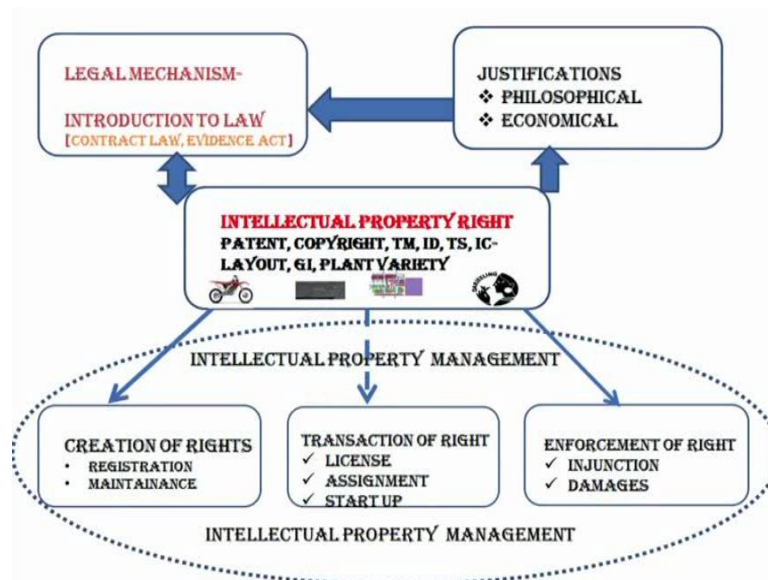


Introduction on Intellectual Property to Engineers and Technologists
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Lecture – 01
Basic of Intellectual Property

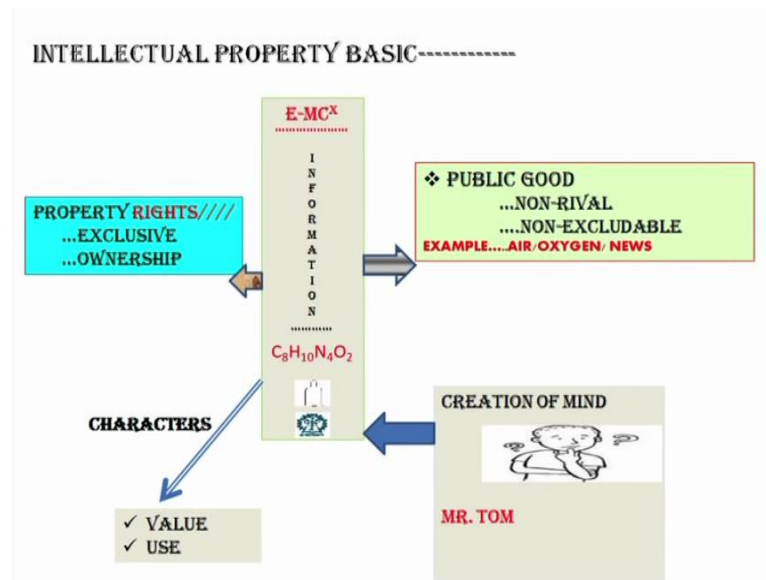
Hello. Good morning all of you, I have already given the frame work of my course.

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I am just repeating the same just like say intellectual property rights and its important is felt by the country, policy makers, international bodies, and say it the in respect of academics and industry in refers to collaboration and others. So, on that premises I have given the overview of my course that will tell about intellectual property, creation, transaction, management all those aspects.

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So, now I will start my first lectures with reference to basics of Intellectual Property rights. So, why intellectual property rights what it is and say what is the theoretical justification behind this forms of rights; every things I will try to covers along with I will give an introduction about the different forms of law that may required for a learner of this course, along with may be a lay persons who are in a technology dominants. So, let us see; I will start with in the class one with the basics of intellectual property per sale. So, what do you mean by information or information goods? Just like say I consider every day a news channel provide some information, a child draw a painting or child draw some curve that may also derived some information.

