Patent Search For Engineers and Lawyers
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Lecture – 16
Types of patent Search

Welcome to the lecture on the Types of Patent Search. In this lecture we will do the following concepts.

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Types of patent search one of the searches which is patentability search understanding the invention disclosure process.

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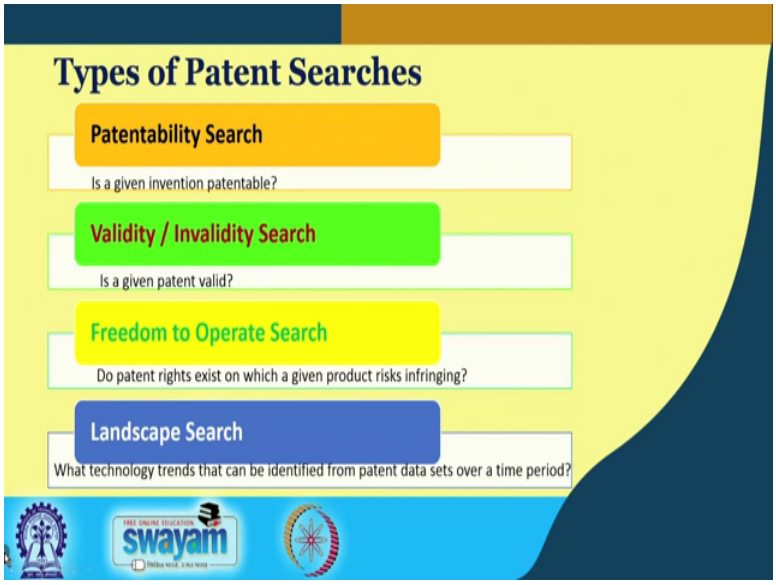

There are different types of patent searches undertaken worldwide in relation to search. One type of search is the patentability search which is essentially to identify whether a given invention is patentable.

The second type of search is called the validity search or is also called the invalidity search, this is typically done post grant of a patent to address the issues of validity of a particular patent. The third type of search is called the freedom to operate search this type of search is essential before you bring the product into the market to look at if there are any patents which are possibly going to be infringed. The fourth type of search is called the landscape search, which is an extensive search to understand technology trends in relation to a given area utilizing patent data information.

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Today we will discuss the aspects of patentability search.

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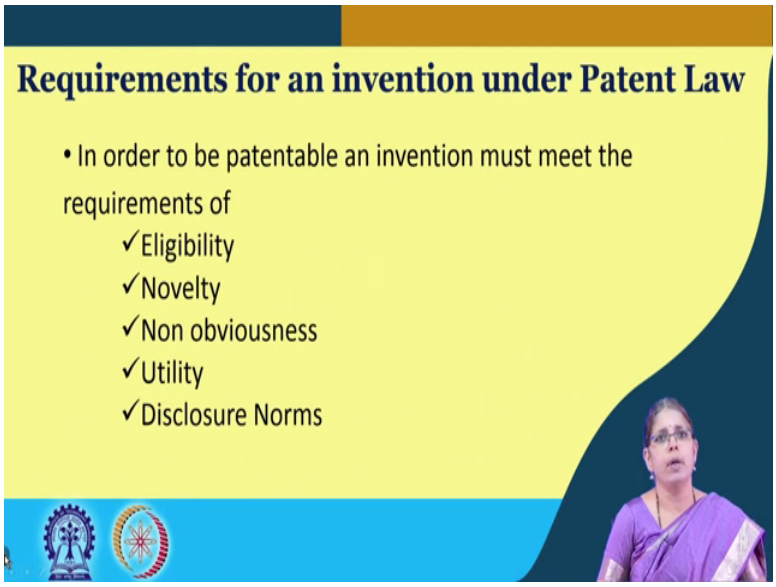

Before we go into the aspects of understanding patentability search, it is important to take into consideration the requirements of an invention under patent law. To understand the requirements one needs to keep in mind that patents are given to inventions and inventions must meet the following criteria is that an invention must be eligible that is it should be eligible under the law for patenting. The second criteria is novelty third one is

non obviousness, then comes utility. Novelty, non obviousness and utility are essentially the patentability criteria.

