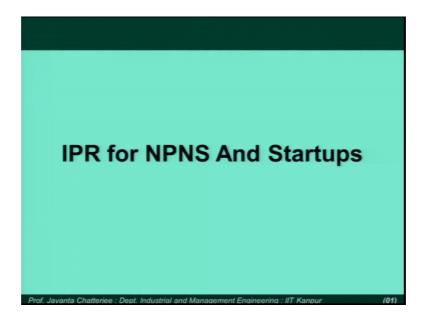
Management of New Products and Services (MNPS) Prof. Jayanta Chatterjee Department of Industrial and Management Engineering Indian Institute of Technology, Kanpur

Lecture – 21 NPNSM - Introduction to Intellectual Property Rights

This is a deep subject, it merit say maybe 10 hours of discussion. But, in this session we are just going to introduce to you the main ideas, and what you should be aware of some simple dos and don'ts. And also I will highly recommend that you visit the website of World Intellectual Property Organization WIPO, which is a global body United Nations sponsored. And the WIPO will provide you a lot of know-how about each type of intellectual property and how to do oh the analysis, how to search the current intellectual property database.

Incidentally, just before I start the discussion normally when people talk about IPR or patents or copyrights etcetera they are particularly in case of patents, they always think in terms of how to protect a particular innovation, how to protect the ideas forming the base of a new product and so on. But, please note that the patent database and some countries like the US patent database is quite exhaustive and very well structured. And that can be a source for your product development idea, because usually in a patent document significant details will be provided and patents are may be a particular product is patented in US or may be in US and Europe or only in Europe and it may not have been patented in India, in which case it is a free game for you.

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And if it is a kind of a product the manufacturer is not going to you will not really be capable of coming to India. There are many such interesting products particularly in the consumer product field, where actually you can therefore take that idea and do some incremental improvements and it can become a winning proposition for you. And until that particular company you know tries to come to India and so on you know you have a good business opportunity. And we have seen that many young companies in India took that route came up with a very good product and then later on if the original patent holder was interested to come to India and very many cases they actually acquired the a Indian company or made some joint venture.

So, it is actually can be a good strategy. So, do not neglect looking at patents as a source of ideas rather than patent as a way of protecting your idea it.

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Patent - Invention typically a process or device Copyrights – Expression of idea: Product brochure, Website, software's, product manuals Trademark: Goods or service to differentiate: product/ company name/ services Design: Product design Semiconductor Integrated Circuits Layout-Design Registry (SICLDR):Layout-Designs of integrated circuits Trade secret – know-how, blueprint, specific performance parameters, client details

And that will also be important, because sometimes you may have an idea but it is always a good thing to check out with the Indian patent database, and all the different information that is available even through normal search engines; that whether somebody has already thought about that an already protected that idea in the Indian context. So, that you know then you know that what more you need to do, or what a different approach you have to taken so on.

To simply put some of these ideas and explain the terminologies, patent is basically an invention typically a process or a device. And even when a it is a process patent it has to be associated with some kind of a tangible product usually. A pure process or pure service patents are can be done if it is properly formulated, but it is a bit difficult. So, patrons typically apply to; and you see the word there is invention which means that there has to be some novelty, there has to be something which is new two the market where you are trying to patent, and if you are trying to look at a global patenting approach then of course it has to be new to the world. Just it is new to your company will not make it patentable.

Copyrights are actually almost a natural right, it is an expression of idea. So, whether it is you know a story, or a painting, or a song, or a software those are they get acquire natural copyright. And things like product brochure or a website or a product manual, those can be you know you can seek copyrights. And it is always good to establish the date when

you are actually first singing a song or first displaying a particular painting because that date give you again that natural copyright so that in future if somebody copies you can then go and contest.

You can see the controversy that is going on right now about some song which has been used for somebody claimed that it is a new song, but then it was found that that is almost a copy of some old song which often happens. And in fact, our Bollywood is famous for earlier you know the original song writer or original the song that was published maybe in Turkey or maybe in Iran, I mean those guys did not really bother. But today Bollywood is so, big that now even Europeans are actually looking at and trying to claim their copyright over certain songs, which might have been kind of adapted from there.

Trademark is something when your goods or services are actually going into the commercial mode, and that is when actually you create; you have often seen that it is actually written in within a circle with t or with some other mark different countries of different conventions. So, that say copyright protected or it may say trademark. So, a product name or a service name can often be trademarked. So, companies names, product names, service or productised service names all of these are often trademarked.