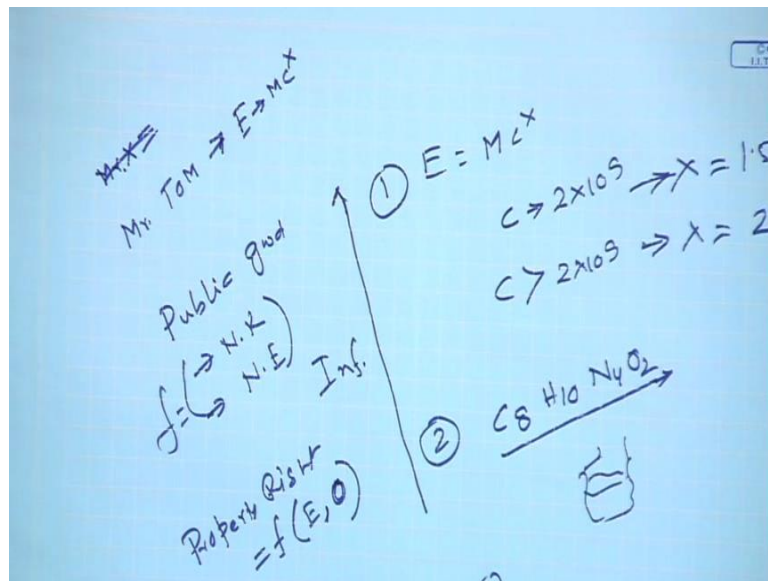
So, information may be considers or information you may tell that as information goods, just like say information goods in economic sense that told that we do not know the value when we create, but it will generate the value by virtue of pronoun use or in your futures. So, let say on that premises you know the value of intellectual property in the present economical context just like say if you read the news paper, even today's news paper you will see that American Government has initially they were telling that Indian intellectual property systems is not as per the international standard. Now they are pricing the intellectual property systems of India.

So, you understanding that in respect of international negotiation and others aspects also intellectual property is also important and you know that intellectual property per say

everyday in news paper or any other reports you also receive that that a particular form assigned and have created something in a particular country and say they are some other (Refer Time: 03:55) trying to make some parted things out of that. Everything you have heard from say if you keep your eyes and ear open from the news paper, TV channels, just like, economic times, and say telegraphs so that business news part will highlights about the intellectual property, but you may not know what is the hidden agenda remains within the word intellectual property per say. So, let us see how can I be able to give some information about the intellectual property to a beginner.

Let say Mr. Tom is a person who is sitting behind a tree or besides a tree and he is thinking. First he thought about let us say you know everybody knows the Einstein's equation E is equal to MC square. He thought about to why C is equal to C square means N value is 2. So, he thought about why not C put C is X and next X as variable with reference to C.

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Just like if I consider let us say E is equal to MC to the power X or for a particular value of C say X is equal to says up to 2 in to 10 to the power 9, X is let say 1.5, where if C is greater than 2 into 10 to the power 9, so X is let say 2 and 2 to 3. So, like this way he thought about an equation. So, that is creating modification of present Einstein's say present that equations; the energy mass relationship equations.

So, now for a person's like you and me what it is? It is per say is also providing some information, for (Refer Time: 06:07) person it will ultimately providing let us say like a E is equal to egg, M is equal to something is like this way, but somehow who can have been little bit knowledge with reference to the particular subject matter he will ultimately able to know; E means he is trying to state about that Einstein's equation, A M is trying to state about that equation mass, C is able to the velocity of lights.

So, now, the particular things he has created, I may consider it is per say information in economic sense sometime we call those information goods. So now, that is that information goods. So, he do not know what may be the future outcome from these particular relationship E is equal to MC to the power X. So, we consider that as information or information goods, so he created once that equation one let us say E is equal to MC to the power X. Now, subsequently he was thinking about say, we run bike, we also say others motor cycles, and others we use some sorts of liquid. So, what can be the chemical formula of that liquid or he has some knowledge about that liquid chemical formula and later on he again generated something that have formula different from existing liquid peoples are using. So, he has created a formula let us say $C_8H_{10}N_4O_2$.

This is also some sorts of information's or information goods in economic sense, because this also by virtue of creation is not providing any kinds of return that will ultimately generate the returns or value in near future by virtue of use. Mr. Tom, say he created something energy domain he created something, some information. So, he created some information in let us say energy domain, he created some information in again energy, but liquid form of energy domain. So now, he is also creative an imaginative. Now, he is thinking about liquid or liquid we required some containers. So, he is thinking about what type of containers will give some sorts of a say look creative appearance to the prospective customer, consumer or users.

So, based on that he has ultimately designed a bottle; so that is also bottle per say is also providing some information to the parcel, person and also it inform him he does not know the value in virtue of creation and it will also return the volume by virtue of use. So, the subsequently he also just like say we have consider a logo for just like say or based on his creative revise he measuring depth or he has created a logo; so now that logo also by virtue of creation as nothing but evenly sub providing some information.