So, we have patent eligibility and then we have patentability criteria all of these must be in the form of disclosure. So, therefore, there are norms with respect to how this information must be disclosed in patent applications.

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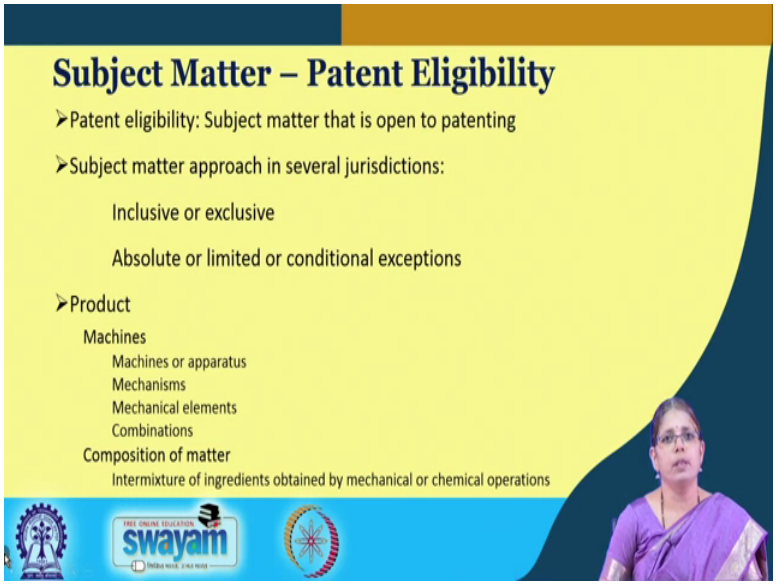

Patent eligibility is about the subject matter that is open for patenting. Different jurisdictions differ with respect to the eligibility in relation to patents. Some jurisdictions have a very inclusive approach in which the provision of the law is open in terms of not specifically mentioning what is not patentable under the law and broadly giving certain subject areas or subject matter with respect to patenting.

So, in a given provision under the law you may have that new methods, new apparatus, new machines or combinations of those could be patentable. If they are useful that is a very very simplistic way of looking at a eligibility provision. Whereas, in many other jurisdictions which includes India. There is a restrictive way or rather the exclusive way of providing the options in relation to eligibility. So, under these laws what are not inventions is specifically mentioned. So, where a statute mentions what are not inventions it means that, certain subject matter is excluded from the purview of patenting.

So, which means that those laws are very restrictive in their scope in relation to a certain subject matter. So, therefore, there are other conditions also which can be imposed in relation to eligibility. For instance public order is one there could be conditional aspects in relation to eligibility. So, therefore, the jurisdictions vary from what we call absolute terms, limited sometimes and in terms of the exceptions. There are different subject matter that can be coming under the purview of patent eligibility.

So, when we say subject matter it is essentially the concept which is claimed as part of the claims. So, here we are looking at a given product or a process or a system or it could be a combination of any of these which could be the scope of subject matter in a given patent application. So, for instance we are looking at machines we can have different machines or apparatus, the combinations of different structures which could be taken as part of patents.

So, the apparatus claims, device claims are these which are structure related. Now in the area of unpredictable arts which the area of pharma and biotech belong to, we have the we have them taken as in the composition of matter. So, composition of matter claims are essentially about the use of different ingredients, chemicals, even the area of biotechnology where they are modified genes and the constructs are taken and then interventions. These come under the word purview of what we call composition of matter under the given provision which can be can be interpreted under the law.

