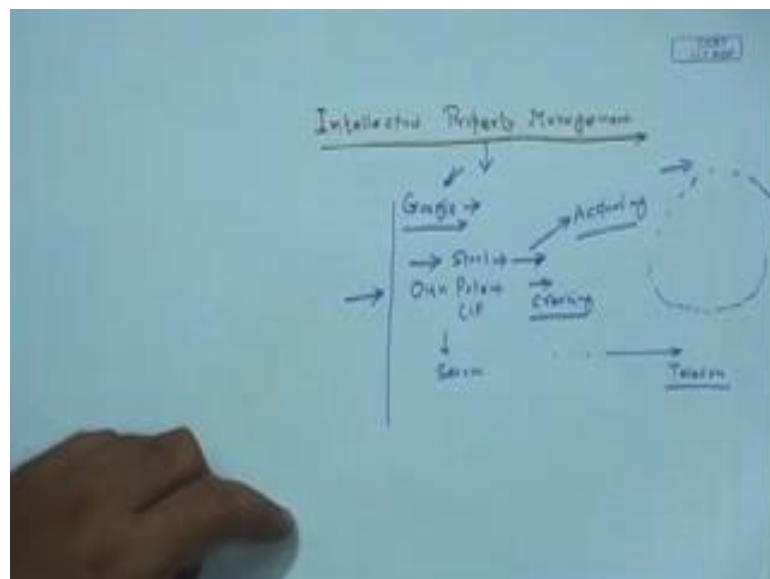


**Introduction on Intellectual Property to Engineers and Technologists**  
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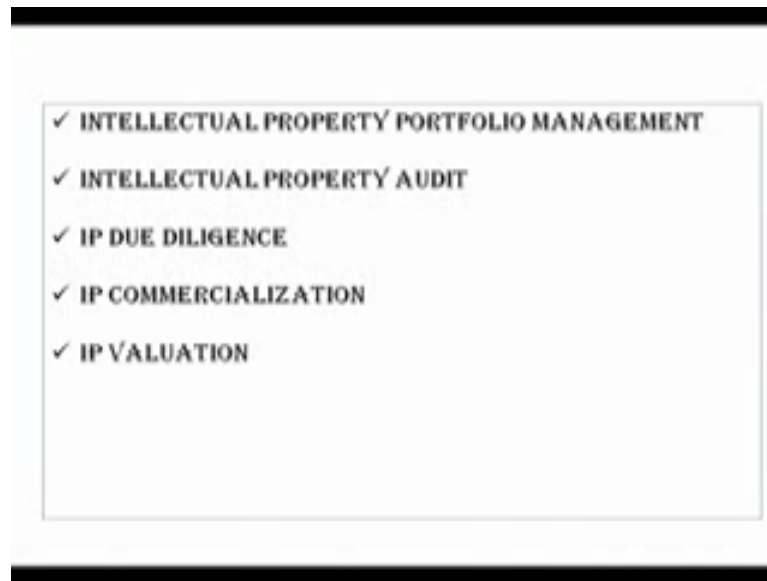
**Lecture - 39**  
**IP Management**

Next two class as your engineer in technologist will be treated as managers. So, I will give an overview because until why I am telling you the work this may be two semesters course subject. And this part can be classified into two three elective subject also. For the design next the 40 45 minutes I will give an overview of Intellectual Property Management. So, I am not telling that as an asset, but I am telling the in the form of a property.

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So, now how will you manage your intellectual property? So there what are the different parts or different sub area you should look, and what is the basic about those things. I will just explain to you. And subsequently I will give you few case studies with reference to that.

Now intellectual property management, I already refereed again in last class also for the digit I refereed classified into two three areas including natures, casino right, transaction of right, and enforce mental of right. Now all the three if you integrate properly then may comes the concept of management. Concept of how you are managing those things. Just like say I have referred here intellectual property portfolio management. So, if I consider ask you, what is the IP portfolio of Google? So, whether it indicates that what are the different businesses they have considering IP, whether they are the say IP means owners or how they own those IP? Just like say consider like this way consider Google. So, I am considering Google having use IP portfolio in today.

