## Innovation, Business Models and Enterpreneurship Dr. Rajat Agarwal Department of Management Studies Indian Institute of Technology, Roorkee

## Lecture – 33 Types of IPR

Welcome friends, in last two sessions we discussed about intellectual capital, intellectual assets and finally, intellectual property.

And when we are talking of intellectual property we discussed that intellectual assets need to be protected by some laws of the nation. And then your assets become your property and when you have those assets into property, you get some rights with that and these are known as intellectual property rights.

Now, we also discussed and we all know as a labour also not a participant of this course that normally a very popular word is there that is patent. So, we most of the time use interchangeably these two words; one is patent and another is IPR. But in this session we will see that there are different types of intellectual property rights and these different types of intellectual property rights depending upon the type of intellectual property you has.

Now, recently to start our discussion; we had a very popular debate in our country in India that debate is about a very popular sweet item we have. Now that sweet item is known as Rasgulla; now there was a fight between two states, the state of Odissa and a state of West Bengal that which state has roots of Rasgulla.

Nowadays Rasgulla is available in each corner of this country and may not be in country; it is globally also. You can get Rasgulla in America, you can get Rasgulla in England, you can get Rasgulla in Australia; so, Rasgulla is available all through the world.

But within India there was a fight between a state of Odissa and a state of West Bengal that which a state has roots of Rasgulla or Rasgulla should be associated with the origin from which state. And finally, this matter are discussed, it was debated with lot of ancient documents.

And then finally, one of the IP which is known as geographical indicator G I was awarded to state of West Bengal for Rasgulla. That means, the Rasgulla is actually originated from state of West Bengal and then from West Bengal it moved to various other places of India as well as abroad.

So, it is not patent it is a different kind of IP; similarly you must have heard about piracy of music videos. You get pirated CDs of newly released Bollywood movies that is what patent that is rather copyright. So, that is another type of intellectual property. So, therefore in this session we will see that what are the different types of intellectual properties? And what are the rights associated with those intellectual property? So, it is basically rights associated with different types of intellectual property.

Now, the two types of intellectual properties are there one is industrial property and another is copyright. The industrial property, the most important industrial property is the property which is very very popular; that is patent.

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So, industrial property is basically property which has some kind of tangible output; that is industrial property and copyrights are for more creative kind of intellectual property.

So, when you write a story; when you write a drama, when you write a poem, when you write a research paper these things come under the category of copyrights. When you develop a new type of product, when you develop a new process which is more cost

efficient, which provides you minimum waste; those type of things are the part of patents or industrial property. So, that is the first level of classification of intellectual property that you have industrial property and copyright. So, that is the primary classification of different types of intellectual properties.

Now within that within the overall intellectual property domain; we have three most important termed of intellectual properties and these are patents, copyrights and trademarks.

	The Big Three	
•Patents		
•Copyrights		
<ul> <li>Trademarks</li> </ul>		
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Without this lecture; we all know logos, brands, slogans of some of the most popular companies of the world; these are trademarks. We know we need to pay some price for download a new song on our iPhone that is the royalty we are paying to the composer or to the music company because that composer or music company is owning the copyright of that song.

So, that is related to another important type of intellectual property and; obviously, as we are repeatedly saying patent is the most popular form of intellectual property where you develop a new product. One of the most innovative company when we talk this stuff that which is the most innovative company of 2017? Which was the most innovative company of 2016? So, one of the criteria to say that which company is most innovative is on the basis of number of patents that company is filing or getting in a particular year.

So, the tagline related to most innovative is normally associated with the patent. So, how many patents you are getting in a year? In India companies like BHEL, Bharat Heavy Electricals Limited; which is one of the most popular PSU of this company, one of the most profitable dream company within the PSU segment. So, they have a benchmark of filing one patent on average on the daily basis. So, that is one of the highest level of achievement for any PSU in this country.

