

**Patent Search For Engineers and Lawyers**  
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**Indian Institute of Technology, Kharagpur**

**Lecture – 18**  
**Types of patent Search (Contd.)**

Welcome to the lecture on how to determine patentability search from a practical standpoint.

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The slide is titled "How to perform a patentability search?". It contains two main steps:

- Step 1 : Identify the subject matter of the invention
  - Is it a product/process/system or a combination of any of these?
- Step 2: Identify the features of the invention
  - If it is a product, what are the key components of the invention and how they structurally organized
  - If it is a process, what are the key steps of the invention and how do these steps work
  - If it is a system, what are the structural and functional components and how is the invention organized.

A blue callout box on the right side of the slide contains the text: "Make sure that you have understood the invention well and picked the key/essential features of an invention. This is a critical step".

At the bottom left of the slide, there are two logos: the Indian Institute of Technology (IIT) Kharagpur logo and the Rajiv Gandhi School of Intellectual Property Law logo.

So, there are various steps on how we embark on conducting a patentability search. The first step is to identify subject matter in relation to a given invention that is what is the subject matter, disclose to an invention whether is it a product, is it a process, is it a system, or is it a combination of those. So, identifying that is the first step.

And then we are looking at this step 2 which is once you identify what is the subject matter, you will need to look at what are the features of the invention, that is if it is a product, what is its structure which means what are the components, how many components does it have; if it is a process, what are the different steps, how many steps does a process have; if it is a system, then it could have components and the components arranged in a particular way and functioning in a particular way, those are what we call identifying the essential features of a invention. So, keeping that in mind is very important in order to look at.

The next step which we call the identifying features of the invention. One key aspect that all those involved in patentability search must keep in mind is understand the invention well. If you do not understand the invention well, one is we may miss picking up these certain features, we may miss identifying a specific subject matter. So, therefore, this is a critical step understanding the invention well.

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The slide is titled "How to perform a patentability search?". It is divided into two main sections. The left section contains two main steps:

- Step 3: Identify the keywords to carry out search.  
Keyword combinations may be used, concept search can also be undertaken
- Step 4: Develop a search strategy for identification of prior art
  - Patent literature, Non patent literature
  - Selection of a database
  - Field of search

The right section features a blue callout box with two bullet points:

- Prior art selected must be prior to the date of disclosure of the invention
- Remember that novelty enquiry is a global enquiry

At the bottom of the slide, there are two logos on the left and a small video inset of a woman in a purple sari on the right.

Step 3 is identifying key words based on identifying the different features of the invention. So, once we know what are the features of the invention, we identify what are the key words that are relevant for conducting the prior art search. In many cases you can actually use keyword combinations. Today databases also as we have seen in the earlier lectures provide for concept based search. Once we assemble the keywords, the next step is to develop a search strategy. And in this case in the case of patentability searches, we are looking at the prior published information in relation to the invention. So, keep in mind the date of the invention that is very important. So, the date limiting that aspect is important.

Then we also need to look at what are the different documents that we will be looking at patent documents as well as non-patent data, because here we are looking at novelty with respect to the entire body of literature available. Then we also need to look at a selection of a database, and the field of search where are we looking at the assessment of the novelty in relation to an invention. So, remember that novelty is a global enquiry which

means we are looking at all the possible body of published data which is there is part of patents or non-patent literature. So, keeping that in mind is very important and the date of disclosure of the invention.

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### How to perform a patentability search?

- Step 5: Identification of **relevant** prior art
  - Screen the collected documents and identify those closest to the invention
- Step 6: Analyse the relevant prior art
  - If all the disclosed features of an invention are present in one single prior art, then the invention is not novel
  - If all the disclosed features of an invention are not present in one single prior art, then the invention is novel

• Pick the prior art that is closest to the invention

• Novelty analysis involves disclosure of the features of the invention in one single place - single patent, single publication etc.,

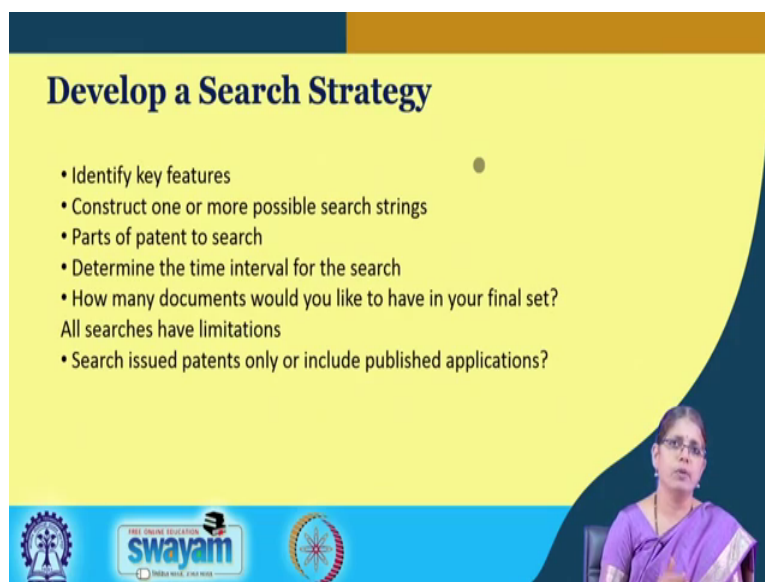
The step 5 is once you do the search you identify a series of a document either from patent literature or non-patent literature. From this set we need to look at screening them out. So, we come to what we call identification of the relevant prior art. So, relevant prior art is that prior art which is the closest prior art in relation to the invention. So, in this step, what we do is we screen out the documents to look at those documents which are closer to the invention. And those could be a, those documents which are closer are now taken them out as a separate set of patent patents or the non-patent literature and further analysis is taken up.