So, definitely the questions will come up that how they are acquired that portfolio or how they are managing their portfolio or how they are enlarging the portfolio considering the business goal. So, just like say Google initially started with search and also that business is there, they come up with the start up may be with definitely with patents say by just

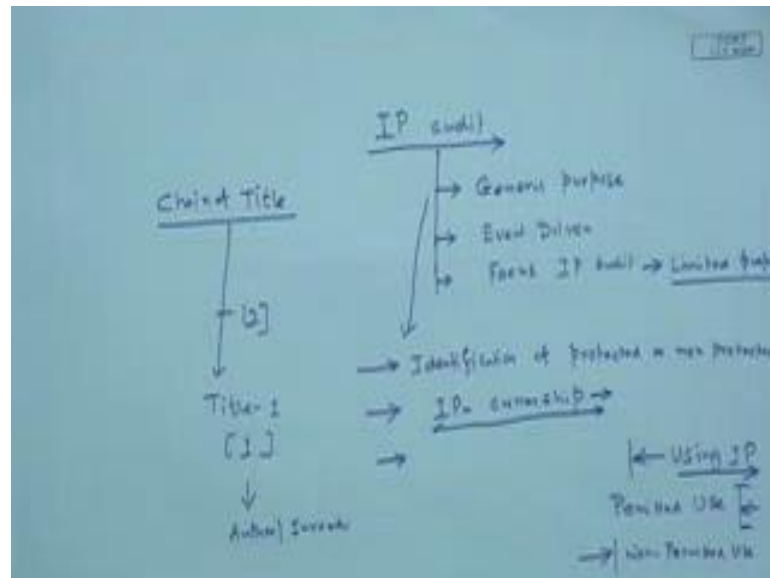
like say their own patent first thing I want refer own patent. Just like consider patent only own patents means own IP. Let us say company formed, let us start up. Now subsequently they again creating further extent in the defined business acquiring, means they can acquire the Google acquired IBM patents. Similarly others patents also they acquired and the ultimately they earned. They are extending the portfolio from search to that telecom and other different sides. And they are seriously extending their portfolio, IP portfolio not for just like the search from search including search they are extending to different area telecom and others. So, that way they are how they can just like we consider you have some sorts of IP, now how can you acquire the dominant position in the market or how can you diversified your business? Whether you will directly diversify or then diversify by acquiring somebody's some IP or creating IP or acquiring and creating. So, how can you make IP strategy for that?

For management of that intellectual property considering your business goal, so that will that that part is come in the purview of may be within the intellectual property portfolio management. So I am referring here simply patent. So, subsequently others things are also may incorporate there, just like say design and trademark branding. Just like say how you will say a brand a particular product or say develop appropriate brand in a brand for a brand on that. So for subsequently whether there is a chance of dilution of house brand based on the diversifications.

Similarly, how will you march or acquire a company? What will be the advantage disadvantage with reference to the merger acquisition, aspects, risk associated and the opportunity associated with those things in the form of IP and competitive advantage, all those things are also involved with respect of the IP management with the purview of a component. So portfolio, portfolio means what are the different things, just like a project I have a 10 portfolio, so then that means what are that say in respect of patent to IP portfolio what are the IP the company have, and how they have acquired, how they are using those forms of IP, how they are enforcing that form of IP. Just like if see that in respect of enforcement 20 percent dependent. You see that even Google like a B Company has two ultimately 8 versus 24 reported, may be more. With reference to specific literature I am telling that they file 8 suite and they have to define 24 sources.

Similarly, define companies also. Sometimes they have to file sometimes they have to defend you see that, that all those things will come in the purview of the portfolio management. So, that way we will discuss about the different sub area within the purview of IP management.

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Just like say, one of the components is IP audit. So IP audit, what do mean by IP audit? Just if I consider; do an energy audit, your electrical engineer mechanical engineer do an energy audit, will you able to do that.

Similarly, an IP audit, so will also able has to do it. For what purpose you will do that. So, there are different purpose defined IP just like a literature purpose. Different sub classification is also there just like a general purpose IP audit, event driven, and focused IP audit. Focus, just like an illustration some time called focus IP audit. So now, IP audit general purpose what is the importance of that? You based on the IP audit you will able to identify what is the purpose you may consider. Identification of protected or non protected IP.

