IP Management and Technology Transfer
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Lecture - 06
Types of IP - Patent

A very warm welcome in module 1 of week 2 of the course Intellectual Property Management and Technology Transfer titled Types of IP Patent. Now, in the first week we have got idea of how this IP system has been involved or what is the rational behind IP system.

And we also understood that yes that this intellectual property management when we are talking it is like a important considering the organization which may be start up may be individual, may be industrial organization, may be research organization any type of organization you consider IP management is we can say knowledge economy is very important.

Before going into details of that IP management system and other details and IP life cycle management, what are the emerging areas what we thought that we should share briefly the types of IP which we are focusing on when we say IP management we are focusing on IP and according to IP we already shared that ok these 8 types of IPs are there.

So, what we will do? We will go little more detail about this intellectual property types in this week actually and we will just briefly get idea about what is patent, what is trademark, what is copyright all these 8 types we will go through actually. And what we will do here the different thing is like that if this one subject if I talk about patent, it is 4 credits subject or if you take a copyright, it is 1 credit that 4 credit subject.

So, what we will do? We will give you the reference videos actually. So, that if you are not aware about copyright. If you are aware about this kind of a recap kind of thing will be there for you and if you are like you want to know little bit more about this patent copyright or if you have not came across the differences and you want to know little more details about that.

This video was probably will help you to know little more details about that particular subject. So, the patent for next four modules will be like a like you will get a little bit conceptual we will talk about the concept and immediately I will share with you the video reference. So, that way it will be easier to do this recap that review brief we can say the understanding about IP types very quickly ok.

Now, so when we are talking about this first IP out of this 8 type first IP is like a this a patent now this patent whenever we are talking out of that 8 type 8 types of IPs we can say that if you are technology oriented or you are science technology pharma in that domain probably patent will be one of the important IP.

I will not rate any IP as this is the best IP or this is the best type of IP no because if it is a expression copyright is a best, if it is a invention patent is best if it is a semiconductor integrated circuit then that act will be useful.

If your agriculture related products are there PPV Protection of Plant Varieties farmer right. So, that will be PPV fr that will be important. So, we cannot say this IP is strong, this IP is weak or this IP is good or this IP is like a not of that use and all that we cannot say that because subject matter is totally different. So, this is one of the IP type we can say which is we can talk about it as a one of the important type IP and it is like patent.

And we can say that the act when you go through probably if you see the that books related to this IP is like patent and trademark it is little bit we can say the number of pages I am just talking about in that language because it is not necessary for you to know the sections and the rules and say you will say it is not necessary for you to know that details actually.

So, this is like little elaborate and if you see the bare act if patent act you see and probably if you see the industrial design act there is a difference in that way. So, now, let us move into the details of a patent and we will try to just understand the definition of a patent actually. So, what exactly the patent is.

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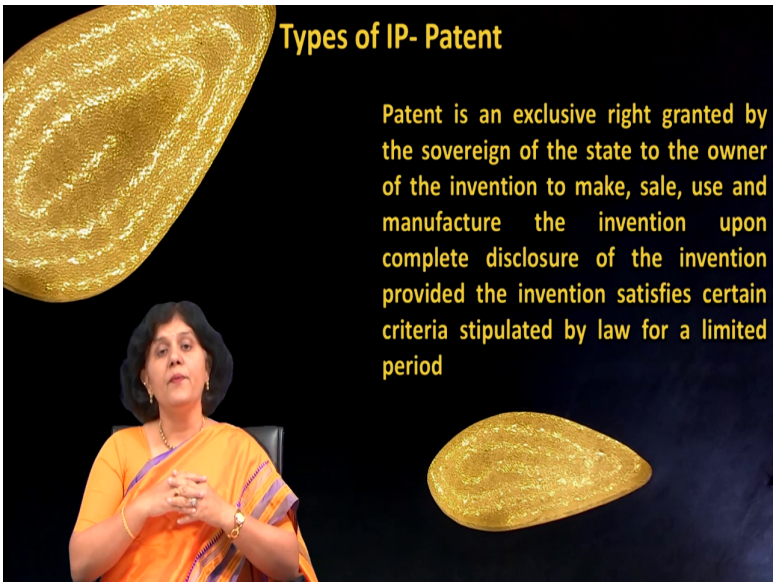

So, when we say that this is like a definition of a patent it is a exclusive right granted by a sovereign of the state to whom to owner of the invention for what? To make sale use and manufacture the invention, but when upon complete disclosure of the invention provided the invention satisfies what certain criteria which are stipulated by the law.

So, if you read this definition carefully there are 6 to 7 important points actually. So, it is exclusive right that is first important who is giving that exclusive right sovereign now to whom the right is given to whom it is given to the owner of the invention. So, owner of the invention that is a applicant is getting that right for what? If you get that right what you can do you can make sale use and manufacture that particular invention, ok.

Now, any other condition to fulfil yes what is that you have to give complete disclosure of the invention that is the condition of the sovereign that if you want right you give a complete

disclosure ok. Now and what are the criteria there are certain criteria actually they are talking that according to law there are criteria and that criteria need to be satisfied. So, I guess this is good enough for understanding the definition of a patent.

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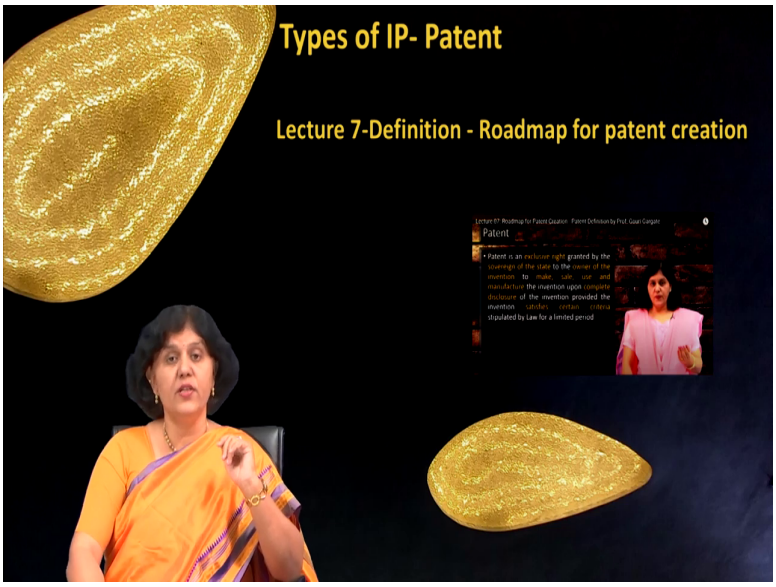

If you want to know a little bit more about this actually. So, what you can do? You just go through this video and we will just show you the small clip of that video and if you want to go into details we will share the link of this video so, that you can go into details to understand this definition in further detail.