So, step 6 is what we call the analysis of the relevant prior art. Using this set of documents, you look at matching it for the patentability criteria. In the earlier part of the lecture, we had dealt with the aspect of looking at the determination of novelty and the non-obviousness. Those principles will be adopted in order to assess an invention for novelty and non-obviousness.

And if you recall novelty is one single prior art whereas for non-obviousness, the inquiry is with the combination of multiple prior arts. And how do you do this? One needs to extensively read the documents the prior art, and then assess it with respect to the

invention. So, key tape points are picked the prior art in which is closest in relation to the invention. Novelty determination is different; non-obviousness determination is different. So, keep these two in mind.

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**Develop a Search Strategy**

- Identify key features
- Construct one or more possible search strings
- Parts of patent to search
- Determine the time interval for the search
- How many documents would you like to have in your final set?

All searches have limitations

- Search issued patents only or include published applications?

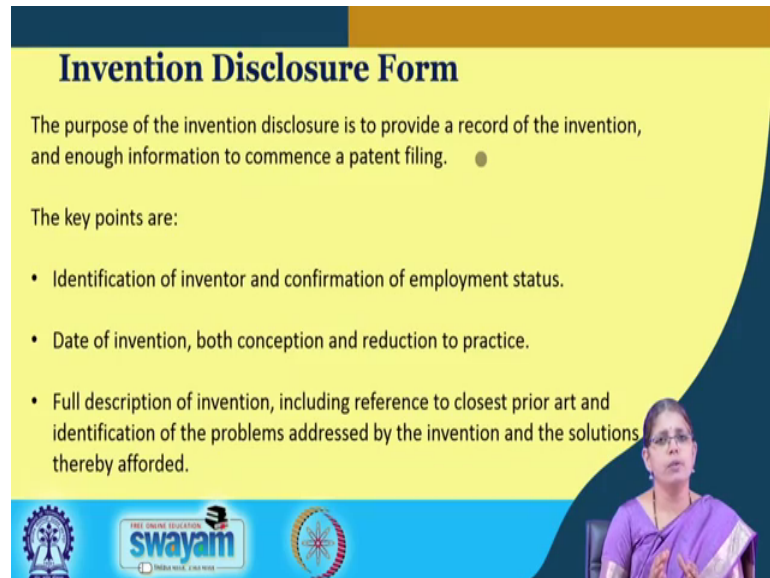
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Developing a good search strategy is very important in relation to the patentability search. Keeping in mind the key features of the invention are important. So, we must focus on the essential features of the invention, not on the inessential features of an invention. It may be possible that is you might have to create several search strings to home in to the closest of the prior art. Determination of what parts of the patent to search are also important. So, sometimes the drawing alone can defeat the novelty of an invention. So, drawing such an important consideration, they found the detailed part of a detailed description of an invention, and a drawing may be very illustrative with respect to as a defeating prior art for a particular invention.

Identify the interval time for search is also important, because then depending on the area that you are working on, you can have an assessment of that this area has been represented well in a particular indicator of the publications or the patent. So, understanding that is important. All searches have limitations. So, what is the final set of data that you have is all dependent on whether documents are available in the publication mode. So, today the prior art search and compasses in relation to patents the issued patents and the published patents only. So, therefore, that is the purview of where you

can look for the data, those which are line just as patent applications obviously, cannot be just searched. So, therefore, there is also that aspect that one needs to keep in mind.

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**Invention Disclosure Form**

The purpose of the invention disclosure is to provide a record of the invention, and enough information to commence a patent filing. ●

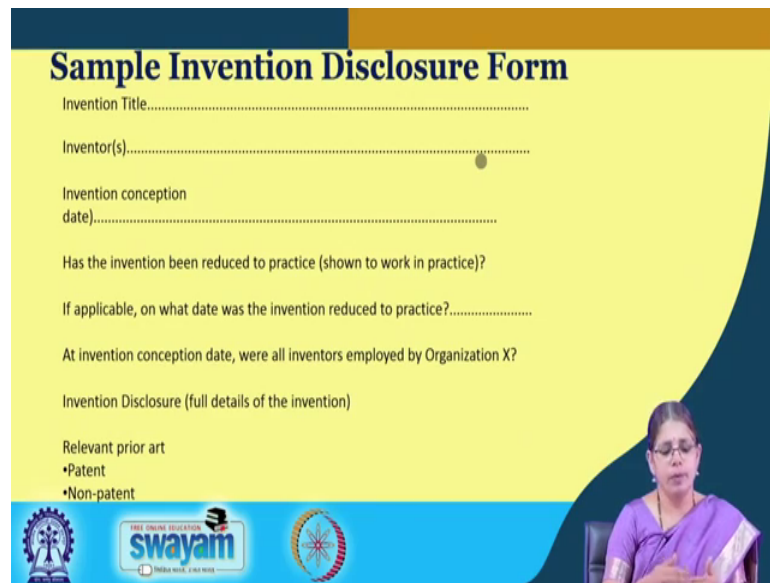
The key points are:

- Identification of inventor and confirmation of employment status.
- Date of invention, both conception and reduction to practice.
- Full description of invention, including reference to closest prior art and identification of the problems addressed by the invention and the solutions thereby afforded.

