

Innovation, Business Models and Entrepreneurship
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Lecture - 34
Patents and Copyrights

Welcome friends, in our last session we discussed about different types of intellectual properties. And we discussed in last three sessions about creation of intellectual property also, moving from intellectual capital to intellectual assets to intellectual property; in our last session we discussed different types of intellectual properties. Some are very very important and then other category of intellectual property are in some supporting role.

Now, in this session we are going to discuss two very important type of intellectual properties which are very much essential for innovators, which are very much essential not only for innovators, but for entrepreneurs also and one of them is patent.

So, largely we will be discussing in this session about various aspects of patent, but we will also discuss about the copyrights, that is another most and talked about IP, but there are many myths which are associated with patents and copyrights. So, in this session we will also like to see what are the facts and what are those myths.

I request all the participants to actively participate in our forum discussions so, that because we all get confused about various aspects of patent. And you will find people around you saying their own version about patents without knowing the law related to protect, without knowing the law related to copyrights people give their own versions.

And since we are so much busy with our innovation, we are so much busy with other requirements of our business that we hardly get any time to read law on our own. So, therefore, we remain most of the time trapped with those myths.

So, this session should help us in overcoming those myths to some extent, but we all expect a peer learning using the forum and in that if you ask more and more questions. So, that will help each one of us to learn more about patent and copyright.

In India, the patent system is in evolution stage and we are learning, we are regularly developing new laws, new clauses, new amendments in patent act. So, therefore, it will

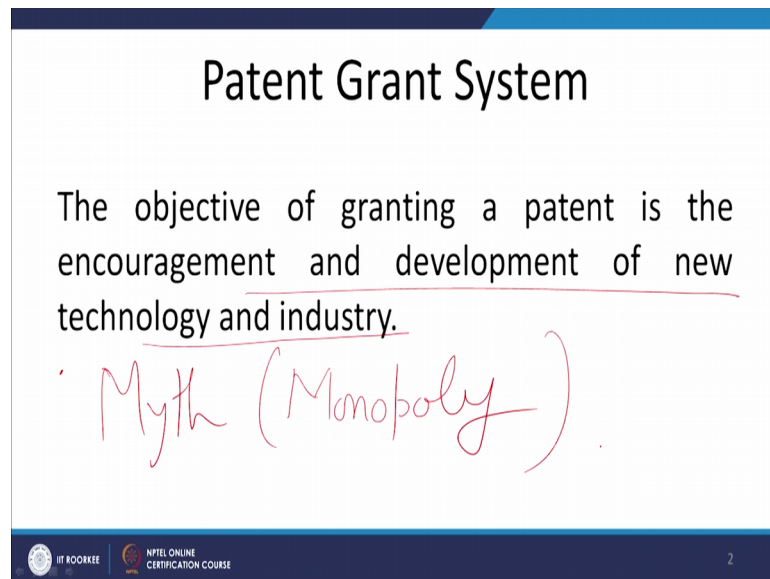
be very good if for this particular session we keep discussing and we can have some examples also in our forum discussions about famous cases related to patents and copyrights.

So, with this we are starting about the patents; now in our last to last session we discussed the need of granting the patent why should we have a patent granting system? And we discussed that efficient effective patent granting system is very much essential for the economic development of a nation.

Because economic development of a nation is directly related with the technology advancement and technology advancement is directly related with the investment in the technology. And investment in the technology should yield some kind of return on investment, then only new investments in technology development will take place.

And therefore, intellectual property laws are required therefore, protections are required because this will encourage and development of new technology and industry.

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The slide is titled "Patent Grant System" in a large, bold, black font. Below the title, the text reads: "The objective of granting a patent is the encouragement and development of new technology and industry." This text is underlined in red. Below the underlined text, there is a handwritten note in red ink that says "Myth (Monopoly)". At the bottom of the slide, there is a dark blue footer containing the IIT ROORKEE logo, the text "NPTEL ONLINE CERTIFICATION COURSE", and the number "2".

So, the basic idea because the first myth is that this creates monopoly; the myth is monopoly that if you have patent you are encouraging monopolies.