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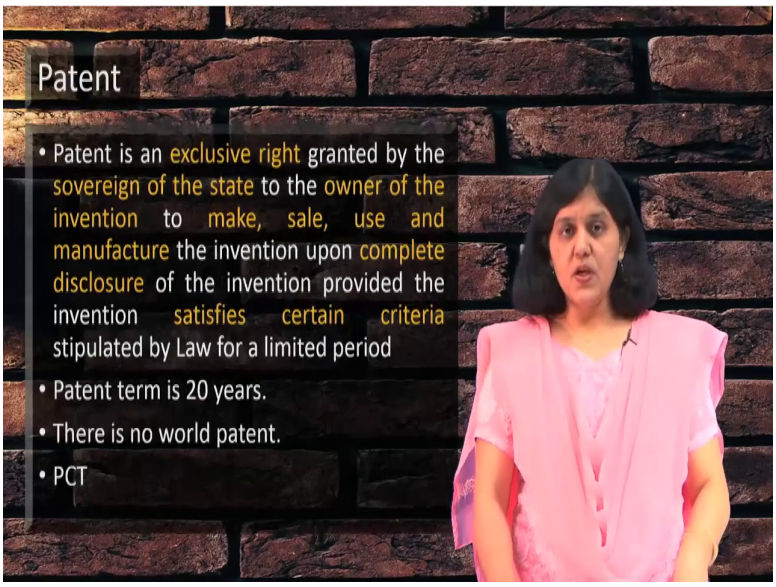

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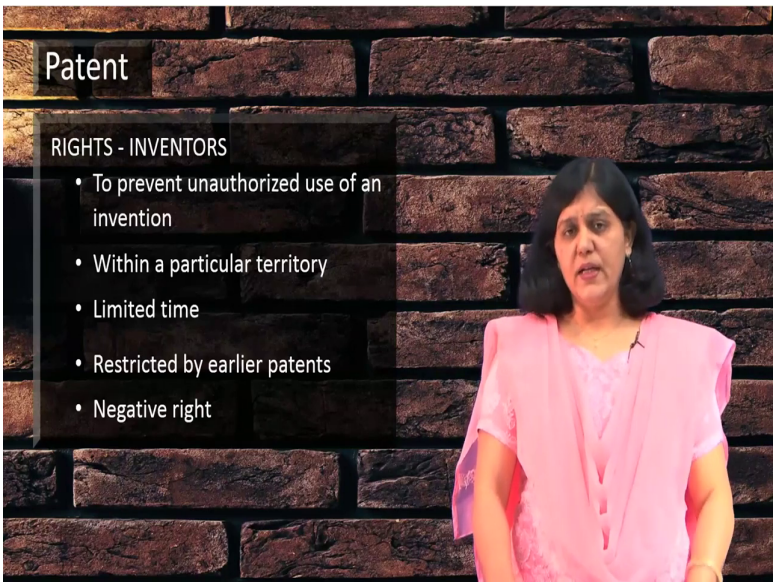

So, the right granted to the inventors are he or she can prevent unauthorized use of invention it is for a limited period and it is to a particular period territory it is limited it is restricted by earlier patents and it is a negative right. So, the question is what is the meaning of a restricted by earlier patents?

So, to understand this we will take example of a mobile. So, mobile already may be having hundreds of patented technology and you suppose are working on that technology and you have developed say the next technology for which you received patent also that is it is a granted. Now, you will say I will use my technology as I am the owner of the patent, but think if it is possible think over about commercialization of your patent.

For you to develop your technology you have to take permission from other earlier patent owners right. Without their permission you are unable to develop your technology, ok. So,

this is the meaning of a restricted by earlier patent. Thus, although you have received grant you are dependent on earlier patent owners to develop your technology.

Now, the next why it is a negative right? Any guess? Because patent excludes others the right conferred by a patent is that patent owner excludes others; excludes from what? Excludes others from manufacture, sale, use, importation or offer for sale of the patented product or a process.

So, it is a exclusive excluding phenomenon or excluding right it is. However, patent owner cannot do whatever he or she want to do with the patent as it is restricted by earlier patents. So, it is a negative stops or excludes others, prevents other to take benefit from your patent hence it is a negative right, ok.

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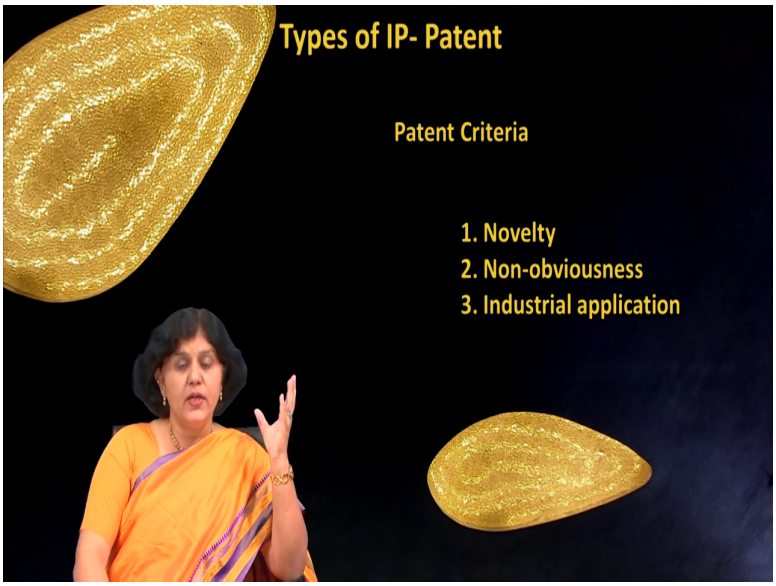

I hope now you got the idea about the patent definition. Now we will move further and now what we will do we will try to understand what are these criteria like novelty, non-obviousness and then there is a industrial applicability. So, there are these three criteria that is novelty, non-obviousness and industrial applicability. Now what is the meaning of that actually? So, what we will do we will go one by one that what exactly is the that particular patent criteria novelty ok.

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So, let us see this you can just check this video actually which gives you idea about the novelty. But to briefly if I want to talk about this novelty this is very important when we talk about patents novelty is worldwide, please remember this particular thing because, we are not expecting novelty locally or that particular covariance we are expecting novelty worldwide.

So, what happens please understand this thing in case of a patent if any new invention is there it is expected that it is first time in the world not first time in India because many times the question comes is like that ok there is a invention in USM can we have a patent for that invention because nobody have filed patent for that and that is successful there.

So, we will file a patent in India for that particular patent. So, whether you are able to do that particular thing not at all you cannot do that particular thing because novelty is absolute novelty, we can say it is like a it should be first time in the world that is very important ok. So, let us watch this video so, that you can get more idea about a novelty.

