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 – 10 Patent filing Procedure

Good morning all. Last week we discussed about patent and it is intricacies. Just like say, what is patent? Why patent? Then, what criteria required for something to be patentable? What are not patentable? Then, you have learnt about novelty, you have learnt about prior art, you have learnt about prior art search, including patent and non patent literature search.

I have given even overview of patent classification based on international patent classification. I have given an idea of inventive steps, just like say, inventive steps little bit tricky compared to the novelty and I referred that for inventory steps you can club to prior art for novelty, is all features of the invention should be present in a single prior art. So, what is the difference if I ask, what is the difference between novelty and inventory steps? So, you may refer that novelty means all the features of the invention should be present in a single prior art or distraction of the novelty, for distraction of the inventive steps. The persons (Refer Time: 01:51) in the art can club the prior art and apply it either problem solution approach, or TSM test, as applicable in US courts or USPTO, for judging the inventory steps criteria.

So, those are the inventory steps, and industrial applicability that another of the criteria, that I referred that invention should have capacity to be used, in an industry. That industry has court has different industry, including agricultures, as industry. So, as, as should be used in an industry, the invention should be used in an industry, then the industry include, agriculture industry, that are all the things. And also I referred that, what are not patentable in India, and what are not patentable in other jewelries and majority, mostly US and EP, because majority of the people, try to file patent the invention, either US or European country, considering the market part.

Now that was just like say, in the discussion that was held in the last week, just I give you a recapitulation of the last week discussion. Now, I will proceed further, because we

have to go ahead, I think you have completed the last week assignments, then if you have any question or clarification, you can also put of those things. And now, let us see I will go ahead with learn a next the today's discussion.

(Refer Slide Time: 03:39)



This is also important, specifically. As an engineer and technologist though, although, the last week discussion, mostly important, but why to miss some other things also, just like say, who can how the patent application be filed? How the patent application be proceed? And how the patents applications be can be maintained? How the patent application, what is the utility of the patent application? If I say somehow not utilized my rights, if somebody enforce or somebody infringes my rights, or all those things, we can discuss in this week. Let us say, start the discussion with the things that patent filing procedure, and we are considering only with reference to India, now.

(Refer Slide Time: 04:56)

So, let us say patent filing procedure, if I state, though immediately the questions will come, who can file a patent application? Who can file a patent application? Last, let us patentable, let us say, you, last week you did already know, came to know, that what are the criteria required for patent applications. Now, say let us say, what is invention you came to know, what invention is not patentable, you know now, let us say, you have, I am considering, that you have generated a patentable invention. Now, what will be the work flow for that? So, whether, then questions will come up, to your mind immediately, whether I can file patent application or, so you means, you are the inventors, or I have to file the patent application through somebody or I have the sufficient knowledge, to file the patent applications or not.

So, those are the questions immediately will come to your mind. So, the act has clarified, those things in the in Indian Patent Act, if you find out, Section 6 of Indian Patent Act, refer, who can file patent application in India. So, they have referred, who can file patent applications. So, just like say I have referred here, first and true inventors. So, first and true inventor, let us say you invented, last class discussion if you consider that, in the some fluid for, for maybe for magneto hydro dynamics. So, that fluid, you are the inventors. So, whether you will be consider fast and true inventors, that part I will explain. So who can file? First and true inventors, or his assignee or assignee of the inventors, means first and true inventors, or legal representative. You

should read it in that way. First and true inventors, or is assignee, or legal representative of the first and true inventor.

So, either singularly, or in jointly, first and true inventors can file patent applications, or he can assign the right to patent application to somebody, or some legal representative, who got the right to file patent application, maybe just like let us say, let us say, he has given by virtue of some legal instrument, who has the right to file patent application. So, legal representative can file patent application, on behalf of first and on true inventors. Now, you have come across the three terms. That first and true inventor, or is assignee, or legal representative. Let us say, I will try to explain all these three terms, based on different example and case studies.

So, who will be considered as first and true inventors? So, here are the two words, along with the inventor, qualifying the inventors, first, and true. True means, you represent the true, by that you interpret the true, true means not false. First means, not second, means who, he has invented the, invented that product, or process, first, and he is the true, not wrongfully obtained from anybody. So, that person can file, only consider as first and true inventors. Let us say, they are studies of case studies or example can be created on that part, let us say, Mr., that the Professors along, with there is two Professors, Professor Roy, and, and Professor Das, went to excursion, along with his research scholar, let us say Ram, Shyam and Jedu. So, they went to excursion, and, when they were passing, they went to a particular field, they found of lots of solid waste lying there, and the area is completely dirty, lots of smell have been coming out from that area, and say, water is ultimately leaching those solid waste, solids waste including maybe some toxic elements, that is also mixing with the waters, rain waters, and say that have been carried to the field.