The slide features a yellow background with a dark blue curved border on the right. At the bottom, there is a blue banner with logos for 'swayam' (Free Online Education) and 'INDIA RISE, INDIA RISE', along with a small image of a woman in a purple sari.

So, let us understand the invention disclosure form two conducting the patentability search. Now, the invention disclosure form is the first step for anyone to start looking at the details of the invention. So, prior to filing of a patent application, the invention disclosure form becomes the first step for looking at the details in relation to novelty and non-obviousness. There is some basic information that is present in every invention disclosure form, the details of the inventor, the details of the date of the invention, and the description of the invention.

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**Sample Invention Disclosure Form**

Invention Title.....

Inventor(s).....

Invention conception date).....

Has the invention been reduced to practice (shown to work in practice)?

If applicable, on what date was the invention reduced to practice?.....

At invention conception date, were all inventors employed by Organization X?

Invention Disclosure (full details of the invention)

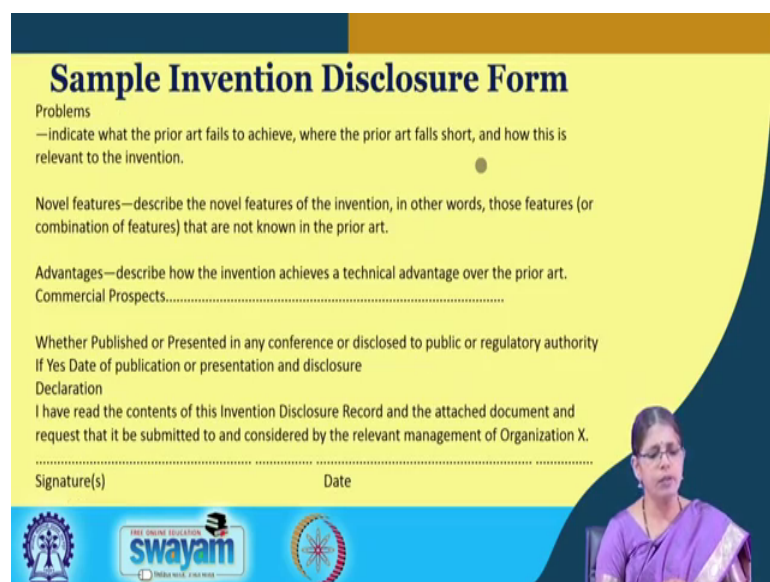
Relevant prior art

- Patent
- Non-patent

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So, there are certain details that are present in an invention disclosure form in terms of the invention details. It also captures the data in relation to when the invention was conceived and the experimental information. And the prior art which they invented himself as or herself as disclosed in terms of the relevance of certain published documents in relation to the invention.

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**Sample Invention Disclosure Form**

Problems  
—indicate what the prior art fails to achieve, where the prior art falls short, and how this is relevant to the invention.

Novel features—describe the novel features of the invention, in other words, those features (or combination of features) that are not known in the prior art.

Advantages—describe how the invention achieves a technical advantage over the prior art.  
Commercial Prospects.....

Whether Published or Presented in any conference or disclosed to public or regulatory authority  
If Yes Date of publication or presentation and disclosure

Declaration  
I have read the contents of this Invention Disclosure Record and the attached document and request that it be submitted to and considered by the relevant management of Organization X.

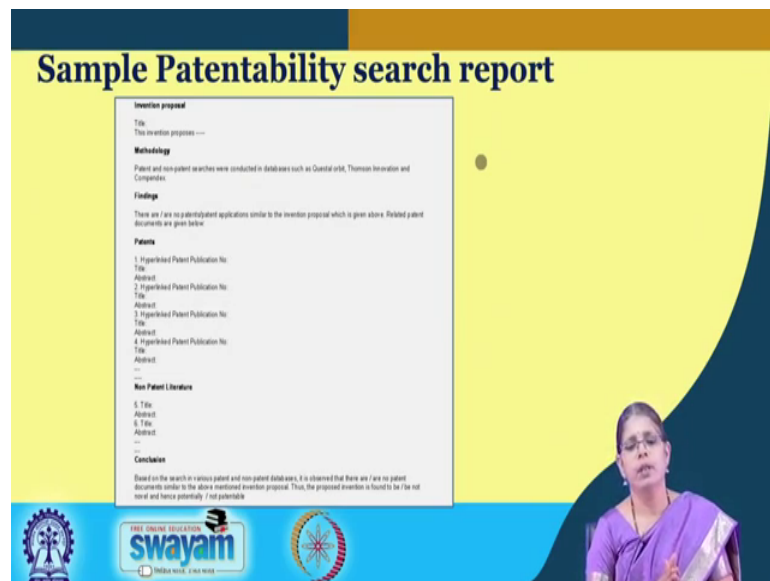
Signature(s) Date

The slide features a yellow background with a dark blue curved border on the right. At the bottom, there is a blue banner with logos for 'swayam' and 'INDIA WIDE, FREE WIDE'. A woman in a purple sari is visible in the bottom right corner, appearing to be speaking.

