## Managing Intellectual Property in Universities Prof. Feroz Ali Department of Humanities and Social Sciences Indian Institute of Technology, Madras

## Lecture – 43 Setting up IP Center Part 1

So far, in this course, we have seen a general introduction to Intellectual Property Rights. We had seen some of the basic types of intellectual property rights with some details; we had seen patents, trademarks, copyright and designs; then we looked at the entrepreneurial function of the university and we had mentioned that the entrepreneurial function comes out of the research function of the university and the research function in itself could result in products and services which could be protected by intellectual property rights. Then, we broadly looked at where to look for inventions and we had also mentioned on the audit that you would do to determine whether an invention should be patented or not, what we call the patentability search. And, finally, we had touched upon the role of IP centres.

Now, in this lecture we will look at setting up IP centres. How does an educational institution a university or a college look at setting up intellectual property centres or IP centres.

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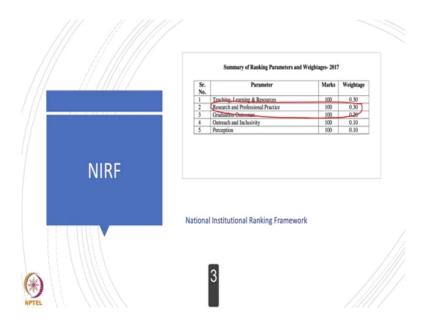


Now, the first question that we need to ask is whether universities need IP centres? Why do they need IP centres? Now, the answer is evident because intellectual property can protect this output of research and because research is an integral function in a university we could say that the output of research can be protected by IP and that IP needs to be managed and for managing the research output which can be commercialized you need IP centres. So, the first aspect is because universities do research you may have products of research that could have commercial value and you need IP centres to manage and to capture that.

Secondly, ranking. Now, we are aware of NIRF and ARIIA ranking there are two ranking from frameworks and these ranking frameworks inevitably look at patenting and how the patterns are being commercialized. Thirdly you have the regulators and the regulations. The UGC, AICTE and NAAC has mentioned in many words they need to set up IP centres and to be filing patterns and even to commercialize them.

Fourthly, which is more of a internal requirement. If you set up IP centres IP centres could become profit centres and when they become profit centres, they bring revenue to the university and some of the examples that we have in the United States are instances of IP centres being the source for identifying patterns which brought in revenue in millions of dollars.

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So, let us look at the NIRF part first. The NIRF refers to the National Institutional Ranking for Framework and this is the summary of the parameters the ranking parameters and weight ages in 2017. Now, you will find that research and professional practice gets weightage which is a bulk of the weightage if you look at the five parameters goes to research and professional active practice.

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Now, in research and professional practice you will find that IPR and patents: granted, filed and license, fetches you a component of mark. Now, this is not to say that this is the only place or this is the only part which could be relevant for the ranking. Because when you see that intellectual property rights play a cumulative role in changing various things which can affect other parameters as well.

For instance, you may introduce a new course on intellectual property right. Now, that could come as something that enhances the employability of your students and for them to get a job in the market. So, that could again relate to something that affects your ranking. You could set up IP centres and IP centres could become a source for commercializing the inventions and because inventions get commercialized you have more revenue for research and because there is more revenue available for research you could be satisfying other parameters as well.

So, setting up intellectual property rights has an effect beyond just the IPR and the patents that are granted, filed and licensed. So, the effect is beyond that.

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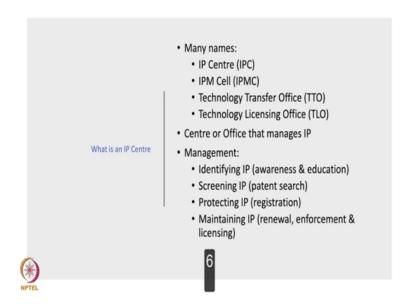


Now, the other ranking framework is called the Atal Ranking of Institutions on Innovation Achievements. Here again the major factors that they consider includes awareness promotion and support of idea generation and innovation. So, how many workshops you conduct, how many forums open forums you have, what are the ways in which ideas can be collected and verified and scrutinized all these things would affect the ranking under the ARIIA framework.

Promotion and support of entrepreneurial development: if there are IP centres which could help a research team file quite a lot of patterns and if the research team feels that they can incubate a company and take the company as a separate entity in itself then that could amount to promotion and support of entrepreneurship development.

And, finally, intellectual property generation technology transfer and commercialization are themselves indicators that would be taken into consideration.

