Patent Search For Engineers And Lawyers
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Lecture - 07
How to read a patent document- Patent Anatomy (Contd.)

So, let us continue with the deliberation on the different patent data different patent documents and the data covered under each of those documents.

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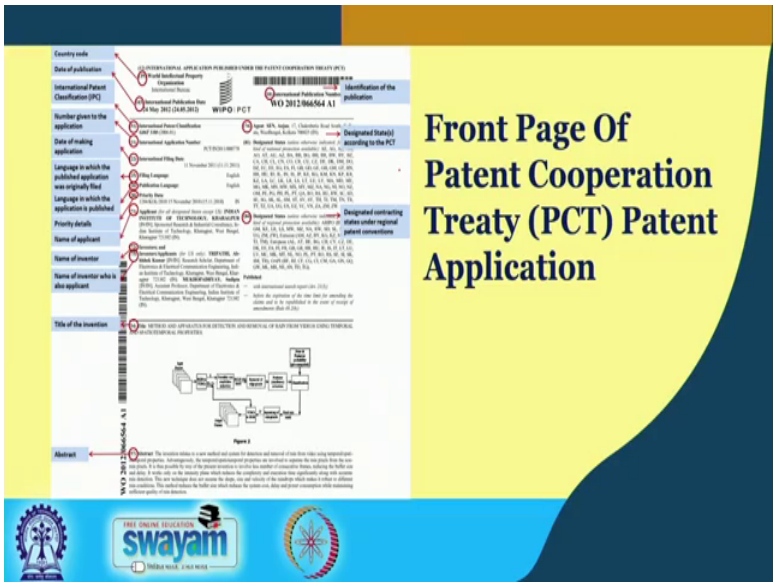

The documents published under the PCT by the WIPO are what we call the WIPO document the WO publications and this is one example of a patent which is published under the PCT mode. Here you can see in this particular document also you have the INID codes represented

So, in the later part of the lectures we will understand the value of looking at the WIPO database where is they the database is called the patent scope where you can access the information in relation to the documents which are published by the WIPO. So, here you see again some different some different aspects of the data that are available which are not present in the other particular applications that you see. For instance you can see the designated states according to the PCT that information is available here in this particular document.

Each patent document though very similar in nature there are facets of where there are there could be differences for instance a PCT document has to follow the PCT regulation. So, there are small differences when it when it comes to the presentation of the abstract viz a way the patent offices in general.

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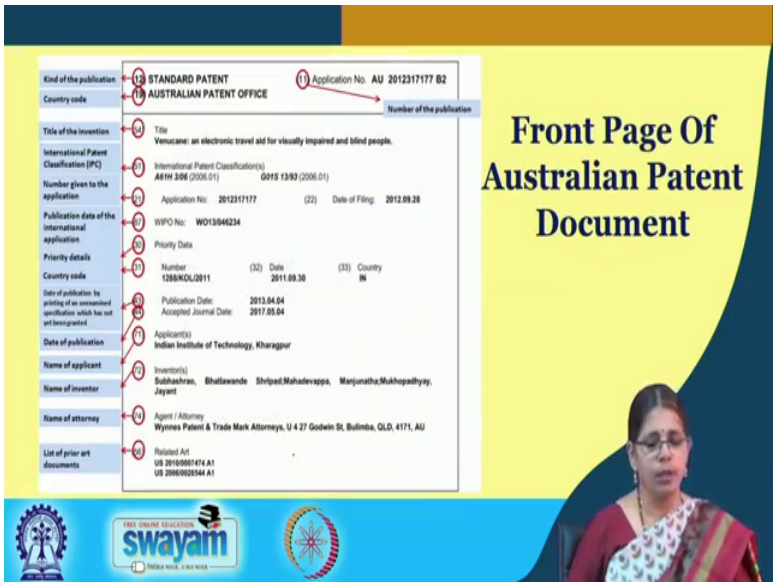

Now, if this is another illustration of the Australian patent document and here you can again see the different INID codes with represented which is represented here with respect to this. Now, why is it that we are looking at so many different patent office documents? Often it is important for you to familiarize with these documents when you are embarking on either a search or you have actually searched and looked at the documents and you are now looking at analyzing the documents. So, while largely most patent office's follow a uniform pattern of class of the representation of data there could be minor variations with respect to how the patent data is actually represented in each case.