So, an invention disclosure form is a starting point to understand what were the problems in the prior art which the invention has addressed. So, there could be several solutions

that the inventor may have come up with in the form of an improved product and improved process, any of those. And the form also gives an idea about the advantages of the particular invention. So, the details provided in relation to invention disclosure form also give you an idea about the process of the disclosure of our invention in relation to a particular organization. And all invention disclosures are actually are important records for both institutions as well as companies. In fact, in many companies that are actually considered very important in terms of value and they are also valued as assets.

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So, how do we go about with the patentability search? Now, this is just an illustration of a patentability search report. And search reports have to be formally prepared in a structured fashion, so that they can be understood by the inventor who to whom you may give the patentability report, or it could be to other in case of clients, or it could be a company a senior in a company to whom you are actually communicating the details of your patentability search.

So, the document essentially would have the title, what was the invention about, the methodology used for conducting the search, what were the findings that came out in this particular search that you did. And then all the relevant prior art with the details of the relevant prior art in terms of the publication numbers and titles are presented, and the concluding part of the document where the decision in relation to patentability started.

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## Sample Patentability search report : PCT

**PATENT COOPERATION TREATY**

**PCT**

**WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY**  
(PCT Form 430A/1)

Applicant's name: **COMAR INTERNATIONAL LTD**

Applicant's address: **COMAR INTERNATIONAL LTD**

International application No: **2017/02008**

International filing date: **08/11/2017**

International classification (IPC) Class: **G06F 17/30**

Applicant's representative: **AKSIPATENT**

Address: **AKSIPATENT**

1. This opinion contains indications relating to the following items:

- Box No. 4: Novelty of the claims
- Box No. 6: Priority
- Box No. 7: Other considerations of opinion with regard to novelty, inventive step and industrial applicability
- Box No. 8: Lack of unity of invention
- Box No. 9: Assessment of compliance under Rule 13bis (1)(c) with respect to novelty, inventive step and industrial applicability
- Box No. 10: Certain documents cited
- Box No. 11: Certain references in the international application
- Box No. 12: Certain observations on the international application

2. **Priority**

If a demand for international patenting is made, this opinion will usually be considered to be a written opinion of the international searching authority (ISA) in accordance with Article 17(2) of the PCT and Rule 13bis(1)(c) of the PCT Regulations. It is not intended to be a written opinion of the ISA in accordance with Article 17(2) of the PCT and Rule 13bis(1)(c) of the PCT Regulations. It is not intended to be a written opinion of the ISA in accordance with Article 17(2) of the PCT and Rule 13bis(1)(c) of the PCT Regulations.

For further details, see notes to Form PCT/ISAO/430A.

3. **For further details, see notes to Form PCT/ISAO/430A.**

4. **Additional comments:**

5. **Criteria and observations:**

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This is one a simple patentability search report; a PCT international search report is a good starting point for someone to be understanding how documents become important for novelty or for the determination of inventive step. So, if you look at a PCT international search report, you would actually get some idea or clue about how the examiner of this particular application has looked at the prior art for considerations of the novelty offering of a particular claim or a non of business in relation to particular claims. So, you can see that the examiner will base the opinion based on certain criteria and that is what is represented in this particular page.

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## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. **PCT/US2008/1252**

**Box No. I - Search of the opinion**

1. With regard to the language, the opinion has been established on the basis of:

- the international application in the language in which it was filed
- a translation of the international application into the language of the international searching authority
- a translation of the international application into the language of the international searching authority

2.  This opinion has been established taking into account the notification of an obvious mistake authorized by or on behalf of the Authority under Rule 13bis(1)(c) of the PCT Regulations.

3. With regard to any **machinable matter** and **sequence** disclosed in the international application, this opinion has been established on the basis of a separate filing filed or furnished:

- in printed form
- on paper
- in electronic form

4.  In the international application as filed

- together with the international application in electronic form
- separately to the Authority for the purpose of search

5.  In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the international searching authority has established the version of the sequence listing to be used for the purpose of search on the basis of the following criteria, in order of priority:

6. **Additional comments:**

7. **Assessment of compliance under Rule 13bis(1)(c) with respect to novelty, inventive step or industrial applicability, criteria and observations supporting such assessment:**

Novelty (N)	Yes: Claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
Inventive step (I)	Yes: Claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
Industrial applicability (A)	Yes: Claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

