

INTELLECTUAL PROPERTY PORTFOLIO MANAGEMENT

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Welcome friends. So, in our last few sessions, we discussed about the one important aspect of our course that is where to file the patent and we discussed the role of Paris Convention, we discussed the role of PCT and we discussed that in which scenario Paris Convention is more useful, where PCT is more useful and it becomes important that you need to know where all is your market and according to your market and competitors available in those markets you have to decide the locations of your IP management. Going further because we are discussing two important questions what to keep where to keep.

Now, in what to keep to decide that out of various innovations which you are doing various type of R and D activities you are doing. various types of product development you are doing, various types of improvement in the processes you are doing, you need to protect all of them. You need to create IP for all of them. But do we need to give equal importance to all these different types of IPs when we are managing a portfolio? So, here comes the role of we can give ranking

we can follow a tier strategy for ranking of various types of IP and this gives us the importance that ranking 1, 2, 3, 4 like that you understand that which is more important IP which is less important IP where we need to be proactive where we may take some time also. So, it is more like a Pareto principle that under the Pareto principle we say that 80-20 rule is there. So, 20 percent may drive remaining 80 percent same is possible in IP also. There may be few important IPs which may drive

or which may create opportunities for other IPs also. So, in this particular session we are going to discuss about this ranking system for deciding your priorities for different types of IP. The broad content which we are going to discuss in this particular session that we are going to introduce you this ranking based system for our patent filing, then we are

going to discuss the classification a possible classification. This is not a perfect science. So, this is a classification which is proposed but there can be many other classifications which our students learners can develop with their understanding and then what type of strategies.

We will follow with respect to different type of ranks in our classification scheme and the methodology which we can follow for patent applications and obviously, we will continue to discuss the benefits of this kind of system because without understanding the reasons without understanding the benefits importance it will be difficult to implement these things in your organization. So, all that we are going to cover in this particular session. Now, coming to the introduction that what is this ranking system? We know that BCCI a very important body in our country for controlling the game of cricket

So, it also gives ranks to our players that they are in the bracket 1, they are in the bracket 2, they are in the bracket 3 and accordingly their compensations, their benefits, their other kind of perks etcetera are decided. So, that is a very common example of ranking. If you go to government of India, there are cabinet ministers. there are state ministers and in state ministers also there are state ministers with independent portfolio and state ministers who are part of some cabinet ministry and though these ministers are not there, but deputy ministers are also possible. So, that is again a type of ranking cabinet ministers at the top

state ministers with independent charges after that and then state ministers and then deputy ministers. So, point which I am trying to say that rankings and these tier system is possible in various fields sports, gaming. is very very common. I gave you the example of government functioning also where also you have this kind of ranking systems. So, these days rankings are becoming very popular in educational institutions also where you have national rankings like NIRF and international rankings like QS and THE.

So, everywhere rankings are there. Another thing like accreditation bodies in our country NAC and AAC is the accreditation body and they are classifying institutions on the basis of their certification. A++, A+, A, B and so on. So, different types of institutions are classified on the basis of this grading which they are putting. So, you can say that they are creating different baskets.

So, in one basket all A++ institutions So, they may make some policy changes like if your institution is getting A++ rank they say that you can be an autonomous institution. So, you do not require to follow the affiliating universities all the guidelines you are so

good that you can be an autonomous institution. So, this is how the benefit is possible that for one type of let us say all the elements of that basket you can make one policy one strategy so that is there in case of games and all those things where you are classifying teams players your customers products also on the basis of this ranking system and

Generally these ranking systems are in hierarchy tier 1, tier 2, tier 3. Most commonly these days in our country we are classifying tier 1, tier 2, tier 3 all cities in our country. And government of India is making different type of policies on the basis of in which tier you are. It may be generally on the basis of size of a particular city, the income level of that particular city and maybe other facilities. So, it becomes and on the basis of this classification only government has come with the idea of aspirational cities, aspirational districts where you need to put more resources for developing or uplifting those areas.

This is how we understand from variety of fields the example of rankings and tier strategies. Same we are going to discuss how it is applicable in the field of intellectual property portfolio management. So, as I already said there is no universal criteria for defining or classifying the tier system particularly for rankings. patenting particularly for IP systems though there may be tier systems available like I gave you the example of QS ranking, THE ranking. So, that is one type of classification which is more or less universally globally accepted.