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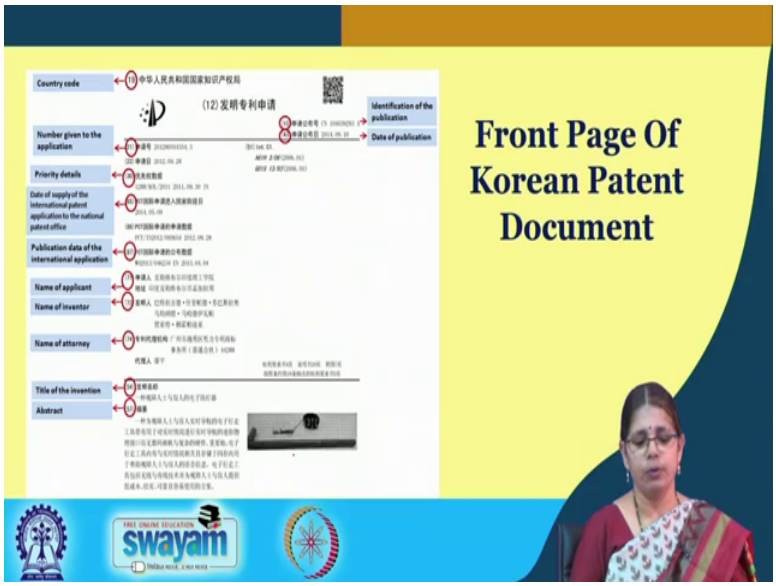

So, to that extent it is important to look at some of these. Today a lot of filings a lot of innovations are coming out of Korea search is also done on Korean patent documents. So, this is one another instance of where you find a whole lot of data in relation to the INID codes and of course, much of it is written in Korean and databases today have the translating tool available for you to translate it out into English to know the area of the invention and the features of the invention. So, this is one representation of the Korean patent document.

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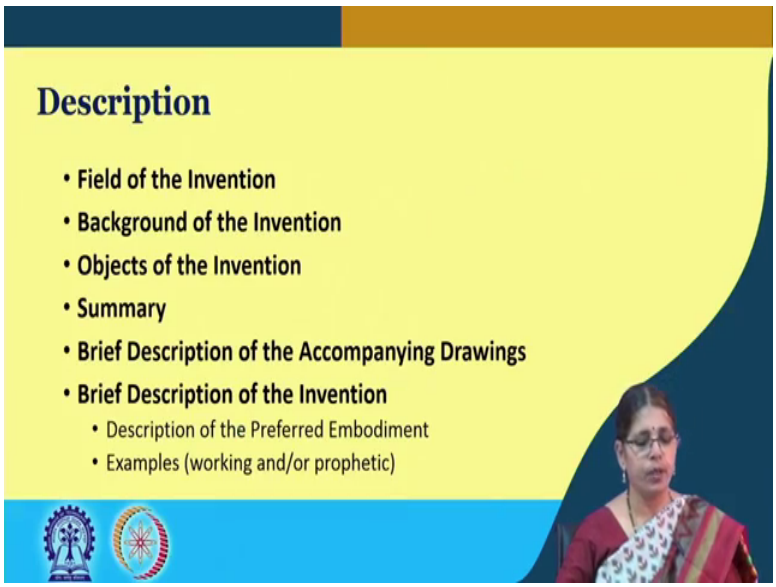

Let us look into the importance of the description of the patent in relation to the invention. We briefly discussed about the aspects of the field of the invention background of invention. Now, it is also important to note that as a searcher where would you look for when you are looking at a particular document for you are looking at a patent document and how to look at its relevance in relation to search.