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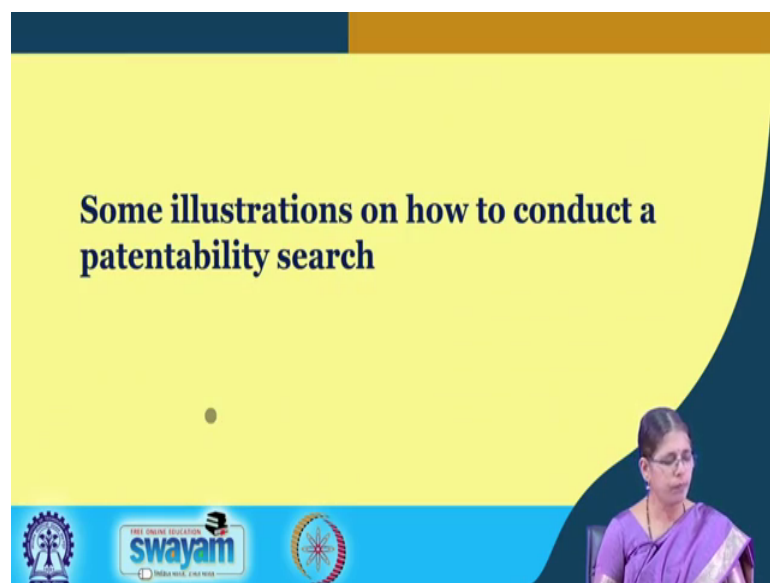




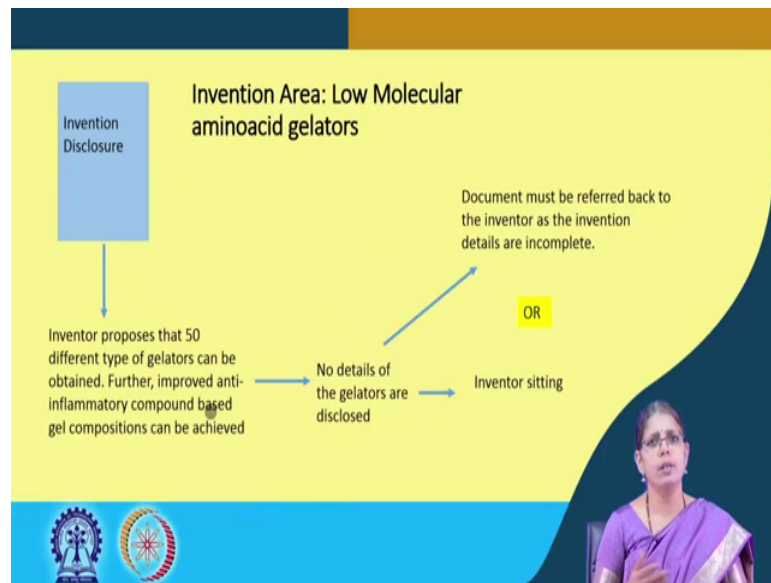
If you look at the aspects of the statement or the details provided by the in this particular page, it gives you the prior art in relation to the specific claims. So, depending on the number of claims a particular application (Refer Time: 11:24), novelty is determined with respect to every claim of that particular application. So, here, your, the claims are 1 to 12. And so the indication of the novelty inventive step and industrial applicability is provided in relation to claims and details in relation to the prior art are also given as due documents.

So, you can have disclosure document 1, which could be let us say you know defeating the novelty of an invention in relation to a particular claim. So, those details are provided, so that the inventor can actually look at where the claims are considered, have been considered as novel or then they have not been considered as novel. Similarly, where the claims are the inventive step and where the claims do not have the inventive step. So, this comes as what we call the written opinion from the international searching authority. And this is a good starting point to look at the assessment of the patentability of your invention, and gives you a step to look at what you can do further in order to proceed with this invention.

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Now, some illustrations are on some of the examples in relation to patentability search. So, for instance, this is one example of where the invention belongs to the area of low molecular weight aminoacid gelators. Now, the invention disclosure document provided by the inventor talks about the process of obtaining different gelators almost up to 50. And further on an anti-inflammatory compound was used and composition has also achieved been achieved.

Now, a complete reading of the disclosure is important as we had discussed in the earlier part of this presentation. Sometimes these details will be missing. So, when you then know details of the gelators are given what happens it is possible that the inventor has missed adding this information.

So, there are two options available to you, one is refer the document back to the inventor to add, so that the inventor can add these details, and then you can start the patentability assessment, or an inventor sitting can be one on another option where you can invite the inventor and ask for the details in relation to this particular disclosure. So, this is one instance where when information is not available, you cannot conduct the way to interpret a search.

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Invention Disclosure

Invention Area:  
Method of preparation of acrylate based block copolymers via surfactant-free emulsion polymerization using water soluble chain transfer agents

Nanocomposite film of specific contact angle

Decision:  
Invention is not novel

Relevant prior art:

1. Claims of the WO/2006/104822 A2 cover the formation of polyacrylate with nano sized silica filler (Claims 1-3)
2. WO/2005/021843 A1 discloses process of preparing superhydrophobic surface compositions and surfaces obtained from them by condensation or radical polymerization.
3. Another published application WO/2007/044487 A1 describes the preparation of stable surfactant free dispersion of hydrophobic substances in polyacrylate derived compounds.
4. Patent WO/2000/014296 A1 titled 'super hydrophobic coated substrates' which discloses films with SHS characteristics with water contact angles.

swayam

Now, the second example this is an invention disclosure in relation to the method for preparation of acrylate based block copolymer via surfactant free emulsion polymerization step using a water soluble chain transfer agents. So, the essentially the invention revolves around making a nano composite film with a specific contact angle area. Now, when you look at the, this is the subject matter disclosed here is a method, and this method involves different steps and different compounds, and it follows a specific way in which the polymerization is done so to achieve a nano composite film.