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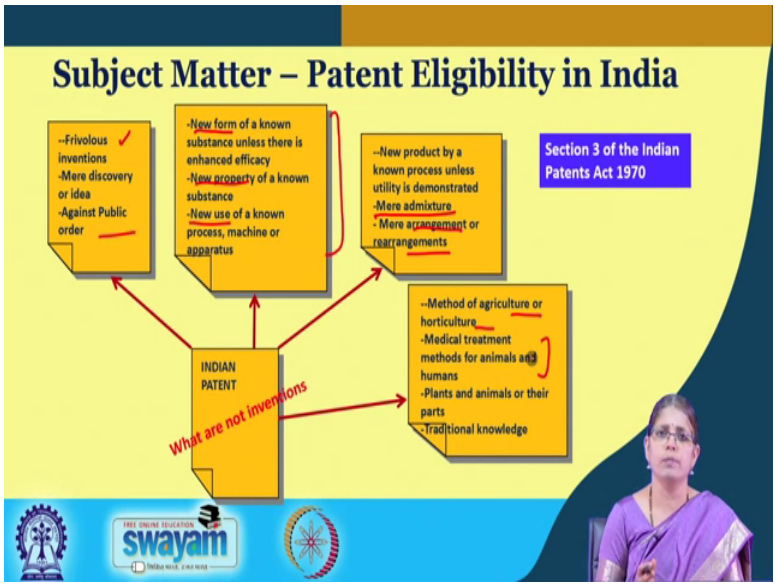

Moving on, in India patent eligibility from the point of view of section 3 has certain connotations. Under section 3, it starts with section 3 A and goes up to section 3 P. So, almost a significant part of the English alphabets you can imagine A to P.

So, these are the different provisions under section 3 and subsections which indicate to what are not inventions which means these are not allowed as inventions under the Indian Patent Act. Some of the examples are for instance inventions which are frivolous cannot be taken as inventions mere discoveries or ideas are not patentable, the expression of an idea is patentable provided there is utility and it is in a tangible way in terms of a product or a process. Those inventions they could be very novel not obvious, but which are against public order again cannot be allowed as invention. So, that is one; those which are harmful to the environment and those which are harmful to living organisms are also not patentable. The connotation under the law is that those which are primarily.

So, it is possible that there are chemical inventions which are secondarily harmful for the environment. Those do not come under the purview of the restricted subject matter those which are primarily harmful come under the purview of the subject matter. So, it is also important to understand the scope of the restriction that is provided under a given provision under the law. Another important category of inventions which are not allowed under the Indian Patent Act are the specific reading of section 3 D in which there is new form new property new use.

So, new form of a known substance in India will not be patentable unless there is an improved efficacy. One can recall the recent case of know what is versus in north India where this was discussed from beginning from the High Court to the a way up to the Supreme Court. So, what is the issue here it is about a particular compound whose salt form is taken as a patent in India.

Well I was moved as a patent application India, it was rejected by the patent office this went down to the IPAD the Intellectual Property Appellate Board post which it went to the Madras I could and from there it went to series of steps to the Supreme Court. The issue here in consideration is that, it is not an allowable subject matter because in 1993 the freebase of that particular compound was already patentable was already patented and in India the salt form of it was being moved as a patent application.

So, since it is a restricted subject matter under the Indian Patent Act the new form of a known substance would not be patentable. It can be patentable only when there is enhanced efficacy and today enhanced efficacy is interpreted under the law to be therapeutic efficacy. Another reading of section 3D is the new property of a known substance.

So, in India new properties of known substances will not be patentable. For instance it can look at a particular compound which is having some let us say temperature tolerance property. An alternate property in terms of conductivity would not be patentable because it would be a new property of a known substance. Similarly new uses of known substances machines apparatus are not patentable India, these are what are called Swiss claims which are again not allowed a subject matter in India.

However, they can be taken as patents in the other jurisdictions subject to the criteria provided under the specific law. There is also other kind of subject matter which is also not allowed under the Indian Patent Act. For instance mere admixtures mere arrangements and rearrangements which indicate to mere innovations mere changes which do not indicate to technical advances would not be patentable. Similarly methods of agriculture and horticulture are not allowed as subject matter in case of patents.

