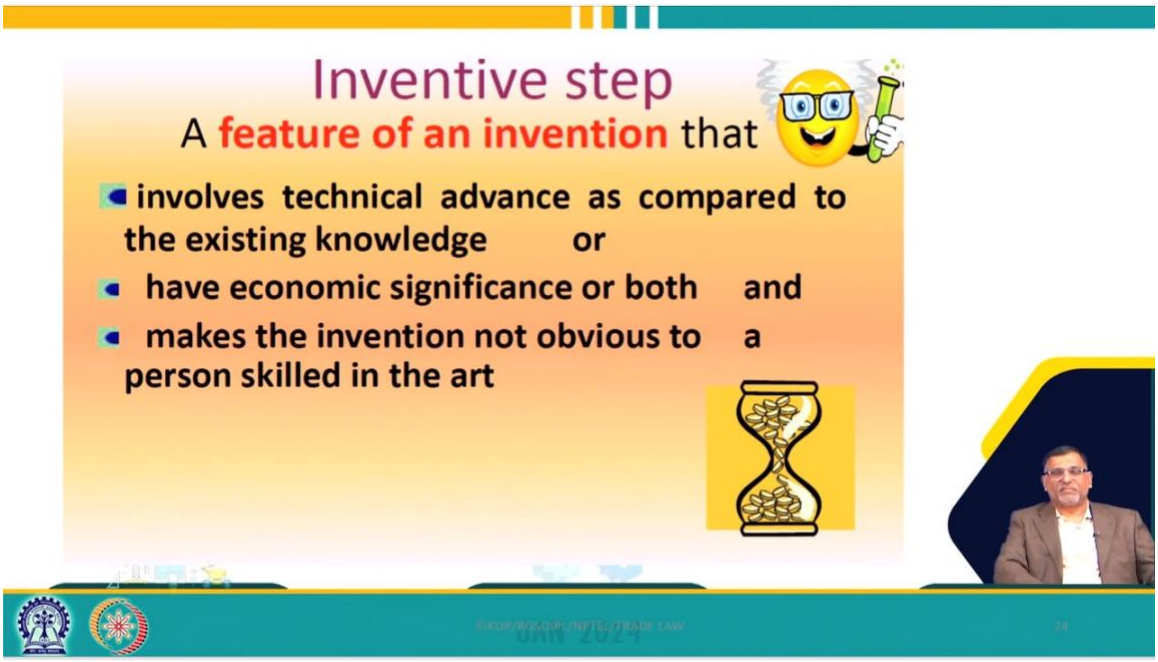


So, Section 2(1)(j) of the Indian Patent Act, 1970 clearly says what is an invention. Only inventions can be patented in India, not discoveries. So, what does it say, invention means a new product or process involving an inventive step and capable of industrial application. So, any invention means: it can be a new product or process. So, in India, there are process patents and product patents. So, registration can be made for processes as well as products. It complies with two criteria: one is the inventive step, and the second is industrial application. So, this definition is completely in consonance with the TRIPS agreement.

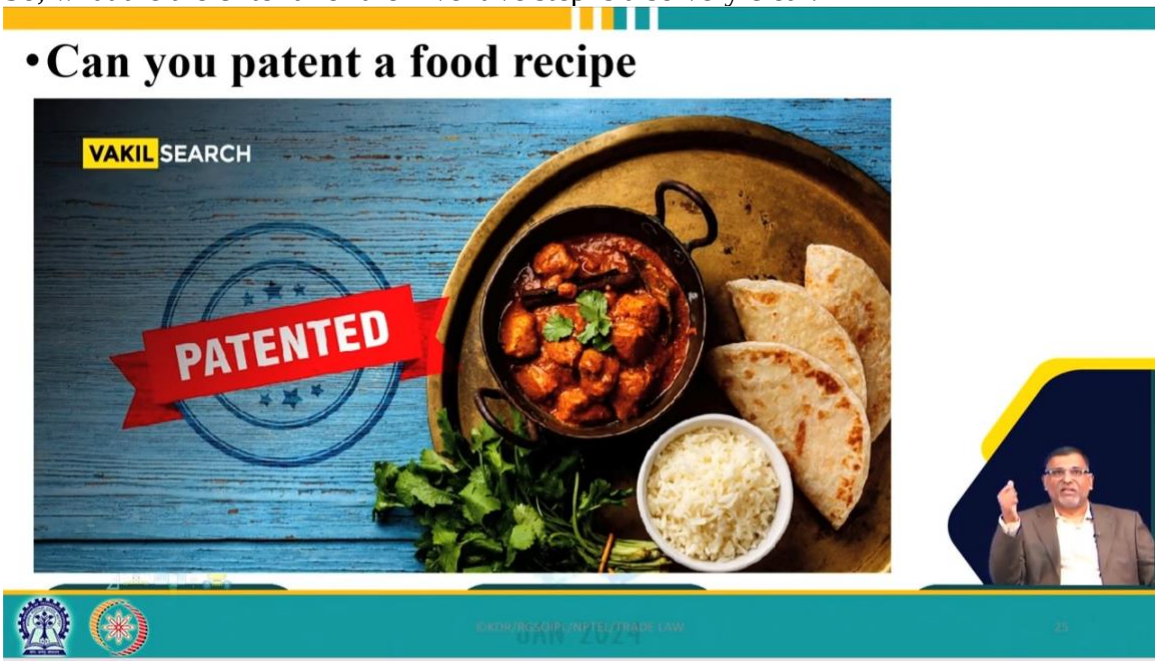


So, if we look into the general criteria, we can see that the invention must be ‘new’, ‘novel’. So, the novelty criteria are very clear: it is not known to the public prior to the claim by the inventor. So, the novelty criteria are very clear. So, what is this inventive step? Inventive step: it is not obvious to a person with ordinary skill in the art so that means, a skilled person in that particular area should not say that this is already existing. So, he should pass the inventive step. Then the last criterion is industrial application. So, it must be useful. So, mere ideas cannot be patented. So, purely intellectual or aesthetic, one cannot be patented; it must have an industrial application, and only then can it be patented.

