## Introduction on Intellectual Property to Engineers and Technologists Prof. T. K Bandyopadhyay

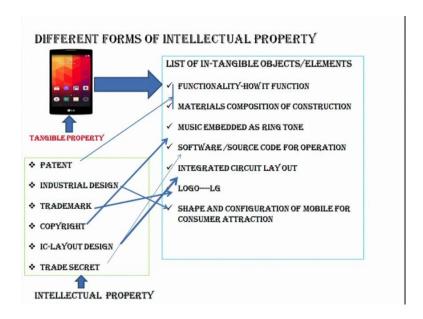
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## Lecture – 04 Different Forms of IP

Let us come to class four.

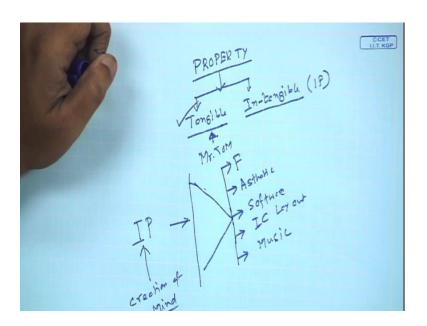
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But, before going to class four, let recapitulate the thing whatever we learned in class one, class two, class three. Class one; again I am reminding you we have learned about that basic of intellectual property rights. They are I have explains about the natures, by virtue of nature what it is. Class two you have taught about that law and different forms law in its applicabilities, in respect of intellectual property rights, there we have learnt about that a contract law, evidence laws and other forms of laws also. Class three we have learnt about that; what are the different kinds of theories, that have come up to also may consider for foundations or for justification of intellectual property right systems. There we have learnt about the philosophical aspects, economical aspects or different form of information goods or public goods.

Now, before going in depth about the intellectual property and say different each element within the form of intellectual property; today will give you an idea of different forms of intellectual property a rights. There you will learn just like we will have miss norms the people have thought about intellectual property rights means only patents, but not like that. So, that thing you will learn from the today's class.

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So now, let us say I referred to you that, property is coming in the form of tangible things. Let us now intangible it should of that I can considered that information would I have intangible thing and whatever we have to considering that is a intellectual property perceive. So now, let us how can I correlate these thing or how one within the one thing how another things may be embedded without our knowledge, lets we will try to or learnt about that. Let us I have taken example of a mobile here. Let show that within the mobile, what type of what it is, somebody can tell me what type of what it is, based on these two classifications. Why I can feel, I can touch, I can evaluate. So, what a mobile is a physical object. So, I can consider mobile as a tangible property. So, who is in position of that mobile I may consider that he is the owner of that. So, I told you that ownership may come up by virtual 2 by virtual title virtual positions.

So, by virtual position is the owner of that tangible thing. Let us say considered Mr. Tom. I refer in the first class Mr. Tom is possessing that mobile. So, Mr. Tom is now the owner of that tangible object. So, Mister and Tom or Mr. Tom does not know that, in those

mobile also different types of intangible object or elements are embedded with. So, then he was thinking about this is I am in the position of that mobile is a tangible thing. Let us say he is creative imaginative I have already referred that. Now he was thinking about.

So, he was trying to let say investigate the mobile to find out, let us say what are the intangible objects or elements embedded within that mobile. So, he first ask the question himself that, how the mobile is functioning. So, functioning that is that clock is ultimately that particular minutes hand and second hand is rotating. So, mobile is also on mobile by virtual mobile I am able to communicate with the different people. So, you was thinking about, but mobile is the tangible things, but now it is functioning definitely some say something associated or that functioning, may be a intangible things. So, functionality how it function, so that part may be some intangible elements associated or that functionality.

He was thinking about the mobile is seem to him is a polymer or ceramic or metal. What is the material of construction, material composition of construction of that mobile, maybe it is also intangible thing, whatever I thought about see 6 as 10 over 10 kinds of formula may be some particular formula is also somebody have developed that formula for that polymer, that have been somebody the use that chemical formula all that composition for construction of this mobile.

