Introduction on Intellectual Property to Engineers and Technologists Prof. T. K Bandyopadhyay Department of Metallurgical and Materials Engineering And Rajiv Gandhi School of Intellectual Property Law Indian Institute of Technology, Kharagpur

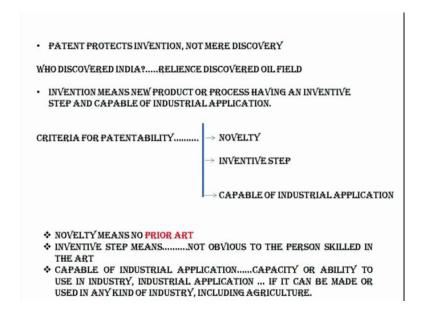
Lecture - 07 Patentability Criteria

Already you got an idea regarding patent what it is. So, now gradually we will move to the integrities of the patent, means what patent protects. You got an idea of product importance for all the products or all process, so whether you have to fix some criteria to give some right, we are giving some rights or to the inventors or fidelity. So, whether you have to fix some criteria or we will give whatever you come whatever we will create or invent will give rights on those.

So, considering that they have created some sorts of or ultimately, so you make consider international body just like WTO by what is your let us say (Refer Time: 01:25), subsequently trips means s state related aspect of intellectual property rights and they have creative some criteria for an invention to qualify to be patentable, whichever we are referring as criteria for patentability.

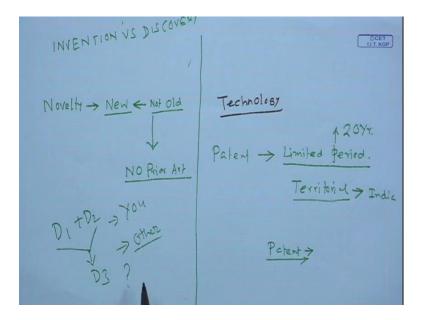
So, patentability criteria or criteria or patentability, means the criteria which required an invention to qualify to be patentable. So, that way we are referring as those as patentability criteria. Just like say I referred that whether all invention to qualified to be patentable or I have to create some characteristics, so that characteristic we are considering that as patentability criteria.

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So, now for the other criteria they will have see already I referred patent protect invention not mere discovery. So, we all refer invention just because I referred that patent is given or the invention is not mere discovery or what you mean by mere discover by as such discovery. So, how will you differentiate invention from discovery invention versus let us say discovery how will you distinguish, can anybody tell.

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So, discovery means if something already existing, already something is already exists and you are putting that to the public knowledge. So, you will be considered this co

owner of that thing. So, what do you mean thing just like I say if I ask who discovered India people say that Vasco da Gama discovered India because before that also discover India was there, but Vasco da Gama was the first person who teached the world that there is a country called India, so he discovered India. Let us say reliance discovered some oil field in Andaman why it is discovery because oilfield was already there, reliance is only the company who has who has put that in the public domain. So, considering that he (Refer Time: 03:57) considered as discovered not invention.

So, there what do you mean by this how discovered? The (Refer Time: 04:05) involved any say human indemnity you know intellectual, so for that is in mere discovery is not come within the per-view of intellectual property systems. So, discovery is mere discovery where no human (Refer Time: 04:25) is involved is not consider within the per-view of patent. So, patent protect invention not mere discovery. So, just clarifying that already I referred what now I refer in the patent as such discovery patent does not put as such discovery where there is no human intellectual involvement is there, you got the thing. Now I referred already last class last class that invention miss the product or process having an inventive step and capable of industrial application. So, from there you are getting the characteristic criteria patentability means novelty inventive steps and capable of industrial applications.

So, criteria for patentability we are getting from the definition of invention itself means novelty inventive steps and capable of industrial applications. So, I will try to explain each of that term in details. So, novelty n o v e l t y, what is the dictionary meaning of novelty? Novelty means a new. So, what do you mean by new? New mean negative way (Refer Time: 05:55) that something is not old. So, negative way we are telling something is not old I will consider that is new not old. What do you mean by old? Old means that was already available, that was that is already at available, considering that (Refer Time: 06:21) understanding.

So, novelty means new that is not that is not old taking that idea, so novelty here say then you may ask me the novelty another feature another part old means old age if I wear a new cloth in this cloth in the class. Now, I have restricted the boundary within the class then I will consider the new within the domain main of that class nobody came which that type of shirt in the class which ever I am wearing today. So, old, not old and if I wear to me it is new may not be new to any other person in the class, clear. So, new to

me, new to the class, new to the Kharagpur, new to the West Bengal, new to the India. So, by virtue of that we are extending the boundary. So, considering that new means not old where we are considering.