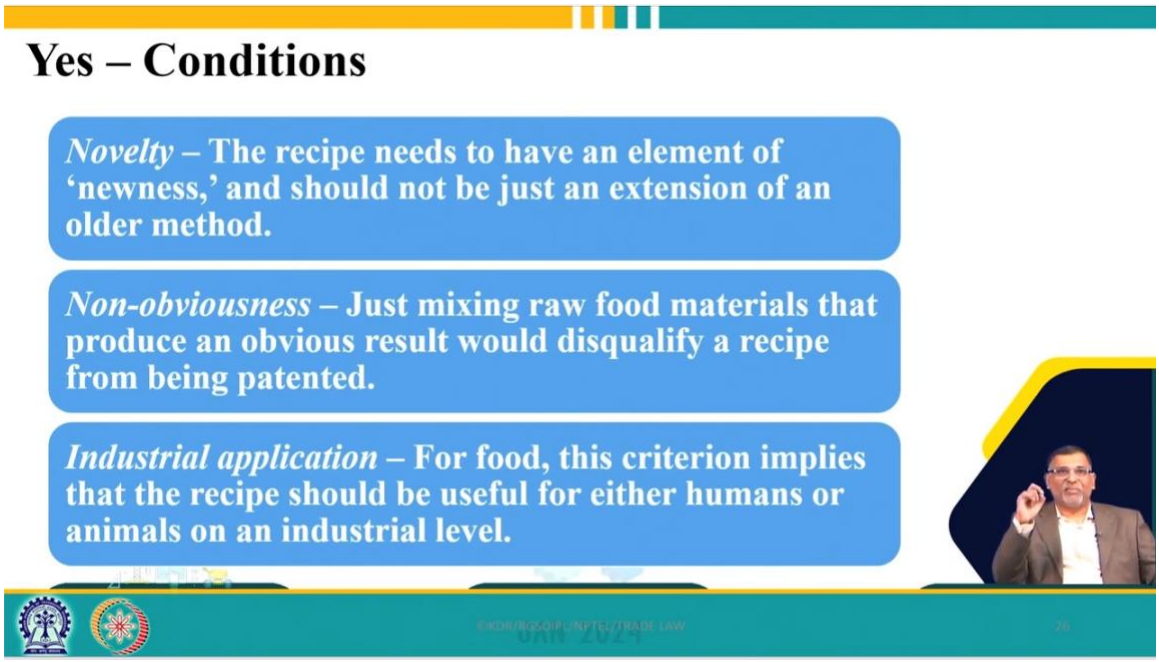
So, so we already said that if it is already published, we used to say that either you publish or perish, but in the case of patents, it is other way around, you publish and perish. So, it should not be published earlier. Prior public knowledge or public use is a barrier to filing patents. So, it should not be claimed by anybody earlier; it is not known to the public, and it is not published anywhere else. So, even though during 1-year grace period you can claim, but so the general criteria is very clear with regard to what you mean by new.



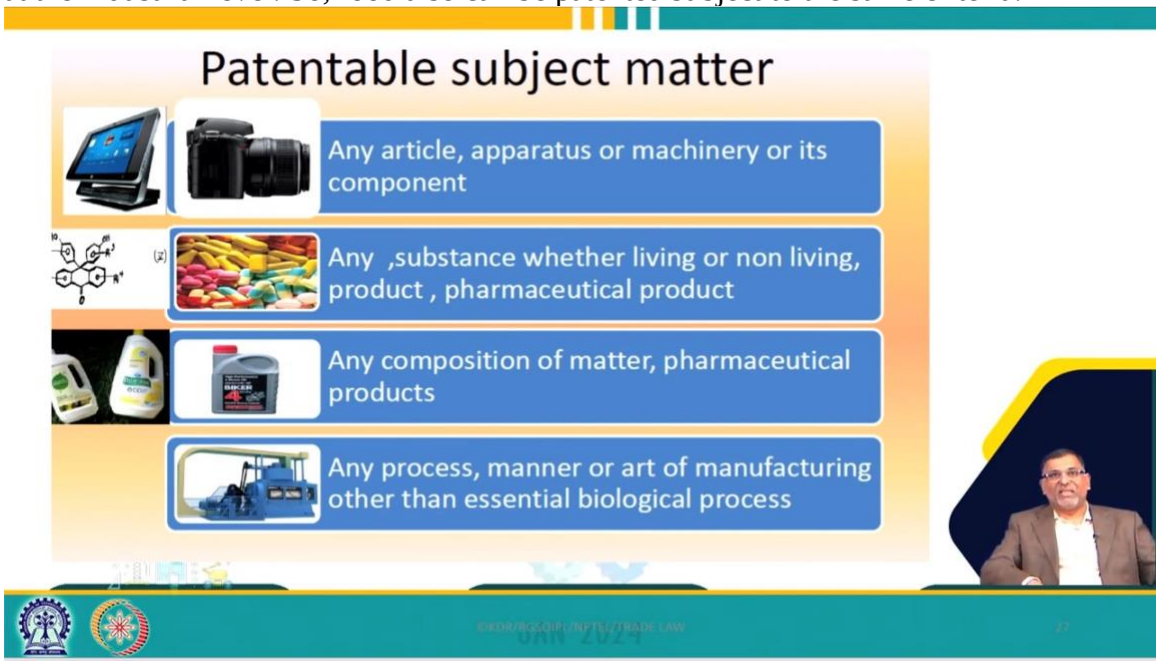
So, the inventive step: the criteria are also very clear, a technical advancement, a technical advancement from the existing knowledge. So, section 3D is a controversial provision in Indian patent law as to whether incremental innovations are patentable. In the famous case, the Madras High Court and the Supreme Court very clearly said that incremental innovations are non-patentable in India. So, economic significance is another criterion. So, the invention should not be obvious to a person who is skilled in the art. So, what are the criteria for the inventive step is also very clear.