So, some of the institutions higher educational institutions the IITs, NITs the different types of private universities they also compare their performance on the basis of patents filed by their researchers, their faculty members. So, patents is a direct measure of how innovative you are. So, these are the first three types of important thing; in our coming sessions we will be discussing in more detail about systems of patents and systems of copyright in a country.

Then there are certain supporting players also most of the time as and individual, we are exposed to patents, copyrights and trademarks. But there are some other type of intellectual properties also and there are different types of rights associated with those intellectual property. So, one of them is trade secrets; the very popular name related to trade secret that is Coca cola.

We say that the company has a typical formula for their soft drinks and that formula is not disclosed to any of the outside world and that is trade secret how do you do business? So, you want to keep that thing confidential, you do not want to disclose that thing what is a specific chemical formula you are using, what is a specific business process you are using?

These things where you feel are a specific competitive edge to your business; you do not want to disclose these things. These are normally trade secrets because you feel that these are giving you an additional advantage. But sometime because it is not a type of patent; it is quite possible that your competitor may copy, your competitor may take that advantage because trade secrets can be copied by the competitors. Then industrial designs these are make industrial layouts they are also the part of a IP regime.

I discuss the story of Rasgulla; so, in India we have Banarasi saree, you have Darjeeling tea. So, these are when you is specify a product with a particular location. So, that is geographical integrator because you know that this particular product is available best quality from this location. So, therefore you want to take the advantage of association of that particular geographical area with the marketing of the product so, that is geographical indicator. So, that is also a type of intellectual property.

Then layout design of integrated circuits; the designing of circuit, circuit design can also be protected under the intellectual property systems. Then non competition, non disclosure agreements can also be the part of intellectual property. So, you have some kind of secret, you have some kind of assessment evaluation team. And for that purpose sometimes we sign this type of non competition non disclosure agreement because I am the part of some evaluation team.

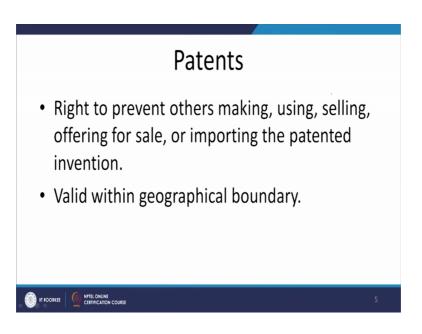
For an example, if PhD thesis comes to me for evaluation. So, it is quite possible that the university which is sending that PhD thesis or M Tech thesis to me for evaluation can get an agreement from me about non completion, non disclosure that I will not disclose, I will not do any competitive activity with respect to the idea, with respect to innovation, with respect to research carried out in that thesis.

So, that is also a kind of intellectual property right. So, these are actually the supporting player as I mentioned and in the previous slide we discussed that patents, copyrights and trademarks these are the most important or popular intellectual properties.

Now, let us see what is patent? Because many a times we are talking of patent and why patents why knowing these things? In this course on innovation, entrepreneurship, business models why it is important to know about patent? Because it is almost impossible almost impossible to go for next level of business without protecting your ideas, without protecting the innovation which you are having.

So, it is because as we have discussed many times in our previous sessions that innovation is a very iterative process. You sometime move to a step forward and one is step backward. So, this is very iterative process and at each stage of innovation process lot of iterations are in work. Therefore, it is a time taking activity and if you have not protected your ideas; if you have not protected your broad outline of your activities, it is quite possible that your idea may be copied by somebody else. And if he or she is smarter than you; so, he may build products businesses faster than you on your idea. So, therefore, for any startup, for any first generation entrepreneur whenever you are coming with something new; it is essential to protect your idea right from the beginning so, that you have a shield around you and this shield will help you to work peacefully with your idea.

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So, patent is right to prevent what IP are, what right it is giving that it gives you right to prevent others making, using, sealing, offering for sale or importing the patented invention.