But dear friends, this is not the case the actual objective of granting the patent is encouragement and development of new technology at industry. With the patent system if you have a efficient patent system this will help more industrialization, more creation

of jobs, more employments and better quality of life for all the persons, all the citizens of your country. So, therefore, that is the first important myth we need to clear that it is not promoting monopolies or rather the patent is for the encouragement of technology.

Because you see it is very simple you are not going to invest unless until you are going to get some kind of return. And those returns are only possible when your inventions are protected properly. You may have a debate that if I am developing something and some company is developing, some very break to research which should be uses for the commons, which should be uses for the masses. So, how patent is useful in that case ? So, we will discuss that myth also in this session.

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- In India, patent granting system is based on Ayyangar Committee report of 1959. IPR
 - The opportunity of acquiring exclusive rights in an invention stimulates technical progress in four ways:
IPR → Tech. Progress.

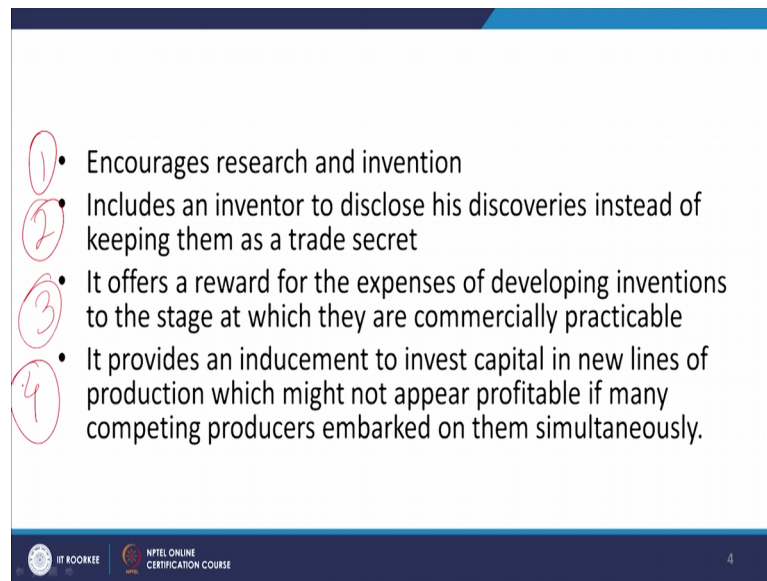
Now if I talk particularly of India the patent granting system is based on famous Ayyangar Committee report of 1959. Though the act is known as the Indian Patent Act, 1970, but the basic premise of that act is based on the committee of added by a Mister Ayyangar which presented its report in 1959.

The basic idea, the basic philosophy which is mentioned in that report that is based on four important elements and what it says; that the opportunity of acquiring exclusive rights in an invention is tube lights technical progress in four different ways.

So, this committee also of the view that giving exclusive rights that is IPR and this will help in stimulating technical progress. So, IPR; so it is not related to any particular IPR at the movement, IPR is directly leading to technical progress.

Now, in how many ways that we see in this slide?

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That it encourages research and invention; that is first then it includes an inventor to disclose his discoveries instead of keeping them as a trade secret. When you are filing a patent, you are disclosing your research, you are disclosing your invention otherwise if this system is not there; you will keep your research as part of trade secret.

Now, when it is coming in the public domain when it is indensed in some kind of databases; then what can happen? Then it offers a reward for the expenses of developing inventions to the stage at which they are commercially practicable.

So, now either you yourself can do some kind of commercial use of your research or there are different ways through which you can make money on the basis of your research output, on the basis of inventions which you have done. Then it also provides an inducement to invest capital in new lines of production, which might not appear profitable if many competing producers embarked on them simultaneously.

Now, to this point some of you see that now because I am doing a research and many companies if these are simultaneously working in that area. If I am a new technology

startup and then there are technology giants like Google, Apple, IBM, Microsoft if all these companies are working in the same area and I am a new startup.

So, I will feel that it is not viable for me I will not be interested to pursue that research because I will not be able to compete with these technical giants, these mammoth organizations. So, to protect that aspect also those companies, those startups which are looking to work in those areas where others are not working; you have a protection against competition that is also the idea, that is also a philosophy which can benefit the innovator.

