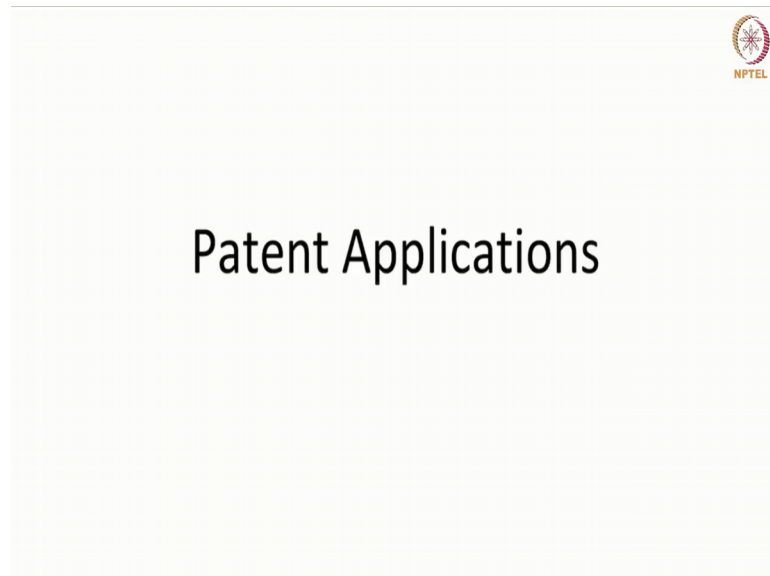


Intellectual Property
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Lecture – 22
To File or Not To File a Patent

(Refer Slide Time: 00:15)



Some intellectual property rights like the Patent right requires an application to be filed before the patent office. This is a formal process of registration. We regard this as a registration, because the process involves filing an application followed by scrutiny by the patent office, and eventually the grant of the intellectual property right itself. Not all intellectual property rights need to be registered. For instance, the rights you have in a trade secret can be kept as a secret through contracts. You can have a series of contracts with conditions that restrain people to whom you disclose the trade secret from disclosing it to others.

And this itself can form a regime of protection. So, trade secrets or what we also regard as confidential information can be protected by a regime which does not require for any registration. So, you could have any number of trade secrets without going through a formal registration process.

Similarly for copyrights as well: if you write a book, all you need to do is put a notice of copyright which is usually a c within a circle followed by the authors name if the author

holds the copyright followed by the year of publication. So, this is what we call a copyright notice. A copyright notice does not require registration. In the sense that there is no need for you to register the copyright before you can put the copyright notice. Law recognizes the fact that you put a notice; it will give you the right to enforce the copyright.

Registration of copyright is optional. In the sense that if you want to register something say for instance you have software code and you want that to be registered before you disclose it to a client. You can have a registration for it which requires you to supply the copy of the code to the copyright office and the copyright office will grant you a registration a number and formalities which follow it. But to enforce a copyright: enforce in the sense that you have a copyright, you have established as the original owner of a copyright and there is somebody who has infringed it without your consent, use the copyright without your consent, then to enforce the legal mechanism for stopping that person what we call a copyright infringement suit does not require formal registration.

So, like trade secrets or confidential information, copyright is another kind of intellectual property right which can be enforced without registration. Just how there are intellectual property rights that do not need registration. Some of them can only be enjoyed and enforced through a process of formal registration. Trademarks require registration. Though you can use a trademark without registration but there is a process of registration of trademarks. And patents also can only be enforced by the process of registration.

So, the registration of patents is formally started by filing patent applications. So, a patent application is an application that is filed before the patent office with a request of a grant of a patent. Now, we will look at how these applications are filed, what is the process that goes through at the patent office and how does do these applications eventually materialize into a grant.

We will look at all the processes and we will see also what is required before you file an application because many a times, filing a patent may not be the best thing to do. In terms of strategy, sometimes you may find that not filing a patent will be more suitable given a particular circumstance and a particular technology. Patents grant a 20 year exclusivity for the technology that is covered in the invention. There are technologies which do not have a 20 year lifespan. There are technologies which do not formally

require a patent protection at all. And there are also inventions which could be more easily commercialized by a licensing regime, even without any formal protection tied to it.

So, we will look at the patent application process and we will see; what are the stages that the patent application goes through before it materializes into a grant.