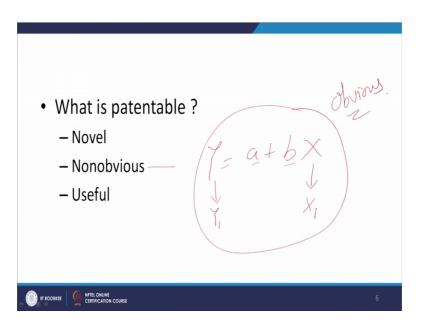
So, you have these types of protection available if your invention is patented, then another important characteristic which is also very important to know that patents are normally granted by a country or a group of countries. So, patents are applicable; patents are valid a particular patent is valid only within a particular geographical area means if I am applying for a patent for India patent office; so, that patent is only valid within India.

If I am applying a patent in USA; so, that patent is applicable only in USA, it is not valid in India. Depending upon my scope of business, depending upon possible competitor threats; I may go to many countries to obtain patent on my invention. And to ease the process of getting patents, there are certain kind of group of countries like African group of countries; they came together and they make a combined patent granting process. So, that for each African country you need not to submit separate patent application; you submit that application to group of countries and that is sufficient for the validity of your patent in entire African region. So, that is just to facilitate the inventor that you need not to put lot of money to get patents for different geographical areas.

Now, what is patentable? That is very very important, all inventions because as a researcher I feel that whatever I am researching is patentable, but that is not the case. So, what is patentable I should be very very clear and for that purpose lot of understanding of previous works related to that field is very important.

Now, there are three important words which we need to remember regarding what is patentable; one is that your idea should be novel.

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There has to be some kind of novelty, this should be entirely new idea. Then it is non obvious, if something is previously existing and if you do some incremental change in x; then accordingly y will change. The meaning is if y equals to a plus b x where y is dependent variable and x is independent variable.

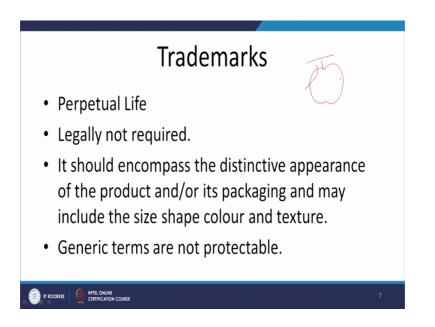
So, now if I am changing the value of x 2 x 1; so, y will change from y 2, y 1; so, this is obvious when independent value is changing and I know that how dependent value will behave on the basis of this independent value because I know the values of a and b. So, this type of change is obvious because you have a pattern of relationship. And if this type

of obvious phenomena is there in your product process, it is also not patentable; you cannot get patent on these types of innovations that in earlier product it is x and the output was y.

Now, you have changed a new product into x 1 and therefore, output is y 1, which is a kind of obvious then somebody else will come with x to input and you get y to output. So, all these things are coming under the category of obviousness. And things which are obvious cannot be patented and third is it should be useful to the society. There has to be some kind of practical utility of this invention for the society; so, that is also very important.

So, three important things the novelty factor, non obviousness factor and the usefulness factor. If a claim is satisfying; all these three important characteristics then that claim is patentable. Whether you will get patent or not that is a separate matter that we will discuss in our next session, but this claim is patentable that is for sure.

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The other important type of IP that is trademarks.

Trademarks, we all know some of the very popular trademarks we have discussed these are related to brand names, these are related to slogans, these are related to logos. So, we all have as I am saying the trademark, you will see that how the institutes names are

written, you have some kind of logo of your institute, we have logos of some of the popular companies; how apple is made when I am talking of Apple iPhone.

So, you recognize; so, many different organizations forms by the way they have a particular writing style. When I make apple like this; you will not understand that I am talking Apple iPhone. But when I cutting this part and the apple is slightly cut in a fashion; then you immediately recognize that this symbol is representing Apple iPhone, this symbol is representing Apple company; so, that is the power of trademark.