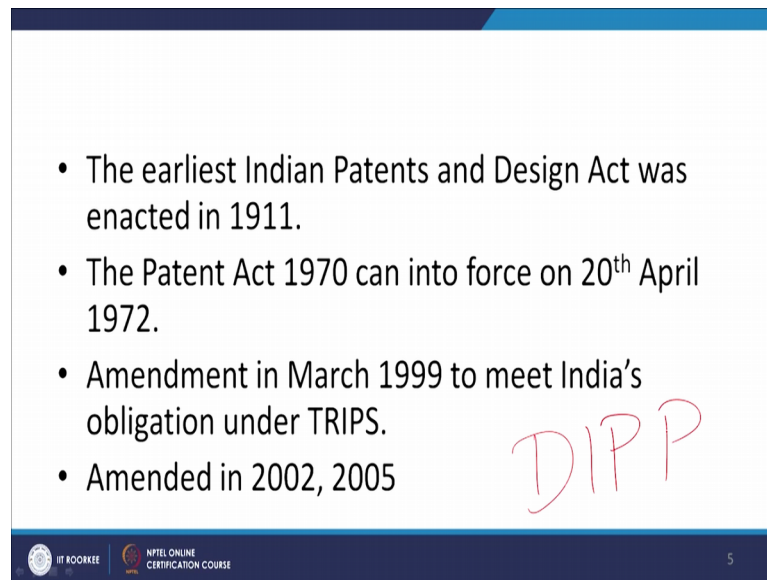
And the second and third are very very important that if your researchers are not properly protected; then it is a trade secret it will not come to the openness and then it will not go for mass production, it will not go for larger commercial use. And in that case your research cannot help public, your research should help public, your research should do good for the society and that is only possible when your research is properly available in the open databases.

And that is possible by having the patents while having the protection you are displaying your research, you are showcasing your research to the world, but at the same time you have proper protection so, that nobody can copy it. You may give it for free to anybody it is up to you because you are the owner I am ruling this land.

So, either I can invite you to have a house constructed on this land and I may charge some heavy amount for that or I may give you this piece of land without charging any penny. So, this is up to me then how I charge, but unless until I disclose that this piece of land belongs to me then there is no possibility of uses of that piece of land. So, these are important issues, important characteristics in which you will see that there is a clear way, there is a clear idea how patents can help society, how patents can help innovator also.

Now if we see the evolution of patents in India, so the earliest patent law which is available in India was of 1911.

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- The earliest Indian Patents and Design Act was enacted in 1911.
- The Patent Act 1970 came into force on 20th April 1972.
- Amendment in March 1999 to meet India's obligation under TRIPS.
- Amended in 2002, 2005

DIPP

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This is known as Indian Patents and Design Act and we all know at that time India was under the British rule. So, this act came as per the wishes of Britishers, the rulers of our country at that time.

After independence there were first attempt to bring a new patent law in 1953, but because of improper time of bringing that law and all those things that law; that law could not be passed from the parliament.

Then we discussed the Ayyangar committee and after Ayyangar committee presented its report to the parliament the law; the report was sent to some joint committee of parliament and it was responsible for presenting that law, that act on the basis of recommendation of the committees report. And finally, this Patent Act, 1970 came into force on 20th April, 1972.

And after that the very first amendment came about 30 years of its passing from the parliament that is in March, 1999. Because we were a signatory of trips which is part of WTO and India was supposed to obelize the trips agreement to honor the trips at treaty.

So, amendments came so that our Patent Act becomes in line in sync with the requirement of trips because trips was coming in force from first April 2000. So, for enabling our patent environment suitable or in sync with the trips requirement amendments were made. And then in 2002, 2005 amendments were made.

So, now it is a very dynamic process because after 2000, we saw real globalization coming to India and because of that the business environment is changing very fast. And business because using the act came into force in 1972 and after 27 years there came first amendment and then you have amendment in 2002; just after 3 years of first amendment, then again in 2005, the third amendment after the second amendment.