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Now, what is an IP centre? Now, the IP centre is known by many names. It is called the IP Centre, in some places it is called the IPM Cell, in the west it is called the Technology Transfer Office or the Technology Licensing Office. Now, by enlarge they perform the same function and we know an IP centre by the function it performance. So, no matter what you call it if it qualifies or if it does the preliminary functions or the minimum requirements of an centre that manages intellectual property then we can call it an IP centre or an IPM cell.

Now, in short it is a centre or an office that manages intellectual property. Management itself management of intellectual property is a broad term. It includes many things like identifying intellectual property, screening intellectual property, protecting intellectual property, maintaining IP as well. Now, these we will look at these the functions of an IP centre in greater detail, but broadly you would know that awareness and educational IP education is something that universities are already doing. They may invite a an expert speaker, they may conduct workshops; they may have some kind of an awareness measure done in the university and all these things are right now being done in universities whether they have an IP centre or not.

Patent search screening or what we can even call as IP intelligence is something which can only be done by an IP centre. Now, this is where we would you would see that the screening IP part or we call the IP intelligence is something which cannot be delegated

you cannot have a third party coming and doing it for you and that is the most important part where you will see that there is a need to set up a centre in your institute, so that the second part the screening IP part or what we call IP intelligence is taken care of.

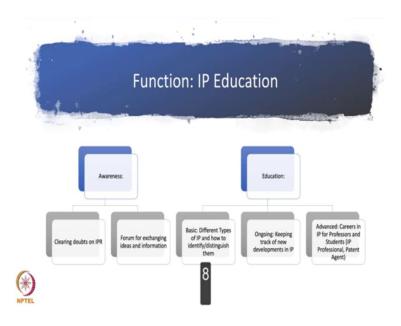
Registration of IP: once the IP is identified and the institute takes a call to file intellectual property protection for it, then it has to be done usually it is done by teaming up with third-party third party service providers. There are instances where the universities can also file it internally, but it will require a different kind of a setup and different kind of professionals to do that. They should have a patent agent within the university to do this for them and then you have once the IP is registered then you have to keep renewing it you have to keep enforcing it and commercialize it by earning by licensing it and earning revenue.

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So, the functions of the IP centre will just broadly classify them as identifying IP, screening IP what we call IP intelligence, protecting IP and maintaining IP. Now, if you can do all these functions or if all these functions are being done reasonably well in your institution then most likely you already have an IP centre or you have someone or some third party who is rendering these services which can qualify for the functions of an IP centre.

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Let us take the first one; IP education. Now, this is a function that the IP centre has to discharge. Now, IP education could mean awareness; by awareness it could mean something like clearing doubts on IPR and which is something most IP centres would have because there are experts within the IP centre they would people would approach the IP centre with certain doubts on intellectual property which may be specific to the work they are doing.

The IP centre can also as a part of the awareness have act as a forum for exchanging ideas and information. On the education part the education part can be divided into three parts; one refers to the basic education on IP, the different types of IP on how to distinguish and identify them this is largely what you had what we had covered in the first two weeks of this course. Identifying the basic types of IP and becoming a comfortable in knowing the different domains.

Apart from the basic education IP by it is very nature because it is dynamic and it keeps changing all the time and there are developments in technology which gets translated into developments in intellectual property right, you find that there is a need for ongoing education. Ongoing education is unique to IP in the sense that they may not be a need to have that in the other sectors. Keeping track of developments new developments in intellectual property right requires IP centres to also participate in ongoing education.

Now, the third part of IP education is the advanced IP education. IP centres may not be able to provide this, but this is again something in within a university set up it could make sense. Now, the advanced education part can take care of carriers and intellectual property for professors and students. Now, if somebody wants to become an IP professional or even become an patent agent registered patent agent they would require advanced education in IP.

So, we can look at IP education from three levels; one is the basic education which online course like this can cover, the other is an ongoing education which would require some kind of an interaction constant interaction with the stakeholders. Because as in when there are developments we may have to address that and train and educate people on that and then we have the advanced courses and the advanced courses are for people who want to make a career in intellectual property rights.

So, the IP centre would not only look at awareness issues with regard to awareness of IP it would also be looking at IP education.

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The second function pertains to I paid intelligence and this is something you need to focus carefully because IP intelligence is something which is very hard to delegate to someone or it is very hard for you to get third parties into the system who can do this intelligence. So, because of the very nature of intelligence it has to be done on an

ongoing basis. So, inviting a speaker to come and speak or conducting a workshop may not address this part of what an IP centre can do for you.

One – it can identify research results with commercial value. Now, the research results may come from different sources within your institution, it may come from a research project, it may come from a consultancy project, it could come from interaction between an industry client and the university. So, it could come from different sources. So, identifying them and testing the commercial value is something which needs to be done by the university.

