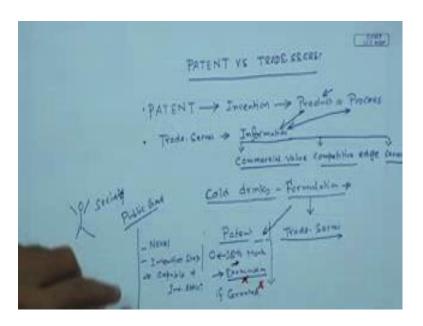
Introduction on Intellectual Property to Engineers and Technologists Prof. T. K Bandyopadhyay Department of Metallurgical and Materials Engineering

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Lecture – 35 Patent Vs Trade-Secret

So, last class, we discussed about trade secret protection.

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So, you have learnt another form of IP, whatever you are calling that trade secret. So, you have now idea about trade secret; you have now idea about patent. And, say you have to take a decision whether you will go for patent, whether you will go for trade secret, the pros and cons of each forms of IP; and, what are the areas, where you can consider the patent and the trade secret, there is an overlap. And, for individual purpose, which is the better protection mechanism; and, for societal purpose what will be the better protection mechanism; and, where the risk; for individual also, where the risk is minimum; where is the risk is maximum; and also, where is the profit is maximum; and, where is the risk is minimum.

So, how can you make a decision out of that? So, today, I will discuss about that aspect, where the patent versus trade secret and a business entity will make a discussion; or, an individual trying to create an entrepreneur how he will decide which will be give him better protection considering different aspects. So, you may not get this any specific book; you will get it from different literature and you yourself can, lot of research papers you may get it. And, we are not discussing the theoretical aspects; we are discussing the practical aspects. So, let us see how we can go forward.

So, patent protect what? Patent protects invention. And, what is invention? Invention is product or process. Now, come to trade secret; trade secret protects what? Information; and, what are the attributes of the information? You know that. What are the attributes of information? Information having commercial value; and, information will give a competitive edge; that is also you knew competitive edge, edge; and, information is you are keeping information secret. Also, sufficient steps you are taking to keep the information secret.

So, now, whether you can link this information with product or process; whether the attributes of the product can be an information; or, attribute of the process can be an information. And, you know what is the meet of information; I already told you, it is information having, let us say product, process, composition or any composition say process of making something, client list. And, all the things can be information. So, definitely, the attributes of the product or process is information. And, information, and product and process definitely you are telling the patent may have commercial value, may give competitive edge and you may keep secret. So, you are telling that, there is a possibility that, product or process can come in the form of information and can come in the form of trade secret.

So, now, let us say you have created a product or process; let us say process just like in the last class we were discussing that Coca-Cola. Let us discuss about that. Let us say Coke, let us say cold drinks formulation. Which will give for-mu-lation; formulation means as you are engineer and technologist, what do you mean by formulations? Formulations means just like say you may consider a particular composition or particular

formula or particular say addition of two components, that is, with particular ratio; that is giving a particular taste or giving particular attributes to the product.

So, now, like this part, you can whether this formulation I can consider within the purview of product or you may consider the process of that; can be also come within the purview of invention. Now, formulation is also there is a composition; I told you composition is also (Refer Time: 06:24) composition or it is a process. Parameters can be also consider information; no problem. So, formulation part you may go for patent; you may go for trade secret although definitely all have to meet all the things that characteristics of patents need to be met for getting it patentable, getting it protected by means of patent. And similarly, trade secret aspects also you have to meet for protect it in the form of a trade secret.

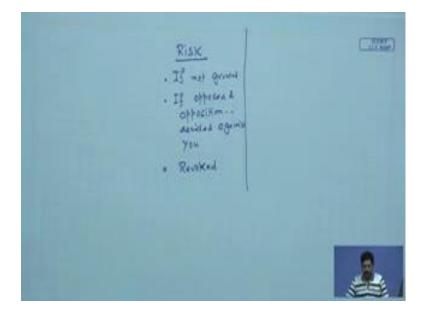
Now, say with reference to an individual, you want to be an entrepreneur; I will consider that aspects and second aspect I will consider as a business entity. And, third aspect third aspect I will consider with reference to an individual, who is not a holder of patent and trade secret, means societal aspects with reference to both the forms of protection. So, now, the patents, the formulation can be patented. So, process, criteria required for that let us say having novel having inventive step and have capacity to applicable and capable of industrial application. So, definitely, you are thinking that formula have all the attributes. So, you are going to file a patent. Then, what will happen? If you file a patent after 18th month, month it will be disclosed to the public. So, this is not remaining as a secret per se. So, now, if you go to file a patent; so, you have to meet some procedural aspects — 18 months. After 18 months, it will be published. So, now, it will go for examination. Then, ultimately, opposition all sorts of things; then, it will be granted if granted then you will get a patent.