So, novelty you got the thing very interesting situation, novelty means no prior art for they were not old, that part we are considering for the patents is no prior or no prior that I will explain what do you mean by prior art subsequently, you are understanding. Novelty means no prior art, I referred here no prior art. So, novelty means that is no prior art means, prior art means that I will explain subsequently see if I (Refer Time: 08:19) understanding from no prior art there is no for that with that cloth is not available in the prior art form (Refer Time: 08:30) prior art form that I (Refer Time: 08:31) in the which form of that part I will subsequently explain.

Now, also understood what do you mean by inventive step. Although this is very tricky situation in the expression required little bit imaginations. So, inventive steps mean that that improvement whatever you have, invention whatever you have met should be not obvious should not be obvious to the person skilled in the art, what do you mean by that? Just like say what consider that I am setting in a chair having how many leg let us say 4 leg, now you are thinking that let us see 4 leg chair is there.

Now, I will just incorporate another leg with the chair, so it will be 5 leg chairs. So, 5 leg chairs is not available in that class room or in India. So, definitely 5 leg chairs will be qualified to be a novel because it is not available. So, 5 legs chair will be considered novel, but the subsequent criteria is inventive steps. So, now, to qualify my 5 leg chairs for to qualify my 5 leg chair to get patent it would not be obvious to the person skilled in the art. Obvious is skilled in the art two parameters, we have two judge obvious what do you mean by obvious if the 5 legged chairs you say that 4 legged chairs, 5 legged chairs automatically it is strength will increase this is obvious that instead of 4 leg if you put 5 leg that it is strength will increase.

So, if it is obvious to the person skill in the in the person with average knowledge they can also invent 5 legged chair because they also know that if I put a 5 leg that will give the higher strength. So, then your 5 legged chairs although is novel may not qualify the criteria called inventive steps.

Another example let us see, let say the door knob used in this room is made of polymers, but the problem with the polymers is that the if some thief want to enter in that this room is he can easily broke that lock because polymer having lower strength.

Now, you have designed the door latch or doors stopper means of metal or door lock based on metallic things automatically metal having higher strength. So, people average knowledge in the material science field. So, they can also in consider that type of invention. So, if you replace polymer by a metal that will not may be new, but will not qualify to be in having inventive steps. So, that will not be considered patentable, that will not qualify to be patentable.

So, what we are getting? That criteria novelty means no prior art criteria inventive steps means should not be obvious to the person skilled in the art or the persons skilled in the art have been defined by the different course optimally and also have been reflected in the art also, person skilled in the art, they referred person having average knowledge in that field means let us say in fabrication of share field the people having the average knowledge they can also consider 5 legged chairs people having in that fabrication industry of door they have also knowledge to replace polymer by metal or ceramic. So, that is not considered to be a patentable invention because that will not qualify the criteria of inventive steps, got some idea about that.

So, similarly let us say another part example if you mixed salt and water then you are telling I am preparing salty water, salty water is not available, so that salty water will not qualify to be a patentable invention, why? It is obvious if you mixed salt with water the taste will be salty and any person with average knowledge in the solution feel the solution chemistry they will also can prepare that thing. So, for that reason it will not qualify to be inventive step.

So, you may ask me why these criteria have been brought out, new definitely to prevent duplication of research, why inventive steps? I will say to protect the average people, so that patentees would not prevent average people to ultimately create or invents something in the form of modification. So, you modify 5 legged consider 5 legged chair door knob and others as somebody have a patent on that field then what will happen average people in that field will not able to use at least his invention or patent for a limited period. So, they will be deprived of doing that kind of modifications. So,

somewhere that will increase the balance to the public average people. So, for that is in these criteria have been brought out to so that average knowledge of the peoples would not be prevented to be utilized. So, further inventive steps criteria have been brought out, should not be obvious to whom? To the person skilled in the art, art means in that field.

So, these two parts, partly you have understood although it required huge understanding. So, an inventive step which is not obvious to the person skilled in the art, novelty means no prior. Now art criteria is capable of industrial applications. So, patent the philosophy behind the patent that is like say inventor will invent something he will generates some product that can be used in an industry, that industry will industry will grow that will generate some economy of the country that will get potential employment all source of thing, considering that capable of industrial application that criteria have been embedded in the form of patents.