People search patents for different reasons, some are interested in understanding the scope of the invention where you would start with the claims and then look at the matching description. Some are interested in only understanding the technical details of the invention in which case you will actually go to the description of the invention looking at the embodiments. Many would be interested in knowing the working of the invention let me understand for example, how is it that the compound is degraded, how is the data in relation to the X ray crystallography is shown in relation to a particular compound, what are the different forms of the compound.

So, patent documents are also like publications to that extent we are in publications we also provide a lot of research information in patents also we provide a lot of research information in terms of the experimental details of the invention. So, to that extent the description of an invention is important for us to note. It is possible that after reading patent documents you may come across an idea to improve that particular invention. So, understanding the different features of the invention, the working of the invention is essentially therefore, important.

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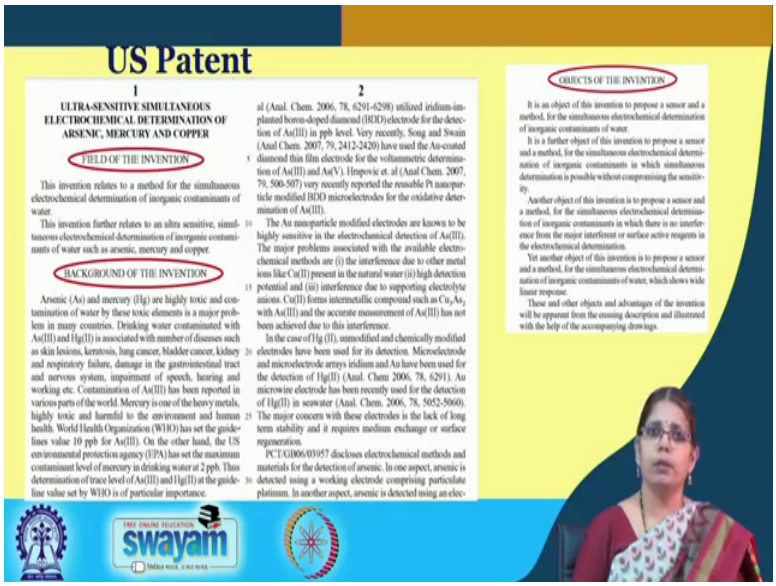

So, we talked about the different categories now let us look at it at on how these are represented in the patent document. So, if you look at the beyond the cover page of a particular patent document you will come across these different categories captured in a patent document. For instance this is a particular us patent which is about determination of arsenic mercury and copper and this determination is by a simultaneous electrochemical determination of the these compounds. So, this is where the field of the invention is.

And in the background of the invention they provide the data or rather the discussion about how arsenic and mercury and copper are usually what is the kind of contamination and how it is how they are modified and the details about actually where is the concern in terms of actually the determination. So, while it gives you that layered information in relation to the particular area at the end of the background of the invention will be a small set of sentences which tells you what is the purpose of the invention, this patent represents what improvement in relation to this particular area.

Now, objects of the invention are important to indicate what is the value of the invention coming out from this particular area of where they are looking at the determination of the different contaminants in water, the arsenic, mercury and copper. So, objects tell you what is the objective of the invention.

So, for instance in this particular case one of the objectives is what to propose a sensor and a method for, what? For a simultaneous electrochemical determination of these contaminants in water, then there are different other objectives of this particular invention where a greater sensitivity reduction can happen and also there are other aspects of where interferences could be there with respect to other contaminants. So, how do you actually look at this particular invention in that context. So, the various context of the invention also provided in what we call the objects of the invention.