So material composition or construction is ultimately coming up in the form of intangible things, now mobile is also providing some sorts of sound or some a music is embedded has ring tone in the form of a mobile. For that ring tone I can touch, for the ring tone I can feel. So, that thing is also a readymade embedded within the form of that mobile. Now may be mobile is touch screen mobile, if I touch then it is functioning, I already told the functionality in the form of a touch screen. So, they are somebody's some intangible things, intangible element associated with that functionality in the form of touch screen. So now, that functionality can further facilitate by means of some software.

So, what do you mean by thing software is a form of some instruction. Instruction provided to the hardware, for efficient functionality of that hardware. Maybe some software or source code for operation over that touch screen or that that particular functionality also associated with that mobile. May be some sorts of integrated circuit or

associated with that mobile and some there circuit ultimately created based some particular layout.

So, that is also may be associated with the particular mobile. So, that is also intangible may be. So now, some I have taken that mobile and that how can I identify that mobile that from which source is mobile is coming up. So, there I found a logo that is telling stating over to LG that indicating that the mobile is coming from the source call LG. That is providing some information also that LG. So, there also I can considered LG is also support a some information that is also we can considered and intangible things associated with that this mobile tangible things.

Now the mobile have I am adopted about that mobile because it has beautiful set and configuration, configuration does not means that technical configuration, configuration in the form of some aesthetic features that will help that mobile company to attract customers and consumers with reference to that mobile. So now, within that tangible object what intangible things we are getting functionality. We are getting say aesthetic features, we are getting say software, we are getting say layout, IC layout, and we are getting say some music. So, all those things are coming in the form of intangible things or. So, intangible things, we are considering intangible things are coming up by means of creation of mind.

So, we are stating them or intellectual or intangible objects or element associated with that we are stating that let say in the form of IP because otherwise that I already told you that theoretical justification part that. So, that functionality or better functionality how we are getting because of that we have providing some sorts of limited period exclusive right, over that over that creation for that we are getting better functionality. now you thought about the mobile tenuous down the line first teenier first, and today's mobile having the better functionality because of those theoretical justification or because of that intellectual property right systems we are getting every day the functionality of the mobile have been say improving over the year over the time over time prince.

Material composition of that construction may be better because let us say your mobile suddenly fall from your hand, it is not breaking may be earlier days it was breaking, may be you are thinking about that it will not ultimately open up and we assume will lose not lose the sim.

So, if an even if you fall from your hand it will ultimately not open up the internal components including the component which is says holding the sims. So, that way that intellectual, that intangible object or elements associated with that. We are justifying that for maximum utilization of those things, we are justifying that we required we have to provide some sorts of exclusive right over those intangible object to whom means, to whom is to the person who has created and ultimately, we got that mobile in the tangible forms. So, they are lies the ultimately defined forms of intellectual property that embedded within that tangible objects.

So, now I will just classify for preliminary class. What are the difference forms of IP intellectual property, that are associated or that we can thought about within that intangible objects or elements. So now, that let us say we are stating that functionality or how it will function, how the improved function we are getting, that has come have fall in the form of intellectual property and we call this that intellectual property in the form of patent. So, one form of intellectual property rights for intellectual element an intellectual property right that has come up in that intellectual say in that intangible object that is have been improving the functionality of my mobile. That has been ultimately come from some patent.

So, patent is one of the forms of intellectual property that are associated with that mobile and that is we can considering the intellectual property or in intellectual property associated with that mobile. You may ask me that that have that for the intellectual property till exist or not that are different questions because I referred that the limited period exclusive right.

So, there may be chances is there that that patent periods of particular functionality may over or may still remains that is the questions of x on that required to be investigated, but that the different forms of in intellectual property that have facilitate to, that have been facilitating ask to get a beautiful mobile. That we are discussing. So, the form of intellectual property rights that is protecting the functionality including the material of composition or construction we are referring that as patent.

