

ROADMAP FOR PATENT CREATION

IP IDENTIFICATION TOOL

LECTURE 16

A very warm welcome in the first module of week 4 of the Course, roadmap for patent creation, titled "IP identification tool" By this time you have received pretty well idea about what is patent?, how to read a patent? what are the different terminologies? what are the parts of a patent? etc. We have also understood that IP identification is the challenge. We have shared with you the example genentec.

You know what happened in this case. Here the inventor domain expert worked hard and invented novel technology. But he could not understand the potential IP in his invention and published this invention. The IP potential is understood by the Technology officer and he has taken efforts to file that patent. Now, to avoid such instances, we are giving you the IP identification tool. So in this module you will see what that IP Identification tool is? You can directly apply this tool to your research or project already you are working on it. Or if there are some ideas in your mind and if you are planning to proceed to explore that idea then you can apply this tool. This tool is nothing but an algorithm which if you follow, it will help you in potential IP identification as well as better research planning.

So, starting with Idea we know, the thinking mind, so many ideas pop up in your mind. It is not necessary that all the ideas which come in your mind you consider for the project or you start working on it. We will take an example. Suppose you are working on, you are a project staff, or you are student and working on the project or you are a researcher and you are working on some of your research topic. How you should proceed so that you can identify the IP in your work or you can consider it in other way. How you can plan your research so that at particular time you think of filing the patent application, may be provisional or complete whatever.

So here the first thing is the idea. Selection of idea from the pool of idea is the first task. Then the second thing is a prior art search. Now you know what the prior art search is. What is the state of the art is. So, it is your first duty or first mandatory requirement before proceeding to the research is that check the prior art. That is the part of a literature review. It is nothing but a deep in-depth literature review. So here in normal literature review generally the people who do literature review, they just go through the research papers, magazines and that kind of publications. But when you are now aware about the patent it is expected that you should go through the patents also along with research papers, magazines, newspapers etc.

So in this way you will do the prior art search. That is a primary requirement. Now what is the advantage of that? What will be the benefit out of that? You will get the idea about the what is currently going on in the technology domain you are working. Now once you know that state of the art then you can plan your research activity. Many times you will experience that you were thinking of something and now through patent search you realized that the work is already done. Thus you can refine the research topic and objectives after going thoroughly through this patent documents. So next is the research activity. Actual research ...experimentation... So, whatever procedures, methodology you have decided you will follow.

Next step is the invention disclosure. Now, generally what happened that invention disclosure is important step in the research This is the point or time during your research you feel that my research is going pretty well to file invention disclosure. if you are a PhD student or you are student doing project or you are working in MSME or you are working in R & D department of corporate or you are scientist working in research laboratory you have to review the timeline you decided before starting the project after every six month to check if there is something which you can consider for patent filing...we follow this for research publication. Same thing we have to do with patent ..and again important no publication without patent as rule is first to file.

We can not predict any timeline for this stage however generally for phd research this stage comes at the third year or the fourth year of your research. That may be the possibility ...in other set ups as MSME, student project, or corporate this stage may come in one year also. So good research planning will help to anticipate patent filing. Thus it will be directed activity and chances of identification of potential patent will be more. Now after that obviously you have to check the patentability or you have to perform the novelty search. What is novelty search? This we have already seen. Then what are various patentability criteria? This also you know. So now with this awareness, you this awareness about what is patent and patentability criteria , you can check out if your invention falls under the invention definition as given by the patents Act. You will check if the invention can be considered further for patent filing. So you yourself can do that patentability search. You will require patent database to check the novelty. There are free public patent databases. In upcoming week we have dedicated one module on how to use public databases? So this will help you to know the patentability.

Also in the week 6 we are dealing with a patent database for research project. In this week in one of the modules we are sharing list of various public patent database which you can explore. By using these databases you can dig out the related patents from that public databases. So, this is patentability search. The next is the patent filing procedure.

If IP management system is well established in your organization Then obviously you need not to worry, please take help from the system. Officers there will help you in patent filing. you can understand invention disclosure system from the officers and fill the form manually or digitally as per the set up in the organization. Mostly all iits have well established system. If you are MSME or if you are a student working in University and there is no facility of invention disclosure or if there is nobody to help you in that you have to take help of attorney and then many times there is a question in your mind whether the secrecy direction will be maintained. Whether my invention will not be stolen? You will worry if there will be any theft of my invention all that kind of fears are always there in the mind of the inventor. So what is the solution for that one solution is that you ask for a non disclosure agreement before disclosing your invention to any patent attorney

Generally there is no any issue of theft however, if you have that fear, you can follow use of NDA. The second thing is that if you are sure about stage of your Research and if you are sure that ok within next 12 months I am able to complete my research up to the level that I can write the complete specification that is complete details of my invention if that guarantee is there...guarantee about specifications of the invention. I am not talking about the prototype I am talking about the specification that you will able to get it on paper all the specifications related to you project and if you have that confidence that you will be able to complete your research by that time the best and the easy way to avoid that fear that you yourself can file up provisional patent.