So, for example, some of these very interesting questions come before us: can you patent a food recipe? So, the answer is yes, food recipes can be patented but subject to certain conditions.



What are these conditions? These are the same conditions that are the novelty, non-obviousness and industrial application. So, it is interesting to see what is a novelty with regard to food. The recipe needs to have an element of newness. So, should not be an extension of the ordinary method. Non-obviousness: mixing, admixture is a disqualification for patenting. So, mixing raw food materials cannot produce a patentable subject matter. In industrial applications, a recipe should be useful for humans or animals at the industrial level. So, food also can be patented subject to the same criteria.



So, the patentable subject matter is mentioned in the TRIPS agreement. So, any article apparatus or its components. So, it can be living, non-living products, pharmaceutical products and any substances, but microorganisms, yes, there are certain reservations for India. So, genetically modified organisms are patentable in India and already extend to

microorganisms. So, the famous judgment is that Anandamohan Chakraborty got a patent in the U.S. for a microorganism, but in India, it is not patentable. So, the famous case is not applicable in India. Any composition of matter or pharmaceutical products is non-patentable. Biological process, other than essential biological process is patentable. So, patentability criteria are mentioned under Article 27.

S.5., Patents and Patentability

- **S.27 – patentable subject matter**
- **27(1) - patents shall be available for any inventions, whether products or processes, in *all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application.***
- **the terms "inventive step" and "capable of industrial application" may be deemed by a Member to be synonymous with the terms "non-obvious" and "useful" respectively.**

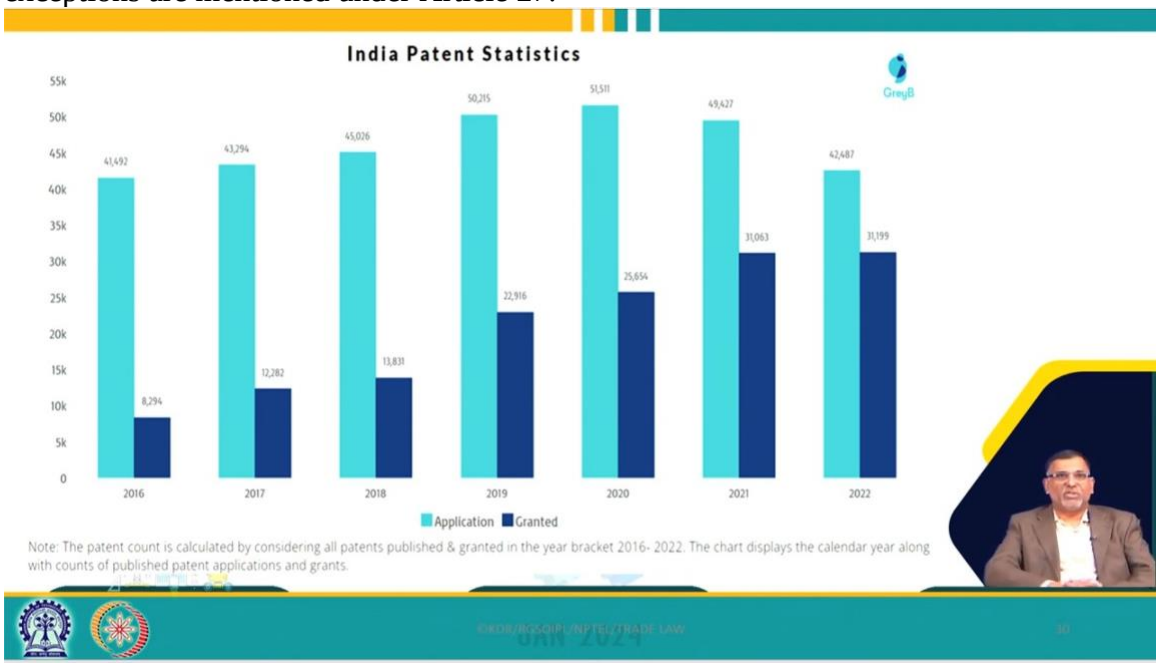
So, Article 27 very clearly says any field, all fields of technology, again the three criteria inventive step, and capable of new, involve an inventive step and are capable of industrial application, three criteria. So, these three criteria are applicable under Article 27 as well.