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Now, in the act you will see one more definition that is a new invention. So, as per Section 2 l new invention is any invention or technology, which has not been anticipated by publication in any document or used in the country or elsewhere in the world before the date of filing of

patent application with complete specification that is the subject matter has not fallen in public domain or that it does not form part of the state of the art.

We will see the details of we will go through this definition. So, two important points in this definition any invention or technology, which has not been anticipated by publication in any document. Second point, any invention or technology which has not been used in the country or elsewhere in the world before the date of filing of patent application so, these two things are very important ok.

So, now, I guess you have got the idea about the novelty. Now we will move further and we will check the next criteria, that is, the non obviousness.

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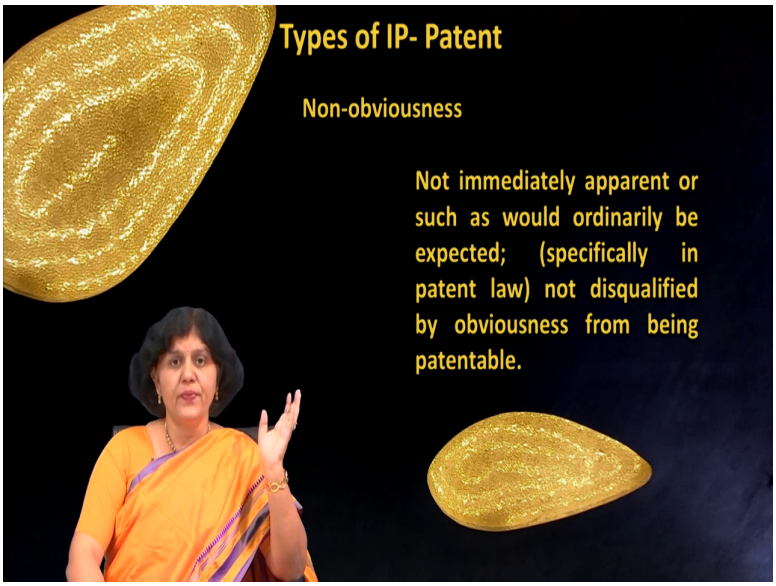

So, when we are talking about this non-obviousness it is a not immediately apparent or such as would ordinarily be expected specifically in patent law not disqualified by a obviousness from being patentable. So, what is the meaning of that? So, the understanding is like that non-obvious no obvious.

So, it should not be obvious to the person skilled in the art ok. So, we have a terminologies like phosita, sita these are the common terminologies which are used actually. What is the meaning of that? That person who is a skilled in the art now what is that person who skilled in the art.

So, suppose the invention is a in mechanical engineering then the person skilled in art is like a any person who is having basic understanding general understanding of a mechanical engineering. So, suppose the person is from biological phase then person skilled art is like a person who is having general understanding about that biosciences.

So, that is a meaning like a person who is a skilled in art and then if that invention which is in biological sciences if that person who is skilled in art field that it is obvious nothing is new is there if you if that person says that no nothing is there it is a very simple thing and it is manageable anybody can do that particular thing if such kind of perception comes.

Then it is a not like it is like a not obvious criteria will not be fulfilled it is like a obvious thing. And, but there are certain guidelines are there like a long felt need or the simple solution may be there, but may be that may not have thought by the that scientific community at that particular time and all that.

So, filament example is a very classic example everybody will give that example that bulb filament actually tungsten filament example is a very classic example for that. So, just if you want to know little bit more about this non-obviousness you can just go through this video actually which is talking about this non-obviousness.

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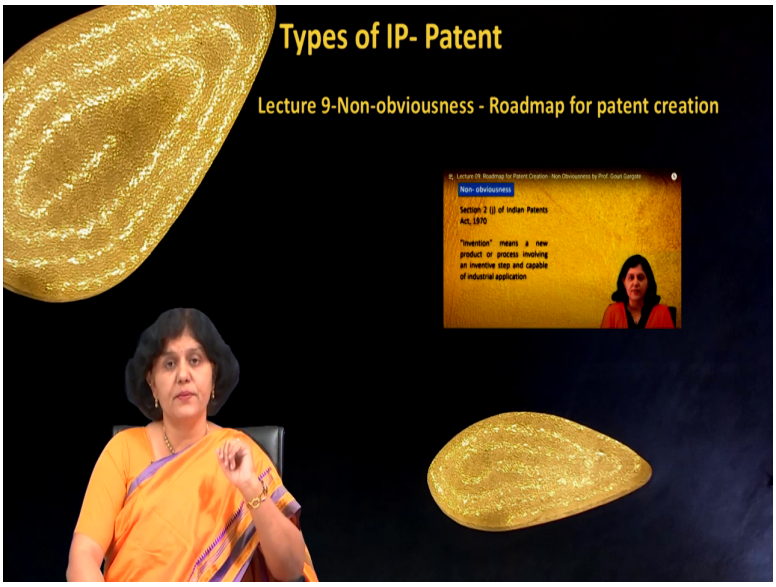

So, you can watch this video actually and get more idea about non-obviousness.

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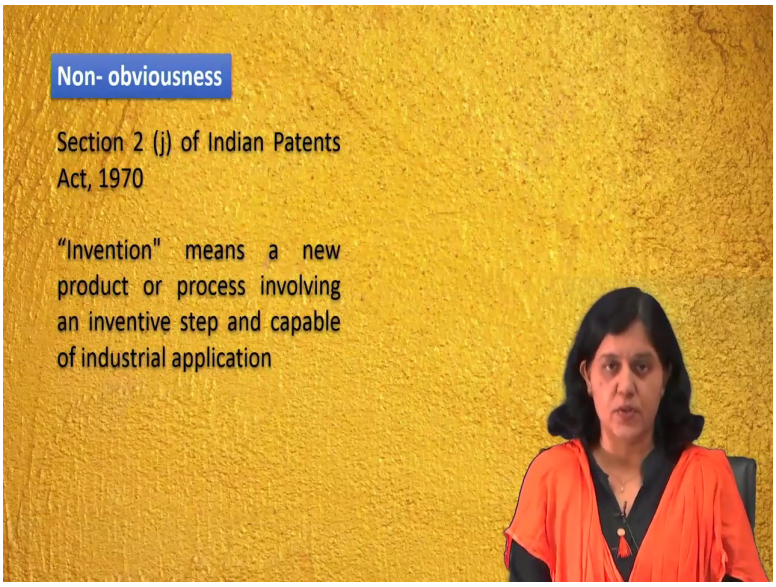

Invention means a new product or process involving an inventive step and capable of industrial application. And we have seen the meaning of new product or process in detail we also mentioned in the definition of a inventive step in the last module. What is the meaning of inventive step?