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The slide is titled "Introduction" and features the NPTEL logo in the top right corner. The main content is a bullet point: "• **Whether:** Determine whether to file a patent application". Below this, there is a sub-bullet: "– Cost-intensive, business plan, investment, prospect theory". Handwritten red notes are present: "kept as a secret" is written above a bracket that groups "business plan, investment, prospect theory"; "publish" is written below the same bracket; "DEFENSIVE PATENTS" is written in a box to the right; "public domain (stop others) (Research journal)" is written below "publish"; and "release the product" is written below "public domain".

So, the first thing a applicant who has an invention and we have already covered that the invention in the context of the patents act is a patentable invention; an invention that satisfies the criteria of patentability that it should be novel, it should involve an inventive step and it should be capable of industrial application. And apart from satisfying the criteria of patentability, it should also not fall within the exceptions to patentability. There are a host of exceptions which we saw in the context of section 3 and 4. The exceptions in the patent act are broadly in these two sections and we also saw that if invention satisfies the criteria of patentability and does not fall within the exceptions only then the invention becomes patentable.

So, let us assume for the purpose of this lecture that you have a patentable invention. In other words, the invention that you possess satisfies novelty. In the sense that the prior art does not anticipate your invention. There is no disclosure in the prior art with regard to your invention, your invention involves an inventive step which is the second criteria for patentability. The fact that it is not obvious to a person skilled in the art appear in

your field, it is not obvious to that person and thirdly, your invention has some utility in the Indian context we regard to utility as capable of industrial applications. So, your invention is capable of being applied in an industry.

So, let us assume that your invention satisfies the patentability criteria and it does not fall within the exceptions to patentability. Now, you will have to determine whether to file a patent. So, what the prospective applicant will do is to determine whether to file a patent application at all. Now, we have already assumed that there is a patentable invention which does not fall within the exceptions, still a decision has to be made whether to file a patent because filing a patent is a cost intensive process. It involves quite a lot of cost and the cost is front loaded in the sense that you will have to expend the cost upfront even before you get the patent.

In other words, you will have to spend on professional fees for creating the patent that is the patent specification which is drafted by a patent attorney. You will have to prosecute the application by filing the official fees and you will have to wait for up to 3 to 5 years before the patent can be granted. So, the cost involved is accrued at the beginning itself and after the patent is granted, you have to pay renewal fees every year till the 20 year term of the patent expires.

So, apart from the creation cost which is what you will pay professional who helps you to draft the patent to a patent attorney, apart from the official cost for filing the patent application, you also have renewal costs. Now apart from these three costs, they could also be cost if somebody infringes your patent. Now, that is an uncertain cost because if someone entering is a patent your technology, the only way you can stop that person is by going to the courts. You need to file an infringement suit in a court and get an action against the person who is infringing and reliefs to ensure that the infringement is stopped. And in case it is an infringement that has caused any harm to you or to your business, then you can also insist on damages. So, this entire process again involves cost and it is not a fixed cost the cost can vary depending on where you litigate depending on the legal team that supports you and depending on various other factors.

So, the cost of patenting as we said could involve professional fees, it could involve official fees, it could involve a renewal fees to keep the patent a life and it could also involve litigation fees. Now, given the fact that a patent has a 20 year life period and the

fact that procuring a patent in one country itself is cost intensive, if you have ambitions to move to other countries and file patents in different jurisdictions to cover your invention in multiple jurisdictions, then the cost multiplies based on the jurisdictions do you have to enter. So, if you if you have to give an estimate, the entire process of getting a patent sustaining it by payment of renewal fees throughout the 20 year life period will itself be an investment in a few lakhs. Now, we are just giving you a ballpark figure.

So, that you can understand that patenting is a cost intensive process. Now, if you have to do this for one country that is India, it is going to cost you a few lakhs. Now, if you need to do this in multiple countries you want to file a patent in US cover it, in China, all of Europe and Japan and South Korea, then you could be expending a huge amount of money as you would do in India to cover all these territories and to keep the patent alive for the next 20 years.

This is without factoring infringement and the cost that will come in defending engaging lawyers and fighting infringement suits. Without factoring the cost, still it will be a few lakhs of rupees that you will have to expend or it could even be crores if depending on the number of jurisdictions you need you have to enter. So, this tells us that patenting involves upfront cost and unless you have a way to recover this cost, you are certain that your invention will be a success in the market and it will recover this cost, you will have to be wary of patenting.