Exclusions

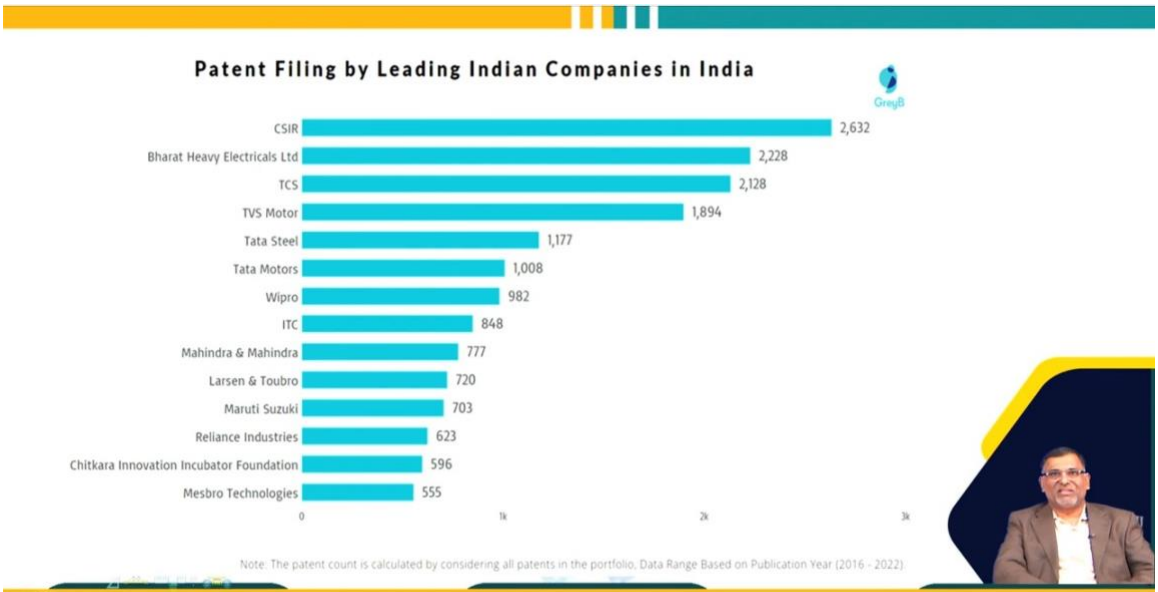
- **27(2) - to protect *public order* or morality,**
- **to protect human, animal or plant life or health or**
- **to avoid serious prejudice to the environment.**
- **27(3)(a)- diagnostic, therapeutic and surgical methods for the treatment of humans or animals;**
- **27(3)(b) - plants and animals *other than micro-organisms, and essentially biological processes for the production of plants or animals* other than non-biological and microbiological processes.**

So, Article 27(2) gives exceptions about what is not patentable. So, the patent can be rejected on the grounds of public order or morality. Public order or morality is not defined. It will differ from country to country and place to place. Public order, order of

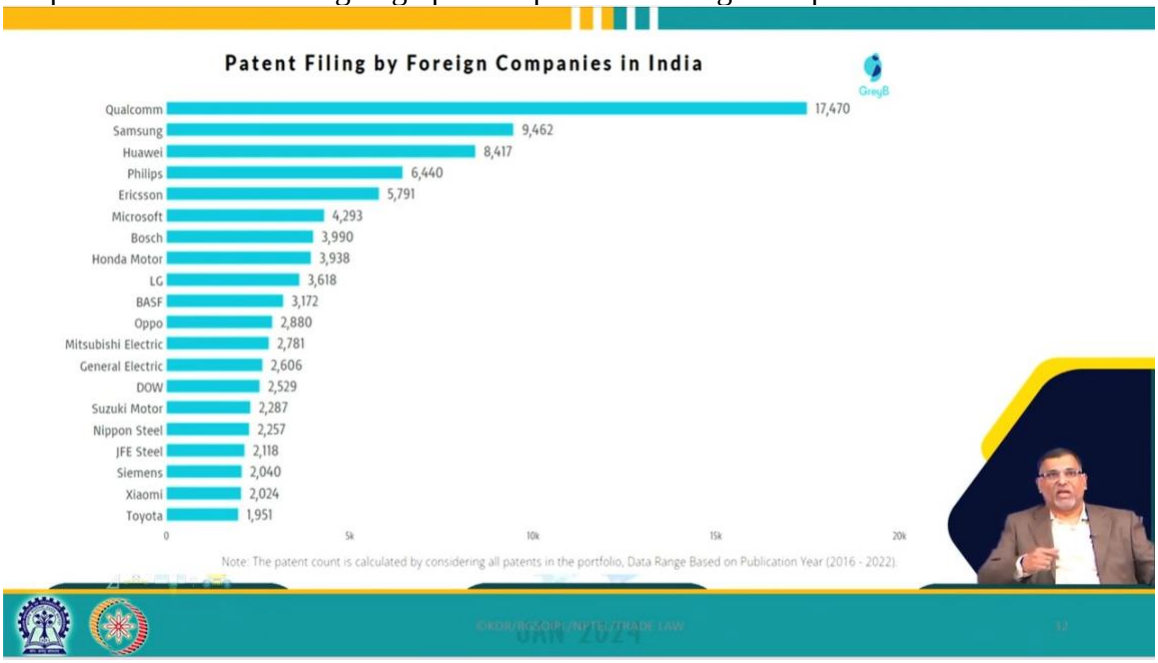
public. So, it is given to every country to determine what is against the public order or morality. Protect human, animals or plant life or health. Avoid serious prejudice to the environment. Diagnostic, therapeutic, and surgical methods for the treatment of humans or animals. So, the methods for treating human beings or animals are not patentable. Then plants and animals are not patentable, other than microorganisms. So, in most of the countries microorganisms are patentable. Essentially biological process for the production of plants or animals, but at the same time non-biological and microbiological process. So, there is a lot of controversy with regard to forming animals by using the biotechnological methods. The Dolly case is very important. Dolly's case is very famous. So, what is patentable and what is non-patentable? The subject matter criteria and the exceptions are mentioned under Article 27.