That way that all office Mr. Tom's creations is providing some sorts of information and in economic sense we call them as information goods. Why information goods, because they are per say by virtue of creation is not providing any value, but that have future potential to generate value.

Mr. Tom's creation has providing information that have characteristic of information goods. So now, you know the nature of information's, the information is difficult to get; Mr. Tom is think sitting behind besides the tree behind the tree or have been sitting behind the tree everyday and thinking, and by virtue of his thoughts process he created those kinds of information and information goods that creates a takes a long time, long efforts, long thinking process, but that things whether how that thing can be a valuable assets that there lies the role of intellectual property rights. So, now, if you consider any information if you that that is like a news or others that have characteristic the people who has created he has given a lot of efforts, but now person who will ultimately get that information he can make a copy N number of copies is out of it. So, its nature is difficult to create, but easy to duplicate or triplicate like this way.

So, nature of E is equal to MC X he has created MC X, but another person can easily copy that equation, another person copy that formula, another person copy that (Refer Time: 11:26) another person copy that logo, whatever Mr. Tom as a put up efforts to creates to. So, so that way that Mr. Tom is thinking about what you will do with all sorts of his creation whether you will put that information considering it is nature in the form of a public goods or he can generate revenue out of his creation. So, how that can be achieved? So, information if I considered in the form of a public good. So, public good, public goods are non-rival, non excludable. So, what do mean by just like a public good, public goods you are telling a non-rival in our let us say non-rival, non excludable. So, public good is function of non-rival and a non excludability.

So, what do you by that? So, if I consider let say oxygen, air, or news. So, similarly E is equal to MC X that formula. So, if mister X he Mr. Tom is created mister X can use that information, mister Y can use that information, mister Z can use that information, if it is in the form of a public good. So, there will be no-rivalry with reference to the use of the creation of Mr. Tom if it is in the form of a public good. So, that will be no rivalry between mister X, mister Y, mister Z, who are per say using the information generated or created by Mr. Tom if it in the form of information's public goods.

So, public goods means there is no rivalry, there is no there is no exclude, exclusivity within that part. So, what the creation I told you the creation by the measures is in the form of an information or that information have the characteristics of a public goods if it is not been given some sorts of we not create some sorts of mechanisms or tools to ultimately convert that in the form of others. So, Mr. Tom can think about that those creation in the form of a public good or he can think about that that creation in the form of property rights the property thinks I will explain in the next class in details, but let us say property rights means what about the public goods non-rival, non excludable, but property rights have the characteristics of property right has the characteristics of let say I am writing a characteristics of say again I am putting another functions of let say exclusivity and ownership O ownership.

So, what it is the it is the characteristics of exclusivity means Mr. Tom if he thinks the E MC X as his property rights then he can excludes other to use that proper that creations and he has ownership power that creation just like a E is equal to MC to the power A X. C 8, H 10, N 4, O 2, bottle and others. So, that his creation can be cut can have characteristics of information public good, but if I establish some sorts of rights over those creations in the form of exclusivity and ownership then he can thought about some he can thought about say thought about some return out of those.

Ok. So, now, whatever the creation, whatever the creation he has developed or made that has say some value that have some use. (Refer Time: 15:28) you cannot ignore the value or use of those information that Mr. Tom has created when he was sitting besides the tree and everybody knows the story of Newton he was sitting beside the besides the apple tree and he found suddenly the apple has been falling from tree instead of going upward then he started retardation over that and ultimately established you know everybody there was he has the he has developed we have we got the Newton's Law out of that thought process.

So, like this way with that Mr. Tom can think about he put will that the E MC X in the form of public good then what will be the problem you will not able to excludes others with reference to the use of that he may not get benefit out of those. So, everybody can use that so, but he can thought about I can established ownership over that, that will ultimately give some sorts of return with reference to by his creation because by virtue of that you will able to excludes others to use that information whatever, he created using

his using his imaginative, creative, inventive, ingenuity, that have embedded within him within himself. So, property rights in the form of a let us say is exclusivity or ownership he may thought about I can establish property rights over my creation in the form of exclusivity and ownership.

So, let us say exclusivity and ownership I can explain little bit on that part ownership say ownership means he is mister X is only owner or Mr. Tom is only owner Mr. Tom is only owner with reference to those creation what I told having the characteristic of information public goods all sorts of things. So, if he excludes others then what will happen, he will himself will use those sorts of equation $E = MC^2$ (Refer Time: 17:56) use that information. So now, if he use for himself the question lies that whether the society will get a benefit out of that creation he is himself using for his research purpose or his students research purpose, but there is no dissemination of those information outside there is also exclusivity there is also ownership.