Now, we say this with element of caution because normally the tendency is that when you have come up with an invention, you would go ahead and file the patent because you are worried about preserving the priority, you are worried about your competitors moving and getting a patent granted, you are also worried about the fact that somebody else can have a patent and stop you from doing what you are pursuing. But the analysis from a cost perspective is important because many a times, patents are filed and later on the inventors down the line realized that they do not have the funds to play the patent game. So, an analysis of costs and an analysis of how you are going to recoup the cost is critical before you can determine whether to file a patent. Now this is what we call a business plan.

So, you need to have the business plan before you can file a patent and what is the business plan abode? It is a simple business plan as to what are the inputs in terms of

cost and how you are going to recoup or get back the investment that you make. So, if you look at patenting as an investment, then you will be able to come up with some way to justify the cost of patenting. And this is a cost that small businesses and MSME's need to factor, because it should not be that the cost of patenting exceeds the cost of your r and d or the cost of your production itself which can be in some cases where you are interested in entering multiple jurisdictions, different countries and protecting your technology in all these countries.

So, a business plan would typically tell entrepreneur as to whether the amount of money he needs to put in patenting is a viable one. For instance, let us take an entrepreneur x who has a turnover of 10 lakhs a year. He is a small business he is an you can it can also be a sole proprietor. Now, entrepreneur x comes across a technology which in his own estimate, the life value of the technology is say 15 or 20 lakhs and the entrepreneur does not see any prospect beyond this.

So, what the entrepreneur needs to do is before filing a patent he needs to draw a business plan, what is the existing state of his business, what are the amount of profits that he is expecting, what are the inputs that go into it apart from the patenting cost he needs to make the product, sell it, market it and what is the profit margin that he is going to get. So, like any other business plan, you need to draw a business plan for your patenting; how many patents are you going to file in the process of covering the invention, in what countries you want to file it.

So, any patent agent or a registered patent attorney will be able to give you an estimate of cost. The estimate of course with regard to the official; fees are fixed so that it does not take much for a person to determine how much the official fees are going to be. The fees with regard to the professional fees that attorneys charge may vary and some jurisdictions may charge higher rates for the attorneys, the baseline for the attorney fee itself could be higher in some advanced jurisdictions. But getting a court be an important thing an inventor would do before he ventures to file a patent. So, whether to file a patent is an investment called which an inventor has to take and this is also supported by some theory developed by economists. There is a theory called the prospect theory which says that patents are filed to cover a prospect. A prospect as we understand is something which makes something which may crystallize in the future into a promising product.

So, because broad patents are treated as prospects, there is always an uncertainty of whether the prospect will actually be commercially viable. There is always an uncertainty tied to a patent as to whether it will make money and the amount of return that will be brought that the patents will bring. So, as an inventor or an entrepreneur who has to take a call on patenting, it is essential that they go through this process of understanding the costs involved in patenting, devising a business plan, treating the patent as an investment in the light of the fact that while filing a patent, you are actually covering a prospect.

The prospect may become successful; There are chances that the prospect may also not be commercially successful. For knowledge intensive companies like say for instance pharmaceutical companies which develop new products, it is an easier call to make because their existing revenue generating products are all covered by patents and the business model for a pharmaceutical company will be to file patents covering a molecule and then commercialize the molecule over the period of years.

So, any given drug company, an originator drug company will have few bestselling products which will kind of subsidize the cost of patenting for it is not so successful products. So, in a company where you have a portfolio of products where some of them are successful and some of them are not, your patenting cost is subsidized by the revenue that is generated by the successful products. So, that is the reason why you find electronic giants like Samsung filing thousands of patent area automotive companies like Toyota and Honda again filing hundreds and thousands of patents and pharmaceutical companies filing multiple patents covering their drugs. Now, this tells us that if there is a way in which the cost of patenting can be subsidized, then companies will adopt that way.

So, you have instances where the companies R and D budget covers the cost of patenting. There are instances where the companies marketing budget covers the cost of patenting and there are instances as I have just mentioned where the cost or the profits made by a successful product can cover the cost of patenting of the entire group of products generated by the company. It becomes a hard call, the call of whether to file a patent application if you are an individual inventor, or if you are a small entity, a startup or if you are a MSME by design your turnover is not is not enough to cover patenting the way in which big entities do patenting or you are a researcher or a scientist working in a

research organization, because research organizations again have limited funds, because they do not have revenue coming in through commercializing their projects, through commercializing their products.

