ROADMAP FOR PATENT CREATION

DEVELOPING YOUR OWN IP SYSTEM

LECTURE 31

A very warm welcome in the first module of week 7 of the Course, roadmap for patent creation, titled "Developing your own IP system" Here, we will introduce to a simple IPM Audit model. How to follow that IPM model will also be discussed. This Audit model if followed sequentially will definitely help to create one's own IP system if it is not there. Secondly, it will help to streamline the processes if somebody is not aware about the different processes which are there in IP management although if IP system is there.

Thirdly, if one needs to analyze the performance level of the present IPM system in the organization/academic Institute or wants to know how it can be improved; this tool will be helpful. This is a very simple model which is very easy to implement. One can do establishment of IP model effortlessly if is that IP System is not there. This can be applied to any sector, or in any Academic/ Research Institute, or Industry. Identification of potential IP is a major challenge. Here, this model will help to identify the potential IP.

This IPM model will answer 3 major questions-

➢ How can organizations develop their own IPM system, i.e. IPM system?
➢ How can organizations assess their own IPM system?
➢ How organizations can manage IPMS efficiently for a wealth creation?

The Model 5 stages and 15 major IPM processes. There are total 15 major processes within the categories of IP stages- Pre-IP stage, IP-stage, Post-IP stage, IP acquisition & IP enforcement which are labeled as A B C D & E. In the 1st stage, i.e. Pre- IP stage, there are total 5 major processes. In the 2nd stage, i.e. IP stage, total 4 processes are there. In the 3rd, i.e. Post-IP stage, one can observe 3 major processes. In the 4th stage labeled as D which is IP acquisition, one can observe the 2 major processes. And in the last i.e. E, 1 process is there. **How this model is developed?** Here, a brief idea will be given on how this model was developed to provide a background. For developing this model, the IP management system of 3 Indian organizations & 3 foreign MNCs was explored. The organizations selected for studying this IP management were considered based on some parameters. These parameters were- It should be a Top IP filing organization, or Thomson innovation award winning organization.

IP savvy organizations which are having a good IP portfolio & they are all from the same field, i.e. Electrical Engineering sector, were considered and then the IP management of each of the organizations was studied in very detail. Based on that study & after analyzing each of the organization, IP management system, 32 IPM related processes were identified. These 32 IPM related processes were then converted into 11 codes because when one thinks of IP management, there are so many processes (almost 130 + processes). Hence here all 130 processes are clubbed into 32 IPM related processes and then coded it to give 11 codes. These 11 codes are further expanded into 15 codes. The 2 codes, i.e. IP Idea generation code & IP inventory code were expanded to come up with 15 codes. From these 15 codes, 5 super codes were then generated. 130 IPM related processes -> 32 IPM related processes -> 15 codes -> 5 super codes.
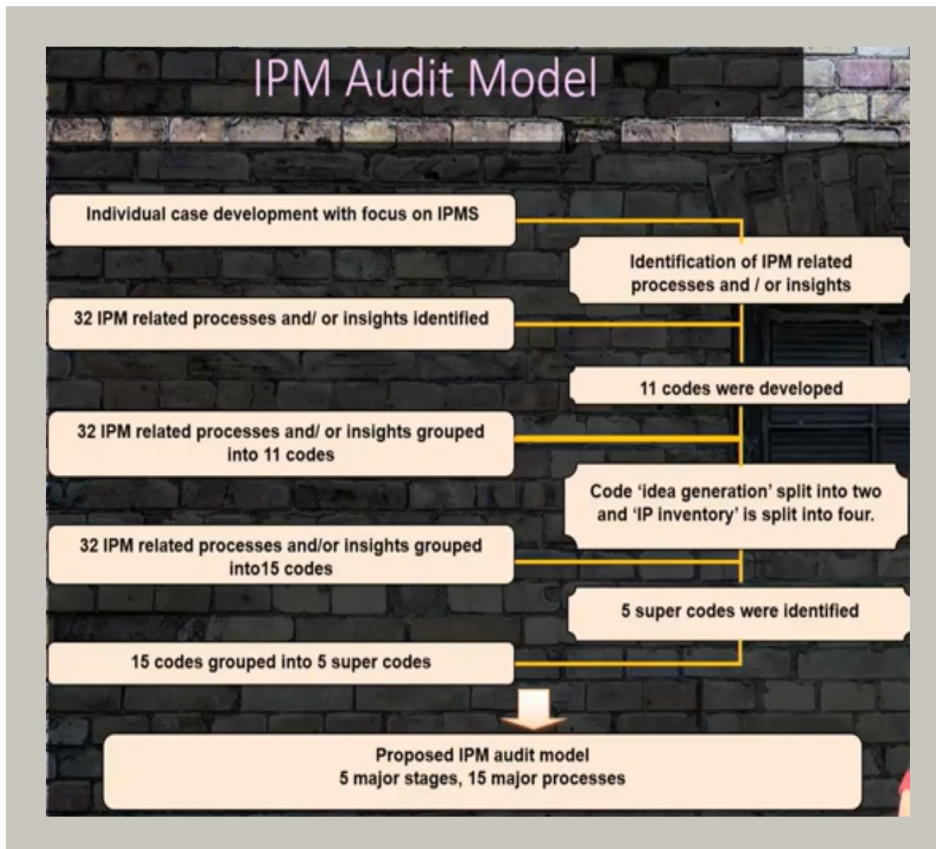
With the help of 15 codes & 5 super codes, the IPM Model was developed. Here, the first 11 codes were- IP Policy & Contracts, IP Security system, Idea Generation, Idea Selection, IP administrative protocols, IP assessment, IP inventory, IP maintenance, IP commercialization, IP acquisition and then IP enforcement. IP security system or Idea generation is itself a vast topic. One can prepare an entire course only on IP Policy & contracts. Then Idea Generation includes IP