So, they found out, the problem they found that this solid waste is creating, what? The creating a obnoxious gas, the solid waste is creating pollution to the soil, solid waste is creating pollution to the soil, pollution to the water, so ultimately that. So, all the type of pollution, let us say, soil, water, and say gaseous environmental, gaseous pollution, have been happening there, on that solid waste, but the solid waste can be used as a potential source of energy. So, that thought about, they about that solid waste, how can we solve the problem in the solid waste? So, they altogether sit. Mister Roy was chemist. Professor Das was mechanical engineer. Ram Shyam and Jedu are the research scholar

working under them. They sit together, and ultimately they came up with a process, a novel process, I will say, consider, novel process, for utilizing of the solid waste, or generation of gases, means bio gas, in the form of bio gas.

So, Professor Das has designed, designed a bio gassy fire, Professor Roy was ultimately instrumental for say how that, what will be the way that solid waste can be generate the gas, the bio gas, and Professor Ram, Shyam, and Jedu all were working in that field and, but that, by virtue of that, they generated a systems for converting, so invention came up, of let us say, system, for, for conversion of, of solid waste, of solid waste, to energy, solid waste to energy. By bio gassy fire, they are they are called ultimately converting into energy. So, if I consider this invention. So, in this invention, so who has the contributed, Professor Roy, Professor Das, Ram, Shyam, Jedu. So, if I not able to distinguish the contribution of all those five members, then all five will be considered as first and true inventor, for this invention.

So, now if I consider a situation, say other case studies. So, first and true inventor you understood. So, if I able to distinguish the contribution of others, then we may consider them as co inventors. If I do not able to distinguish their contribution, then they will be the inventors, inventors. Now, consider a situation, they, when they got the idea, but ultimately that have been fabricated, designed, with the help of technical assistance, or some vendors. Because let us say, Mister Das has designed the gassy fire, has given to Mr. X to fabricate that gassy fire, Mister Roy has used his technical assistance to, to, for the synthesis of that, for the production of the bio gas.

So, now whether, the questions will lies, that whether, that Whr. X, who have Mister, who has been used by Mister Das, and whether Mr. Y, who has been used by Professor Roy, for production, as a technical assistant, and Professor. Mr. X as a navigator for gassy fire, whether they also will be consider as inventor or not. So, what do you think? Whether they will be consider inventors or not? So, based on that, just like say, in that, different types of, different cases, came up in the courts, so they came up with a solution, that they will be considered, the contribution of each member, in respect of the invention. If they say, the contribution of all, let us say Mr. X, Mr. Y, Professor Roy, Professor Das, Ram Shyam, Jedu, all having the substantial contribution, then, they will be treated as inventor, along with say, others member. So, Mr. X, Mr. Y, will be treated as inventor, if their contribution is substantial.

So, you may ask me, what do you mean by substantial contribution? So, substantial contribution means, without their contribution, invention will not complete. Means, some at least some aspect of, say intellectual involvement of Mr. X, or Mr. Y is there. So, their contribution is not mere robotic contribution, such like, like Mr. X, has not simply, follows the instruction whatever provided by Professor Roy, for the chemical reactions, Mr. Y has not followed the design whatever Professor Das has given him to fabricate, he has involved his, say intellectual, to somehow modify the design.

And that design ultimately, lead to the better production of bio gas. In that case, Mr. Y has also contributed substantially, for that system or invented system. So, Mr. Y also will be a consider inventor. Similarly Mr. X has not followed the instruction provided by Professor Roy; he has just changed the temperature or other condition of the reaction, to, for production of the bio gas. So, then Mr. Y, also have contributed substantially for generating the bio gas, so Mr. X also will be consider as inventor. So, question lies. So, who will be considering true, true and first inventor? Who has contributed substantially, to generate that invention, to generate that invention?

Substantially, how you decide? Substantially means, without their contribution, invention will not contribution, contribution means, what type of contribution? Physical contribution - no, means intellectual contribution. Physical contribution, I will consider a mere robotic contribution. So, without their intellectual contribution, if invention is not complete, then they will be consider as first and true inventors. Then who can be considered as assignee of the inventor? Let us say, you have invented something, but you are working in an organization. So, what organization policy suggested? Whatever you will create or invent, you has to assign that thing to the institute. So, in that case, the assignee will be the institute or organization, where you are working, because their policy suggested, organization policy suggested, who, whatever you will create, during a course of employment, or course of study, you have to assign that thing to the institute, and institute in return, will provide some sorts of reward, or incentive.