Then comes the design, this is a little bit new field where a design, a distinctive design can now be protected under this intellectual property regime. And then this is a also a new one which is called semiconductor an integrated circuit layout. So, it is a kind of design, but a very specific type of design and this a protecting this is very important because you know a lot of R and D often goes into developing a new chip, a new semiconductor device or coming up with a new integrated circuit design. And that is why this new type has been introduced.

And there are many companies in India who may not be producing the chip, but they do the design of the chip. And, so in the lab where in Bangalore Mysore or Hyderabad or Calcutta where this design takes place and finally its implementation in between you know there are several possibilities of leakages, that is why this protection has become very important and is often used by very advanced semiconductor or electronic design companies in India.

And lastly trade secret you know although about the trade secret of Coca-Cola and so on, this is actually it can be some kind of know how a particular type of recipe a chemical composition it can be even a blueprint of an inner design.

Now trade secret obviously, keeping it secret I mean there is no government body or there is no outside agency which is going to give you that particular protection. Trade secret you have to manage your own secret and you have to see that it is you know properly all the safeguards are there, that is why they say that you know even the full recipe of Coca-Cola will not be known to one person, but they a few persons have to come together to create that finally that mix or the powder that gets transmitted to different you know outlets, there are different facilities around the world to produce finally what we drink.

Few dos and don'ts regarding this dealing with the IPR for inventors for new product new service developers, that often these developments take place in academic institutions, where there is a compulsion to publish. You know most faculty members even advanced PhD students or master students they need to publish their worth in reputed journals. But the idea here is never publish before you file your patent or other applications, because in patent something is very important that the prior art search should not yield into finding that somebody else has already talked about it. Even if you have talked about it in the public domain then it comes in the way of your patenting, that is why the golden rule is first file and then only you publish.

So, even filing a provisional application before you work out the more detail application and as I will briefly show that a pretend application is pretty onerous it needs a lot of work and that is why most often you have to go to a patent lawyer or specialized company to create the patent. And the patenting applications differ from country to country, as yet there is not really a global application form which will be you know valid everywhere there are some blocks, block of countries that you can cover. But generally they remain more or less the same the you know the approach remains the same, but there are differences.

So therefore, you have to decide in how many countries you need to protect, but markets you are going to approach; remember all the discussions that we had about segmentation, targeting, positioning all those will come here. But of course, if you have that product

portfolio platform idea, if you have the a plan you know a roadmap of getting into one market today and then you know progressing even that when we discussed about the chasm marketing then to catch the early majority, you may actually tomorrow go from a small country where you launch the product and prove the product and established its credential and then you want to go global, that you have to imagine to some extent. And if you are really serious and you feel that there is that potential then you should cover your patent in those countries as well.

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Don't publish before you file
 File provisional application if not ready with complete specification
 Company must ensure security of data/software
 Sign agreement with Employee
 NDA

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So, it is expensive to file a patent. So, you have to therefore, kind of way cost benefit and then accordingly decide. Also there are a few other stuff that are very important, they are not exactly issues relating to patenting, but they are issues relating to protecting your intellectual property. For example, you have to have proper security systems and safeguards, so that the software which is getting developed or data that are generated you know do not walk out with an employee.

Or, so people who deal with sensitive data, employees who deal with core development you have to sign agreements with them that that they will be liable for prosecution if they actually leak it out or take it out or you know surreptitiously sell the idea, and it happens in the high tech industries quite often, because competitors often actually tapped into employees, and try to convert them it is almost like a spy energy. So, you have to guard against that.

And finally, even people other companies other entities even universities you may be collaborating with you have to sign what is called NDA Non-disclosure Agreement. All these have now become fairly standard formats are available lawyers know it very well, but these bullets are here for you to know that these are the different ways as a new product, new service company you need to protect your intellectual property.

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MANY SUPPORT SCHEMES > IIT type of Incubation schemes for Technology Startup Units > Financial support for International Patent filing to encourage innovation and recognize the value and capabilities of global IP Prof. Javanta Chatteriee: Dept. Industrial and Management Engineering: IIT Kanpur (04)

Now, coming to if you are a you know young innovator if you are a young designer, then you may feel sort of overwhelmed by the prospect of going to this whole patenting exercise going through that and to determine whether you should just be satisfied with copyright or you have to go all the whole hog.

So, like at IIT Kanpur we have an incubation center innovation incubation center. Most other IITs now have such bodies and other many other institutes universities they have this incubation centers, where the nurture because as a country we have now focused on innovation. We know that in today's world the economic growth of a country depends on its innovation index.