So what that provisional and complete specification is? Briefly I will explain here what provisional patent and a complete specification is ...we will see the details later in one of the modules So provisional specification and complete specification.... these are the two Stages of patent application. Provisional specification is initial broad writeup about the research. There are certain rules but you can draft provisional patent .you will draft that provisional patent and have to do the submission in the patent office. There are some skills required for provisional patent specification drafting but not that much whatever required for the drafting of the complete specification so what I will suggest that if you yourself can do the provisional patent filing then that is a good way

Obviously for complete specification drafting you should take help of a patent attorney or a patent agent Because you are not expert in patent drafting so it is always suggested that for complete specification you should take help of patent attorney or a patent agent but for provisional I will suggest that you yourself can do the drafting. Probably that will be very safe way for you to disclose your invention to anybody

including patent attorney, funding agency or all other agencies with whom you are planning commercialization or any other activity related to patent ...

Then the next is FTO search. FTO search is the freedom to operate search. So we have seen novelty or patent ability search for patentability search. Now what about that FTO that is a freedom to operate search. Freedom to operate search means it is done in the much later stage I can put it in a right way that when you are going in to the market at that time you have to do the freedom to operate search. You can go into the market means after provisional patent filing also you can start commercialization With provisional you have secured the priority. You are getting the rights provided your patent get granted ...you can execute your rights after granting of the patent.

So after provisional patent filing you can start commercial or any other activity you have planned considering this patent You can start the commercialization It is always good practice to do the freedom to operate search. Where you check whether there is any patent in force and if I am not infringing the patent of other Most of the corporates always do this freedom to operate search before launching of the product. So this is a freedom to operate search.

The next is invention commercialization. Once you are sure about freedom to operate report and you are sure about there will not be any infringement issue then you can start the invention commercialization....So this is what the idea to that invention disclosure and commercialization , a general cycle is. Now after that what exactly is a ... the other way for invention commercialization is after patent filing you do a technology transfer,Technology transfer may involves any of the activities like joint venture, collaboration, licensing, selling etc....the license may be exclusive license it may be nonexclusive license . So after patent fling you can do all these activities related to commercialization. So this is a one cycle ... from idea to the invention commercialization.

So idea Now what caution or .. what procedures you follow in the laboratory. Or wherever you are doing that particular invention The first thing suggested or a good practice is that you should maintain a lab note book Most of the organizations follow use of lab notebook...In lay man language lab note book is nothing but a book which is manintained in your lab... maintaining the lab notebook is good practice... you have to writelabnotebook almost everyday about the progress of your research what ever work you are doing, It is good to note that all important steps or the procedures , the findings, positive result, negative result whatever it is . Everything you should note down.Also whatever idea pops up in your mind it is good practice to write that ideas too in your lab notebook. So this way you can record the ideas That will be very useful.

So after one year, two years when you go back and go through the lab

notebook you can read that. That will help you obviously in your research. Now legal point

of view lab notebook is very useful because if there is any mess-upbad luck and if your invention is copied by someone or used without your permission then lab notebook will be the proper evidence we can say that lab notebook will help you to prove that you are the one who have worked on that project so it is always good practice to maintain a lab note book there are rules and regulations how to maintain a lab note book. So we have dedicated one module on maintenance of a lab notebook.

So that is about the lab note book. then obviously the prior art search already we have seen briefly about the prior art search. Now after the prior art search next is you have to check patent ability you have to check whether my invention is following that three criteria. If you are satisfied with that then you can proceed for patent filing the another way of managing the research is that when you do a prior art searchyou dig out literature ...which include research papers and patent you know how to do a research paper analysis to identify research gap. Similarly when you take out the patent you can do the analysis of that patent.

One analysis you can do to check technology in your working and find the gap in that domain so you do technology mapping The second is that you can check the bibliographic information. What that bibliographic information in the patent? who is assignee who is inventor. So this information will be very useful to you as already we have mentioned in the earlier module that in the technology transfer this assignee mapping helps This assignee mapping as well as technology mapping. This assignee mapping will help you for various things such as collaborations joint ventures licensing etc.

Technology mapping will help you to give the new ideas and you can check out the new opportunities so from the single starting point you can have a bifurcation and you can just chop out all the small ideas to develop different projects within that big project. After this it will follow the same line that is a invention disclosure, then patentability search, patent filing, freedom to operate search and the invention commercialization. So this is what in short the IP identification tool is. I suggest after watching this video please spend some time and follow the tool first stepid to write the ideas ...then check the feasibility of executing...then sequentially follow the steps in the tool

We can take an example suppose you are working in mechanical engineering or if you are a chemical engineer then you start with your ideas . Define stages /identify timeline for invention disclosure. Then you do the patentability search yourself. then based on that refine the research topic...proceed for the research file... the provisional

patent or a complete patent filing depending on the resources available with you. Then before commercialization perform FTO search and then go for the commercialization of the patent.

And in this way the cycle will continue to produce or to manage The other way if I already you are in middle of any project then check the possibility of any potential patent So what I will suggest that today only after going through this module you just sit down and just apply this to your research work This will help you to identify potential patent or atleast you will start thinking in that direction With this we come to the end of this session. In the next session , “Patentability tool”, we will check how to determine patentability See you in the next session

Thank you!