

Intellectual Property
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Lecture – 71
Publish or Patent

One of the concerns that people who work in the university have is with regard to whether they should publish the invention or the technology that they have developed or whether they should go for a patent. So, the publish or patent debate has been reading for some time and there is quite a lot of strategies that come into play in understanding whether the work of a researcher or a professor in a university should first be published or whether it should be patented.

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Late Realisation: Rob Pernecky

- Professor in Imperial College London

In 2010 Pernecky isolated a protein in cerebrospinal fluid that could be used as a biomarker for Alzheimer's disease. Pernecky's protein promised to substantially improve the accuracy of early diagnosis of the disease. When he approached his TTO with a view to commercializing his discovery, he was surprised to learn that it was not interested. He had already detailed exactly what he had hoped to patent in a paper published in a leading academic journal. The discovery was now in the public domain, the TTO informed him.



Late realization of this dilemma whether to publish or to patent could lead to disastrous consequences. Now, we have the example of Robert Pernecky, the professor in Imperial College London. In 2010 Professor Pernecky isolated protein in cerebrospinal fluid that could be used as a biomarker for Alzheimer's disease. Now, it promise substantial improvement in accuracy with from earlier diagnosis and when he approaches his TTO, TTO is the Technology Transfer Office; in India the equivalent is IPM cell Intellectual Property Management cell. It is an office within the university that manages all IP that

comes out from the university. And, you will see more detailed discussion on how the TTO or the IPM cell operates.

When you approach the TTO with a view to commercializing his discovery; he was surprised to learn that they were not interested. Now, this happened because he had already detailed exactly what you hope to patent for in a paper that he had published in leading academic journal. So, the TTO's told them that the discovery was now in the public domain and they could not patent it. This could be a case that many professors may come across, they have published their research and then they want to patent it only to realize that patent law does not allow them to first publish and then patent; except in exceptional circumstances.

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What's Bad about Publication?

- Kills Novelty
- Grace period: Take a conscious decision
- Publication: Public domain
- Patenting by others: Credit and stall commercialization



So, what is bad about publication? In patent law the publication kills the novelty of an invention. So, you cannot publish first and then patent because, we are already covered this. Patent law wants to safe guard priority of inventions. It wants to safeguard a person who invents first provided that person approaches the patent office and files an applications.

So, filing an application before the patent office is a way to protect your invention. If there is any disclosure be it from the professor himself then that disclosure can kill the novelty of an invention. So, regardless of what a person or a team develops in the university, it is important that the invention is not disclosed until it is protected by filing

a patent application. It is not necessary that the patent should be granted, but filing an application preserves the priority and it cannot be used as a novelty killing disclosure.

Now, in India there is a provision which grants a grace period, a grace period means that you could make a disclosure provided that is a protected disclosure; law protects one kind of disclosure we will get to that soon. If your disclosure is a protected disclosure under the Patents Act, then you can file a patent within 12 months. So, this is what we call the grace period, whether to use the grace period or not the university and the professor will have to take a conscious decision whether to take that call.

Publication of any information pertaining to the technology that a person is developed will put the information into the public domain. And, once it is there the public domain the patent office would search it and use that against the person; if he does not protect first by filing a patent application. Now, not filing a patent application and merely publishing it could also lead to cases where it could be patented by others.

Now, the credit for the patents will definitely go to the person who files the patent and this could also eventually it could stall commercialization itself. Because, if your technology needs to be commercialized and that technology was protected by a patent file by another researcher or another team though the patent could have been filed much after you invent that the technology; still when the patent is granted, the patent holder can stop the person who developed the invention in the first case.

This is possible because patent law and this is the point that we discussed follows the first to file principle. The patent law in India and in other places follows the first file, it does not follow the first to invent principles. So, because it follows the first to file in principle it is necessary that a person who wants to protect his invention approaches the patent office.