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Inventive step as a feature of an invention involves technical advance as compared to the existing knowledge or having economic significance or both and that invention not obvious to a person skilled in the art. So, let us see the definition of inventive step in detail as for that there are four points first that is a inventive step as a feature of an invention involves technical advance as compared to the existing knowledge.

So, technical advancement. Second invention must have a economic significance. Third it says it can have both technical advance as compared to the existing knowledge and economic significance and fourth it says invention should not be obvious to a person skilled in the art ok. Let us move further and the third criteria is a industrial applicability.

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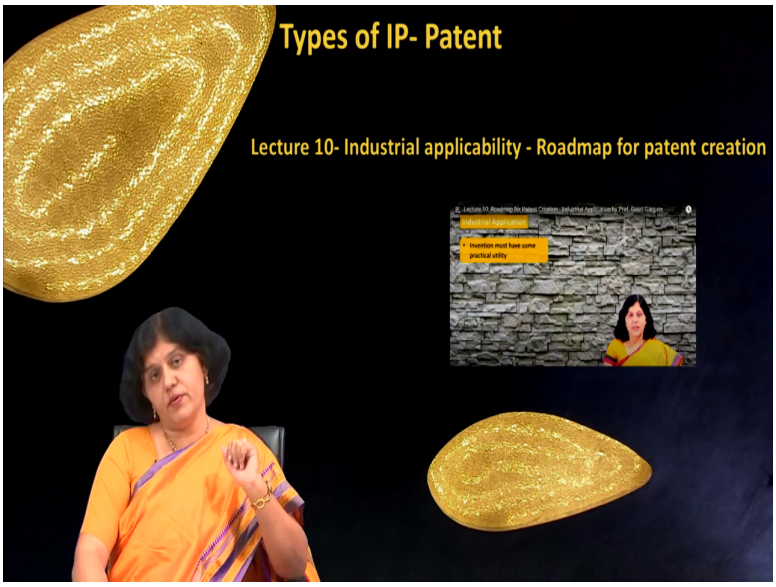

Now, when this industrial applicability criteria is there it is very simple, very simple question you have to ask whether the this particular invention have any usefulness or not. So, there is any applicability industrial applicability otherwise what happens you will make something very fantastic technologically if the appearance of it may be like a something like which looks very high tech and all that.

But if there is no use of that particular whatever the creation is then it can be only, we can say the expression and it will fall into the copyright criteria, but it will not fall into patent because it will not have that industrial applicability that particular expected criteria will not be followed. I hope you understood that something if you make something you have to have that particular article must have industrial applicability. For example, if a very innovative screw you have developed innovative screw.

You also know that stapler pin then the other means such a simple well screw is a we can say the that invention also is like a very interesting story is there behind that, but these are the like the solutions are very simple solutions are there, but the inventions are very fascinating and very useful actually solving that we can say the day to day problem actually.

So, that the solution may be very simple means for example, if you take a bottle and so, for example, this is a bottle you know that this bottle cap is there and for that cap also there is a utility is there right means there is that utility of that cap and for that cap then separately there are more than 1000 patents are there.

So, the criteria is like that there should be the industrial applicability it may be screw, it may be car whatever it may be the invention may be of at any kind of level it may be, but there should be the industrial applicability to know more about this particular thing just you watch the video and you will get more idea about it.

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Now, we will concentrate on the third criteria for patent that is industrial application.

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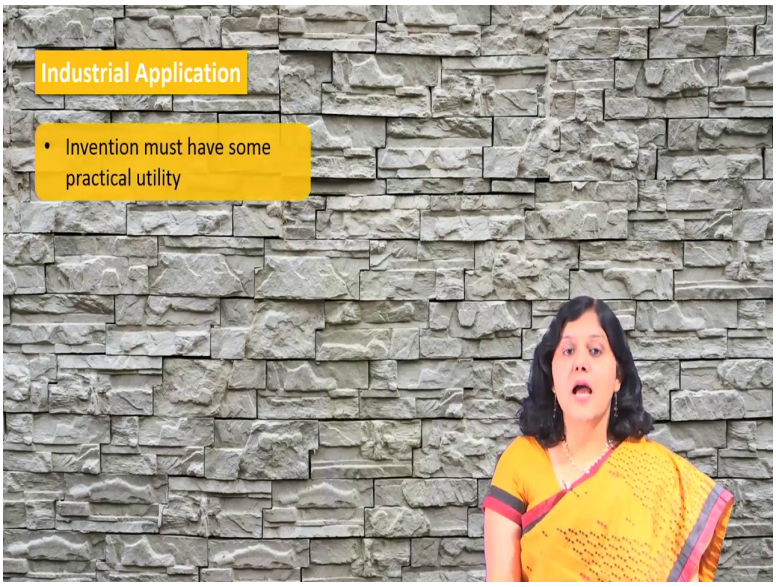

The title industrial application clearly indicates it is application in industry fine. So, the invention must have industrial utility. So, as per the term it is correct that industrial application is application of invention in industry whether loss is same thing let us check that.

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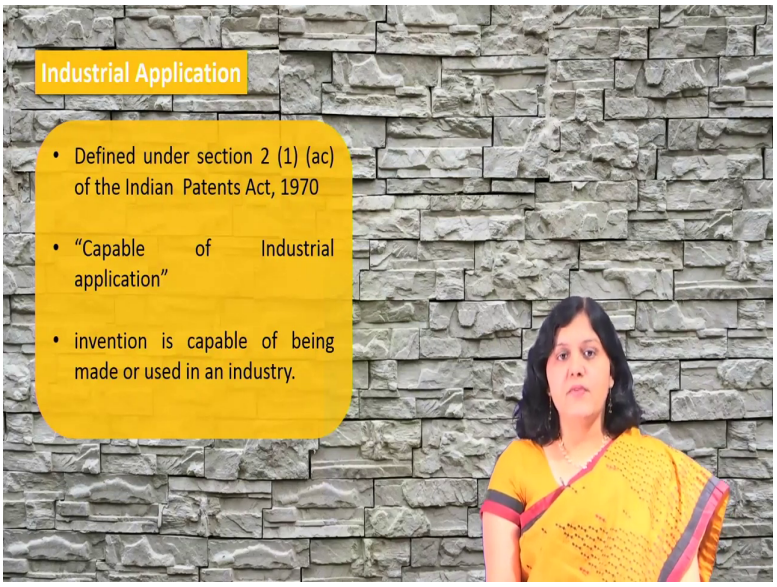

So, how patent act defines the term industrial application? Section 2 1 ac of the Indian Patents Act 1970 defines capable of industrial application in relation to an invention means the invention is capable of being made or used in an industry. So, generally from this definition we understand that invention must have practical utility. Historical justification of the industrial applicability is to assure society receives a positive effect.