So, then again the problem, what is problem may be society will not get appropriate benefit out of the mister Tom's creation why because he himself is using public has not have knowledge about those kinds of information whatever, use he has been creating over the years. So, then lies their lies ultimately the problem that society is not getting benefit out of those creations, so that way that as that property rights although exclusivity ownership, but what sorts of property rights will be beneficial for this kinds of creation, so there lies the role of Intellectual Properties.

So, now, say intellectual property we can considered that I told you Mr. Tom is sitting besides the tree then we call them as such there is no legal definitions available for intellectual property or intellectual property rights we consider that as creation of minds. So, my virtue created of mind. So, I am telling that mind created $E = MC^2$ is X created that formula that bottle, that logo.

So, I can consider that information or public goods whatever we created that is considered as creation of minds, creation of minds have been the nature of public goods, but public good if I put that in the form of public good what will happen Mr. Tom may not get any benefit, but whether society will get proper benefit out of that their lies the questions by why lies the questions of that lies the questions because that is if I say put in the public goods ideology that everybody knows that peoples are thinking about open

source softwares, versus proprietary software now there is their if the economics are trying to do a research which will be the appropriate mechanism for software par se let us say open source or proprietary basis all those kinds of the thing. So, that way that is the questions that why in the form of intellectual property in the form of public goods only beneficial or I we can gives in the form of a some property rights what I told many exclusivity or ownership is the components within the preview property rights.

So, they are they are ultimately the trade of between the public good verses private rights, or property rights, that trade of lead to the formation of intellectual property formation or creation of intellectual property rights systems. If you know just like say from (Refer Time: 21:12) old practice, if we considered that intellectual property right systems was they are even in past just like say when peoples are thing about some creations and they are thinking about how can I get benefit or how that society or say they say some institution can say can create further creation of minds. So, on that mechanism if you know that if you I can tell a story regarding the just like say queen Elizabeth style he said prepared a nice dish for her then that he was she was thinking about that is she prepared that he say as prepare the nice dish but.

So, now, she is he as prepared for a one times whether he will be happy to prepare that think for N number of times then he thought about no may be if I give create some mechanism by virtue of which I give some sorts of rights over his creation for a may be for away limited period of times then maybe he will be interested further for his creations or for his preparation of that particular kinds of dishes. So, he has just things she has given some limited period rights over that particular varieties of dishes to that (Refer Time: 22:52) and (Refer Time: 22:53) also happy why she was happy because the rights over that types of preparation have been provided only to that (Refer Time: 23:02) for a particular period of time.

So, he was happy and he queen was also happy. So, see that the how in this situation who is preparing the dishes he is also happy and the queen who is the user of that dishes he is also happy. So, that they found if I create that type of mechanism by a main incentive in form of exclusivity then the both the party means let say creators is happy, the users is also happy and they are they are getting the creator will create further new things and users will get the better quality of things better performance product.

So, say on that premises that that a property rights justification lies on creation of minds, but now the ultimately the questions another say peoples the liberates peoples was thinking about the property rights whether we will input that property rights like in the form of a nature E N rights or say form of perpetual rights or we can put the property rights for a limited period of time, because they also period of a thing that mister X has given the property rights over his creation just like a ownership of that creation.

So now, what he will do? He is the owner, he will exclude others with reference to his creation then he will ultimately regulate the market; why he will regulate the market? He will try to get maximum benefit out of his creation. So, you will try to increase the cost of say C 8, H 10, N 4, O 2, whatever he has created or invented. So, if I give perpetual rights over that then he will ultimately get a benefit out of his creations. So, what further reason they all thinking about that property rights in the form of limited periods or rights it is.

Now, let us conclude over the basics of intellectual property rights. This is creation of minds by nature it is say in the form of information goods or public goods by virtue of his nature, why I am telling by virtue of nature because it is easy; it say value I do not know so it is difficult to exclude. But, now I have to derive benefits out of that particular creation of mind. So, there lies the justification of ownership exclusivity in the form of a property rights.

So, here I can considered that intellectual property means creation of minds and on the creation of minds I will give some sorts of limited period, exclusive rights to the creator for the benefit of the creators and for the benefit of the society. So, I think you got some idea with reference to the intellectual property and it is basics. Next class I will discuss about the property rights and the various laws.

Thank you for today's class.