And when I am talking of apple trademark all the benefits associated with that company also comes in your mind. So, that is how you remember your trademark that is the utility of trademarks for the business.

And it is one of the very important type of intellectual property because you will see if you do Google you will find many companies; they are having a very huge valuation of their trademarks, their logos. And if you see our previous discussions of last two sessions, where we discussed about intellectual assets, intellectual capital this is one of the very important type of intellectual capital for some of the organization.

Because you have no physical assets, these are just pictures, these are just symbols. And for those symbols, for those names you get very high valuation and that is a very live example of intellectual capital.

Now, the modern things related to trademark the important characteristics of the trademark are that trademarks are having perpetual life perpetual life means in finite amount of life is there. For example, in case of patent, the life is only for 20 years in most of the cases the life of a patent is 20 years and after that 20 years; the protections are not there that it is open for all.

The inventor will not have any protection after 20 years of getting the patent, but in case of trademark the life of trademark is all through, it is perpetual, infinite. Legally, trademarks are not required you develop a symbol of writing the name of your company, you may get it registered, you may not get it registered it is up to you. If you feel that it is not going to give you any additional advantage.

So, you may not go for getting that trademark registered for your name, but if you feel that this style, this name is a very unique thing for you and you want to create some kind of identity with that and in that case you want that it should be protected under the law and nobody should copy it and in that case, you need to go for getting that production then it is required.

But plainly speaking it is not required in the beginning if you are a starting business and you are into the entrepreneurship mode. Initially you need not to worry for trademark, but as soon as your valuation is a started increasing then you need to think that your valuation is increasing now your name is becoming popular and at that time you should get your trademarks, your name of the company properly registered so, that you create an identity with your name.

It should encompass that distinctive appearance of the product or its packaging and may include the size, shape, color and texture. So, the trademark should reflect the distinctive appearance of the product and its packaging and what is the size, shape, color, texture all these things; somehow gel with the type of product you are going to offer.

The important thing when you are applying for trademark generic terms are not predictable; like if you are a starting a cycle company in that if you want to make your cycle company is cycle limited; then it is not possible to get registered cycle as your trademark because cycle is a generic name.

So, you need to always see that generic names are not predictable this is important thing because there are a lot of confusion about medicinal field, about protecting the generic name or not. So, generic names cannot be protected; for an example for an example I give you the very simple case of Chyawanprash.

Chyawanprash is a yurvedic medicine kind of thing health ah product and Chyawanprash is a generic name which is available in ancient ayurvedic literature. Now nobody, no company, no firm can get this name registered for their product you may have Chyawanprash. Chyawanprash from Patanjali, you may have Chyawanprash from (Refer Time: 27:56), you may have Chyawanprash from Jandu, you may have Chyawanprash from Dabar, you may have Chyawanprash from Himalayas.

So, there are; so many different companies making the same product with the name of Chyawanprash, but none of them can have this Chyawanprash as trademark for their own product because it is a generic name. So, whenever generic names are there these cannot be protected.

So, therefore, some of the companies have to distinguish their products from chyawanprash. So, they have kept some different names like Amritprash, now this Amritprash can be protected under the trademark act because this is not a generic name, some other company has kept name like Sonaprash, Chandi prash.

So, these are not the generic names these are trade names therefore, these can be predicted under trademarks. Then there is a process of registration of trademark which we are not going to discuss right now. Because you need to apply and then there is a registration process and after fulfilling certain conditions.

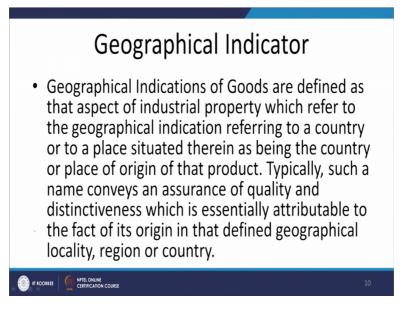
So, you get the trademark some of the most valuable trademarks globally are like Google, IBM, Apple, Microsoft Coca-cola.