So, in the area of agriculture what is patentable? Agricultural implements agricultural tools they are patentable because they are not methods of agriculture's since therefore, it is a bar only for methods of agriculture and horticulture. And if one would look at the interpretation of the word agriculture, agriculture would involve agriculture, agriculture processes including the cultivation practices associated with agriculture. So, prawn cultivation fish cultivation all of that could come under the purview of agriculture. The other subject matter which cannot be patented in India is the medical treatment methods for humans and animals, which means surgical methods, cosmetic methods, curative all of this and diagnostic methods cannot be allowed as patents India, but a diagnostic tool can be can be patented.

So, therefore, there are restrictions which are provided under the Patent Act. Living organisms particularly the plants and animals and their parts are not patentable which includes also the in case of plants the seed also. However, this restriction is not imposed

on modified microorganisms. So, that is the section 3 j which is in relation to living organisms. One important aspect of the section 3 is about traditional knowledge.

So, inventions which are in effect traditional knowledge are not patentable under the act this is one important provision to secure the traditional knowledge information in the case of our country. So, what would be exempted out is that those which are derived out of traditional knowledge are perfectly patentable. So, which is in effect traditional knowledge is not patentable.

So, understanding the patent eligibility requirements is as much important in relation to going about with the patentability search.

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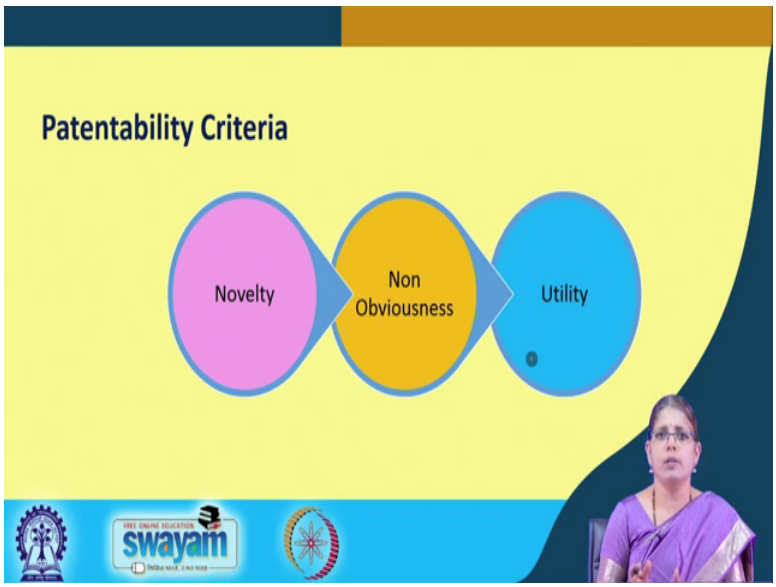

So, we continue with the discussion on where we come to the point of understanding the next important set of criteria which are called the patentability criteria. So, a given subject matter in the case of an invention whether it is a product, process, system method must be novel not obvious and must have utility.

So, these are what we call the patentability criteria. Fundamentally the first important criteria is novelty. If an invention satisfies these 3 criteria it can be allowed as a patent under the given law. Let us understand the different aspects of what is novelty, what is non obviousness and what is utility and how these are comparable in relation to a given invention, how does one decipher novelty in relation to a particular invention.