So, taking the basic features of this invention we look at the prior art. And then from the prior art we assemble the closest of the prior art. Now, in this case, there are four different prior arts which are relevant to the or which are the relevant art in relation to this invention. Now, in this case, we are looking at claims of this particular published application, this particular patent application which is again talking about formation of polyacrylate with nano sized silica. The claims 1 to 3 of this patent are relevant.

Now, in other case of another patent application which is a published patent at PCT publication, describes the polymerization steps specifically again in relation to this pertinent art. Another published patent application describes the preparation of surfactant free dispersion of hydrophobic substances very close to the invention area. Further on another patent application which is again another published PCT application talks about

super hydrophobic coated substrates where using the method of similar to this invention contact angles are being discussed. So, this is again very very close to the invention area.

Now, when we look at features that are present in the invention and we are looking at this set of relevant prior arts we are doing what we call the identity matched. And this identity match would happen with respect to one of these if you are looking at it for the purposes of novelty. Most likely the fourth one is the most relevant one is what was came out of this particular study. Because the contact angle disclosed in this particular invention disclosure is within the range which is disclosed in the published PCT application, which is represented by the fourth prior art, and the invention area is also the same.

So, what is the decision that the invention is not novel, because it belongs to the same area, the process of preparation of the blocks is the same, and the contact angle comes within the range which is already disclosed in this particular patent application. So, this is how the novelty of this in particular invention disclosure is defeated.

(Refer Slide Time: 17:08)

**Invention area:** "Cleaning with bubbles"

**Description:** The cleaning effect by using ultrasound vibration and addition of abrasive particles to the fluid on metal object is due to the phenomena of shock wave generation and microjet formation, both occurring at the final stage of bubble collapse at elevated pressure.

Surrounding liquid  
Increased static pressure

1 2 3 4

Cavitation bubble imploding close to a fixed surface generating a jet (4) of the surrounding liquid.

The slide features a diagram illustrating the stages of a cavitation bubble imploding near a surface. Stage 1 shows a large bubble, stage 2 shows it flattening, stage 3 shows it forming a thin disk, and stage 4 shows a high-speed jet of liquid being ejected from the surface. The diagram is labeled 'Surrounding liquid' and 'Increased static pressure'. Below the diagram, text reads: 'Cavitation bubble imploding close to a fixed surface generating a jet (4) of the surrounding liquid.' The slide also includes logos for 'swayam' and 'Maha Vidya, 2000' and a small inset image of a woman in a purple sari.

Let us take another area which is about the area of cleaning with bubbles where the phenomena of shock wave generation is used to create the pressure around a surrounding liquid, and then that is how one can have the effect of what we call cleaning with bubbles.

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**Patent literature found:**

- Patent No: JP2014180757 A ✓  
Title: ULTRASONIC DEBURRER
- Patent No: US20180354003 ✓  
Title: Device and method for deburring components ultrasound
- Patent No: EP1138437 ✓  
Title: Method of deburring ultrasonic devices
- Patent No: US 20150298231  
Title: Portable micro-deburring component using micro-electrical discharge machining process

The slide features a yellow background with a blue and orange header. At the bottom, there are logos for Swamyam and other educational institutions, along with a small video inset of a woman in a purple sari.

So, there is a lot of literature that is available in relation to patent literature which described this particular phenomenon. There are Japanese patents, US patents, EP patents, then their devices also which actually carry out this particular process of actually doing this.

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**Non-patent literature found:**

**Title:** The use of ultrasonic cavitation peening to improve micro-burr-free surfaces  
**Title:** Book: Physical Principles of Ultrasonic Technology  
Chapter 3  
Cavitation-Abrasion Erosion  
§ 1. Mechanism of Cavitation – Abrasion Erosion

The erosive activity of a sound field can be enhanced by the addition to the liquid of finely disperse abrasive particles commensurate in size with the effective range of the shock wave created by the implosion of a cavitation bubble..... Not to be overlooked is the fact that **individual small particles falling into the zone of action of the shock waves generated by collapsing cavitation voids can acquire very high velocities and work additional destruction due to direct impact of the particles against the solid surface.**

Right away it is important to mention that a significant increase in the erosion level with the addition of abrasives to the liquid is observed only if the static pressure is increased to definite limits, so that the shock wave intensity upon collapse of the cavitation bubbles and the acoustic streaming velocity are greatly increased in the liquid.

**At normal atmospheric pressure the addition of abrasive articles to the cavitating liquid does not increase** the erosion level unless there is direct impact between the radiator and an abrasive particle caught between the working face of the radiator and the treated surface, as in the case of ultrasonic cutting.