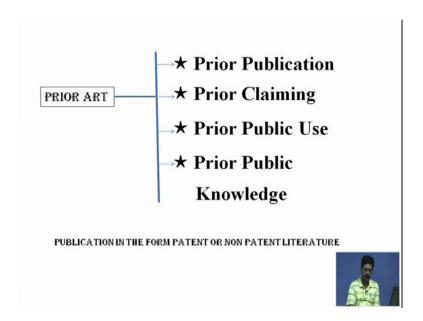
So, what do you mean by that? Capacity or ability to use in industry, your invention should have capacity when you are filling that the office will judge whether your invention have the capacity or ability to use in industry. So, industrial application it do not it can be used can be made or used in any kinds of industry including agriculture that has been defined or boycott in subsequent cases that industrial application means it can be used made or used in any kinds of industry including agriculture, agriculture also now within the purview industry. So, your invention should have capacity or ability to be used in industry, industry means understanding that multiple skill, multiplicity only on unit product of API is not sufficient that API should be produced in an industry in a multiple scale, it has should capacity to be produced multiple unit's industry means multiplicity multiple unit's.

So, it should have capacity to remedy to use in industry. So, industrial application means it can be made or used in any kinds of industry, it can be made means APIs can be made in an industry like pharmaceutical industry or there is a process is your invention then your process would be used in pharmaceutical industry to generate that API. So, if you are now make thinking about some invention, so what are the criteria you have to think about? You think about novelty means you have to do a search that whether this is available, that part I will come to that available where.

Now again subsequently I have to think about that that new part whether new part is obvious to the person skill in the art although it is difficult to judge time, but you make consider a situation it was just let us say document 1 and document 2 you are clubbing, you have to think about that whether others in that field also can able to club that two document to generate that invention.

So, means d 1 plus d 2 you are clubbing and generating let us say d 3. So, you and others also means others means that is a person skill in the art whether they can also club d 1 and d 2 to generate the d 3 or not that part also you should analyzed or getting patent. So, not like that if you consider something new will qualify for patent not like that you have to consider the second step means inventive steps that are also essential parameters or characteristics or an invention to qualify for patent. For criteria means your inventions should have capacity or ability to be used or made in an industry that includes agriculture.

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So, you got the idea about the three parts, but you would have not got the idea about the others elements yes that part I will just explain. So, now, referred that novelty means no prior art. So, law has defined or defined or try to interface based on different case laws that prior art what is the domain of prior art. So, when you do prior art restricted within the purview of 4, means prior publications, prior publication what do you mean by prior publication? Means, before the date of filling your patent applications if whatever is your

invention that is available in the form of publication, public means some will call communication to the public.

So, some publication definition communication to the public if it is already communicated to the public prior to the date of your filing then it will be considered prior art with reference to your invention, means let us say you are thinking about a product may be let us say m x c y, m x c y I having composition let us say m 50 weight percent c 60 weight percent. If whatever the compound you are thinking about and what are the composition you are thinking about that document before filing your patent application if it is available to the public in the form of a publication that will be considered prior publication.

So, if you communicate something to the public by means of a publications or publications means it is a research paper or conference paper or blog or face book posting or work shop things then it will be considered prior publication like m x c y product if you disclose to before filling the patent application in a work shop with composition, with property, in a Facebook, in a blog, in a journal, in a conference paper, then it will be considered prior publications, got the idea.

So, prior publication I am not yet define where. Then prior claiming - prior claiming means patent sometimes we consider as a claimed right, I will explain in subsequent class. Means whatever somebody claimed in it is patents specification sometime we consider his right is restricted within the purview of the claim it is a boundary or (Refer Time: 22:57) office invention. So, let us say some this product whatever I referred m x c y, if already somebody has claimed in it is patents specification before date of filling your patent application that will be consider as prior claiming.

So, with reference to the claimed by Mr. Y, your invention claimed in consider, this claim will be considered prior claiming. So, based on prior claiming your invention will not qualify to be novel, got the thing, just like say for that reason the search is essential; whatever you are filling or patent whether that patent is already claimed by somebody in the form of a patents specification within the specification patent claim emails. So, that privacy of that you may consider that it is prior claiming. So, patents is something is available in the form of a prior claiming then also it will not qualify to be patentable because it will consider having the prior art and that prior art will destroy the novelty of

your invention then subsequent thing is prior public use important parameters, prior public use this, OK.