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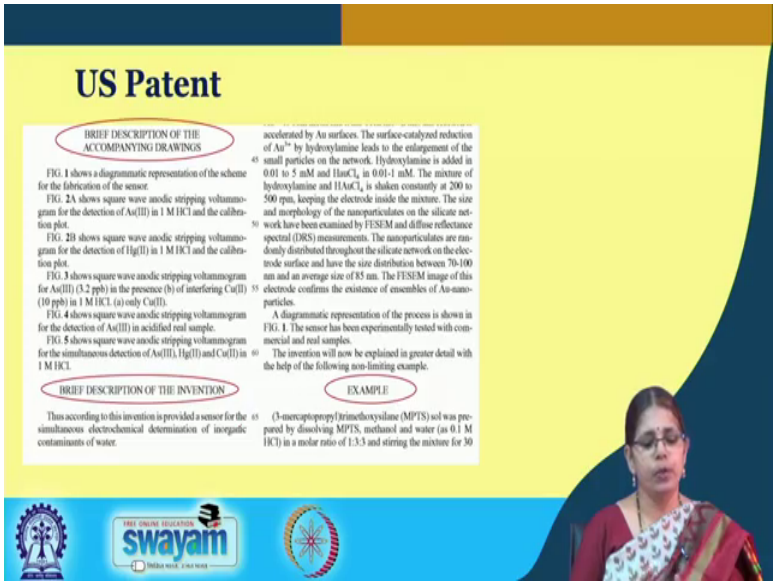

The description of the drawings are important. So, these come under the purview of what we call the detailed description of the invention, for instance in this particular patent there are five figures some which are showing the we talked about a sensor and a method. So, basically the details of the sensor are captured in some part of the figure, the method itself is captured in the other part of the figures and how this method works in terms of the diagrammatic representation in terms of graphs and diagrams is also represented in the figure.

Now, accompanying this is what we call the brief description of the invention where the description of the invention is provided followed by the examples. Now, examples are an important category as I mentioned earlier with respect to the enablement of the invention which means we from this section we understand the how this invention operates or how does it work. So, there are several working ways of an invention that are possible which

is what we is called enablement in patent law. So, this patent may represent many of the different working ways of that particular method and that sensor. So, all of this will be given in the example.

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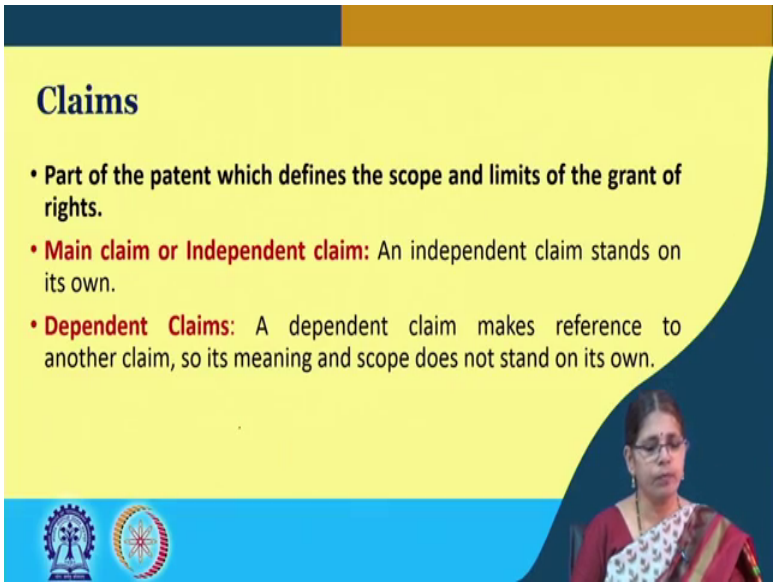

We come to the one of the important patent data in relation to a patent is the claims. Claims define what we call the boundary of the invention that is the scope of their rights in relation to a particular patent and in a particular patent application there could be many claims. Essentially there are two different types of claims; one is what we call the independent claim and another is what we call the dependent claim.

The independent claim is also more colloquially called the main claim and every patent must at least claim one independent claim that is the minimum threshold, there could be many many different independent claims that could be claimed.