Now, as per act we will check the definition. We know the definition of invention and inventive step. So, first step anyone have to do is to consider these two definitions and check if the invention under consideration follows the two definition. Then as per above mentioned definition next step is to check if the invention under consideration follows industrial application definition.

The term industrial application was introduced in Patent Act through the amendment in 2002 it says invention is capable of being made or used in an industry. In Lakhpat Rai and others versus Sri Kishan Das and others it was held that utility does not mean improvement it means practicability. We will see now further details.

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Let us check first what is the meaning of industry. As per investo (Refer Time: 20:03) industry is a group of companies that are related based on their primary business activities I repeat industry is a group of companies that are related based on their primary business activities.

Ok, so let us move further and we will try to understand ok you understood that there are three criteria. So, what are the three criteria are there? Yes novelty, non-obviousness and industrial applicability. Also, we have understood the definition of patent ok. Now we will

move and if suppose you are doing some invention or you are working some doing invention in a sense you are working in some area and probably you are thinking of filing the patent for that particular outcome and that you will call; obviously, as a invention.

So, probably you will require to go through the patent document. So, how to read a patent actually or what are the parts of patent document?

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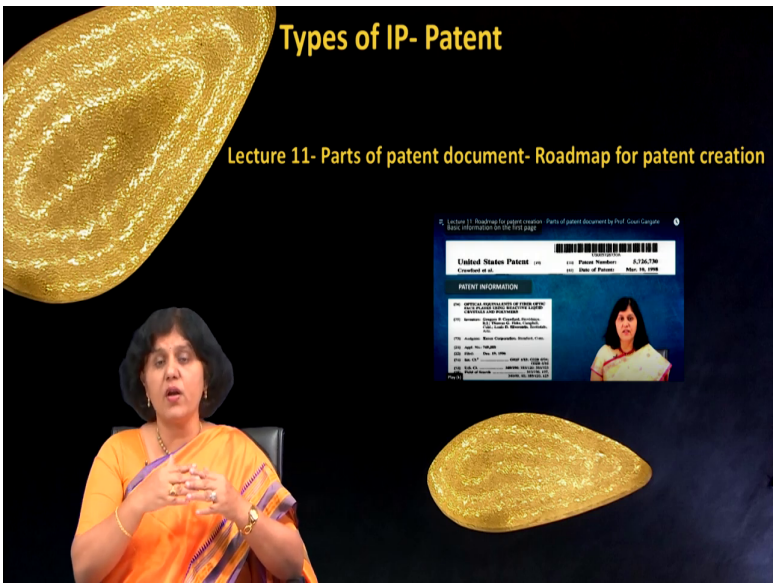

So, please check here that this is these what are the parts of patent document and there is a video also you can watch that, but I just give you the little idea about that particular part. So, that it will be easier for you to go into the details of that particular patent document.

So, there are like a first page is a bibliographic information is there. So, what is that bibliographic information that who is inventor, who is applicant, when this patent is filed,

what is the country of that the priority filing then if it is a US patent you will get the information about the attorney you will get IPC classification details.

Then you will get the details about the abstract how many drawings are there, whether it is granted or it is a application stage everything that information is around the first page that is a bibliographic page. And then the next is like a what happened at the complete document starts and there are the parts like the field of invention, then background, then there is a object of invention, summary of invention, drawings then there is a detailed description and then there is a claims and then the abstract already on first page.

But whenever you are submitting it is on the last page ok. So, this is a document structure is there and anywhere you go, you take a US patent, you take a European patent, you take an Indian patent structure is standard ok. So, please watch this video and you will get more information about this particular document.

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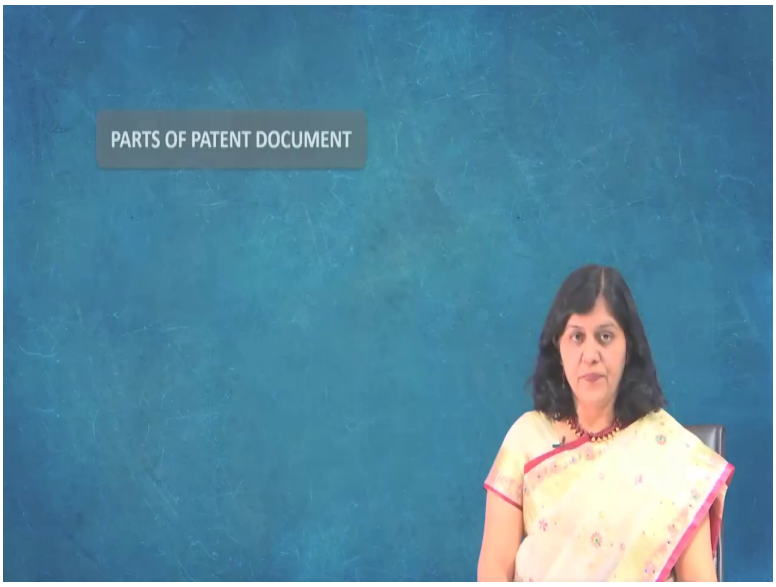

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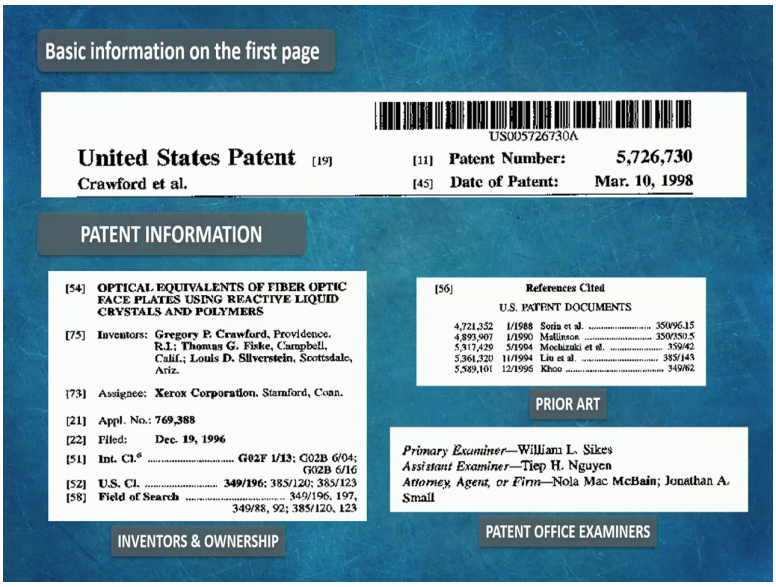

So, check this. This is the first page of the patent document all bibliographic information you will find it on the first page. So, it says United States, Crawford et al, then it says a patent number and a date of a patent. So, this data gives you information as follows. This patent is filed in USPTO office the main or principal inventor is Crawford, the patent number is 5726730 and the date of patent is 10 March 1998. The next it shows information as.