However, there are always questions on them also, but still it is acceptable. And in my discussion here for IP management particularly we can have two broad categories One is internal tier system, the second is external tier system. Now, internal tier system is internal to the company and it is for various process improvement, where outside world is not aware of this type of tier system and it is generally very confidential. For example, I am top management in the company.

And I have to classify my employees on the basis of their performance. So, what criteria I am using? I keep it very confidential. Otherwise, if that classification becomes open, it may be a reason of bullying to my employees. Or some of them will be motivated, some of them may not be motivated.

So, therefore, many a time it is confidential. But it is also correct that it is not 100 percent confidential all the time because those who are doing good. They should know it and those who are not doing good, they should also know that we need to improve our performance. Otherwise, everybody will feel that, okay, I am also doing good and I am

also doing good. So, the improvement will not happen, which is the purpose of these type of classification systems internal to the organization.

So, it can be confidential, but it may be open also. So, you have to see that if it requires to be confidential in that only it is confidential otherwise it can be open also. In the case of external tier systems where it is to the public obviously we need to tell it loud and clear. that how these organizations, how these products, how these customers, how this player, how this team is coming into this kind of ranking, this kind of tier system. So, it is very well used for strategic decision making and we know that how different teams are classified for let us say Olympic quota.

So, based on your performance some of the teams get qualification directly, but some of the teams need to do participate in the qualifying games to get Olympic quota. So, this is a external tier system that if you are able to maintain up to this level of your performance you get automatic qualification, but if your performance is lower than that you need to go to a qualifying match and then only you will go to the Olympic quota. So, this is where you need to be clear and it is very much open to all the public. Now, coming specific to IP management on the basis of this ranking system on the basis of this tier approach.

Now, in this case our purpose is to have efficient intellectual property portfolio and when I say in efficient it means that there may be some IP which are more important and there are few IPs which are less important. If I am a company which is in the area of let us say mobile device development and if I develop a new type of processor or a new type of operating system it is a very critical invention and it requires different type of attention. While if I improve performance of my camera the camera in the mobile which is slightly add on. which I will not consider as a important strategically important innovation. So, I may give less importance for a new type of camera while I will give more importance for new type of operating system because that becomes my strategic invention.

So, therefore, giving more importance more emphasis I may file patent for my new operating system across the globe in multiple locations while i may not like to file the protection for new type of camera in multiple locations i see that okay where my high-end phones are being sold only in those countries i will be able to protect or i will like to protect so uh in this way in this way you can understand that if i am apple company i will protect my ios across the locations. But I may not be so much interested in protecting my camera technologies in all the markets and therefore, it becomes a very efficient kind of a

decision cost effective decision that where to protect what and that answer can come with this tier based patent filing strategy. Now, here the first type of tier or the rank one is

core invention. Core invention can give you a different type of competitive advantage and these core inventions are not going to happen on a routine basis. It is the result of huge R and D efforts. It is the result of lot of hard work. A lot of resources are used for developing the core inventions.

So, you need to be very very proactive very careful in protecting all your core inventions. So, therefore, the action point, this is the cause and this file immediately is the action point. That you, if you are going to develop a core product, you need to file your patent as soon as possible. Take the example of COVID time.

During the COVID problem, some of the companies developed COVID vaccines. Now, it became a core invention for those organizations, those companies. And therefore, they wanted to have protections as soon as possible. So, the action point was to take the protection and not only protection in their own country because almost the whole world was suffering the issue of COVID. So, they went immediately in multiple locations for getting the protection and that is how tier 1 activities are worked.

So, when your inventions are very critical, to your business model and the potential is very very high like I just gave you the example of covid vaccines. So, it became a very high commercial potential almost the whole globe was the market for those vaccines and since there were very limited almost no competitor available at that time. So, you wanted to take the benefit of first mover and therefore, it became the point of filing the patent immediately.

I can also give you the example from our own institute. During this time, we developed a low cost closed loop ventilator. So, this is low cost closed loop ventilator and we named it as Pranavayu. During corona time ventilators were high in demand we developed a very low cost ventilator and before showing it to anybody else we wanted to keep its production and for that purpose we filed the patent almost midnight because we wanted to show it to PMO office We wanted to show it to Ayush.