So, independent claims as the name suggest stand on their own, dependent claims are the dependent on the independent claim. So, therefore, their scope should be read in relation to the independent claim and normally when we talk about an invention the essential features of an invention are captured in the independent claim of the patent.

So, therefore, independent claim relates to the subject matter of the patent just a while before we discussed about the US patent on the sensor and method. So, let us relate to that patent and understand how that patent would have captured independent claims. So,

the sensor would be one independent claim the method would be another independent claim.

Now, there could be different aspects of how this sensor is being used to determine the maybe the concentration of arsenic mercury and copper which will all be captured in the dependent claims similarly method claims can also have what we call dependent claims. Of course, there are other category of claims which we call the multiple dependent claims which are multiplied dependent on one or more independent claims and they are allowed in some jurisdiction statutorily in other jurisdictions there also by way of practice they have also being captured in many patents. A little later we will understand the nuances of claims in relation to patent documents.

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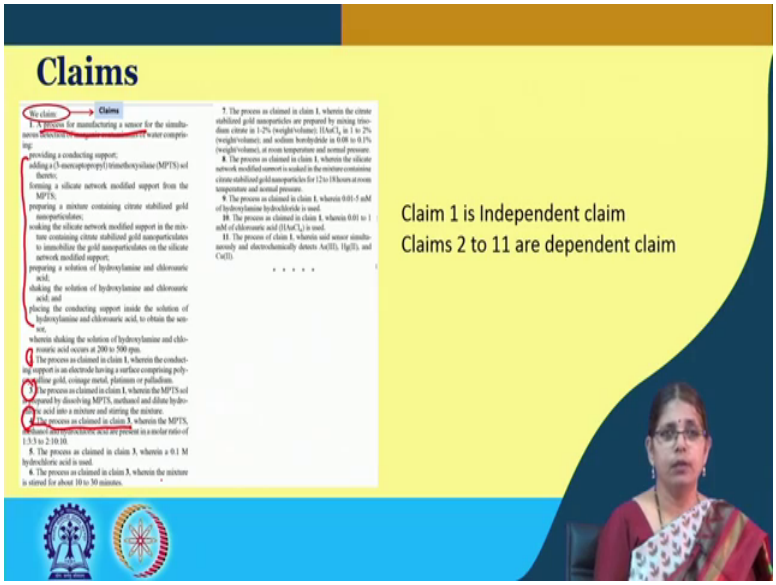

So, when it comes to a patent document for instance we are looking at this particular patent document in which this section starts with we claim. So, that is the beginning of the claim section of this particular patent and if you can see the first patent is a process for manufacturing of a sensor this is the subject matter.

And then what you find here this part of it is what we call the body that is suppose I had said in let us take a very simple example. If I if chair is a claim, then there are different aspects of a chair which is an arm of a chair there is a leg of a chair, there is a seating area all of that is comes under the body of the particular independent claim.

Now, if you look at the claim number 2, claim number 3. The process has claimed in claim 1 this is a dependent claim because it is dependent on claim 1 that is what is, it is referring to claim 1 and the aspect of it is being described, similarly claim 3.

Now claim 4 is dependent on claim 3 because one aspect of the process is being discussed in relation to claim 3. So, it starts with the process as claimed in claim 3 wherein MPTS methanol and hydrochloric acid are present in a given molar ratio. So, this is how claims are actually sequentially placed in a particular application in order to understand the how the features of the invention are captured.

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So, far we have gone through the different aspects of understanding what are the different types of patent data bibliographic data we looked at the patent the technical data itself. So, you can understand that there is a elaborative way in which patent documents are presented when they are published by the patent office. So, there is a lot of value that is captured and there is a lot of value that is available when you have the reading of a particular patent document. Primarily it is important for research and development.

How does it help us? It helps us to know the prior art, it helps us to avoid the duplication of research because if something is already patented then one is that you cannot patented if you are repeating the same thing if you are working in the same area and repeating the invention is also not novel.