Optical equivalents of fiber optic face plates using reactive liquid crystals and polymers. Then it says inventors there are three inventors; Gregory Crawford, Thomas and Louis and their addresses are also given then assignee that is a Xerox Corporation, then application number 769388 then it shows information as this patent is filed on 19 December 1996.

Then it says international classification is G02f 1 slash 13 and then other IPCs are mentioned then there is a US classification as 349 slash 196 and then further it is other US classifications or classes are mentioned.

Thus, it is a rich source of information. What it says? What is the title of the invention? Then who are the inventors? Who is the assignee? On which date the patent is filed? Which is the IPC class related to this paten? So, the title of the invention is Optical Equivalents of Fiber Optic Face Plates Using Reactive Liquid Crystals and Polymers. So, this is the title of the invention.

Then you have received information that Gregory Crawford from Xerox has invented this invention along with his colleagues. The applicant is Xerox then further it lists down information cited in this patent. So, the references are given here. Further it gives information about who are the primary examiners, assistant examiners, attorney, agent or firm.

Thus, we received information about patent application details, inventor ship, ownership then what is the prior art related to the patent. And who are the patent office examiners as well as who have drafted this patent. All this information you are getting it on the first page of the patent document ok.

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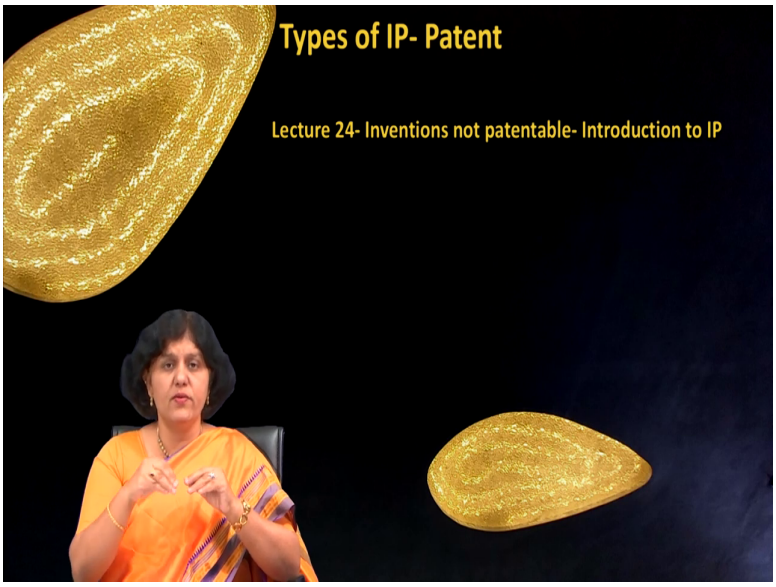

So, now you feel that ok everything is fine, three criteria it is novelty non-obviousness and all, but there are certain things which inventions means such inventions are not patentable. So, according to Indian Act actually there are certain inventions which are not patentable.

So, you can watch this video and you can get understanding about what the inventions are not patentable, but before going into the video details since you go into the that watch that video, I will say that the few examples I can show. So, that it will be easier for you to understand that.

So, Second 3 defines that what are the inventions which are not patentable according to Indian Patents Acts 1970. So, the anything which is against public order, anything which is a frivolous, a mathematical expressions, computer programs per say, then there is like any environmental related which are any mention which will damage environment, parts of

animals parts of a that any parts of animals or any technique which is used for a increasing the productivity of that animals and all.

We are not allowing that particular kind of a inventions patentable they are not patentable in India ok. And there are mere admin mere you means admixture and then there is a criteria like a new use of a known substance and all these details are there in the this Section 3.

And there is one more section which is talking about a inventions not patentable considering the security of the country and that is the Section 4. So, when somebody ask you that which are the sections which are determining that inventions not patentable then Section 3 and Section 4 both are important.

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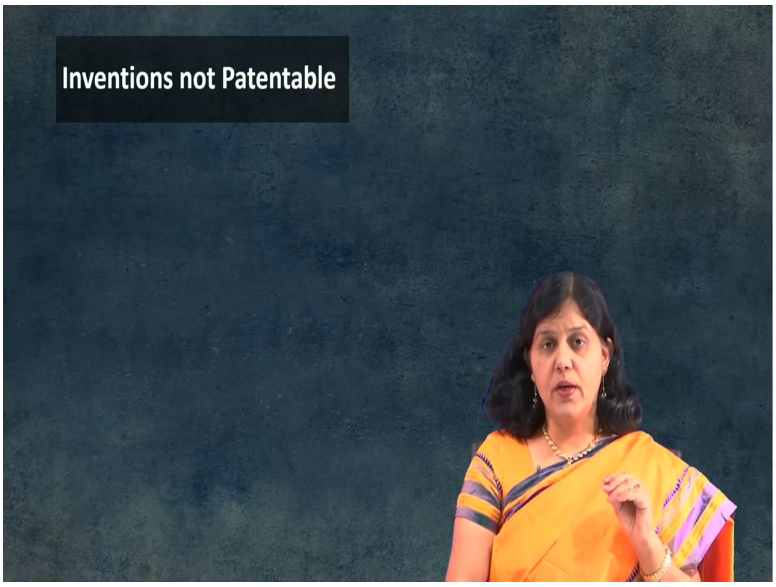

So, let us watch this video. Having said that and with this background we will check the list of inventions which are not patentable ok.

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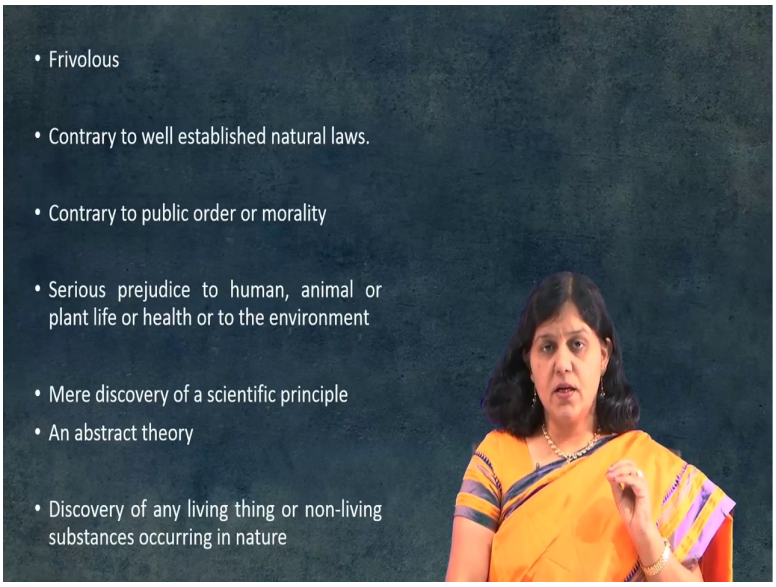

So, inventions which are frivolous or which claims anything obvious contrary to well established natural laws I repeat, the inventions which are frivolous or that is a one thing or which claims anything obvious contrary to well established natural laws. So, what is the meaning of this? We will understand this with a example, we will take one example here.