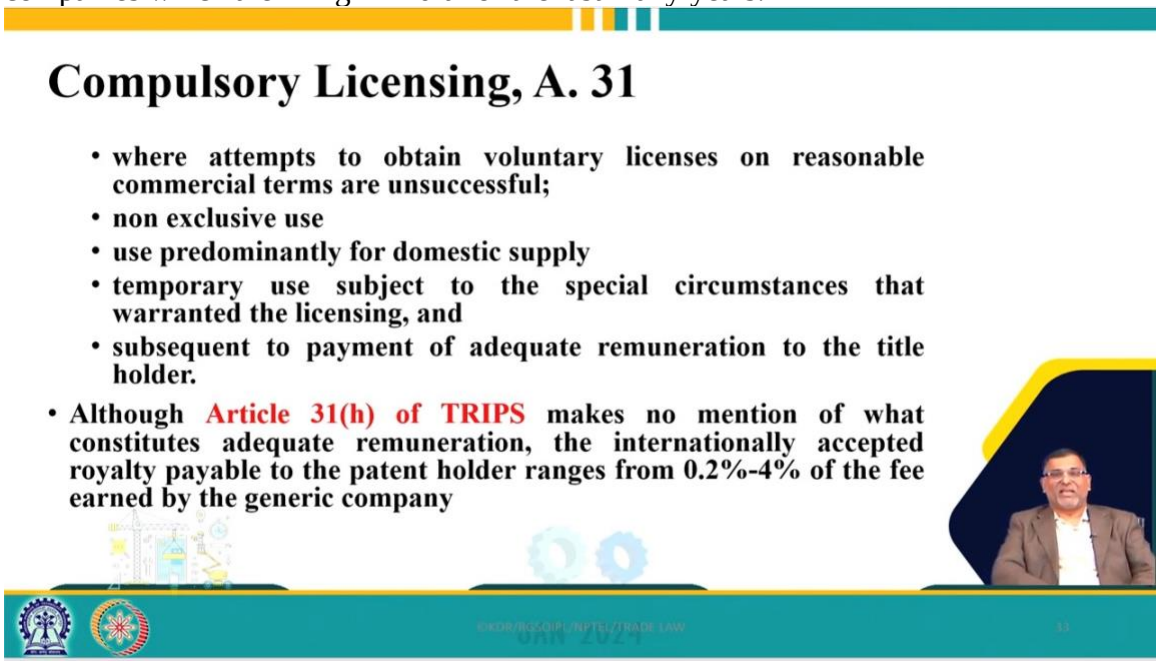
So, if we come to India, you can see that the application numbers are going up, but it is not going up like, for example, for a period of almost 6 years, data clearly shows that there is not much progress in the number of applications. It is 40,000-50,000 and again it is dropping to 42,000. So, if you look into 2016 and 2022, there are not many variations in the number of applications, but the patent office has granted the patent, which is increasing day by day. So, the number is increasing. So, the working of the patent offices has been revamped by the government at this point in time, and probably, the grant may be very quick in recent times. So, the number of grants is increasing and it has reached to almost 21,000 and 22,000, it is almost 30,000, and I am very sure that 2023, it will be more because if you take 2019, 2020 or 2021, it was affected by the pandemic, but 2023 is not affected. So, the number may go up. So, the patent statistics in India are not very encouraging. The number of applications filing is not very encouraging.



And if you look into the filings in India. So, in India, which are those companies or institutions filing patents in a single year? You can see some of the institutions. So, for the same period of time from 2016 to 2022, the data says it is CSIR, the only government of India institution, holding the number 1 position. Then 2, the second is also a government of India institution that is the public limited company that is Bharat Heavy Electricals. Third, you can see private companies such as TCS or TVS motors, Tata Steel or Tata Motors, Wipro, ITC, Mahindra and Mahindra, then L&T, and Maruti Suzuki. So, we can see the trend is very clear. The private companies are filing very much. So, for example, 6 years average, you can see that around less than 200 patents per year. So, the number of patents filed by Indian companies is also not very high per year. So, some of the public institutions are going up with speed and foreign companies.



If you look into some of the foreign companies filing in India as the largest telecommunication market, for example, telecommunication equipment. So, Qualcomm is there and another technology in telecommunication Samsung and Huawei, Philips, Ericsson, Microsoft, and Bosch. So, you can see these old multinational companies are there in India because India is a huge market specifically for telecommunication and industries and other industries and the ICT sector, I would say that. So, these are the companies which are filing in India for the last many years.