Example; let us say you are trying to find out just like in academic institutes you are performing this task. So, how will you start? Let us say general purpose IP audit. So, let

us compile the issue root has, say there is a no IP cell, there is no percentage IP, and there is no awareness about the reference to IP, they do not know what is IP and others. So, how will start and audit it. In that case I will definitely first have to build an awareness then you proceed with reference to that you can go to the different labs and ask or frame question and from that questions you may create and got some idea, from that idea how to create a potential IP out of that or they have some unprotected say elements just like you consider also unpredicted elements so how you can think about let us consider it is not a public disclosure and others situation. How can you advice them to protect or create rights of that one part.

So, now say in a organization you are trying to say performing an IP audit. Then you will identify the different protected IP just like say what are the different IP they have registered and protected. And what are the unprotected elements. And here one component is also will do that IP ownership part. Just like say, why I am telling this part? So, some cases there will be some care with reference to the ownership in respect of the IP generated or created. Consider IP have been created or a patent has been invented by students, technical assistance and offices. And there is need for retain need of assignment from either of those persons. Do you think that title is perfect or ownership is perfect? If you read that stand ford versus lossy case that case, that the student leave the institutes and subsequently that is has share those idea let and the company are patented that think and the university is also realize the use of written assignment. So, no implied assignment, no oral assignment, written assignment from the inventors is necessary. In that case the ownership part have to be consider that the ownership by virtue assignment.

Similarly, consider that your organization got the ownership based on acquisition or based on assignees. So, that case also you have to say look the agreement and see that what are the defects lies in the respect of ownership of that IP. So IP ownership, you will able to find out at the defect in respect of IP ownership by virtue IP audit, just like given the example.

Similarly, say other part subsequently to the ownership you are trying to find out how that the company is or organization is using some IP. We have to find out whether they are using that IP based on permitted use, if say why waste on assignment sell or others

that the different that part also you have to check, or using some IP. Then first you must identify based on permitted use, let us say use if the IP still enforced. Means if it is already patented reserved or not that is the question or non permitted use that leads to the infringement.

So, that way you can also able to identify that potential threat to the organizations also you are stating. That way that IP audit is important parameters when you are in a general purpose you are doing. Then even driven with respect of merger, acquisition, or you are want to take a license or want give license of your IP. There is another important task we call due diligence exercise. So in that here, because you are potential intellectual property you are acquiring or say you are taking license. In that case you have to think about whether their IP is from whom you are taking, whether they authorized to give you license or not. Who will you check you? You check it you out, you can find out what are the patents their providing license and you see that. Really their patent owner, but if you think from patent office side I am getting they are the owner subsequently they have evidence has been assigned or they are sub licensing it they are not permitted to do sub licensing.

This the difficult task, you have ultimately access the agreement that license agreement for whether they are permitted to sub license or say how will you get the rights. So, they have a chain of title. Sometimes we call chain of title, chain of title. Just like this also applicable with reference to that physical property is how he is got the title. Just like how the tile title one, then how will you title list and owner one how he got the title. First one is one, then how he got that title like this way. This they are inventors or authors, similar pro cooperates are also authors inventors, then the applicant.

So, then like this way the chain of title it is an important parameters for identifying application of the ownership for the identification of the person from whom you are taking license. So, that way that IP audit is important parameters in the IP management tools. Just like say consider they say Google have acquired a different company then definitely they have exercised those intelligence, exercise at subsequently negotiated and the acquisition has happened.

So, this is the one important parameters that I am just although this how the exercise can be done all sorts think is good parameters, but just regional purpose IP audit, then event driven just like when he referred specifically just like for margin. Just like in license, out license situation or with respect to merger acquisition you can do. And if limited purpose focused IP address, so limited purpose this for limited purpose focus IP audit. Just like it can be done when you are venturing into the new business or some you are thinking about say drastic say a just with reference with foreign patent filing in desired territories. In that case also you may do limited purposed focused IP audit to ultimately manage your intellectual property in the different jurisdictions.