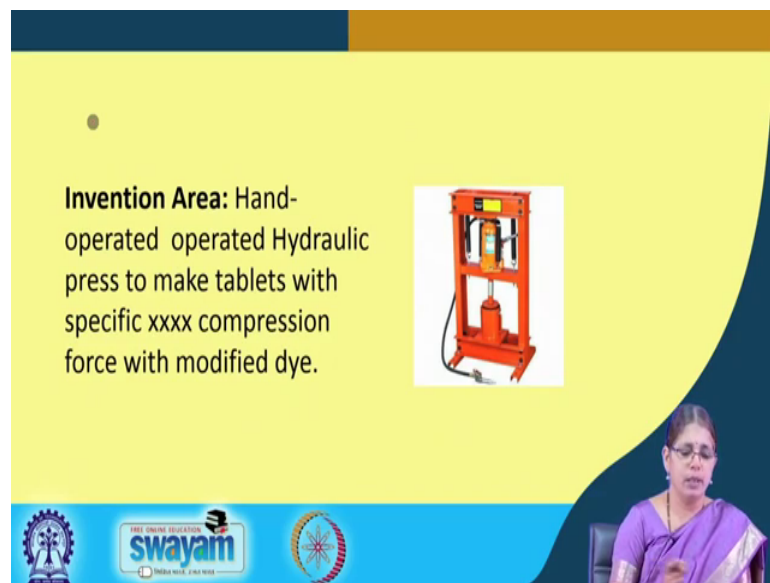
Decision – Not Novel

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Interestingly a lot of non-patent literature was also found. And the non-patent literature could be textbook information also. For in this particular case, we looked at this particular book. And in chapter 3, you have what is called a mechanism of cavitation and

abrasion discussed. So, this discloses this exact mechanism of what we is actually disclosed in the invention. So, this one single prior art is enough to defeat the novelty of an invention. So, one must imagine that the entire body of literature prior to the particular patent application which includes even textbooks can be available for defeating the novelty of the invention. So, in this case again, the decision is the invention is not normal.

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**Invention Area:** Hand-operated operated Hydraulic press to make tablets with specific xxxx compression force with modified dye.

Another example is the area of hydraulic press, which is used to make a tablets, and this is a hand operated one. And in this case the inventor has come up with a specific compression for the with respect to this particular device. And let us imagine it is achieving a specific x-type of compression.


(Refer Slide Time: 19:19)

Non-patent literature found:



Hydraulic jack to removal and installation of gears, universal joints, pulleys, wrist pins, bending/straightening and other various jobs.

Features: Heavy-duty gauge steel construction  
multi-position bed for work height adjustment  
Heavy duty return springs for fast ram retraction  
Reinforced head plate  
Safety bypass valve assures unit will not exceed rated capacity  
Easy-to-use, hand-operated with pressure gauge for direct pressure readings.  
Tables raise and lower easily with use of hand crank



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So, here we are looking at hydraulic press compression mechanism and that specific compression. So, when we are looking at a prior art, we have to look at that specific compression whether it can be achieved using the system. Non-patent literature was already available in relation to the invention which could be, which was actually achieving use of such a hydraulic press would achieve that particular specific compression strength. So, presence of this in the non-patent literature already disclosed would amount to defeating the novelty of the invention. So, this is how one can actually look at a single prior art which actually identically gives the features of this particular invention disclosed and so there is no longer any novelty.

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Conclusion: All essential features of **xxxx Hydraulic Shop Press** are substantially there in the proposed invention hydraulic press machine.

Decision: The proposed machine is found to be not novel and hence not potentially patentable.

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So, all the essential features of the hydraulics press were substantially present in the machine already discussed in the non-patent literature. So, how do we come to a conclusion say most likely, yes, this invention is not patentable.

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### Limitations

- No patentability search is ideal as all documents published may not be available for access.
- A single sale, even by a small shop, is relevant to patentability.
- No patentability search can include every publication or assure that no sale has occurred.
- Patent documents as part of prior art are too large at times and not all patents are published in English
- Every country does not have an online patent database
- The quality of a patentability search will depend on:
  - The invention for which the search is being conducted
  - The skill of the searcher
  - The materials being searched
  - The time spent on the search

The slide features a yellow background with a dark blue curved shape on the right side. At the bottom, there are logos for 'swayam' and other educational institutions, along with a small inset image of a woman in a purple sari.

While patentability searches are essentially taken with respect to the determination of novelty and non-obviousness, there are limitations in relation to conducting patentability search. The first important limitation is what we have the issue of that all documents are not published at the same time that is one. The second thing is some documents are not



published. So, when documents are available for publication, they may not be accessible because of language considerations. In some cases full text information will not be available in will and so therefore you may not be able to assess the invention in a complete form. And another case where documents may not be published, so you will not have a access to information.

So, this is so therefore, patentability search is in to that extent limited in the type of publication that you can pick up in one go. The other limitation of the patentability search is that when it comes to the public use criteria it is often very difficult to determine documents can be accessed and can be can be actually analyzed. But public use category is often very difficult because somewhere in some corner, someone is actually selling it even in a small shop, you may not be aware, but that potentially affects the novelty of your invention. Determining this is obviously, sometimes very difficult, because it is a question of actually accessing that public use information.