Now, it also helps us to understand what are the further technical solutions that we can come about in a particular area. Many a time we read patents to keep a breast with what is actually happening in that particular technology field, it may also be possible that you may also have a great idea of improving an existing patent also many a time you also understand how technologies can be adopted if you understand the inherent nuances of what are the problems that patents are solved.

So, I may actually go up and find out whether I can actually use a particular patent in order to adopt a particular technology that could happen by way of licensing and other options that are available.

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Now, patents also have a lot of value to industry in terms of. So, you actually go ahead to patent in order to now look into bringing products into the market and we all know that patents are negative rights they are exclusive rights wherein they help actually to bar others from practicing in the area. So, sometimes we also look up patent documents to understand who are the owners of the particular patents and if they are in a licensing options that would like to look out.

So, it is important to understand legal status of patents therefore,. Also it helps us to understand where the area of expertise is available and with whom it is available. So, often patents are also one stopgap to understand who are the people to collaborate. Today most patent documents have inventors across companies, across organizations sometimes

patent documents also show what we call joint assignees which could be institutions and companies working together.

The area of competitive intelligence is very important when it comes to patents because it actually helps monitor competitor activity. So, reading of patent documents has different purposes to different people.

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So, the relevance of patent search today is important because patents have become integral to research and development.

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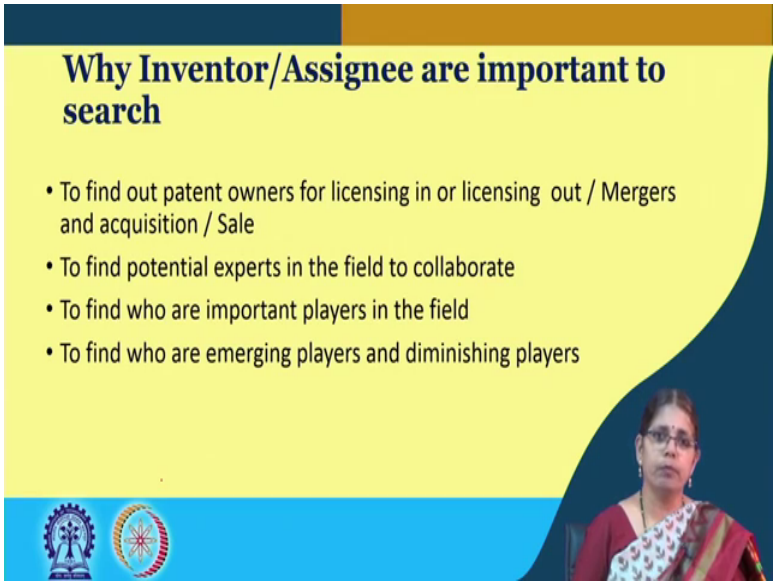

So, when we look at the aspects of inventor and assignee search which comes under the purview of what we call the legal status search. Today it is not about one patent, it is about a bundle of patents. So, for instance let us say we are looking at buying out a particular technology from a particular owner an important consideration for us would be to look at whether this technology is covered by one single patent or a set of patents.

And the other important thing associated with this is what is the legal status of this particular patent, has the patent being maintained with the patent office is the patent under an infringement suit, what are the subject matter claimed in those particular patents. So, its important therefore, to understand in a case of a licensing in or a licensing out in a case of mergers and acquisitions we are looking at the value of intellectual property and patents being highest in the innovation index are central to that punch of IP that is being looked at from the point of view of transfer.

We talked about the aspects of understanding who are the inventors who are actually the experts you know who are working on certain patents which industries have a group of patents which is important to collaborate. So, this reading of patent documents also helps in building, collaborations in some sense. Understanding the patent documents and patent data helps us understand who are the major players in a particular area, it also helps us understand who are also not going forward with the area. So, that gives us a trend about how companies are moving from one particular technical area into another particular technical area. So, therefore, understanding legal status search is also an important point.