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Strategies that Exist

- File a provisional before disclosure
- NDAs
- Approach the TTO/IPM cell before disclosing
- Strategic disclosure: Limit disclosure to main result – “what” the technology can do, and not the “how”



Now, there are some strategies that exist to ensure that the disclosure does not proceed the filing of the patent application. First is that you can file a provisional patent application though complete may not be ready before making the disclosure. Now, this we have seen some university professors using this, they have to make a presentation in our conference and they quickly reach out to the technology transfer office. And, the provisional is filed before the disclosure is made. Another strategy is to use non disclosure agreements NDAs, which can be used to protect limited disclosures. Now, disclosures to the public cannot be protected by NDA.

But if you want to disclose it to a technology partner or a partner who is interested in commercializing it or a person from the industry then an NDA can protect a limited disclosure. The strategy will be to approach the technology transfer office or the IPM cell before disclosing the invention to any third party. The TTO or the IPM cell would help an inventor to ensure that the rights are protected before a disclosure is made.

Now, in case it is necessary to make any disclosure to a third party say for getting additional funding. Then the limited disclosure of the main result with that is the what of the technology can do the work rather than disclosing how the technology works, the details of how it works. So, the limited broad disclosure without disclosing the details of how it is being done should work as a strategic disclosure for instance for getting into a joint venture agreement or to bring a partner or funding for the university.

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Educating Profs on IPR rules

- Long process
- Default: “Publish or perish”
- Incentives: Promotion, Research Grants



Now, one of the issues with which the IPM cell or the TTO normally face faces is in educating the professors and the researchers in the university set up. Now, this is a long process it can take time. Because the default today is publish or perish. So, because of this attitude that publication is the most important aspect of academic life; there is a tenancy that some professors may overlook the fact that they could be ways in which the invention can be protected before it gets published.

Additionally the incentives today are more primed towards publishing. I like if a person needs to move up in the ranks by way of promotion then the publications play a greater rolled then say patents. Though now we find the UGC norms have recently started considering patents filed as well.

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The Grace Period as it Exists

- Section 31, Patents Act

(d) the description of the invention in a paper read by the true and first inventor before a learned society or published with his consent in the transactions of such a society, if the application for the patent is made by the true and first inventor or a person deriving title from him ⁸³[not later than twelve months] after the opening of the exhibition or the reading or publication of the paper, as the case may be.



We just mentioned a grace period exist in India, in limited circumstances where a person makes a disclosure there is a grace period of twelve months for the person to file the patent. This operates in very limited circumstances. Let us see what section 31 of the Patent Act says, it says that it is possible for a person to make a disclosure provided the disclosure as a description of the invention in a paper, read by the inventor before a learned society. So, that is the first protected disclosure.

The disclosure should be a description of the invention, by a paper read before a learned society say a conference. And, if what amounts to a conference is a subject matter that has to be notified by the government or it was published with his consent in transactions of such a society. So, the learner society appear, reviewed group or a journal; if it is published with his consent in the transaction say the publication appeared review journal can be regarded as a transactions of a learner society.

In these two cases if the application for the patent is made in not later than twelve months, that is from the date of disclosure by way of reading a paper or publishing a paper within twelve months if a patent application is filed then it would be within the protected period. So, the grace period can be extended in only these two circumstances for research work that is presented before the learned society or that is published in a journal.

Now, there is some uncertainty on this provision because one, what the government has notified as a learner society is not really clear. So, there has to be an additional notification that comes out and the patent office has also not made clear as to what amounts to transactions of a learner society.

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What needs to be done

- Take a Call: Significant implications
- Time to commercialize and decision on resources on patenting
- Average patent earns less money than it costs to get it
- Only about 10% will be commercially successful



Now, what needs to be done? The most important thing for a researcher who works in the university setup or a professor who has research being done in the university they need to take a call on the implications of whether to publish or to patent. Now, this is a call they need to factor that time that is required to commercialize and that decision on the resources needed for patenting. On an average only 10 percent of the inventions that are patented become commercially successful, which means 90 percent of the patent that have been filed are not commercialized and average patent earns less money than it cost to get it.

So, a patenting process if it is done in India alone it could cost in lakhs and the process, if multiple jurisdiction say you want to protect your invention in 10 jurisdictions around the world apart from protecting it in India. Then the cost which includes the official fee and the fee that you would take for the professionals involved in prosecuting and drafting the patent in different jurisdictions could be a matter the transect 2 crores.