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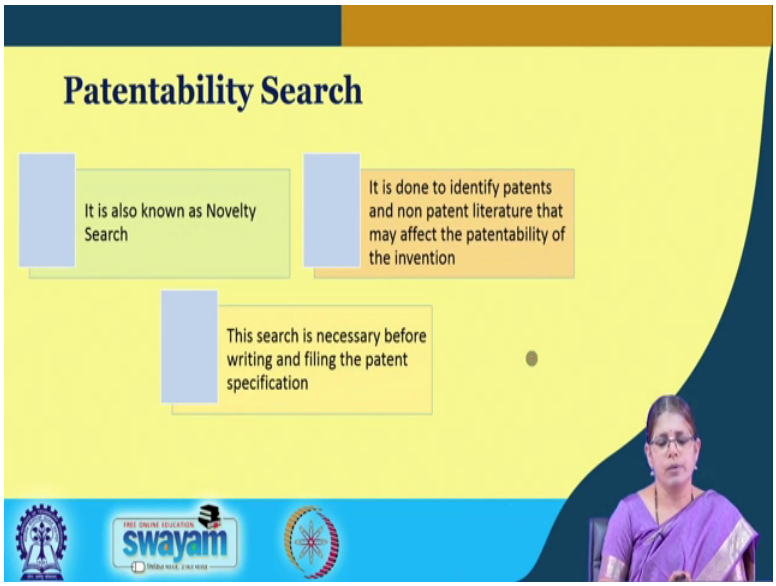

When we conduct a patentability search, fundamentally we are we are interested in the novelty of the invention. So, therefore, patentability search is also called novelty searches and why are they conducted they are conducted to identify the prior information in relation to the invention.

So, as on date if you are looking at a particular document which discloses an invention, the way of looking at the patentability search is to look at what is prior to the invention, is the same invention disclosed prior to the in the invention; which means we are looking at the entire body of knowledge which includes publications patents to identify whether it is the same invention has been disclosed earlier. So, the two sets of data we typically search for which are patents and non patent literature. This search is necessary before you embark on writing and filing the patent application in a given patent office.

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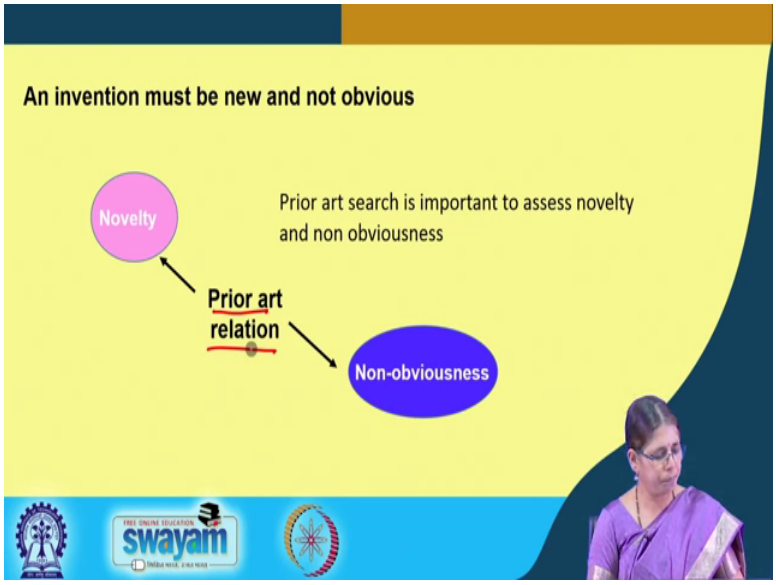

So, when we said they an invention must be new and not obvious, the relationship of a of establishing whether invention is new or not obvious comes in relation to what we call the body of knowledge which is called the prior art. So, prior art is all that body of knowledge prior to the invention and so understanding prior art relation is a very important consideration in establishing the patentability of a given invention.

So, a prior art search must be undertaken to determine these two criteria.