Development of a perpetual motion machine if someone claims that he or she has invented a machine perpetual motion machine; obviously, it is not possible it is against the natural law. So, it will not be patentable or if someone claims that he or she has created a machine where

if you put some vegetable in that machine automatically it will convert into metal say gold or platinum.

So, conversion of vegetable into gold or platinum if someone claims that kind of invention definitely it is not possible at least up to this time it is not possible from vegetable platinum this is a frivolous. So, if someone claims such invention then that is not patentable ok. Now, next that ok you have understood what is patent, what are the criteria now you have gone through the patent document now you have to file the patent. So, what is the procedure for that?

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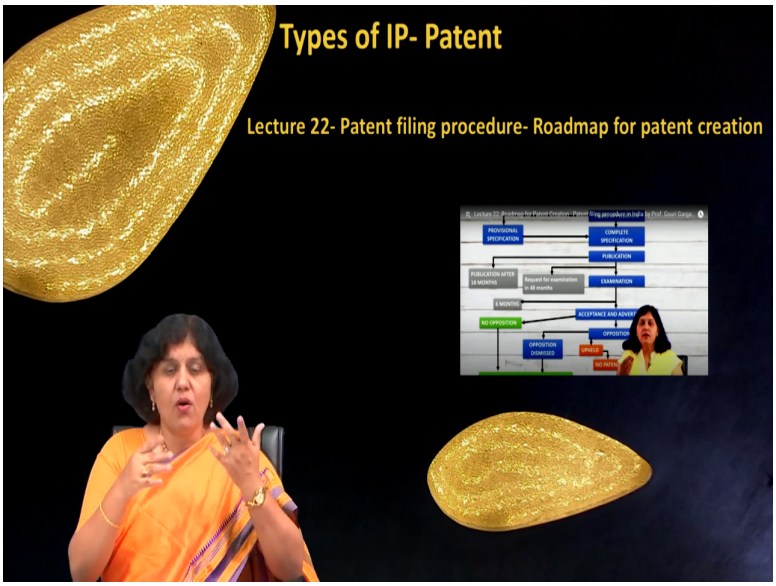

So, to understand that that ok what procedure to be followed, which are the forms, what are the fees to file the patent, then what is the timeline for patent filing and all. So, probably this video will help you to know that how exactly the patent filing goes and it will give you idea

that what is provisional specification, what is that complete specification, then what are the timelines for that 12 months timeline then the PCT filing is the then what exactly will happen after you file the patent, what is the FER all these details you will get in this video.

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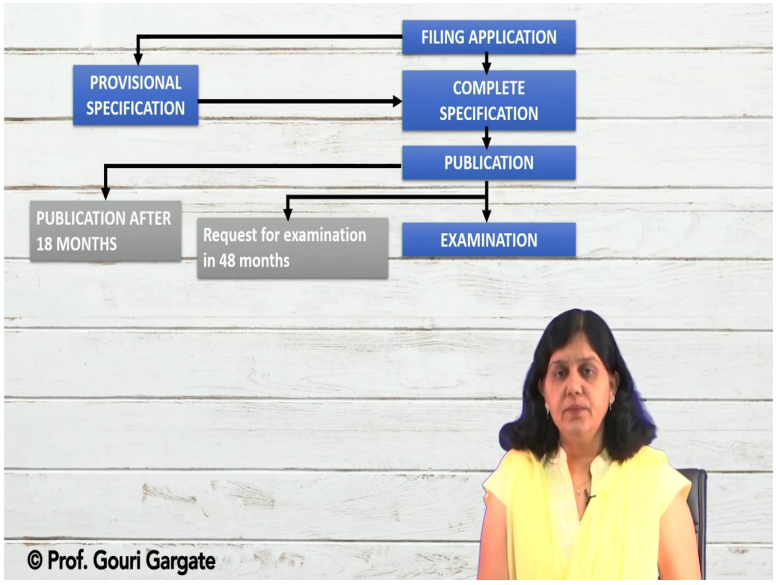

So, the first step is applicant will create a document that may be provisional specification or it may be a complete specification. Next is a publication what is the meaning of publication? Here after 18 months the patent application will be published it is automatically. So, based on the date of the application you have filed either it may be a provisional or a complete that 0 time is considered and from that 0 exactly at the end of 18 months your patent application will be published.

Now, the third step next step that is a examination whether this is automatic like a publication or you require to give some fees for that. Yes, you have to give fees for that it is not automatic

you have to file the request for examination. So, here the applicant have to give the request for examination along with the requisite fees unless until this request is received by the patent office the application cannot be considered for the patent examination.

Ok, now we will go further and to help you actually because what happens that the sometimes you understood this is the way which you are going to file the patent and you are like this is the timeline, the PCT timeline and then India timeline and this is the way with which the prosecution will happen everything we understood. Now, the first question comes that ok is there any tool is there any easy way that?

Because I cannot go every time to the patent expert to know that whether my invention or whatever outcome of my research is patentable or not.

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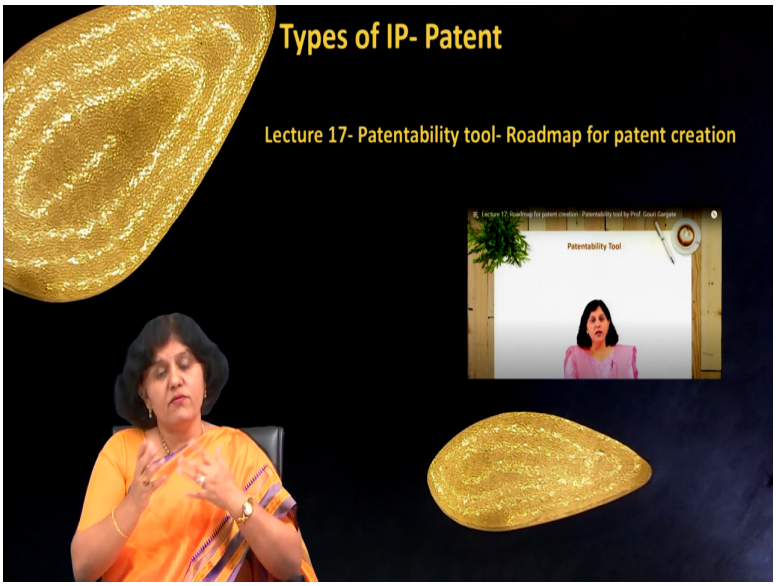

So, I cannot go every time to the that expert actually because the for that meeting also the expert will charge you some fees actually. So, is there any tool which will help me to understand that yes if this invention whatever I am talking about whether I am dealing with whether it is patentable or not. So, just check this video actually and in this video what we have done in this video we have shared a patentability tool actually.