Also documents are huge, and each patent document is runs into several pages. So, screaming through the prior art, obviously, becomes a difficult thing when you are looking at the assessment for patentability criteria. So, typically a patentability search can run between 1 week to even more than 15 days at times because of the nature of these documents, the documents are sometimes really big in size and screaming through all of the document is important in order to assess for the novelty. And of course, we discussed about the language concentrations, not all of them are published in English and. So, therefore, translational requirements are there.

However, (Refer Time: 23:04) though translation tools are available, one must keep in mind that if your translate claims, it may not exactly mean that the claim term was translated in the exact meaning, so that is. So, therefore, a level of manual curation is also necessary for you to really look at the claim term meaning. And this is first of all very important for the novelty part of it, because we are concerned about identity match. And so machine translated claims may not always give you the meaning in the sense of the actual wording of the claim in that particular language.

All countries do not have an online patent database, so that is one important consideration one needs to keep in mind. The quality of patentability search, so therefore, would depend on many factors. It is for the invention which is being searched in terms of

the nature of the invention itself. The invention can be from a very simple art, it can be from a very complex art. The skill of a searcher is very important and that is where patent searchers are hired with a lot of technical expertise. The materials being searched and the accessibility of search is also important in term.

The time spent on search is important sometimes we rerun the search, sometimes we look at reanalyzing the document. So, it is an iterative process in that sense. So, one has to give that amount of time in order to really look at the, so it is almost like doing research. You will have to understand the invention well. You, will need to look at the prior art also, and understand the prior art well and then look at the relationship between the prior art on the invention.

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**An invention must meet Requirements of**

- ✓ Eligibility
- ✓ Novelty
- ✓ Non obviousness
- ✓ Utility
- ✓ Disclosure Norms

**Patentability search:**

- Understanding the **search subject** (a product/process)
- Determining features for search such as, **Country of search, Timeline, Data type**(i.e., applied or granted patent prior art)
- Searching through **patent** and **non-patent** literature database
- Identifying **key-features**
- Developing **search strategy** and conducting the search
- Identifying **relevant prior art** of search
- Screening & **analysis**
- Organisation of the report

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So, in summary, today we have looked at the aspects of the requirements of an invention under the law, patent eligibility, patentability which involves the aspect of novelty, inventive step or non-obviousness the utility criteria, and how disclosure norms have a value in relation to the disclosure of information which can potentially affect the aspect of novelty and non-obviousness. We have understood the aspects of how patentability search has to be undertaken in relation to an invention.

So, the key summary points coming out of patentability search are understanding the search subject is very important whether a subject is a product or a process. Determining features of the search subject is also important, understanding the fields in which the

search should be done in terms of the country of search, timeline and the data type. Searching through patents are relevant, non-patent literature is also as much relevant in relation to the analysis. Developing a good search strategy is important to conduct the search.

Assembling the relevant prior art in relation to an invention is fundamental to look at the closer assessment of the novelty and the non-obviousness of a particular invention. Once the screening of the invent of the prior art is done, the analysis is carried out, and then the opinion is written. And it is at this stage that the patent searcher must keep in mind certain important things. Your decision will materially affect the process of the future filing on writing of a particular patent application. Your decision is also going to affect the research in that particular area.

Another important consideration is that is your decision based on the evidence that is present in the prior art. So, a decision to describe an invention as not novel must be followed by a complete extensive opinion that is to be provided in relation to the patentability search report. So, this should also reflect on why the relevant prior art is defeating the novelty of the invention. So, one must clearly provide that indication in the patentability search report.

To the extent that, you must mention that this prior art is defeating the novelty of your invention for these different purposes, and to such exactness as to indicate the page numbers or the paragraphs or even to the figure. Today the area of patent search has become a very big area of enhanced practice, because patentability searches are very important in relation to the developing skill that is needed for many professionals in the area of this industry practice. And patentability searches will materially affect they go forward for an invention.

So, today this practice of doing patentability searches has to be understood well from the point of view of the basic aspects, the preparation of the report. And sometimes it may be wise to actually have an inventor sitting for two purposes, one is that the inventor is not a person who understands law, he does not understand the aspects of patentability criteria or disclosure norms, and so therefore, may not have completely disclose the details of the invention.

So, an inventor sitting will provide you what is the other supplementary data that is necessary for your invention the disclosure, so that you can conduct the patentability. The second reason that inventor sitting is important is inventors are also concerned about disclosure process that because some novelty may be destroyed by disclosures. Today inventor share a lot of information on the email system. So, it is good to have an inventor sitting in which case the inventor may actually tell you what is the specific contact angle that invention works well on or what are the ratios which the inventor has used for mixing to get the particular composition or even the structural and the functional aspects of the invention.

So, since the inventor is the one who is from the technical area, it is a good starting point even to understand the invention from the inventor standpoint. So, basing your opinion on the patentability of an invention should be well thought of process, and a well researched process, because your opinion is going to have make a big change to the inventors, further research and the potential patentability of an invention.

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So, this is the deliberation that we have had on the patentability search. And their further details are available in the references that are provided. In this as a part of the course we have actually come out with a patent search workbook, and you have further details of the examples provided in this particular workbook.

Thank you.