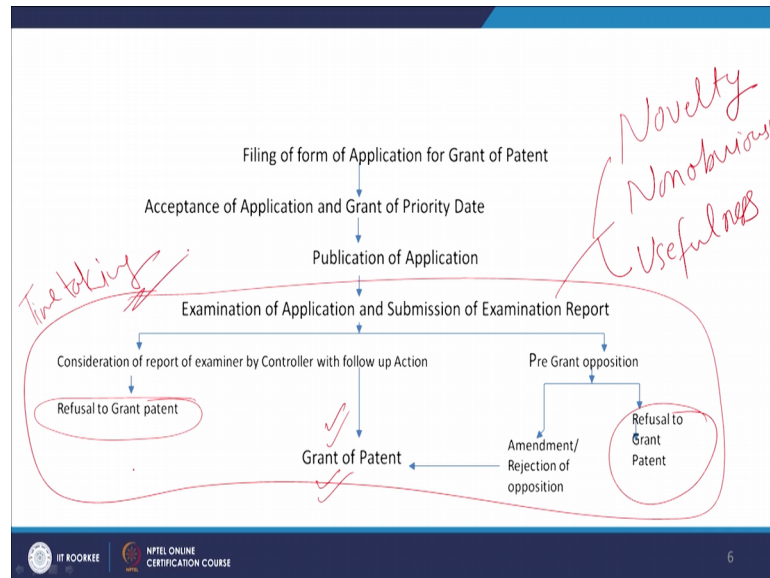
So, now amendments are regular phenomena and we are regularly seeing new amendments. And therefore, to have the latest update in this regard of the patent system of India, you need to go the site of Department of Industrial Policy and Promotion; DIPP, Department of Industrial Policy and Promotion where you will get the latest updated patent act as on date so, that whenever you go to know that what are the clauses? What are the sub clauses related to patent act?

You need to go to the site of Department of Industrial Policy and Promotion which government has made the central agency for or intellectual property related matters. Otherwise in previous periods the matters related to intellectual property were distributed to different ministries, there were different caretakers for different aspects of intellectual property issues, but now you have one central agency that is DIPP, which is looking after the develop all the matters related to intellectual property, whether it is patent, copyright or trademark etcetera all the matters are related to ip are handled by DIPP.

Now, what is the process of granting the patent? So, let us see that very important thing because getting a patent takes sufficient time, time means it may take up to 3 to 4 years to take a patent, to grant the patent. So, you need to see in advance that today I am filing a patent; today I am submitting an application for taking a patent. So, it will actually be granted after 3 or 4 years. So, you need to be very very proactive in filing the patent because you keep filing, but out of your so many filed patents many patents will be rejected.

So, please as a practitioner I request you to file as many patents as possible if funds permit. So, that your most of the claims will not be accepted, will be rejected there will be oppositions on your claims. So, therefore, if you see that I am filed one patent and that is end of the story please do not have this kind of myth, you will get that patent after 3 or 4 years of complete process which is available on the screen. And this is every time consuming activity; this is also iterative in nature.

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Because you see there are 3 or 4 steps which are in sequence, but there are some steps where some kind of iteration is required.

So, the first step is filing of form of application for grant of patent. So, first you go to the website of DIPP and download the form and fill that form. So, whatever fields are available in that form, you fill that; then acceptance of application and grant of priority date. So, you will apply online and you submit the application on to the registrar of patents office and after that you will request there is some additional fee for the publication of application.

So, your application will be published by the registrar of patents office and after publication of patent application means you have got a temporary file number by the patent office. Now, the examination of your application starts once your application is published; then the examination of your claim will start and that is the activity of a patent office. Your role is filing of application and after application filing, the patent office will come into action, come into picture and after publication of application which is intimated to the inventor also the invention ah; the patent office will do the examination and it will get the examination report on your claims.

Now, the report can have two types of output; now after consideration of report of examiner by the controller of patents and with some follow up actions also. First priority if everything is ok; if your claim is accepted claim with respect to three things; please

remember, we discussed in this in the previous session, but three things are there only with basis of which examination report is based that is novelty, non obviousness and third is usefulness.

So, if all these three criteria are available and there is sufficient justification for these three things in your claim, then examiners report will be positive and it will be taken by the controller and you will get the patent. So, this is granting of patent you will get the patent. It is also possible that when examiners are putting the approval process, they find that there is no novelty, there is no non obviousness, the usefulness is not properly defined or it is not useful.

So, it is also possible that your patent is refused; controller will refuse granting the patent that is the two straightforward output from the examination process. But it is also possible that you have a pre grant opposition, the pre grant opposition means that there are certain observations, there are certain issues on your claim by a group of people who have reviewed your application.