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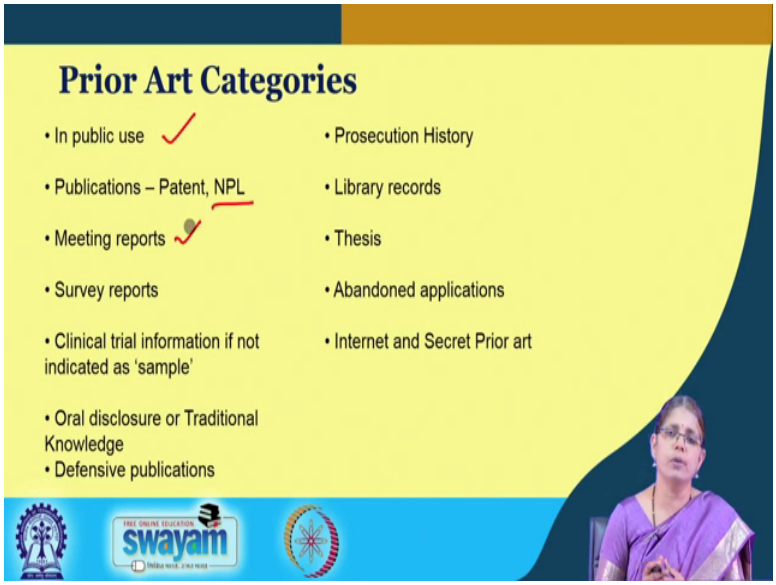

There are different prior art categories which we come across in patent applications, when we when we look at the prior art search. So, prior art search is done in relation to

patents and in relation to non patent literature. There are several categories of prior art which we search for one is in public use. If the invention is already publicly used it is no longer novel and it does not warrant a patent grant or a monopoly for 20 years.

So, the invention is no longer novel. Publications are one body of literature which are searched for and in this we have two categories patents and non patent literature. Data submitted and disclosed in form of meeting reports are also important to look at survey reports sometimes looked at for assessing novelty. Clinical trial information is also another category provided the samples are not indicated as test samples or sample..

If there is a sample which is coded as sample of a test that will not come under the purview of what we call the prior art which is relevant for the novelty purpose. Another important category for prior art is traditional knowledge or oral disclosure. It is very interesting that not many laws not many patent laws in the world recognize oral disclosure as part of the statute, which in the case of which in case of India we recognize traditional knowledge from a statutory standpoint.

So, it means that the information that is present in certain communities let us say in relation to the practice of a particular area cannot be taken as an invention. So, there could be compositions there could be there could be mixtures which are used the process of making those make those compositions the way of using them these cannot be bound into patents because they are already known knowledge a lot of defence defensive publications are filed across the world they also are an important category for conducting prior art search. Other than this aspect, we have some other records also which are essential for looking at them as prior art. Library records are also prior arts from the point of view of a given invention they can be also assist. From the point of view of the interpretation of the law the indexing of a record itself means that the record is available for access and so, therefore, such records become part of what we call prior art..

All the published thesis information also is again a category under the prior art. So, the novelty of an invention can be defeated by the prior published thesis which discloses the same invention. Internet as a search engine the information that that internet provides for in terms of web pages can also be a potential prior art in case of assessing novelty of any given invention. The prosecution history in relation to the patenting process can also be a potential place for looking at the assessing the novelty, where claims are not allowed and

so, that becomes a point of record in terms of assessing the novelty in relation to certain patents. Secret prior art is that part of the prior art where it deals with the earlier applications that are residing with the patent office.

So, which are not available as published documents and so, therefore, they become a category called secret prior art.

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A whole body of information which relates to the technical information available in different databases today is available for easy access in order to carry out what we call the prior art search in relation with non patented literature. This can encompass a whole series of a documents which can include handbooks, textbooks, encyclopaedias, conference proceedings technical reports dissertations..

There are also a lot of industry reports which are published which are the trade publications or the industry publications, newsletters sometimes newspapers can be potentially another place for looking at the prior art and websites. It is important to keep in mind these different prior art categories so, that one is the assessment of the novelty of the invention another aspect that we need to keep in mind is if you have an invention already with you it is not good to be disclosing in prior to filing a patent application.

So, therefore, many a time researchers are looking at what is the right stage for filing of a patent application and today with the digital digitization of information, the information

dissemination is extremely high and rapid. Given the nature of a social networking and websites available under this social media network, many a time researchers are not clear about whether they should disclose the information on a social network.