So, in that case, that institute will be your assignee. So, there is, this is based on the employee, employer, contract. In several cases also, you may also, without be, without, without independently going to the filing patent, or filing patent office, you may also think about, let us it assign to some company, or some organization. So, you can execute an assignment deed, or assignment agreement, with the company, then they will be the

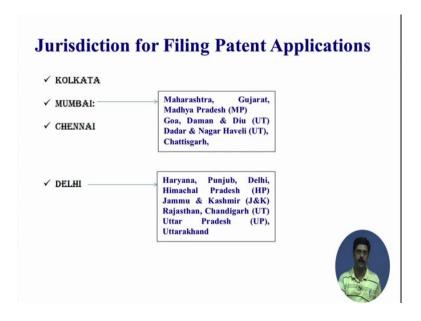
assignee and that assignee will file a patent application, as an applicant. So, you got the thing, so assignee of what? All true and first inventors, where you have to question lies that assignee, means Mister, all say, how many player involved here in these situation? 5 plus 2, 7 players, so assignment has to be done by all 7 players, to the organization, otherwise, his right is not complete with reference to that invention.

So, there is the, this is the, one situation, you have to be cautious, that assignment should done by all the first and true inventor, who has generated that invention, otherwise, the title or say or application, as provided to that, say assignee, is not complete. So, you understood what is assignee means, assignee of what? Assignee of the inventor, how, what is assignee? Assignee is by virtue of some deed of assignment, or you may consider by means of some assignment, agreement. Who is assignee? First and true inventor is assignee for what? Assigning to file, may be right, with reference to filling the patent applications. Now, another part is. So, assignee part you understood, based on employee, employer, agreement, or based on some assignment deed. So, first and true inventor can execute an assignment deed, or agreement.

So, who is considered as legal representative? So, let us say, consider a situation, let us say, let us say, Mr. X has invented something. Now, during that, during that process, Mr. X has passed away, but he has executed some, legal instrument, to passed the, pass all these legal, or equitable rights to somebody. So, by virtue of some, that legal instrument, legal representatives can get the rights to file patent applications. So, the situation, one situation may arise is, just like a person dies, but he has given the rights, based on some legal instruments, to file the patent applications to a representative. So, who will considered a legal representative, also some cases, we execute, power of attorney, to file patent applications through some attorney, three cases also we used the attorney, give some to power, by means of general power of attorney, to file a patent applications, or execute on, on behalf of the applicant.

So, these are the different situation we may consider, as a legal representative, mostly with reference to the situation, where the person dies. Maybe in this special situation, if assignee, let us say company, in that case, maybe, we may use that legal representative, assignee can ultimately let us say, a company dissolution, devolutions, all those kinds of situation may also, that legal representative, can be interpreted or used. So, you got the things, who can file patent application, the three parts?

(Refer Slide Time: 21:24)



So, now, the question arises, let us say, you are from Ahmadabad. So, where will file, your address of service is Ahmadabad, your place of residency is Ahmadabad, your place of business is also Ahmadabad. So, where will you file the patent applications? So, then that Indian patent say, IPO has divided into the four jurisdiction, for filing of patent respect, with respect to patent filing Kolkata, Mumbai, Chennai, Delhi, and they have also divided the jurisdiction for let us say Mumbai, Maharashtra, Gujarat, Madhya Pradesh, Goa, Daman Diu, Dadar and Nagar Haveli, Chhattisgarh, are the jurisdiction, for Delhi these are the jurisdiction as referred in the slides. So, you are from Ahmadabad. So, what jurisdiction will use? You will use Mumbai patent office jurisdiction, you will use Mumbai patent office, because you are from Gujarat state. So, you will file patent application in Gujarat patent office.

(Refer Slide Time: 22:32)

Filing should be made immediate after the invention is developed for commercial working

Delay in filing may involve certain risks

- ☐ Other invention of substantially same nature may take the advantage of priority, depriving the true and first inventor
- ☐ An inadvertent publication of invention by inventor or others may damage the novelty of invention

Patent should be filed before any kind of publication or commercial using or communication to others



So, you got the thing? You are the in first and true inventor; you are filing the patent application, where you are filing patent application, that also you got the idea now. So, filing, when you to file how to file patent applications. So, the file patent application should be filed immediately, because, either or otherwise, you may loose the novelty of invention, just last class I discussed, about that ball point pen cases, about that car testing in a over a road.

So, is restrict in, in instead of that, loosing the novelty of your invention, you should go or to how to patent applications, if you think about your patent application is not complete, there also rules are available, if you, that is say, that is call sometime you call provisional routes, then complete patent specification routes. So, I will suggest, you should go and file patent application, whenever you are thinking, that your invention have some potential, commercial potential and the. So, you should go, and file patent application, even that invention is not complete in all respects, you may have to complete, require some time, to complete that invention, but do not wait for that, you should go, and proceed and file patent application, using the provisional routes.