enforcement & IP acquisition which are again vast domains to be dealt with separately. This 'idea generation' has been divided for the sake of implementation into the 2 codes- Idea Generation driver & Idea Generation process. Maintenance of inventory when doing IP management is very important. Organization keep the varieties of inventories created based on different parameters.

	Total IPM process codes	Code
1	IP policy and contracts	IPG-PC
2	IP security system	IPG-SS
3	Idea generation	IPG-IDG
4	Idea selection	IPP-IS
5	IP administrative protocols	IPP-ADM
6	IP assessment	IPP-AS
7	IP inventory	IPP-NIP
8	IP maintenance	IPC-MAI
9	IP Commercialization	IPC-COM
10	IP Acquisition	IPA-AN
11	IP enforcement	IPE-IPE

	Total IPM process codes	Code
1	IP policy and contracts	IPG-PC
2	IP security system	IPG-SS
3	Idea generation drivers	IPG-IDD
4	Idea generation process	IPG-IDG
5	Idea selection	IPP-IS
6	IP administrative protocols	IPP-ADM
7	IP assessment	IPP-AS
8	IP maintenance	IPC-MAI
9	IP commercialization	IPC-COM
10	IP acquisition	IPA-AN
11	IP enforcement	IPE-IPE
12	Idea Inventory (Potential IP)	IPG-PIP
13	IP inventory (Non-commercialized IP)	IPP-NIP
14	IP Inventory (Commercialized IP)	IPM-CIP
15	IP Inventory (Acquired IP)	IPA-AIP

Here, 4 major inventories are developed. Within that one can just think of so many different kinds of inventories. Inventory is divided into the 4- IP inventory commercialized, IP Inventory non- commercialized, IP inventory acquired & the Idea Inventory (which is the potential IP). Hence, at the end of each stage in the model one can see the inventory. What each of the stage means?

1.   **Pre-IP stage** Pre-IP stage is having total 5 major processes which are - Technology strategy, Innovation strategy, IP law related human resource availability & IPM Tools accessibility. All these are aligned in such a way that through this IP management process maximum wealth is created any organization when they do the IP management. The major motto of IP Management is creating intangible assets & then using these intangible assets for capital/wealth generation. Here, 1st stage is Value Creation stage whose output is to get an Idea Inventory. One will dig out the potential IP of the organization in this stage. For any organization, thinking of IP management, the 1st important thing is that they should develop slowly the culture of data confidentiality if it is not there. Because it is never known which data will be important & how it can make a very valuable asset for the organization. Unless & until the commercialization happens, one may not understand that thing.

        The 1st important process is IP policy & contracts. Any organization/ academic/ Research institute is expected to have IP policy and then the contracts related to IP. Second process is IP generation process or the security system generated. After data confidentiality, whatever the security system is followed by the organization falls under it. 3rd process is Idea Generation drivers. Remember that when IP related things are involved it should not be restricted to R&D. It is a general concept that any invention is the duty of a R&D department. It is not the case though. The whole organization should participate in that process including the manufacturing unit, the shop floor people etc. The workers who are involved/doing that activities daily are capable of giving more suggestions to do the things better. Therefore, there should be some processes that will push the people/ the person/ whole organization to think differently (idea Generation Driver) & there should be a mechanism to capture their ideas.This will result in development of Idea Inventory.

        When one talks about the Innovation, so many ideas come. But selection of the idea that will result into potential IP is next important task. But if this basic thing is followed, i.e. policy & contract, security system, generation drivers, then generation process will result into development of 1st inventory i.e. Idea Inventory. Example. Suppose you are an academic

institute, what you can do is just have some processes, some activities in the college/ school so that students

can give their ideas & you can make a directory or a database of all that ideas. You can then just explore those ideas for any further project or student project activity or if a faculty is working on some research topic then they can consider that particular activity.