One important warning to all the inventors is that, if you have a potential invention in hand it is not good to be disclosing because that would be your own disclosure in a social website or let us say a newsletter or a proceeding would be potentially a case for what we call self anticipation which means, your prior disclosure in any of these documents will potentially defeat. The novelty of the invention the only exemption in this case is if a country provides grace period.

There is a grace period available under the Indian Patent Act that is from the date of disclosure 1 year is the time period by then you should have actually gone on filed a patent application at the Indian patent office. Though there is this learner society disclosure to a learner society is exempted from the point of view of anticipation under the Indian Patent Act. Nevertheless we usually advise researchers not to be disclosing in any of those for a if there is a potential in invention which they have at hand. The good thing would be to go and file a patent application and then mention the patent application number in their proceeding. So, what happens is at least you have staked the priority in relation to that particular invention.

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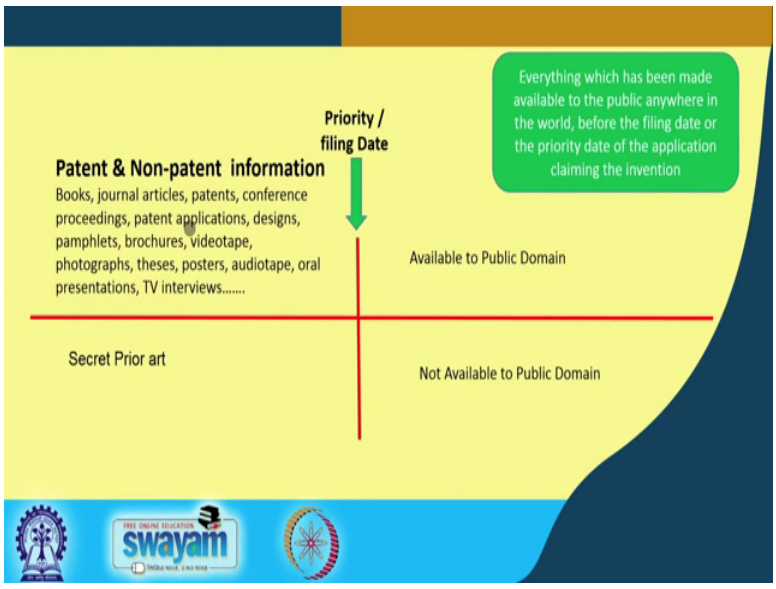

Moving on. So, we come to the discussion on what we call the priority or the filing date. This is fundamental to the novelty of an invention there are researchers across in the world working on inventions in different areas. It is possible that many researchers are working in the same area and the same invention what matters is whose stake the first priority on the invention who filed first. Today more or less most jurisdictions have the first to file system. In the first to file system the first one who files to the patent office stakes the first priority on the invention. It is possible that the there could be different inventors of the same invention, but the discovery phase on who is the true inventor comes only in the later part of the patent application and the prosecution.

So, the first to file eases out on the filing system wherein you actually go and first file at the patent office and any inventor ship issues if they were could be treated in the later part of what we call the inventor ship determination. In the earlier first to invent system it was important it at least in the case of the US which followed the first to invent system. It was important to go to an inventor assignment route and indeed then and file at the patent office. Today those procedures are simplified and the administrative simplicity has brought in by introducing the first inventor to file system in the case of the US.

So, determining the date of filing in relation to an invention is very important and that determination happens by looking at the record notebooks, information which is available with the inventor.

So, the prior art search that you undertake should be with respect to the as on date that is assuming that today is the date of the filing, when you are looking at determining the novelty and the patentability criteria in relation to invention one must consider the prior art which begins from yesterday. So, that is the body of information one should search for and; obviously, you are looking at the entire published information that is present. The challenge that we have with respect to looking at a documentation in relation to publish the data is that it means anything available which is published in the world. Information from all patent offices is not available in the uniform way in case of some patent applications only the abstract is available.

So, therefore, it is often very difficult to get the full text information in relation to the invention and so, therefore, a range of publications and the information present in the

public domain is taken as the entire body of the prior art for the consideration for assessing the patentability criteria.