And then comes the most important provision in the TRIPS agreement that is Compulsory licensing provision, but TRIPS has never used the terminology compulsory licensing. So, the TRIPS has used 'without consent'. So, when is it happening? It is happening when most of the companies that are involved in negotiations with other companies for patent licensing. So, usually, a voluntary license happens. If the voluntary licenses are not successful and the companies are reluctant to license and also subject to certain conditions. The patent offices can go ahead with compulsory licensing of the patents which are registered in their respective jurisdictions, subject to certain common grounds, again subject to adequate remuneration. So, there is a lot of controversy. For example, India has granted a compulsory license for only one medicine, and it has been criticized by most countries and most multinational corporations. It will be very difficult for any developing country to implement such decisions because of far-reaching trade consequences and other consequences.

Term of Protection

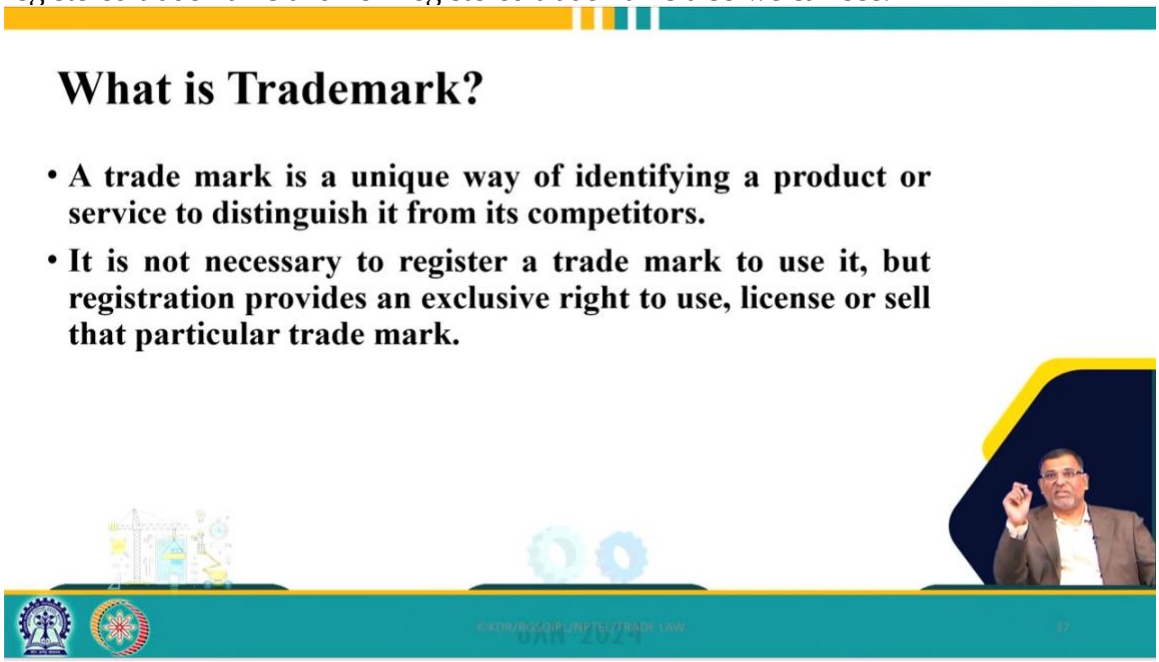
- The term of protection available shall not end before the expiration of a period of twenty years counted from the filing date.

So, the term of protection is very clearly mentioned now. The patent term is only for 20 years from the filing date. So, this is uniform among 164 member countries in the world.

TRADEMARKS

So, with regard to patents, if you can say that the patent provisions put basic minimum criteria of protection under the TRIPS agreement and also the patentability criteria are mentioned, exemptions are also made, and the provisions for compulsory licensing are also made in the TRIPS agreement. Let us quickly come to the trademark agreement. So, trademark provisions are known to every country in the world.

And we can see the trademarks identifies particular business establishments and registered trademarks and non-registered trademarks also we can see.



So, what actually is a trademark? The WIPO says a trademark is a unique way of identifying a product or service to distinguish it from its competitors. It is very clear and it is not necessary to register, but registration provides exclusive right. So, you can license it if you register it, or you can sell it if it is registered. So, there is more protection to a registered trademark.

What can be registered as a Trademark?

- A trade mark can comprise letters, numbers, words, colours, a phrase, sound, smell, logo, shape, picture, aspect of packaging or any combination of these.
- Words that competitors might legitimately use to describe their goods or services, such as the name of a place or a generic term, may be difficult to register.
- For example, a plumber based in Mumbai would have difficulty registering the words 'plumbing' or ‘Mumbai' as Trade marks.

So, the next question is what can be trademarked? So, the trademark can comprise letters, numbers, words, colours, a phrase and sounds. Now, there are sound marks, smell marks, new categories, logos, shapes, pictures, then aspect of packaging or any combination of them. So, the trademark contains a complex set of individual components, and it must describe the goods or services. So, the generic terms, name of a place or a particular area will be very difficult to register. So, a product related to a particular region is registered in the geographic indications. So, ‘Mumbai’ cannot be registered as a trademark. So, whether it is ‘electric’ or it is ‘plumbing’ cannot be registered as a trademark.