2.   **IP protection stage** Here one has to take a decision about which ideas shall be considered for project development & from there what kind of IPs can be generated. Decision related to that protection is very important because there is involvement of a big finance when dealing with IP protection & therefore it should be very selective & guided activity.Here, 4 IPM processes are there & at the end, the IP inventory is created which is non-commercialized IP. This is the stage where IP is protected & it is ready now for the commercialization or the strategic exploitation. The Challenging task here is selection. Suppose one has 100 ideas & need to select only 5 ideas, then they need to set the parameters in order to select 5 ideas. There is a process for that but it is beyond the scope of this text. Once those 5 ideas are selected then they have to be worked on. For this, again there are processes to plan that activity. And after planning the processes one will need to tap that potential IP & protect that particular IP. There are processes for each of these steps. One can use simple filters for selection like- feasibility, Development feasibility, current market scenario, and business related aspects (for organizations/ MSMEs); just to give the idea.

Even in the academic institute, one can think of this kind of thing so that applicability of research is there. One can identify & learn about the position of technology in technology life cycle (Leader equal follower) along with where exactly that technology is present, internal-external resources which are available for Idea development. Based on these filters one can select the idea & then work on it to generate the inventory which is a Non-commercialized IP.

3.   **Post-IP stage** The 1st stage generated idea, 2nd stage generated IP which is not commercialized. The 3rd stage is a **Value Extraction Stage**. The value is henceforth created & now one is going to extract it. Here 3 major processes are there & at the end one gets IP Inventory i.e. a Commercialized IP. The challenge here is selection of IP for further maintenance. Every IP when is being generated, one has to give the maintenance fee like License fee.

Note: To keep an IP, one has to give maintenance fee. Suppose the person has 100 IP, i.e. a portfolio of 100 IP that are to be maintained, here the IP commercialization activity should be effective & therefore at times one has to take a decision about which IPs to be maintained & which to be not. That is a very strategic decision & is to be taken in the Post IP stage. Example.

In an organization usually only 2-5% of IP is commercialized. So if there are 100 patents then only 2-5 patents are commercialized. Either external or in-house development is there or any other mode of commercialization. 30-40% of these are useful during negotiation activity if cross licensing is there or these IP may be utilized for strategic benefit. The remaining 50-55% creates the organization's position in the market. (The more IP an organization owns, the more innovation/ IP savvy it is considered.) Generally that is the scenario but at times it is observable that one may not understand or anticipate the use of a particular IP at that particular moment. And if technology moves further then probability is there that the IP which was not useful at that moment maybe useful in the later stage.Hence depending on the technology & analysis one has to be very vigilant in the selection process. At this stage the IP commercialization activity takes place where one creates Commercialized IP. The organization typically follows various ways like- bundling of IP rights, Integrative IP approach etc. These are the best approaches for commercialization.

4.   **IP Acquisition** When any organization thinks of the acquisition, the IP portfolio & Due Diligence process is present. After Due diligence process all other things are taken care of; IP evaluation of that IP portfolio is done & accordingly the financial transaction occurs. This has been divided into 2 things i.e. Acquisition & inventory which will be generated after acquisition. Numerous times acquisition is done to avoid competition. The big organizations do the acquisition of small companies to avoid competition. There are many other reasons for acquisition also. Here these will not be discussed further. Hence after acquisition the portfolio that comes will be Acquire IP.

5.   **IP Enforcement** This is an important stage as by now one has taken so many efforts to create IP portfolio & if one does not enforce their rights then they may lose the expected benefits from that portfolio. There are dedicated external agencies for the IP Enforcement & the organizations can take help of these agencies. It is a challenging task but is mandatory. Exercise. Suppose you are a academic institute, you are 1st time doing the activity of IP management, as you are observing 15 processes in the model, so you can decide where to start from. Plan the activity, i.e. first 6 months can be applied for IP policy where you will just draft the IP policy for

the organization. Then next 6 months can be dedicated for the Idea Generation & development of Idea Generation drivers. (Example- you can keep a suggestion box i.e An Idea Creation Box, & you can ask students, staff & faculty members etc. to drop ideas into that box. After that you can assess the ideas can see if you can make the list of that ideas.) Then in the next year, you select ideas, make groups of students/ faculty & divide the ideas. Like this you can develop a project on that

thing & while doing the project you can plan the IP activity also. The IP activity may be addressed in the form of questions like when probably IP can be generated. Whether to go for IP filing, How to file a provisional patent etc.? Hence if you started with 20 projects, at least you can think of 2 patents to file. That is a good achievement in 1 -2 years. Then you can start strengthening each of the processes, slowly you can generate the idea activity as a compulsory activity every year in the form of some program, just like cultural programs, you can have a Idea Generation program. After this you can think about commercialization & related activity. Exercise. The other thing to use this model is to create matrices. Suppose you are a MSME, if you are an Indian organization, & have just started the IP activity, and then based on this model you can create matrices for the performance efficiency check. You can take any parameters related to that to check or create the matrices.

Details of these 5 processes are given in the research paper hosted in reading material folder. From that you can select the parameters & you can develop the matrices. After that you can do the self- assessment using this model. Exercise. This model can be used for self assessment also. For that also you can create the parameters based on the activities & then you assess at the end of the year whether it is done in particular way or not. You can give marks on the scale of 1-5 for the same. After that you can try to improve further. You can start from zero & within 3 years you can have a very good IP management system in your organization. With this we come to the end of this session. See you in the next session.

thank you!