We wanted to show you to some of the potential users of this technology. So, it became a kind of a core invention and obviously, it has to be protected immediately because you need to explain your core invention to many stakeholders. But there are very high risk of copying infringement of this kind of a core invention as I just said. It is not possible for

everyone to go for core inventions. So these are rare activities and therefore you need to have immediate protection.

But one very important thing in this case which I feel is a very important action point again. That rather making your claims very specific you need to keep slightly broader claims. So, you can have a more you can say scope of protecting your innovation. For example, if you do a process where the temperature which you kept is let us say 300 degree and that reaction is happening at 300 degree. Now, if some other

inventor is able to achieve the same result by keeping the temperature let us say at 250 degree he will get a separate patent for that. Because he is getting that at 250 which is less than 300 and that also becomes a novelty and therefore, a patent is possible for that also. But if I write that the temperature should be between 240 degree to 320 degree it becomes a broader claim and then all those people inventors who are thinking to keeping the temperature between 250, 260, 270 etcetera will not be able to file the patent because of this broader ranges. So, it is always advisable it is a very important strategy that for your core inventions otherwise there will be a possibility of getting a slightly modified application and which may also get a patent award.

So therefore, I will suggest that keep broader claims and broader claims will always help you for a broader protection. Or in this language, you can say the strong protection. So, strong protections are possible with the broader claims. Narrow claims or the narrow ranges, narrow specifications will give, you can say, slightly weak protection. It gives scope for your competitors to slightly tweak your application and file for a patent application.

Then, coming to the second level, after that, strategic invention which require further evaluation the action point is you need to evaluate it further. So, these are those inventions with the potential for future development. So, there is a scope it can be a very important strategic invention, but may not be immediately useful it is some more R and D efforts are needed and after that it may become a very important innovation for entering to a new market or to start a new range of products.

For example, if I am a company in the field of communication engineering and I develop some new technologies, new solutions in the field of 6G communication. So, that is a strategic innovation because I know future is of 6G and since right now 6G spectrum is not in practice it requires further evaluation. I am in the area of steel technology. I know

that there will be a requirement of more and more solutions in the field of steel technology and I may develop let us say new type of materials.

I may develop new type of paints, I may develop new types of communication devices. So, on one side steel technology is developing and on the other side how to counter that steel technology that solution also need to be developed and all these are part of examples of my strategic inventions. So, since these are for future so therefore, more testing more R and D data is required making your claims for patent. But you know that yes we need to invest some kind of resources, money, manpower, physical resources on these strategic invention because in future these inventions may become a important source of my competitiveness.

And right now because sometime it is possible that you need to share these kind of inventions with the other stakeholders. So, you need to have some protection also. So, the action point is provisional applications. So, that your idea your initial invention is protected properly.

So, rather going for full application for these strategic inventions it is advisable to file for provisional application. So, that your novelty your idea is properly protected and then you can go ahead with more R&D activities, more future development, more refinement of your idea. So, that is the tier 2 where more R&D efforts are needed and you have a scope of developing that technology for future use. Then comes tier 3.

In tier 3, these are Peripheral inventions and you will see that large number of inventions are in this category only. Here depending upon your situation in the market I am just explaining that you may go for filing or you may not go for filing it is optional. But since we are at this moment in race of numbers also so therefore we should go for filing in this case. if you are in a market where people do not want to infringe your intellectual property even if it is not properly protected.

In those markets I do not think there is a requirement of filing, but if there is a market there is a society where people are habitual in infringing your IP in that case filing should be necessary. Now, peripheral inventions Like in some of the cases, you can have like example of China, it come under the utility models also. So, if your country permits to file utility models, you can take the advantage of that utility models also. But for example, in country like India, where utility models are not possible, you need to go for regular patent only.

So, that becomes slightly expensive and that therefore the whole discussion is coming. So, these things are generally available in the form of some improvement, some add-ons on the existing inventions. There are majority of improvements are happening on your communication devices. Majority of innovations are happening around your communication and these laptop, computer, television, these type of devices. And most of them I will say can come under this peripheral inventions.

These may be valuable for defensive purpose or bundling with core inventions. So, either you see that how you can add them with your core inventions. that is one possibility or for defensive purpose. Defensive purpose means that you are creating a wall for yourself enemy should not your competitor should not encroach your boundary and for that purpose also the peripheral inventions can be protected by regular IP system. And in some cases because IP is a cost if it is possible that you can maintain a trade secret

because for trade secret there is no cost. So, if it is possible that is also a way of keeping something confidential under your exclusive right. So, you can use trade secret route also for these kind of peripheral inventions. So, here as we discussed in your core inventions the claims were very wide. while in case of peripheral inventions we work on very narrow claims, very specific thing one single add-on, one single improvement and for that we take these type of patents.