So, simple yes no kind of answers you have to give and just go through that tool and then it will be easy for you to take a decision whether you should go for a provisional filing or not. So, just watch this video.

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We will go through patentability tool we will see in detail how exactly anyone can judge whether the invention under consideration fulfils or satisfies the criteria for the patent. So, let us check what is this patentability tool is, the patentability tool will concentrate on a single

invention disclosure or technology domain and it will help to check out whether the invention under consideration is patentable or not.

Ok so we understood that yes that what is patent what are the criteria for patent, then we have understood the what are the parts of patent document, then we have understood that ok if these are the parts and all, what are the inventions which are not patentable what is the that timeline PCT timeline or conventional patent timeline actually and then the prosecution actually how exactly prosecution happen.

Now after knowing all this I guess and after going through all these videos if you before also if you have not gone details about patent probably this videos will helped you to give a pretty well ideal about this subject actually that is this type of a IP.

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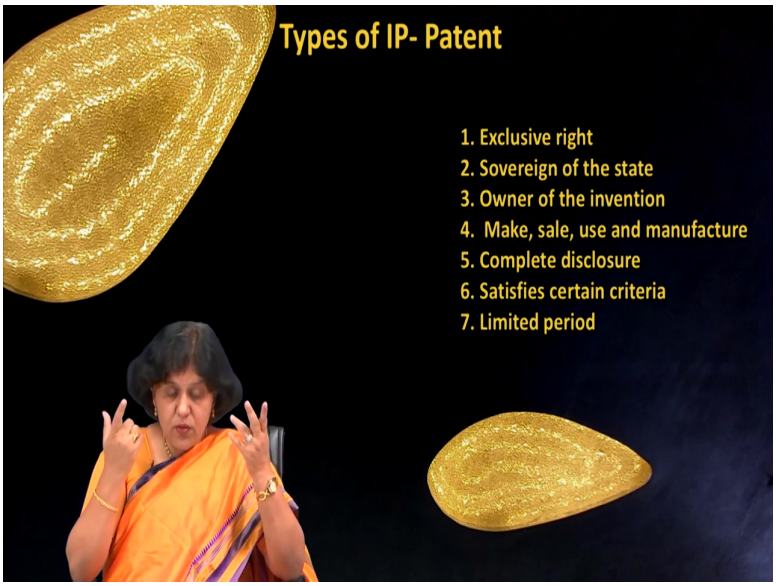

So, to summarize actually if I want to summarize, I can say that it is a exclusive right given by whom sovereign of a state to the owner of the invention, for the make use sale and manufacture then upon complete disclosure and we can say that the certain criteria you have to follow and it is for a limited period that is a you will find out that period. Because you have watched the video now so, you will find out what is a life of a patent ok.

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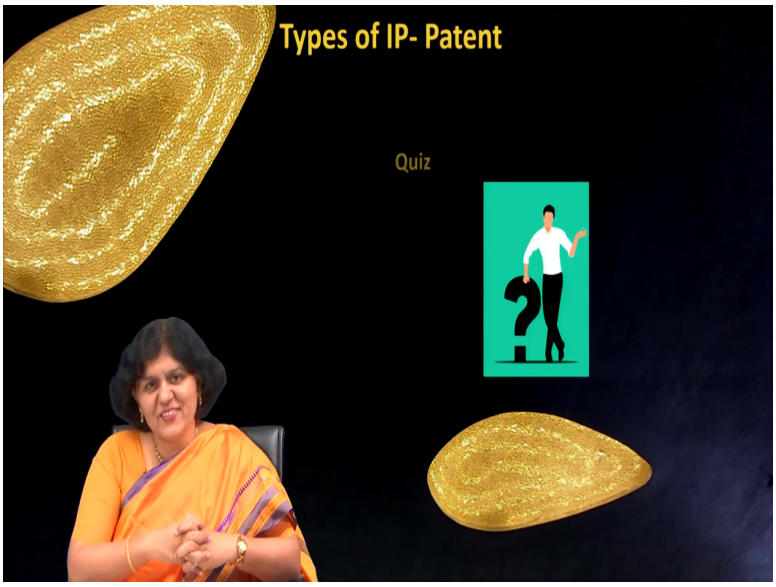

So, the quiz time and I have already expecting you to check out what is a life of a patent and just write down in the comment box. And I hope you have got the pretty well idea about this type of this type of IP that is a patent because that is I will again will not say that one of the important I will say I will not say only important it is one of the important type of a IP.

So, the first question already you are going to answer that is life probably you have already answered that question because it is very simply you probably have watched that video. So, you know now a simple one more question that what is a from where that 20 years start.

So, just find out that suppose I file a patent in India today and maybe after 6 months I am filing it in USA and then after 8 months I am filing in Europe, 9th month I am going to you Australia and maybe 11th month I am filing it to South Africa [FL] good enough. Now, you just tell me if I am filing in these countries at different dates how I should calculate 20 years what is the starting point for that 20 years just check out ok?

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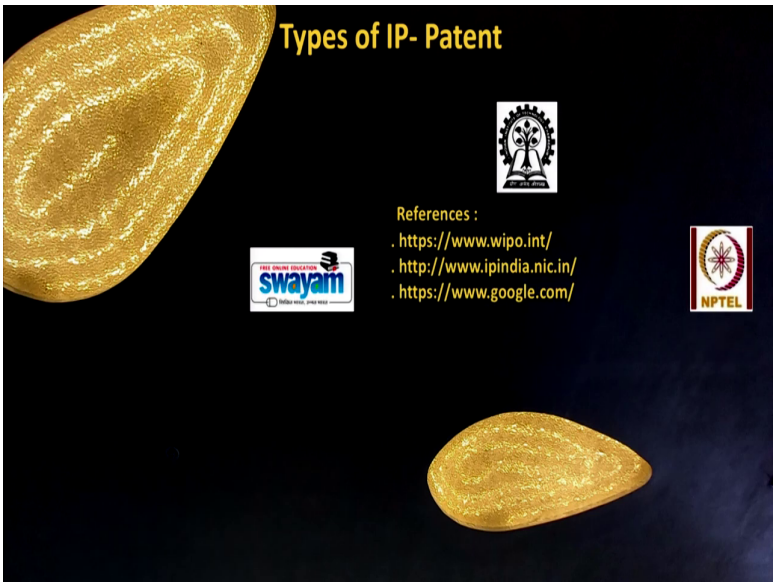

So, write down in the comment box your answer see you in the next session.

Thank you.