So, the first call an inventor needs to take is to determine whether to file a patent application. Now, what are the options for a person who does not want to file a patent assuming there is an invention and there is an opportunity for an inventor to file a patent. Now, the most important aspect of this issue is that if you take a call not to file a patent for whatever reason, then you have broadly two options; you can see whether the invention can be kept as a secret or you can see or you can determine whether it is better to publish it. Now, this is a personal call that the inventor needs to take. The choice between keeping an invention a secret or publishing the information about the invention is a call that the inventor has to take. Now, there are technologies where it is impossible to keep an invention a secret especially when you have to release the invention as a product in the market.

Reverse engineering will ensure that people can find out how you came up with the invention. So, if that is not an option, if the technology does not allow you to keep the invention a secret, then the other option that you can explore if you are not taking a call on patenting is to publish the invention. Now publishing has its advantages. Now one by publishing an invention, you put it into the public domain. Now, once something comes or becomes a part of the public domain, it would stop others from patenting which is very important because if others patent they will have an opportunity to come and stop you from doing any further work.

Say, you are a researcher in a leading technical institute in India and you are doing cutting edge research with your students and the research scholars and you find that there is a particular area in which you have done substantial amount of work and you find there could be patents that you can have in that particular area. You also find that it is not viable for you from a cost perspective though the invention merits a patent. It is a patentable invention, it satisfies all the criteria for getting a patent; still from a courts perspective, you take a call that this should not be patented. Now, if you remain without publishing this information and if you do not put this information into the public domain, there is a possibility that another entity, there is a possibility that another entity which could be your competitor a fellow researcher or even a company which is involved in the

same line of work can patent this technology that you have and stop you from doing any further work.

Now so, this can be avoided by publishing the information in the public domain. There is also an aspect to this, now in case you do not take the publish route and you have some interest in filing a patent though, you are not really sure about how to commercialize it or you have as I said how big companies work the cost of patenting is subsidized by other products. Companies may also involve in what we call defensive patenting. So, these are patents which are procured with the sole objective of ensuring that others do not stop your activity.

Now, there are various automotive companies which have which file patents that are overlapping. Some technologies in cars, almost all the luxury car manufacturers will claim to have that piece of technology, but you will find that many a time these are overlapping technologies and you also find that these car manufacturers do not sue each other, they do not file cases against each other and why do they then file patents. For instance as a commercial by Mercedes Benz which shows that Mercedes Benz has 80000 patents.

The reason why these companies file patents in great number and not enforce them against their competitors is the fact that the patents are one, it is a marketing tool for them because otherwise, why would you make a commercial saying that you have 80000 patents. It is a marketing tool because a person who pays a premium in buying a luxury car knows that it is protected by technology. And one way to tell the world that something is protected by technology is by telling them that there are patents covering it. So, apart from the marketing angle, companies also file patents for defensive purposes; because of the nature of the activity, they do not want others to be stopping them.

So, defensive patents are filed by companies whose cost of patenting is taken care of. If that is not an option, if filing a defensive patent is not an option or the cost of patenting will not allow you to file difference of patents, then it is a better put it in the public domain by publishing it. So, you could publish it and put it in the public domain; that is one way of doing it or you could release the product itself; that is another way of publishing the information. So, you could either look at a public domain publishing, so, the options of publishing are either you publish the information about the invention

through a research journal, an article in a research journal or you release the product itself.

Now in patent law these two have two different connotations. If you release the information in the form of a publication, then you are putting the information on above the invention into the public domain in such a way that it becomes a prior art; what we call you are you have now made this information public and it becomes a part of the prior art; prior art as a term that refers to the knowledge in that particular field. So, your literature, your research journal now becomes a part of prior art. So, that nobody else can file a patent over it because if they file a patent after you have published your journal article, your journal article will now become a prior art for questioning that patent; that patent will not be granted in the light of your disclosure. So, disclosing information by publication is a great way to ensure that others do not get a patent and this is done as a defensive method.

Now, in case you are not inclined or your situation does not allow you to publish the information through a research article, then the other option is to release the product itself releasing the product again becomes a part of the prior art, because when you release the product, the product becomes a part of the prior art, because it is now available for people to use it in the public domain. Releasing the product or using the product or exhibiting the product, all have the same effect as a publication.

So, these are the two ways in which you can publish the information about the invention; one is by a research journal, publishing it in a research journal like what more scientists and academics do the other is to release the product itself. In both the cases, it forms a part of the prior art and any future patent that is filed covering this technology will be hit by your disclosure. Your disclosure maybe in the research journal or your disclosure maybe by prior use; you used it before or you exhibited it before.

So, these are two ways in which you can take a call on publishing the information about your invention that is if you decide not to file a patent.