So, a countrywide innovation effort is necessary for to keep our country at the forefront of economic development. And therefore, there is a need of countrywide processes for intellectual property protection; because we are signatory to many of the global agreements. So, we have to the owners is on us to do this protection follow the processes, to help young innovators young designers micro what they say MSME medium sized or

micro enterprises all these universities IITs Indian Institute of Science. In fact, even some IIMs they have this incubation and innovation assistance facilities.

So, you can even from many of these institutes if you have a good idea which has been accepted by their screening committee, you can get financial assistance for the protecting union. And if the committee finds that yes this particular idea or innovation has global potential there will be significant amount of assistance available from the central government to go for a global intellectual property protection.

So, check these out, these are available on various government websites these data. So, you can go to the department of science and technology or department of biotechnology website, you can also visit the website of IITs whichever is your nearest IIT and at least I know.

About IIT Kanpur we have fairly detailed information provided on our website. So, take advantage of that because that something that it will help you.

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HOW TO APPLY

Applicant can register online in the SIP-EIT portal
(www.ict-ipr/sipeit/)

Further information, detailed brochure and guidelines are provided in the portal

Applicant can login after registration and then apply for support under the scheme

Multiple applications can be submitted by a single user; 5 applications can be accepted per financial year

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For example, here I can I have shown one particular website you can see here, you can go to this website and see they will be mainly interested I think this is associated with c dac the center for development of advanced computing and. So, many of these information communication technology oriented intellectual property protection, you can get support from here.

So, you can actually download their detailed brochure guideline etcetera, and then you know the process is given here you can log in after registration, and then apply for support under the scheme that they have. I am using this only as a as an example, because similar processes are available at number of institute, multiple applications can be submitted by one user..

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SUCCESS STORY: CHINTHALA VENKAT REDDY: AN INNOVATIVE AGRICULTURALIST

- Chinthala Venkat Reddy is a farmer from Ranga Reddy, a district in the state of Telangana
- > a series of patents for soil management technique to enhance the crop yield.
- Using this novel soil management technique, Mr. Venkat Reddy has been able to get a yield of 30-32 tonnes of grapes per acre, while his counterparts using pesticides, fertilizers and other types of organic manures, got yields varying between 20 and 25 tonnes

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The here there is some example taken from that same sight and from that same institute, the case of this mister Venkat Reddy he is a farmer from Ranga Reddy a district in the state of Telangana, and he developed some soil management innovative techniques for enhancing particularly the yield of a grapes, and using that it was found that the yield increased improved by 30 32 tons per acre and so, they actually the patent was taken, this is the these are the patent numbers, as you can see here this patent has been taken.

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SUCCESS STORY: CHINTHALA VENKAT REDDY: AN INNOVATIVE AGRICULTURALIST

- Mr. Reddy's inventions have proved very helpful in commercialization of agro based small-scale industries. Realizing the intellectual property potential of his invention he got his inventions patented
- ➤ He had filed an Indian Patent (Number 239213) which describes the process to improve the nutrient contents of the soil in the cultivated lands. Subsequently he filed other patents WO2006001030, CA2581446, CN1953654, DE602004018195, EP1765051, US20070095117 and EP2272313 for increasing the yield of Rice, Cereals and fruits by soil management technique..
- Chinthala Venkat Reddy has been awarded with Mahindra Samriddhi India Agri Awards 2012 for this path breaking innovation.

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Not only on a wider scale, and it actually increasing the yield of rice, cereals, fruits for many other cases this soil management technique can be used and therefore, it has been protected accordingly.

Sometimes through these processes you will come in to the attention of government agencies like department of science and technology or DBT biotechnology, and thereby actually you can also get a lot of marketing help or networking help and so on you can get connected to potential partners.

So, that is it as far as this topic is concerned, as I mentioned more you want to know go to the website of WIPO world intellectual property organization, go to the website of different IITs, go to the website of department of science and technology and other departments and this other website which I have mentioned in this presentation, and try to explore it the for preliminary understanding go to WIPO very good.

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HOW TO APPLY Applicant can register online in the SIP-EIT portal (www.ict-ipr/sipeit/) Further information, detailed brochure and guidelines are provided in the portal Applicant can login after registration and then apply for support under the scheme Multiple applications can be submitted by a single user; 5 applications can be accepted per financial year Prof. Javanta Chatterice: Dept. Industrial and Management Engineering; IIT Kanpur (05)

Then I also mentioned that if you want to do patent search either to generate a new idea or to test your own idea how novel it is, you definitely look at the Indian patent database, the US patent database, those are two particular ones where. And there are also number of patent search engines available today.

So, you can also take the service of those patent search engines, to do a more detailed search and get the documents and the patent documents are in education in itself, because it tells you how to a structure, how to present, how to describe your idea for proper protection.

Thank you.