Trademark, Service Mark, and Trade Name

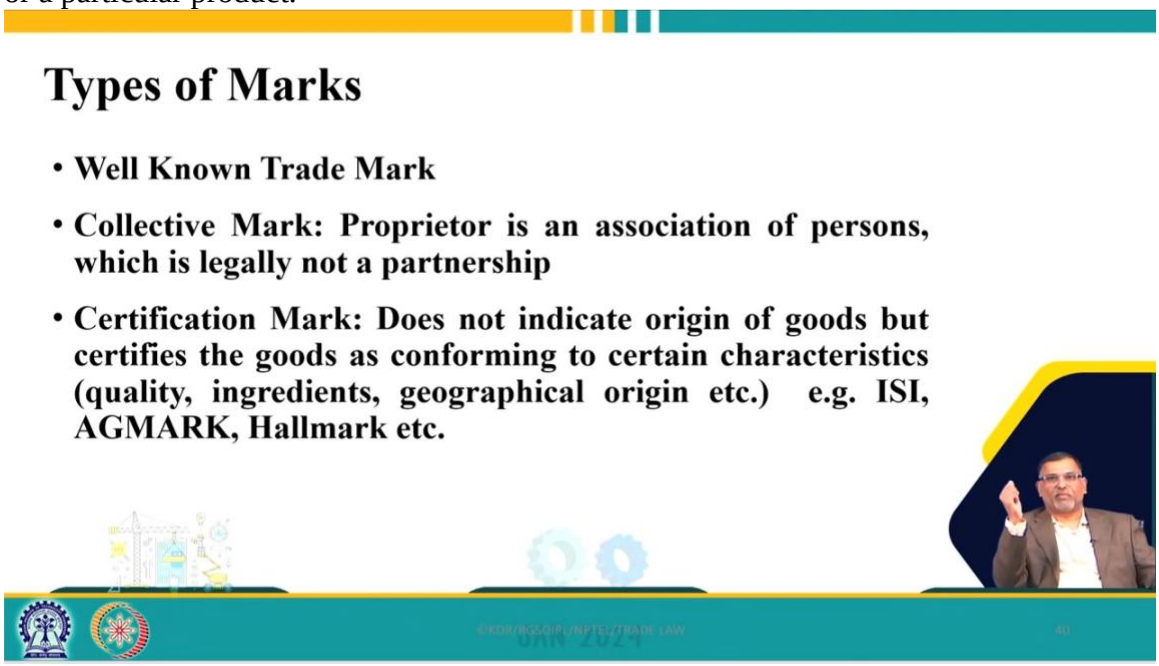
- Distinctive symbols, signs, logos that help consumer to distinguish between competing goods or services.
- A trade name is the name of an enterprise which individualizes the enterprise in consumer’s mind.

Legally not linked to quality.

In fact, linked in consumer’s mind to quality expectation.

And also for trademark we can find different categories, service mark, trade name. So, here you can see distinctive symbols and logos to distinguish those particular goods or services. At the same time, the trade name of an enterprise, for example, Tata, Reliance

comes to the consumer's mind. So, it has nothing to do with quality. So, trademark has nothing to do with the quality and trademark is basically related to reputation. This link to reputation may be linked to the expectation of quality, but this has nothing to do with quality. This is linked with the reputation of a particular service or a particular company or a particular product.



And also we can see the well-known marks as well. Well-known marks, collective marks, associations of people who provide collective marks, then there is a certification mark, a standard of quality which includes the certification mark. For example, the ISI mark and earlier it was ISI mark in India, now it is the BIS mark, Bureau of Indian Standards, BIS marks. AGMARK for agriculture products, Hallmark for gold. So, you can see different certification marks. So, it may lead to quality, ingredients and even geographical origin. Specifically, I said that now the protection is under the Geographical Indications Act.

Forms of TM

- **Visual: Words, letters, numerals, devices including drawings and symbols or 2-D representations of object or a combination of two or more of these, colour combinations or colour *per se*, 3-D sign as shape of goods or packaging.**
- **Audio: Sounds, Musical Notes**
- **Olfactory: Smells**

And some of the forms of trademark, can be visual, videos or words or letters, numerals, devices, drawings, symbols, 2D representations, a combination of 2D or more colour combinations, 3D signs, shapes, packaging, sounds, musical notes and smell, smell marks. These can come under the trademark as well.

Criteria of TM Protectability

- **Distinctive (basic function):**
  - **inherent (e.g.RIN), or**
  - **acquired by usage (e.g. TATA)**
- **Non-deceptive (to avoid misleading)**
- **Not contrary to public order, morality**

Special Requirements

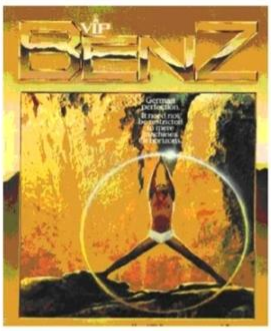
❖**A mark is registered for specified classes of goods or services.**

And the criteria are very simple. One is distinctiveness: inherent or acquired by usage, non-deceptive, not contrary to public order or morality and these are some of the criteria of trademark protection.

Cases

- SONY for "nail polishes" was not held to violate the rights of "SONY" of Sony Electronics (see AIR 1985 Bombay 327).
- SONY for "frames for spectacle and goggles" from Sony Corporation (see 1989 IPLR 92).
- AB Textiles v. Sony Corporation 2007 (35) PTC 288, Sony Corporation could not defend the use of the trade mark SONY by AB Textiles for ladies undergarment.
- SONY is not an invented word, but is a "feminine name" as well as a surname in India.