You are thinking about some patent. Let us say wound healing property of haldi. So, you told that I am the person who is ultimately created any invention that if I apply haldi in a wound, wound will ultimately heal very efficiently. So, it you are considering it is my invention. Now I will found, people found that it was when I observed that peoples are was using haldi for would healing purposes from long back and presently before you are filling of your patent applications also they were using that thing for using that thing. So, then it will be considered prior public use.

So, your invention you have to remember your invention should not be available in the public in the form of publication or in the form an use before the date of filling, very interesting stories are there here - just like say, one situation listen Mr. X has invented a car not invented an say a break system or engine system used for in a car now, he was trying to test that thing and that car was running in a high road, people was stopping the car and inquiring about what is invention all sorts of thing, somehow Mr. X was not ignorant about the patent systems he has told – oh, this is that, this is my invention I am using this, I am testing this; just like say consider presently we are considering about that driverless car.

Now, shall I that before filling a patent application of the driverless car you are trying to investigate much to simulate all the mechanism of the car, you are running that car in a road and you are now people are inquiring about that car you are just stopping the car and they are inquiring about it you are describing that thing. So, it will considered prior public use. So, based on prior public use your things will not consider to be novel. So, situation differs just you are testing it and in confidence without describing people are not stopping the car, people are you are not describing that thing. So, then you are not be considered that prior public use may be considered as secret use or secret disclosure.

Similarly, just give one important case is there somebody invented a ball point pen, before filing patent application he has given his pen to his friends. So, tell them and also stated them please test this pen, test this pen and he has ultimately test this pen. He has not told please test this pen in confidence, the situation will be deferred if you tell them you can freely use this pen and some cases you are telling you can use this pen secretly

or in confidence the situation will be deferred; when it is in confidence means it is not in public is in confidence, well it is say freely means whatever the way - they can use they can use it in big bazaar, they can use it in (Refer Time: 28:28) platform, they can use it in others, if he was telling in confidently you can using in your hostel room then situation will be differs just a legal interpretation. So, sometime your public use will also destroy the novelty.

Then, prior public knowledge, prior public knowledge also can destroy the novelty of your invention just like say you know that, that I referred the story of wound healing property of haldi and it was a in public knowledge before filing of the patent applications if the traditional people have been using that thing. Similarly neem, so neem the (Refer Time: 29:09) of the that you know that India is a rich heritage of ayurveda and all ayurvedic components people have been using over the year in India and people having the knowledge regarding those kinds of ayurveda systems. That thing, if something is available in the public knowledge forms then that also will also destroy the novelty of your invention.

So, all that thing whatever I referred as prior art prior publication, prior claiming, prior public use, prior public knowledge. So, publication, claiming, use, knowledge, so 4 components may destroy the novelty of your invention, then you may ask me you referred already that where prior art. So, prior publication they referred our publication anywhere in the world. So, if something published anywhere in the world in the form of a blog or something then it will be considered prior publications. Means, prior means before the date of filling if something is claimed anywhere in the world in the form of a patent specification that will be considered prior claiming, but prior public use somehow is restricted in that territory. Just in US if we consider US patent act nice way they mentioned the prior public use should not be in US.

So, prior publication anywhere they are claiming anywhere in the world, but prior public use is restricted to US. Similarly prior public knowledge is anywhere in the world. So, it mean was just like say basmati – yes, you know that basmati US company rights take try to patent the basmati, then we told that the basmati is in public knowledge in India. Then somehow you know that how you try to go for a reexamination of that patent in US similarly you know that wound healing property of haldi in European country how we able to revoke that patent because of based on the prior knowledge concept that prior

knowledge concept we able to revoke, we able to partly alter or amend the patent specification of basmati in USA based on the prior public knowledge concept.

So, all the prior public knowledge is important in respect to patent you see the case specifically to basmati and haldi is eye opening case with reference to prior public knowledge. So, let us see what we can summarize. Now we only got some idea about the novelty, inventive step partly and prior art what are the components of the prior art remains to be checked for an inventor or inventor is trying get a patents what are the prior art he should check before filling the patent applications.

So, these are the prior art he has to check before filing patent application to ultimately qualify the first criteria of the patentability that is somehow called novelty. So, we are now closing here for this class with only the knowledge of novelty let us see subsequently I will discuss about the inventive steps and other elements. So, novelty means no prior art no prior art means no prior publication, prior claiming, prior public use, public knowledge. So, as a technologist or engineers we got the idea of the prior art, art does not mean just like say a beautiful drawings - prior art here we refer that prior art prior publication, public claiming, public use, public knowledge.

So, let us finish the class with this now. We subsequently will continue with other thing in the next class.