Now, on the basis of that pre grant opposition; two possibilities emerge one is refusal to grant of patent; if this pre grant opposition is true then the refusal will take place. Or if you are able to improve; if you are able to improve your proposal on the basis of those objections, oppositions or the controller finds that these oppositions are of low standing, there is no merit in those oppositions ah. So, he may consider those oppositions null and void. So, in both these cases if you improve all your oppositions are becoming null and void, then also you get the patent

So, either controller directly gives you the patent based on the reviews report or if there are some kind of observations ah. So, controller will see the observations and whether those observations are correct; then the refusal will take place and if those observations are having no merit, then the observations are rejected and or if you are asked to do some kind of amendments and if your amendments are accepted by the review committee then you will get the patent.

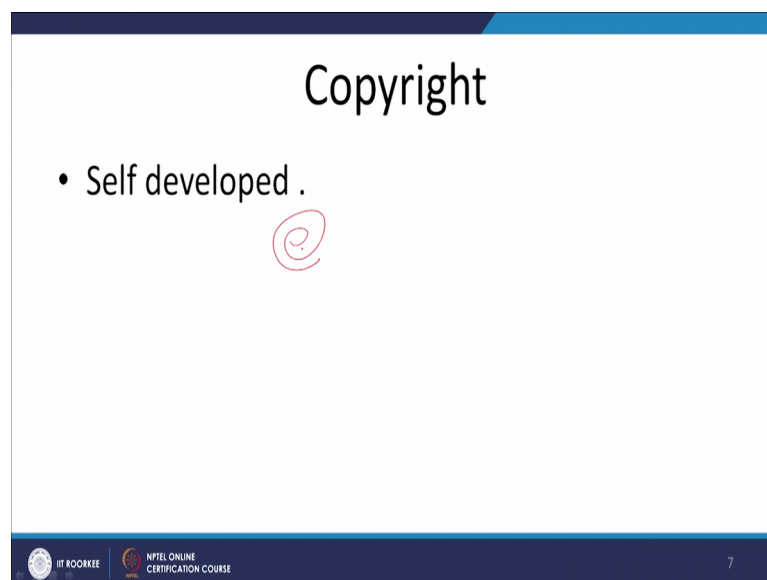
So, this process this process is a very time taking process. And it takes years 1 year, 2 year, 3 years to complete this process; however, government is continuously trying to expedite this process. But there are certain limitations the one limitation is non availability of experts in different areas because you want good examination reports; so,

non availability of experts that is one important challenge in improving the speed of or responsiveness of this patent granting process.

Then after getting this patent you may go for different types of use of this patent, you may go for using this patent for developing your own organization, starting your own venture you may go for licensing this technology to somebody else, you may transfer this technology you may sell this technology so, that you can work on a new technology.

So, all these alternatives all these ways are available to you to take advantage of your research or to take advantage of your property; so this is about patent. The other important type of intellectual property is the copyright, the very interesting thing about copyright is that it is self developed what is the meaning of self developed?

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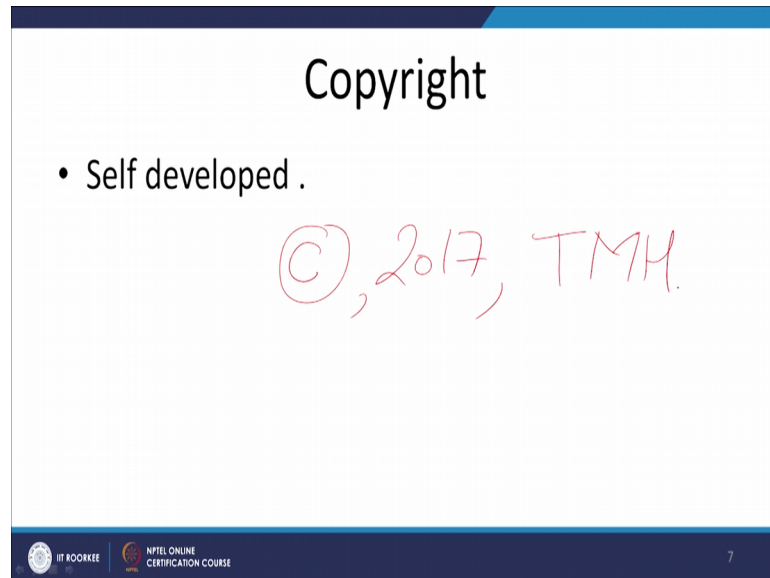


That I do not require any kind of protection, I require protection what I am trying to say that I do not need to get it registered somewhere for ensuring this is my copyright. We I am delivering this lecture and as soon as I am delivering this lecture this becomes my copyrighted material I am writing a story on a piece of rough paper.