So, you have this most universities may have an invention disclosure form which can be filled and submitted so, they could be an internal scrutiny of the invention disclosure form if there is an IP centre or if there is no IP centre then that part is also sent off to a third party service provider. IP could most likely be within publications as well. So, if it is already published then it becomes hard to file a patent and this is something which we covered as a part of the novelty requirement and patent law.

But, publications are a source for screening or looking at IP. So, if some if the institute has a long list of publications happening at regular intervals and if the professors are informed that before you publish you have to actually do a screening on whether something can be patented then that will set a culture where the publications before they get published are also screened for IP. So, that is the first part of IP intelligence identifying research results with commercial value.

The second part is to evaluate the commercial potential of disclosures. So, whenever a professor or a research team makes a disclosure it is the job of the IP centre to make a business plan and to evaluate the commercial potential. Now, the evaluation is again it is something that has to be done before you actually reap the benefits of the research; benefits of the research results.

The evaluation refers to looking at the prospect or the commercial prospect of the invention. Now, this can be done in different ways; one – you can look at the existing market players, the existing service providers in the market for a particular solution, what are the alternatives available, ease of imitation, you can look at the ability to use alternatives. Now, when you look at all these factors you will be able to say whether a

particular invention when it hits the market what could be the commercial potential for that.

Again, it is only an estimation, but it is good to do the estimation, so that you know where you are going to invest your money in because patenting by its nature is an expensive process, it involves a resources and it is also a time consuming process and by the time a patent gets granted, it could easily be anything between with considering the new timelines it could be anything between 3 or 5 years. So, when a patent gets granted it is only after the grant that patent can be fully commercialized.

Now, because of the way in which the system is set it is necessary that the university comes up with a business plan. They make a business plan like there is going to be investments and there are going to be returns just like an in any other business plan. So, before filing a patent the IP centre will have to look at or draw a business plan as to what is the commercialization potential for this particular invention, whether it resides in India or whether it is abroad because if it is outside India then it would require filing foreign patents by what we call the PCT route or the convention route which again the cost of investment made before the commercialization which is what patenting caused us then that shoots up.

So, making a business plan would involve considering all these factors; what are the things, how value valuable is the technology, how much money you need to invest to bring the technology out into the market and the amount of expenses that you will incur in protecting the invention by way of patents. So, it is kind of a cost benefit analysis to see whether the money that is invested could be recouped.

Now, in some cases universities and even institutions may not get into a cost benefit analysis because the trend is to have portfolio of patents and if you have filing portfolio of patents the underlying impression is that you may be able to commercialize the portfolio together and the more successful ones or the what we call the more commercially valuable ones will also help to sell the other patents which may not be very as commercially valuable.

So, a portfolio is selling them as a portfolio could be one way to hedge the risks or universities and institutions may take a call that a successful patent would bring in revenue to subsidize the cost of the patents that are not commercialized. So, so there are

two views you can take, but the thing is that you have to make some kind of a commercial you have to evaluate the commercial potential at some level before you can file a patent and it is a steep slope. Once you start investing money into patenting then the money is like it will it will incur expenses not just in the form of prosecution and registration, but also after registration they could be money that is required to keep the patent alive through renewals; there will be renewal fees. So, an understanding of the timeline involved and the cost involved is something what we call a business plan. So, a business plan has to be laid out before taking a call on filing a patent by understanding the commercial potential of the invention.

The third thing that an IP centre can do with regard to IP intelligence is to take the call or decide whether to protect the IP. Now, there could be cases where the intellectual property right need not be protected by way of an IP and what kind of IP whether it should be or something for a shorter duration or whether it should be protected for a longer duration, what will be the kind of IP you would use this call is taken by the IP centre. Obviously, the IP centre will also be assisted by a committees we will come to that later, but this is a call that the IP centre has to take whether to protect it by an IP at all. Because university is always have an option of publishing their research.

So, if they take a call that they will not protect it by way of an IP, then they can publish the result research results and get the credit for the same. So, this is where getting a patentability search report something which we covered in last week's lecture would become relevant. It is not possible to do an in-depth search analysis for every case and search is again something that could be done in a simplistic way, but and also in a very detailed way. So, you would find that a patentability search report is essential before you have to take a call on whether to file a patent or not.

And, the fourth point is the IP centre as a part of it is IP intelligence would be engaged in market research and by market research we refer to constantly looking out for industry partners and look at which technology to them in such a way that they could be interested in taking it and commercializing the results of those research. Now, this can happen by independent negotiation with the industry partners, identifying the interested parties could itself be tasks that the IP centre takes and negotiating with them, it could also happen out of consultancy and other projects which are already there in the university.