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We discussed the aspects of different dates in relation to a particular application. So, understanding the filing date of a particular application helps us understand how long this patent is still available subject to grant in terms of the monopoly. So, if a patent is not maintained at the patent office, it would expire and so it is available for all to use.

The second one is the priority date which we discussed. So, if the understanding of the priority date helps us to understand the set of inventions that encompass the same priority date which are actually coming either by way of the Paris Convention or the PCT. So, in many cases the priority date is the same as the filing application and that is how the importance of priority date is also necessary to look at the subject matter claimed across the set of particular applications and understanding the novelty in relation to that.

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We talked about the aspect of publication date and the grant date. So, in most jurist in many jurisdictions post the grant a patent can also come under challenge. For instance post the grant an interested person can challenge the patent by opposing it under several grounds that the patent may not be novel it may not be obvious and there are many other categories in relation to there is a specified time period also by which a post grant opposition can be filed and each patent office.

So, often people are also looking at the official journal of the different patent offices in order to know in this particular week what are all the applications which are published. So, that is the first hand information that you get in relation to the application that are published in that particular week and so, many actually also planned out the things with respect to opposition and you know challenge of patents. So, patent office journal is also one place where patents are searched.

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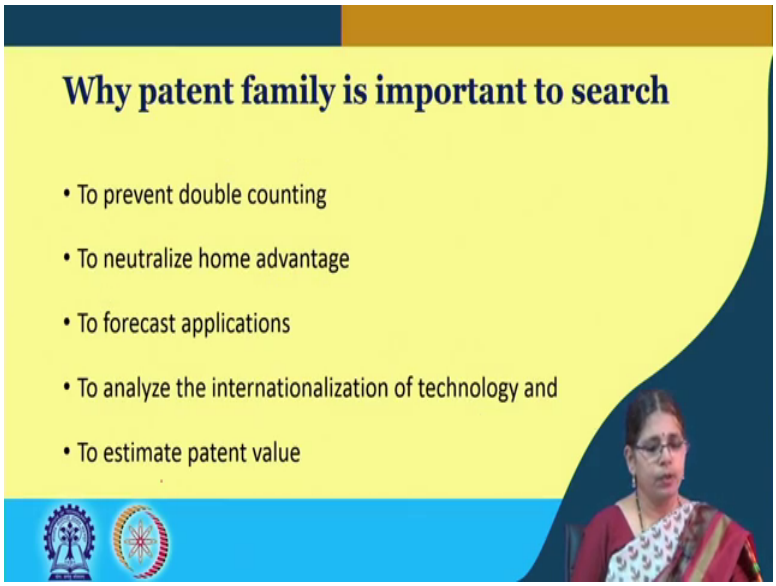

We talked about patent family information earlier on. So, why is it important to search by patent family? It is to prevent what we call double counting of the same invention, its also to get the importance of advantage of a particular invention in terms of its spread. It also helps to what you call forecast applications in a particular area. It gives us this the other aspect is it gives us a spread of that particular patent family with its spread in different jurisdictions one can also understand is this technology representing a set of inventions which are captured in multiple jurisdictions in which case most likely it is actually a technology which is going to be applicable at the global front.

Patent family size is also used as an indicator to give the value in relation to a patent. The greater the size of the family the greater the value of the invention is one way of actually realizing the importance of a particular patent family So, in summary let us understand what we have studied in this particular topic.