We will discuss in details regarding that. So, you now first remember that the functionality, all material of composition is protected in the form of one interpret, that we are considering them as patent now. So, another things we told that we peoples are

purchasing a mobile somebody's purchasing for functionality, somebody purchasing that mobile not for functionality, because or shape configuration of the mobile is giving some sort of aesthetic look of that mobile. So, some portion is ultimately have involved in the evaluations of that mobile, to provide some sorts of beautiful shape by providing some beautiful shape and configuration of them mobile.

So ultimately he deserves. So, I told you in the best on the theory he deserved some sorts of reward incentive in the form of limited period exclusive right, now, the philosopher. So, interpret rights creators have given in some sorts of right in the form of an industrial design. So, he is the person who has created a beautiful say when configuration of these mobile, the mobile he has the right in the form of industrial design rights over that mobile. So now, we got two form of intellectual property associated with this tangible mobile. Now come to the third part. So, we have procure that mobile because we know that LG has good brand, that have been providing mobile with consistence good quality.

So, because now how can I distinguish this mobile form apple mobile, they are we have to identify that apple mobile is coming from apple source or 1 g mobile is coming from LG source. So, they are lies that that LG role of LG logo they are. So, that logo is ultimately coming in the form of industrial property or intangible things because we do not know; what is the value of that logo. It is difficult to measures this is difficult to fills that logo. So, that is also coming up in the form intellectual property rights. So, that is that logo. So, they have is the another form of intellectual property rights that we call that as a Trade mark. That is also another form of intellectual property right. That is associated with that mobile that is providing some information about the source of that mobile, from which company or which source it have been coming that LG is indicating it is coming from a particular company call LG.

So, we have already come up with the three forms of intellectual property rights that are associated with that mobile. Now what are the others intangible object or elements associated with that mobile? I told you music embedded as a ring tones, software source code for operation. So, that is also coming because let us say measures of each intangible objects or elements are different something with reference to functionality, something with reference to the material, something with reference to the shape and configuration, something with reference to the logo. So now, that natures and forms with reference to

music and software they are we have developed one form of intellectual property rights we call that as Copy Rights.

So, see that each intellectual intangible objects or elements are different. So, for different things we have created different forms of intellectual property right system for betterment or of its use. So, use betterment for the maximization for the wealth creations. So, there ultimately we have telling that is coming in the form of a copy rights we will discussed these thing about the copy rights and others. I told you that there may be an integrated circuit based on that circuit, that circuit have been if you do the reverse engineering about integrated circuit or chiefs we came across a layout. One individual or creators ultimately design that layout and fabricators ultimately fabricate that I c using his layout. So, he is also part of a value adopt in the form of in the in that value chain of that mobile.

So, he is we cannot neglect he is contribution in the form of creation of minds. So, for that reason we have created another form of IP for that creation which for that layout we till that IC layout design. So, IC layout design is also coming up another form of intellectual property rights. Subsequently one is another thing is called Trade Secret. Trade secret also coming in the form of in secret information having the business value, so that is perceive secret. So, we may consider trade secret associated with that source code trade secret may be associated with that particular design.

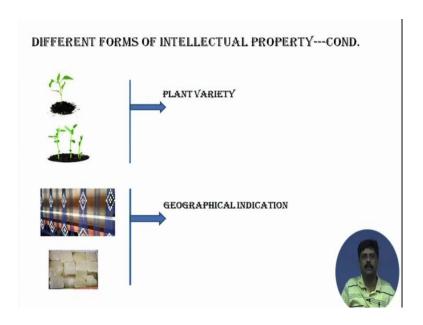
So the secret means information having the business value, that may be source code may be the material formula may be that particular functionalities integrities is also trade secret that because of that trade secret they are providing better function you everybody knows the copula formula and copula formula people have not able to reveal till date. Copula formula is unknown. So, that is trade secret of copula. They have see try to compute with reference to copula with respect to formulations of that particular coke, but not able to do that. So, may be they make keep something as a trade secret within the purview of that that is also come with the purview of intellectual property rights or sometime we call industrial property rights.