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These are the top five most valuable trademarks in the global business world. So, and these names itself have lot of value, intellectual capital and therefore, people look for having a very high value for their trademarks. Then another type of intellectual property the story of Rasgulla related to geographical indicator.

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Now geographical indicators are that part of industrial property which refer to geographical indication to a country or to a place situated therein as being the country or place of origin of that product. Now you have a concept in marketing that is Country Of Origin; COO; now this geographical indicator is basically related to that concept of COO where you are relating the product with its country of origin.

Because this name conveys and assurance of quality and some kind of distinctiveness which is essentially attributable to the fact of its origin in that defined geographical locality, region or country because as we know that in India; tea is very popular from Darjeeling there is a special flavor of tea from Srilanka Ceylon tea.

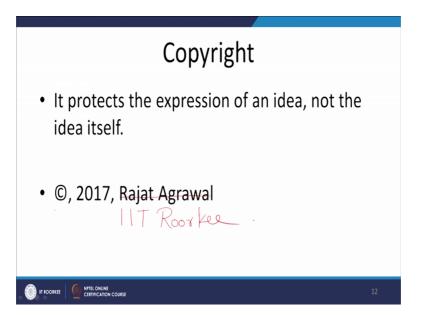
Similarly, there are a special type of work we do on ladies garments that is [F] in Banaras. So, these products are associated with the local area, with the place of origin therefore, geographical indicator gives that type of unique quality, that type of distinctiveness that it conveys that particular thing. So, therefore, geographical indicator is given in that way.

So, there is a complete process of getting the geographical indicator you need to submit all the applications, relevant documents and with the help of your claim that what uniqueness this particular product is offering from this location, the geographical indicators are awarded. Then another type of important IP is copyright; now copyright protects the expression of an idea, not the idea itself. For an example we have surgham; [FL], this surgham is there, but there are so many different compositions millions of compositions are there just using different combinations of this surgham.

So, the expression of idea is a particular combination of this surgham; the idea is surgham when I talk of music. So, music is starts with surgham, but how you are combining that surgham into different permutations and combinations; so each combination is a different expression of that idea. So, you can protect under the copyright that particular expression of idea, in all Bollywood movies, there is a hero there is a heroine and there is a villain.

Now, hero beats heroine or heroine beats hero and there comes a villain and after some story, after some time hero wins over villain and finally, in most of the bollywood movie we see happy ending either hero and heroine marries or they progress further in their life. So, idea is this only three important characters are there hero heroin and villain, but in each movie we see that the expression of this idea in different ways; so therefore, each movie can be copyrighted.

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Normally the copyrights are represented by the symbol and then the year of producing that article that creative thing and then who owns the copyright. So, just to give you an idea this is the copyright symbol, this is the year and this is my name to give you that

how on the front page of your documents you write the copyright owners name. If in this case if I do not want to give copyright to myself and as a policy, if copyright is to be of IIT Roorkee.

So, in this place it can be IIT Roorkee. So, whoever owns the copyright that is the third item in this expression of copyright. Copyright is not to be obtained; it is a self type of right which generates on its own. Then another type of IP is trade secret and as we discussed about the example of Coca-Cola.

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So, chemical formula manufacturing processes machine design business models; all these things come under the part of trade secret, but you suddenly need to maintain that secret, then only it remains trade secret. When it goes through because of secret it is quite possible that somebody else can take away some kind, your own employees may leak the trade secret and therefore, you need to have that non confidentiality, noncompetitive agreement from your employees also to get protection against these secrets.

So, these are some of the important type of IP intellectual properties we discussed. And particularly as an innovator we will come across patents, we will come across trade secret, we will come across trademarks, copyrights. And if we are talking of group of innovators from a particular location, we may also think of getting geographical indicators. So, with this we come to end of this session.

Thank you very much.