So, here you are talking very very small and you are taking the benefit of IP ecosystem of utility model if at all it is available. Then comes tier 4, the tier 4 is if you are not able to classify in tier 1, tier 2, tier 3 it comes as a tier 4 activity and here either you can evaluate on your own or you need to take the help of some experts. So, that you can assign a particular tier to these types of technologies.

So, anything which is not possible to classify in T 1, 2, 3 we will come to tier 4 and here you need to further evaluate and we need to categorize these applications in one of the you can say tiers tier 1, 2, 3. So, in fact, it is nothing, but it is pushing them to that cycle of 1, 2, 3. what is the methodology for doing this tier based application. So, you need to understand the organizations objective that is the number one whether how you are using your IP in this whole discussion. So, organization objective is very very important what are the specific goals and priorities for your organization with respect to IP.

Second important thing is data collection and patent application inventory that you need to collect data for all this process data related to the competitors, data related to the market potential, data related to future technological waves also. So, you need to get all

these data and at the same time you need to check what type of patents your organization is doing. So, the entire patent inventory also need to be checked before deciding the tier or the rank of a particular patent.

Then you need to classify them on the basis of some baskets. So, you need to make some baskets that is 1, 2, 3, tier 1, tier 2 or tier 3 that is one type of classification which you can follow that all my core technologies are one basket. All my optional technologies are tier 3 and all my future technologies are tier 2. So, that is the simplest example of bucketing the technologies or in some other cases you can do on the basis of different types of technologies your organization is making.

For example, if I am a company like Microsoft I can do that technology is related to AI in one basket, technology is related to image processing in another basket and so on, on the basis of different technological domains which another can be natural language processing and so on. So, you can create multiple baskets based on the technological expertise you are having. So, you can follow anything whatever is suitable to you for creating the baskets, creating the folders for putting the technologies. you need to decide the scoring parameters.

What scoring parameters you are going to use and in this scoring parameter you need to basically decide the criteria. So, for example, Since patent is considered to be academic activity also so citations that how many people are referring how many other organizations are referring your technologies in past and that gives you one idea that. how much citations your work is getting, the independent claims, claim length, detectability of overlaps and the market segment, size of that, all these are the criteria for scoring your technology. then the different ranking categories like I am saying high, medium, low and you can have many more ranks also.

So, just an example that generally you can say rank 1, rank 2, 3 etcetera. Very important thing is the documentation. You need to maintain appropriate documents for this entire ranking process. So, documentation is very important so that people know what type of parameters you are using, how much weight you are assigning to each parameter, how did you complete the scoring, how have you done the categorization of different baskets or buckets.

So, that is very important because in organizations people keep changing and without proper documentation it is difficult to follow that what schemes were used by the previous teams. So, finally, we see that when you are doing this ranking based tier system

you are able to classify your efforts your resources more for tier 1 Less for tier 2 and even less for tier 3. So, this appropriate allocation of resources that which resource, which basket, which rank type of patent need to given more importance even not only for filing but for execution point of view also.

you can take easy decisions for a group of patents not for individual patent, but for a group of patent you can make easy decisions. And it becomes important source for your increased competitiveness with the help of your proper intellectual property management. It will also help you because if you remember the first point in deciding the bucketing, deciding the criteria is the objective of your business. So, once you are developing your this entire ranking system on the basis of your business objectives obviously your intellectual property portfolio will have a better alignment with your business objectives.

and since you are becoming very efficient you are cost effective. So, with lesser resources you are expecting higher returns. So, you will get higher ROI higher return on investment on the basis of this particular thing on your patent assets. So, all these are the different types of benefits which you will get from using this concept of ranking or tier or baskets or bucket whatever you call the ultimate purpose is that different patents need to seen with different importance and how to decide that importance that we discussed in this particular session.

So, with this we come to end of this session that we need to prioritize high value, low value and very low value type of IP and if you do that your IP portfolio will be more effective, efficient and it will help you to get more ROI on your IP assets. With this we come to end of this video. Thank you very much.