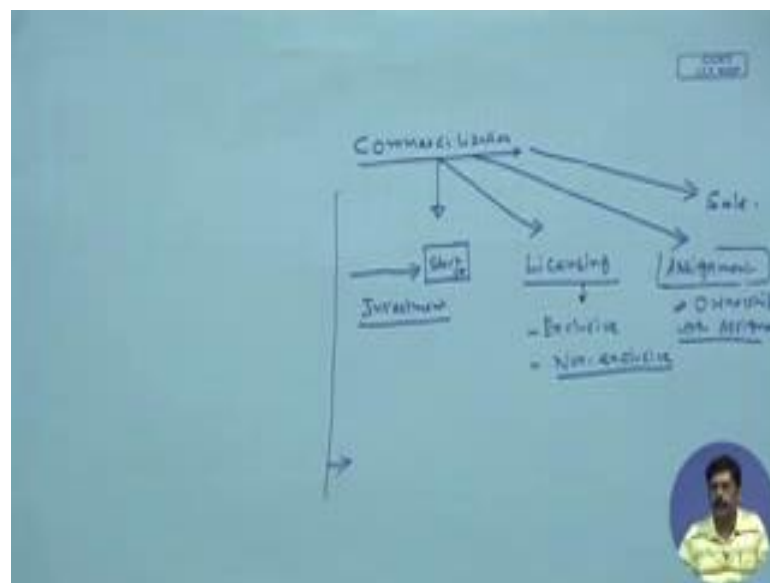
So, IP audit will help you to identify the potential IP, how? Say I got that I told you living visiting a laboratory and from that laboratory on discussion you find out that there is a chance of potential inversion from that laboratory. Then what are the steps they should follow. Just like what is the roomer what is the motive behind laboratory note book and record keeping? You may refer them because this will help you identify the contribution of inventors and the quantity to decide fast and true inventors with reference to the invention, because from that specifically the ownership chain of title with reference has been evolving. Then, say you refer whether you have to go for filing of that how to file then you are creating a potential IP for that organization from the simple idea specifically. So, that is one component.

And another part is IP due diligence. That I referred already that due diligence is somehow called investigations. Just like say you have a potential IP or you want potential IP then you have to investigate. What are the defects in respect of that IP that is also linked with audit specifically; whether the IP is the perfect reference to that technology with reference to the legal? Legal means the ownership with reference to the technology means you understood that part means, whether that this technology is fool proof. This technology is passed a impinging another technology, those kinds of things we have to investigate by means of due diligence.

So, just when you want acquire an IP or even in respect to ill license or in respect to out license also you may go for due diligence exercise, because let us say license agreement you are thinking about getting royalty based on sale. Then you thought about that the

whether the appropriate returns will get it based on royalty from that company or not. So, the IP is also important parameters in respect of IP management. Then just like say if I referred here IP commercialization, if I ask how you will commercialize your intellectual property? What are the ways you can commercialize? So, you may thought about just like a commercialization

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So commercialization, how you commercialize your IP? So, commercialization involve just like you have patent holders. If I ask how you commercialize you may thought about creating a start up. How can you create a start up? Start up you is creating in the form of a legal entity. So, different types of entity you may create LLP, partnership, private limited companies different way. So you may ask me, how will you get the investment related to that? Investment from or where from I will get investment. Their lies the two investment; one is seat investment initially based on the proof of concept, and then you can go for capital investment. Capital investment will come from may be based on annual investor concept or based on say equity concept also may come up. So start up is one of the things just like the entrepreneurship that part is also you may create just like a Google also have started start up type of situation.