So, within these mobile how many forms of intellectual property rights we are getting. We are getting patent to, we are getting industrial design, we are getting trade mark, we are getting copy right, we are getting IC layout design, and we are getting trade secret.

So, see that one within a tangible object we are getting 1 2 3 4 5 6 seeing form of intellectual property rights. So, may be somebody have invent somebody or some not somebody, may be in n number of person involved in respect of functionality.

So, inventors are getting rights or they are inventing and that is coming in the form of a patents is a creator. Creating beautiful; Shape and configuration that is coming in the form of industrial design; some bodies designing that logo companies using that logo that is coming in the form of a trade mark, music embedded in the ring tone or ring tone music is coming up in the form of a copy right layout of the mu layout of the integrate circuit is coming in the form of an I integrated circuit layout and overall some elements of the trade, some element of the source code and others may come up in the form of a trade secrets, so trade secrets.

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So, we are getting six forms of IP within these forms. This is not the complete list of IP. There are others 2 forms of IP. So overall 8 forms of IP will discuss in these course, others two forms of IP is coming up. One is called land variety, another is called geographical indications. Just like say we have created a particular variety of plants. So now, that breeder created the particular plant variety.

He definitely deserves some rights over that particular variety, so that its fruits of labors should be rewarded. So, he will get some sorts of incentive for his creations. So, they are that thing is coming up by virtue of plant varieties sometime we called breeders rights.

Breeders have some sourced of rights over that a particular variety he has grown. So, that there lies another forms of intellectual property rights now we call is that Plant variety perceive.

So next is that one and form of intellectual property rights is called Geographical Indications. I have given the two figures that refer a textile goods, that have been developed in a particular region that particular community have that skill to create that hand loom product. I have given a food product you may guess what it is it is Agra petha. So, that particular product have been some attribute because of that place that attribute may come up because of its say Agro climatic conditions (Refer Time: 26:10) condition that is say subjectively verifiable or may be the skill or of that particular community, that community has acquired over that years.

So now, to reward that particular community for that particular creations, another forms of intellectual property rights has come up in the form of geographical indications. Everybody knows about Darjeeling teas, Assam teas, Nilgiri teas (Refer Time: 26:46). So, those are how that particular community or can get reward because of that particular product, originated in that place. So, they are lies the role of geographical indication that geographical indication, that particular indication of that product or that have been having product place link and that for some reward mechanism of that particular a of that society or people of that place. So, this is another form of intellectual property rights coming up in the form of geographical indications.

So now what are different forms of IP we have a listed within a tangible object we about will able to analyst 6 forms of IP, that is patent industrial design, trade mark, copy right, IC layout design, trade secret. We have again created two others forms of intellectual property right or industrial property rights that is coming up in the form of a plan varieties or and geographical indications. So, over all how many forms of intellectual property we have got knowledge about; how many functionality property 6 plus 28 within a single tangible object, we got 6 form of intellectual property right intellectual property patent industrial design trade mark copy right IC layout design trade secret and two independent intellectual property in the form of plan, variety and geographical indications also is they are. So, total 8 forms of intellectual property rights.

So, we will discuss each form in details in one class. So, all 8 forms of IP may be one within a class or clubbing 2 clubbing two forms of IP within a class will try to finish all the forms of IP in subsequent classes. So now, I think at least we will able to identify what are the different forms of IP within a associated a within a tangible object, whatever we are using and now if you know that what are the intangible object associated with that tangible object will able to ultimately do, some iteration you within your mind to make that make that product more attractive more functionally improved.

So, he definitely we will able to create or invent then you will be inventor or creator or you will have the right in the form of patents, copy rights or industrial design. So we will finish it here now. Say we one we are finishing I will upload the assignment of these module, this module about the basics forms of intellectual property right different law and its introduction different theories of IP and different forms of IP.

I will just give some assignment with reference to these modules in the form of multiple choice questions and some descriptive analytical questions. So, I will upload that assignment YouTube finish that assignment as for within the prescribed limit.

Thank you.