Now, let us say consider a situation; any examination and your or opposition, your patent get say your patent examination and opposition that, somehow let us say examination after hearing that, patent office rejected the patent, rejected the invention; or, after if or in opposition it may ultimately decided in favor of opponent. Then, the formula you do not have whether the formula you have any rights? Per se no, why? Because it is already disclosed to the public; so, secret attribute of the formula has lost maybe examination

and subsequent opposition or examination during examination. It has not qualified the criteria of patentability. So, patent office rejected. Or, during opposition, the opponent found that it is not meeting the patentability criteria, got rejected. Or, even after that, subsequently it got, it may revoke, subsequently also, it may revoked. So, see you have a formula that you are thinking about a potential IP; now, you are going by a patent route. Where is the risk associated to go by patent route? If that thing is not yet patent, your formula is not having capability or capacity to be avoided or patent or to be granted for patent. Then, you are not getting patent, and you are not getting a trade secret out of that. So, I will see that, in this case, you may loose a potential IP.

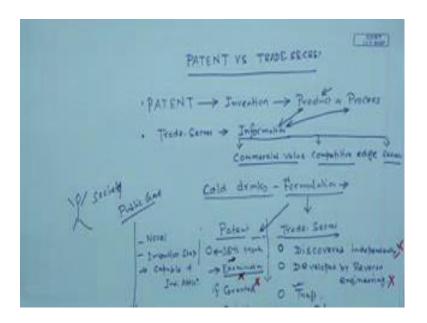
So, benefit for the others means let us say third person who is let us say third person here or he is part of the society benefit. So, some say some formula is now become public good; formula of that coke cold drinks now become public good. Advantage that, anybody can make that cold drinks using that formula nonviable, non-excludable, because now it is not in the form of any IP except let us say if you are keeping elements within the purview of know-how and other, that is the different element. First, I am considering the formula as such. So, there is no overwriting associated.

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So, risk, what is the risk in respect of this patent? Risk with reference to the patents; so, if it is not granted means risk, let us say risk with reference to risk for patent. This part we are telling risk that part we will consider. First, let us consider the patent part risk with the patents if not granted; if not opposed and opposition decided against you, or even granted if revoked. So, these are the risk associated with that formula to get it patented. So, now say if I consider again, come back to the trade secret.

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Now, you are thinking that, I will protect my formula in the purview of trade secret; no, you protect your formula by means of trade secret means you are keeping the information as a secret information, you are taking reasonable step to keep it secret; definitely to make it, definitely having a commercial value. So, now, risk means what are the risks with that formula to keep with the purview of trade secret? Risk is let somebody discover that formula independently discover. Or, during my independent discover means without knowing about the formula, he has come out with the same formula whatever you are keeping as a trade secret. Then, whether you will able to enforce your right against that discovered of that formula? Per say no, so you will not get any you will not able to enforce your right against the person, who will independently discover. Subsequently discovered by or developed by reverse engineering. What you have done? Somebody have let us say purchased that cold drinks; he has now tried to find out the

formula of that and somehow achieved that formula, whatever formula your are trying to keep it as a trade secret.

So, whether you will be able to enforce your right against that person? No. So, independent discovery, reverse engineering by pursue of that, you may lose your potential intellectual property. Again there is a chance of say in advertent disclosure theft or, in advertent disclosure, that I am not adding; theft in advertant disclosure. These are the different types of risk associated with reference to the trade secret. So, formula by virtue of trade secret, what are the risks associated with the entrepreneur or with the organization means discovered independently, developed by reverse engineering. So, I am and say in advertant disclosure; so, then again there is problem; I last class also told regarding enforceability. So, that way the problem with respect of trade secret or risk associated with the trade secret are all these.