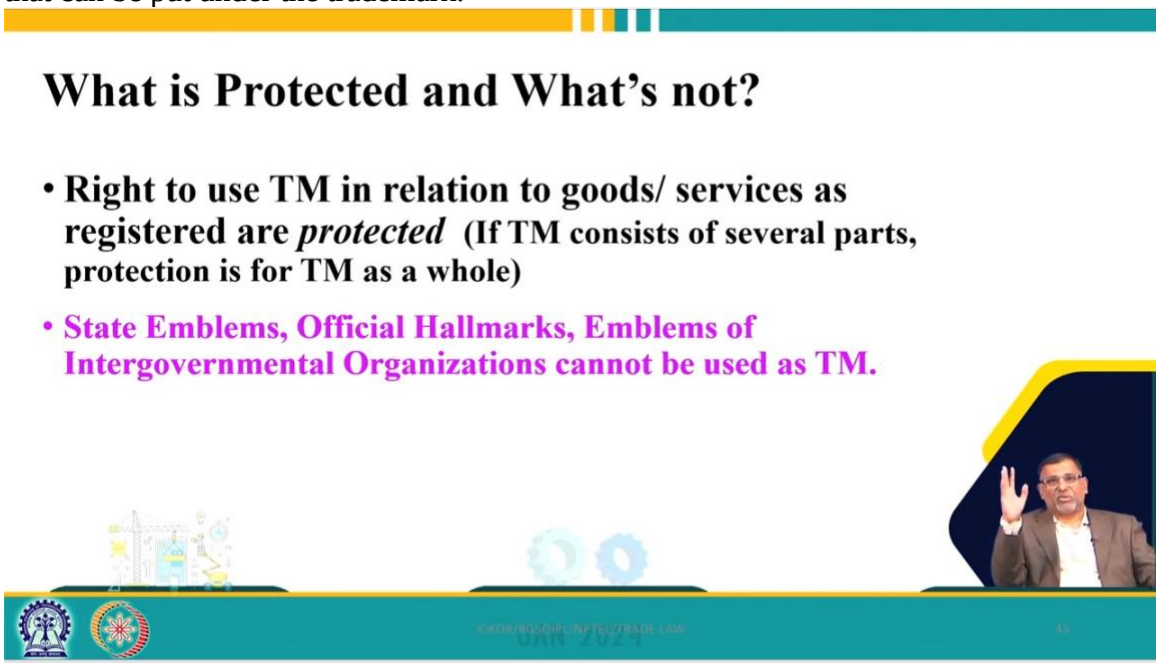
And you can quickly see some of the cases in India. There is a number of cases, and everybody knows what Sony denotes. So, the Sony company cannot prevent others from putting Sony. Sony is even a very popular name in India for people. So, but when it comes to a trademark, it is related to a particular company in electronics, but putting the same name to other areas is not prohibited. So, it is not a general name, it is a trademark.



TATA

But in some of the cases, you can see here, one Indian manufacturer of undergarment came up with this particular advertisement, VIP Benz is shown in the picture. So, you can see the name is Benz. So, the Benz company sued this particular company for violating its trademark. So, as I already said that, you cannot claim the whole ownership of trademark of some particular name. So, Benz everybody knows it is an auto manufacturer. The Benz cars are world famous. So, Benz sued this particular Indian

company, but the way in which the advertisement is depicted in the picture, the Indian court said that yes, this is a violation of the trademark of Benz. Because the way in which the advertisement is put that is the main reason to hold that it was a violation of the trademark. So, it is not the case that you can use the names for whatever you want. So, even though the Benz car has nothing to do with undergarment, but the Indian court prevented the Indian company from using the name Benz and also the picture in the way in which the picture was put. So, the case also shows what exactly are the criteria for fixing the trademarks. So, trademarks, well-known marks, certification marks and also you can give the associations which they grant and also certain marks like hallmark, quality, AGMARK, again point to the quality. So, there are different categories of marks that can be put under the trademark.



And here you can see the trademark. The trademark is protected for goods as well as services. So, service mark: it is registered, it is protected. So, it can be emblems. A series of things cannot be registrable. The emblem of intergovernmental organisations cannot be used as a trademark. The state emblems cannot be used as a trademark. There are prohibitions. So, what can be trademarked, what cannot be trademarked, there are specific distinctions.

Conclusion

- Trademarks has its genesis from Paris Convention, which incorporates and strengthen the protection of well-known marks. In India, the terms of protection of Trademark lies up to 10 years.
- Patent is that form of intellectual property rights that available for any invention, which consist of products or processes. Patents involve all fields of technology, subject to the conditions that are new, involve an inventive step and are capable of industrial application.

A trademark can be registered, and the term of protection is 10 years which can be renewed from time to time. So, all over the WTO countries now it is 10 years protection of trademark. And I already said that, all the international conventions are now applicable to the member countries as well relating to their respective fields. So, here we can see that the trademark, the Paris Convention is already a part of the TRIPS agreement. So, the trademark provisions and patent provisions are applicable. So, it is very clear. See, in some of the countries, it is 10 years, which is provided in India, and in the TRIPS agreement it is specified. So, some countries go with the TRIPS agreement protection and some countries go with more than TRIPS agreement protection. And patent, as I told you that the patent criteria is mentioned, what can be patented, what cannot be patented is mentioned. The basic standard of protection and the minimum term of protection are also mentioned under the TRIPS agreement.

So, we can, we can conclude that the basic protections are available, and the countries have implemented these provisions according to the TRIPS agreement. Even though for countries like India, it took some period of time to implement, but it has been implemented. So, in the next classes, we will see the individual respective categories of intellectual property rights and other categories of intellectual property rights in the coming classes.

Thank you.