(Refer Slide Time: 23:49)



So, because inadvertent delay, of invention, by inventor may damage the novelty of invention, I already mentioned, that way, who can file the patent application, where to file the patent applications. You can file the (Refer Time: 24:01) and refer, that, say it view, if you that if your invention is also not complete, you can go and file, patent application. So, there you can use, the two routes, provisional and another we will consider, is complete. So, if your invention is not complete in all respects, you are thinking about further improvement and other, but you are thinking about that concept as used potentially, in the.

So, better to protect it, to get some date, or we sometime call, priority date, in that case, you should file a patent application, using the provisional applications route, or sometime you call provisional specification route. In that route, you give that given, give the details, details of the concept, along with whatever data are working, working data, or description you have generated till date.

So, by, that way, you can you will get, some, somehow, you will be getting a priority. So, then what is the routes? Then, if you getting the priority, but you have to complete your invention within a 12 month, so a complete specification provisional specification, is giving you a priority, to complete your invention within 12 month, if you do not able to complete within 12 months. So, then you will loose the priority. But there is a procedure we called post dating, you are thinking about say, you file a patent application today, but

in 11 month, you are thinking about that, I will not able to complete my invention within a month, in that case, you withdraw your first provisional applications, in file, a phase, but there is also a chance, that within that say, 0 to 11 month time frame, if somebody came up with a same or similar type of invention, then there is a risk.

So, if you filed, in that between, let us say, 16 months, your file in zeroth month, somebody file in sixth month. So, and you are withdrawing in eleventh month. So, 6 month persons will get priority, over your eleventh month, when you are filing another phase provisional patent application, you got the idea? So, better not to post date, that, your invention, or withdraw your provisional applications, so you file, and you should get at a provisional patent applications, file a provisional application, then you file within a 12 months, a complete patent complete specification provisional. So, your filing date will be considered, from the date of filing provisional patent applications.

So, provisional patent application will be consider, the date of filing, means, your rights of that, is whatever I referred as 20 years time, 20 years time will start from the date of filing the patent applications. So, how will you file the patent application? Where you will file the patent application? When to file the patent applications? You got little bit idea? Then what will be the content your, of your patent applications, that part I mentioning here, that applicant is such that, so you have to file, abroad filing and status of filing, that part I will explain later.

Filing complete specification, then provisional complete power of attorney, if you are giving a by means of legal representative, you may give by, to the, in the form power of attorney. So, let us say summarize whatever discussed now, you have got an idea? Who can file patent application? How will determine who is the true and first inventor or how will you consider, who is assignee? How will you consider legal representative part? What are the different hypothetical situations or case study we can create out of those? All those, all those things, you got an idea, then you got the idea where to file the patent applications, what are the jurisdictions have been prescribed by Indian patent office, for filing the patent applications, that is decided based on your place of business, address of service, that jurisdiction will be applicable to for you to file the patent applications.

So, you got an idea of that, now, what will be the advantages of provisional patent applications of provisional route, and what is the complete specification. Also you got

little bit idea, although, this part may require further analysis all the things, but you understood, if you, you, what the things, that inventive provisional, if you think about the invention is not complete at this stage, you should go for a provisional patent applications. So, provisional patent application will not, not keep details of your invention, because your invention is not complete.

So, you may ask me whether, whether, in the complete specification, that I can change my scope, I will say no. If your invention is reference to the light, the light, so your invention you cannot act in a complete specification of him so that but you think about a fan and light, I can club together, so illuminated fan and light. So, within the same inventive concept, illegal term we call, then you may consider illuminated fan and light, fan illuminated light, or something like that, then it will be possible. So, in the same inventive concept, means with the working of the fan, I can also link the working of the lamp. Then fan and lamp can be linked, if both are independent, then you cannot linked. So, within the scope of your provisional specification, you have to file the complete specification. This part you have to remember, within the scope of your complete specification, a provisional specification, you have to file the complete specification.

So, you may file a, two, three number, a two, three, more number of provisional specification, for different attributes of the, of your concept, there is no problem. There is no problem, you can for different attributes of that, let us say, first you filed fan, then fan you linked with light, then lights links with the sensor, like this way all together you may, file a provisional specification, and then all clubbing all the provisional specification, your filing a complete specification. So, here the provisional specification and complete specification, how it links? It should come within the same inventive concept, which concept you have been stated in the provisional, first provisional specification, a complete specification, will be within the scope of that provisional specification.

So, let us say how to file patent application? You also got? Now, let, we are stopping it here, for today. We will further continue, with subsequent steps involved, with reference to your invention, to get some rights, from a particular jurisdiction.

Thank you.