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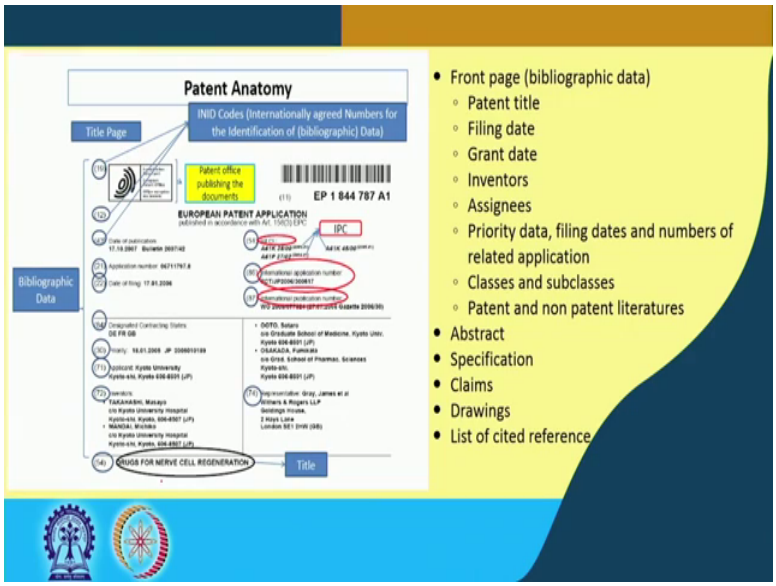

One is we have looked at the aspects of what we call the representation of patent data whether it is the bibliographic data or it is the technical data in relation to patent anatomy where we have discussed the aspects of the cover page, the INID codes, classification codes, the value of dates, value of numbers and their representation and the technical data which is the abstract specification itself which is the claims and the description part and also the examiner citations and the references that are there with respect to a particular patent application.

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We also have understood the general value of looking at patent data with respect to how the value can be realized in terms of its the search to a particular purpose whether it is an R and D or it is a industry. So, wherever we are looking at improvements we are looking at the prior art.

So, it becomes important to understand patents in that regard, it builds current awareness, it also tells us who are the competitors in the area and what are the potential available. It also helps us to prepare for the opposition of particular patents on how we could invalidate them. It also balances in terms of the value that can be derived in relation to patents and also the inventions that are coming out to the market.

So, it provides us that kind of information and patent somewhere tell you where you are positioned with respect to the technology. So, it is actually a kind of a position that it is created you know in relation to where you are in that particular technology. Thank you.

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These are a few references that are available which can be accessed from the documents that are available which are shown as the illustration from these particular websites.

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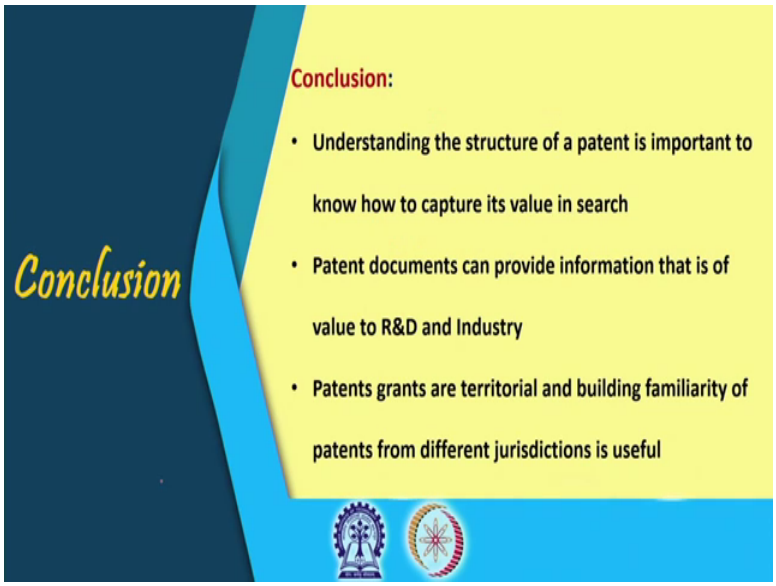

So, the conclusion of the lecture is in these following aspects we have understood the structure of a patent document and how to capture its value in search. Patent documents represent what kind of information and value to R and D and industry and patent grants are territorial in nature and building the familiarity with respect to understanding patents from different jurisdictions is important.