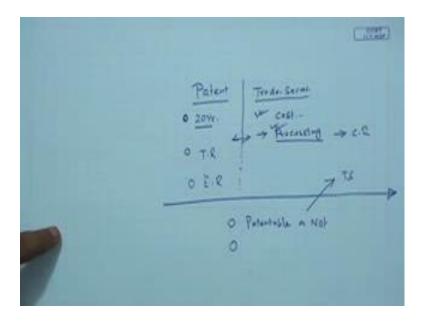
So, now, it is told about the risk with reference to the patent, risk with reference to the trade secret. Now, let us tell, because you have to make a decision; how can you make a prudent discussion, where the risk is minimum, where the risk is maximum; how will you decide about that? Now, if you consider here; based on the risk part and considering your formula part, how will you decide, how will decide which will be the better form of protection, you know now. Why I am telling you the better form of protection? And, let us say first better form of protection, because patent is protected for 20 years and trade secret will be protected as long you will able to keep it as secret means others are not publicly known, not disclosed publicly. So, that it is maybe one day or maybe 100 years also. So, definitely as an individual aspect, you will get more exclusive rights or right when in you protect it in the form of a trade secret compared to the patent.

So, now, how will you make a decision, an individual or an organization, how will you make a decision? That will go for trade secret or for a patent means where, how will you decide with reference to the risk here? So, definitely, you have to judge your formula or formulation or product attributes. Now, you have to decide whether it is easy to reverse engineer or not; whether it is easy to develop independently or not. If it is easy to reverse engineer, then which will be the appropriate route? Obviously, patent if it qualifies the characteristic of the patent. So, obvious route will be patent. But, if it is very difficult to

reverse engineer very difficult to reverse engineer; it is not possible to at all reverse engineering.

Then, I think you should go for trade secret. So, that way understood that, how you are making a decision; they are ultimately decision that who will tell this part the engineers, technologists, or R and D people. They will thought about the attributes of that product including composition, process of synthesis and others. Whether it is easy to reverse engineer, because product will be available in the market; so, if product is available in the market, whether people can go for reverse engineering or not; that is the other aspect. So, they will definitely go for it, because computer will always try to just like say try to somehow develop something, which will be better than you or at least your product. So, that way that, if it is not easy to reverse engineer, then you should go for trade secret.

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Now, you understood the risk and benefit with reference to risk and benefit; risk part already told; benefit part means in patent. Let us say benefit part let us little bit discussed versus trade secret. Benefit means you are even if you disclose the things in a public, you have exclusive right for 20 years; assured right for 20 years. So, if you are thinking about again decision making; if you are thinking about that, your product or process, you can use it on license basis and on cross license basis. And, that will give you a better market

power a competitive edge with reference to the market in a market. Then I though also you can think about going for patent. Even 20 years period will be enough. So, 20 years exclusive right; assured right if you got the patents, there always you have to be under to keep it secret; always under to you have to keep it means sometime people say that, cost associated higher, but there is no processing cost; understood? Cost for protection sometimes they told higher, but there is no. As such you can consider the econometric analysis regarding that, where the cost is maximum.

And, advantage here also you understand no processing thing, no processing, no register, no registration, no processing, no processing. Also, we will get the right. Just like here advantage, disadvantage; sometime people tell at least you may require some time to get the patent that, what rights you have during that period although you have a right from the date of patents means day of the filing patents. But, till that time of grant whether you will really able to enforce it by law, the question remains; but, here you have the rights from the day one because there is no registration, there is no processing. So, that advantage with reference to the creation of right, CR creation of right.

Advantage trade secret enforcement So, creation of right trade secret; transaction of right, patent advantage, because cross licensing and others; here always you have to fear of disclosure independent developed, reverse engineering developed with respect of trade secret, transaction of right part TR let us say advantage. So, enforcement I will put enforcement of right advantages this side; this way patent part is advantageous this side. So, there is that way you are getting that, pros and cons all that formula to get to protect in the purview of a particular form of IP.