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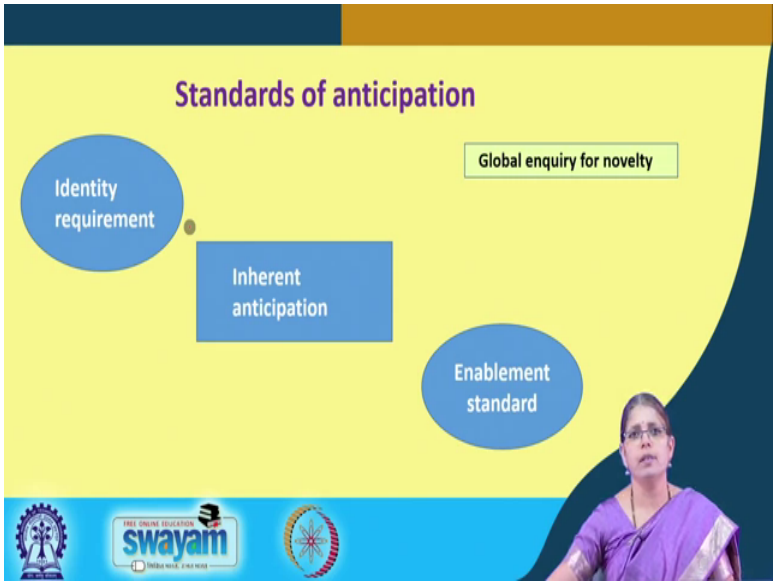

Let us understand the relationship between novelty and anticipation. A simple relation between novelty and anticipation is, the higher the anticipating art the lower the novelty which means novelty and anticipation are inversely proportional. So, greater the anticipating art the lower the novelty of the invention.

So, when we are looking at prior art and considering a given prior art to be anticipating in relation to the invention, we need to understand what are the different yardsticks by which we need to assess novelty. And through various case laws the standards of anticipation have been determined. One is what we call the identity requirement which means simply. If your invention has a mirror image in the earlier published prior art it means identity is met and that particular prior art defeats the novelty of your invention. So, here we call identity requirement as an important requirement and to defeat the novelty.

So, the determination of novelty is actually a matter of fact which means suppose the invention has four features, we are looking at these four features precisely in the single prior art prior to the date of the invention. And if all the four are there simply it means that identity is met. So, that is one standard of anticipation the second standard of

anticipation is what we call inherent anticipation. Many a time the prior document or the prior disclosure may have elements which can be combined.

Let us say 1 plus 2 plus 3 gives an invention x and x is your invention now let us imagine that there is an intermediate that is possible in relation to the combination of let us say 1 2 and 3 which inherently is present or has to be made. A later invention cannot be claiming that because the prior disclosure inherently has that particular compound though not disclosed in it has that.

So, this comes into the picture of what we call inherent anticipation and it comes from what we call the doctrine of inherency. This is very relevant most of the time for pharmaceutical cases and for biotechnology cases the third standard is what we call the enablement standard. Now enablement standard is another standard which means that when the features are disclosed in the prior art the feature should be enabling in nature. So, there are two conditions which will be necessary to look at from the point of view of her whether a prior disclosure comes under the purview of what we call the enablement standard for novelty.

One is in which case let us imagine there were four elements in your invention and those four elements are there in the prior art. If by general information you are able to construct the four elements then we can say that enablement standard is met. Though the enablement has not been clearly defined in that particular document, but you are actually extrapolating that to be easily we made into a particular component. The second scenario is where the document specifically discloses that this enables the making of that component.

So, enablement is one important standard which we discuss in relation to the novelty. So, novelty should be enabling in nature. So, these are the general standards for anticipation which are considered for analysis of novelty of patents. So, this is where we look at the basic aspects of understanding novelty, we move on to the next one in relation to the discussion of the further aspects of anticipation.

Thank you.