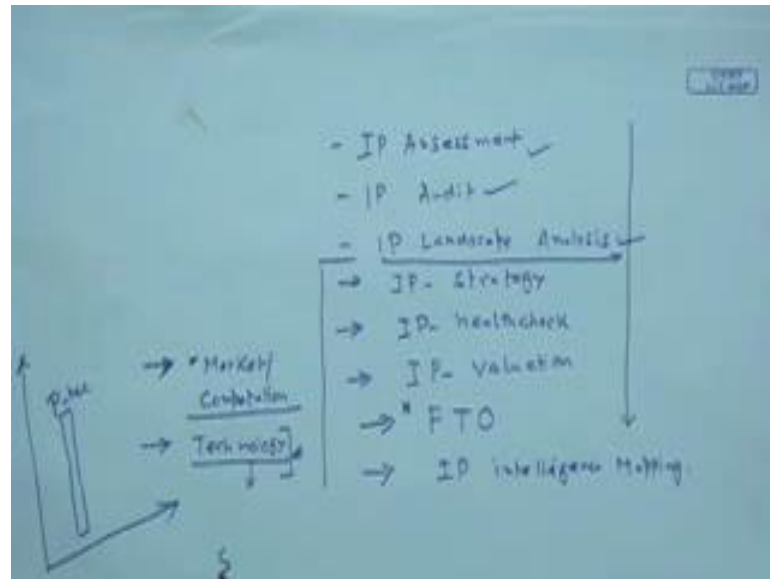


So, then they have just like they got the investment from that say markets also, so you get the investment based on public equities also. That way that investment will come up then subsequently you ultimately proceed with reference to the commercialization aspect. This is the one part that your own businesses you are growing then also is available to commercialize by means of licensing you take date income. This licenses your patents; license your patent just you are not thinking about or you can go for assignment which will be beneficial. You have to decide whether assignment or licensing will be beneficial. Licensing means the owner still remains with you assignment means is with assignee; ownership with assignee. So, you have to decide the managerial decision that holder will benefit if you transfer the ownership or simply keep the permission.

Now, here permission also given and defined just likes exclusive or non exclusive basic. You can create multiply non exclusive licensing see with reference to the simple IP in a particular jurisdiction or you can create an exclusive license see with reference to your patent in s s during jurisdiction. So, they way you can also get income also of your IP licensing assignment. So that way commercialization part either start up or through licensing or through assignment or we may say that I am selling my IP. Further other part is also coming just like I refer one is best part just like say some time that is part not say it is a specific IP but how can you enlarge the scope of IP. They are that rule of the merger acquisition is coming up.

So, though the IP commercialization one of the important parameters. There are other aspects are also there in respect of IP management sometimes we refer three elements.

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Now, just like say IP assessment, then let us say IP audit, then IP landscape analysis, IP strategy, IP health check, IP valuation. All those things will come in the purview of IP management. Just like IP assessment and IP audit I referred already. This is an important parameter this also one at least half semesters course is a practical course, IP landscape analysis. So, what do you mean by landscape analysis? Just like say consider you want to extend your business in respect of wind energy. Now you want to do a landscape analysis with reference to that wind energy part. So, what are the things you have to use for business diversity reason with the reference to the wind energy, because now you are got a patent specific to wind turbine now want to extend your business in respect of wind turbine specifically manufacturing.

So, now you have to find out the based on landscape analysis two part, we make if you consider market or competitive competition or technology part. So, whether in respect to market how you have able to know the based on landscape analysis. What the different market clears are there in respect to that wind energy, in that jurisdiction where you are thinking about extending your own business and how to face competitions from them. So, how will you identify the competitors or competitions in that market? And also in respect of technology assessment we will able to that whether your technology is

superior to those competitors or not, what aspects your technology have some super imposition or diversification compared to others.

So, landscape analysis is also help you in that regards, there is another term something is called freedom to operate search within the purview of landscape specifically. Then some time is called patent intelligence with the IP intelligence mapping, hence mapping. Those are the part is also there in the purview of IP management. So, you will do a say competitor search based on the patent search specifically you will able to identify the wind energy. You just keep different say keyword with reference to that your technology and create equivalent to word for searching you can do a search with reference to that those keywords. Then identify the different patentee in defined was the patent how many number of patents in respect to of which technology they are the patent holder.

So, that part you will do a search and analyze that part an also analyze if their patent holders analyze their patents then identify that the SWOT analysis sometimes we consider. Strength, weakness, opportunity, set; SWOT analysis but strength weakness opportunity set that how with extend your patent is strongest to their part. Further you will get it domain able to get a competitive each over those player in the markets or not. So, that we will able to identify those things by means of say IP landscape analysis sometimes it is mostly applicable for patents, patent landscape analysis.

So, for that reason you will see y hypo site and few landscape exercises with reference to wind energy or energy related part is already there. You can visit the sites and get the knowledge with reference to the landscape analysis how to do. That this is the practical exercise you may take these as a take home exercise for IP landscape analysis. And something with reference to let us say turbine nuclear, energy turbine. Similarly solar energy, because these are the new area has been developing just like have to you will work in company. They want to diversify their business for those types of thing. Then how will you help them in respect to landscape analysis, so you can please take home exercise for landscape analysis with reference to the wind turbine specifically.

I am just closing here, subsequently I will discuss the IP valuation part, and then I will show you few case studies from y hypo site.