Now, you may ask me whether I will go for dual protection. I will suggest you may get ultimately avail that, because let us say product. You patent it; not say try to avoid disclosures about the exact product composition or formula or attributes somehow; then, you can get a patent and the exact formulation or the process parameter and others; you are keeping in the purview of trade secret; no problem. You are keeping on the purview of trade secret. So, that way you are getting a dual protection I will say that patents. And, even after expiry of the patent, you have a trade secret with some components of your product. So, that is the thing. Sometime we call know-how part you may embed in the

form of patent secret that part you may consider. But, say you have to decide think about the know-how it will be possible to independently develop or say discover. Then, I think say immediately when the patent say will be disclosed. So, automatically, people may get the know-how out of that; then you are loosing the rights of the trade secret. So, you may consider that aspect in sometime like and try researcher research aspect.

Let us say after 18 months you know how is come somehow 18 months or beyond something, people are not able to try that; remains as a trade secret. So, that way you may consider also. So, those ways how you are making a decision with reference to your product or formula that part. I will provide some say hypothetical cases or this is a real case, but I am converting in the hypothetical one. Let us say some genetic or some pharmaceutical company manufacturing some drug. So, they are protecting some attributes of the drug by virtue of patents. And, even after patent period is expired, no generic company is able to produce that drug; got the thing? So, they protected something in the purview of patent, but they have not disclosed may be the exact formula and others in the patents specification. And so, to see that, the process part nobody is able to repeat and nobody is able to produce that generic drug. So, you understood even after the patent period is over, they are trying to protect; they are getting the trade secret over that.

Similar type of situation let us say somebody has filed a patent with reference to the e-commerce; let us imagine one click patent e-commerce related invention. So, now, they have tried to protect it by the virtue of patent, but patent office denied. So, what is happening? So, if they try to keep it within the purview of trade secret, then they will be beneficial. But, they have tried to make it in the purview of patent. So, they lost a potential IP. So, when you are thinking about to protect something in the purview of patent or trade secret, then which thing will make will you help to make a decision; first thing whether invention is kept on the attribute. So, that is in the patentable invention is patentable or not.

If it is not patentable, try for a trade secret. If it is patentable, then just like that Drug Company thought about, let us keeps whether it is feasible or not, tries making an attempt. That will be more prudent, because you are trying to somehow getting a dual

protection kinds of situation, but difficult. So, then, third attribute just like say if you are thinking about, there is chance less chances of getting it patent over trade secret so that way you are deciding that invention and its attributes or you are analyzing whether it is patentable or not; whether there is chances of getting patent or not; just like say I am considering. So, paid per se is not patentable in India.

So, now, you are telling that, you have developed a source code. And, that source code per se is difficult to reverse engineering or independently developed. I will suggest go for TS – trade secret. So, something similarly; let us say you have say you have purview; let us say created a medical method of treatment. And, just like method of treatment, say you only having that knowledge or information of that method of treatment in India; then, you keep it as trade secret; you know that particular say somebody told that, Hyderabad and on that particular region, a particular community only knows how to treat asthma. Similarly, in India, lots of these kinds of things are available in the form of traditional knowledge in a particular community or within that. So, whether that thing is coming within the purview of the trade secret of that community; that is, definitely we may consider that way. So, that way you have to decide that what is the characteristic of your invention, then you make a decision the whether you will go for patent and trade secret.

And lastly, I can tell with reference to the societal part just like a third person, I have mentioned here the society, who is looking for that. For him which will be beneficial? Patent part because after 20 years, it will be considered as a public good, anybody can manufacture that product that likes a generic drug. So, then there may be a chance of let us say chances of price decrease in respect of escalations. Just like say you consider after patent period is over, when the generic drug is available in the market; so, it may be the cost is lower, because lots of company is coming to manufacture the generic drug and they are selling they are using their brand at different prices. So, then, that way that, it may lead to the decrease in the price.

So, it will beneficial for mister this x society. So, patent is better always for society. But, let that come company, who is after patents also came (Refer Time: 30:59) nobody is able to reverse engineering. So, definitely that cost for that they will delta-delta will

increase. So, that why the pros and cons of patents and trade secret; that part only we discussed. So, this is also legal and managerial part. So, for that reason, this is also important for (Refer Time: 31:21) engineers and technologists. But, first, you will work in an organization; and, this knowledge will help the organization to make a decision with reference to patent and trade secret. I am closing it here.