I am writing a poem on a piece of newspaper and I do not require support or certificate of anybody else as soon as it is created; it is my expression which is copyrighted. The expression of idea is copyrighted the idea is not copyrighted it is something we discussed in our previous session also, but it is the expression of that idea which is copyrighted.

But the important thing is it is self developed we discussed that you need to have this type of symbol and then year and then who owns the IP.

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So, copyright generated in year 2017 and it is with Tata Mcgraw Hill. So, that is the way of writing the copyright some of us have this type of myth that copyright is only possible when you write this type of statement, but again this is a myth.

For an example I write a book but I do not write this copyrighted symbol 2017 Rajat Agrawal and you feel oh this material is non copyrighted. So, I can freely copy it and distribute it or rather I can make it printed and I start earning the money; that is not possible simply writing or non writing this symbol is not the guarantee of copyright. Even if I do not write this symbol this material is copyrighted to me.

So, please do not listen those people who say that only materials with this type of symbol etcetera are copyrighted. This is a way of presenting that yes this is a protected property, but even if you do not write and I am the author; legal author, I am the legal publisher of this document this copyright is still owned by me. Now how do we get the copyright and what are the other intricacies related to copyright?

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Copyright

- Copyright and related rights protection is obtained automatically **without the need** for registration or other formalities.
- However, many countries provide for a national system of optional registration and deposit of works. These systems facilitate, for example, questions involving disputes over ownership or creation, financial transactions, sales, assignments and transfer of rights.

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So, as we just discussed the copyright is obtained automatically without the need of registration or other formalities. However, in India we have office of registrar of copyrights where you can pay a fee of rupees 500 to get your documents copyrighted. So, that is possible, but it is not necessary as I mentioned that copyright is automatically generated without any need of registration.

So, that is very important thing we need to understand that copyright is automated and therefore, in most of the institutions nowadays when we submit PhD thesis, we write copy right year of submission and then the name of the institution that copyright is with XYZ institution.

So, that is the system; automated system of copyright, but as I mentioned that many countries provide a national system of optional registration and deposit of their work. These systems facilitate for example, questions involving disputes over ownership or creation, financial transactions, sales assignments and transfer of rights.

So, sometime it is good because then you have to track that who owns the copyright. You are also writing the story, I am also writing the story and both the stories are very much similar. Now I start getting revenue out of my story you are slightly slow, you are not getting that kind of revenue from your story.

Then tomorrow you may claim that I copied your story; now in the court it will be difficult for you to prove that the story written by you is 1 month before then I published that story in a magazine or in the form of a book. So, therefore, sometime this system is required so, that if at any time you need to go for some kind of legal dispute, you can create a mechanism that how will you find that date of origin of that work.

Because whoever has done the work first he or she will get the advantage of copyrights, you can also see the simple form of copyrights when we write a research paper. So, since I am writing a research paper this copyright of that research paper is automatically generated and it is with me, but when I am putting that paper to a journal and when that journal is publishing that paper. So, journal asks me to transfer the copyright and in that case I sign an agreement to transfer the copyright to that journal.

I did not get the copyright by registering that paper to some agency because I am the author to this right of copyright is automatically available to me, but when I am giving that paper to some journal; I need to sign that agreement to transfer this copyright to that publisher; so, that is with copy right. So, you need to see that somehow create a mechanism where you can track the origination of various manuals, various documents, various reports, various brochures of your organization.

Because all these things are under the domain of copyright and another thing is the patent for which you need to get registration through the controller of patents in India. So, we discussed in detail in this session about two important types of intellectual property; one is patent and another is copyright and our focus was primarily that development of patent and development of copyright within the Indian law system. So, with this we come to end of this session.

Thank you very much.