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IPR FAQs

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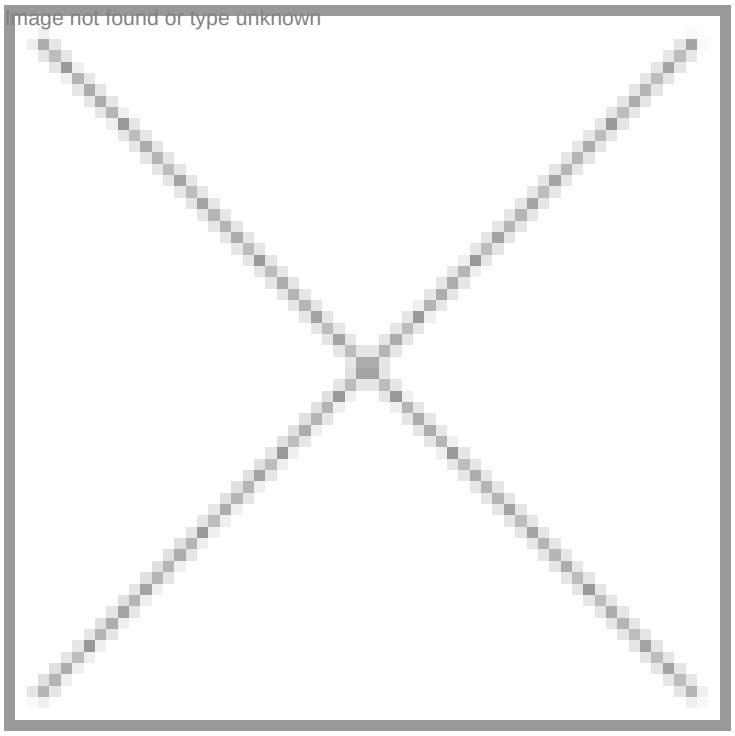
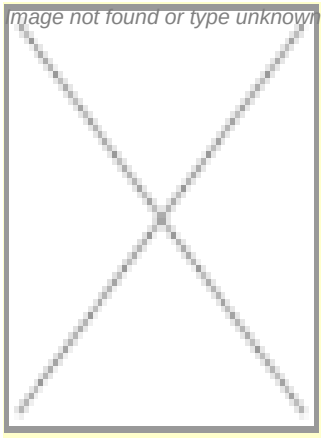


IPR FAQs

This article simplifies IPR



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What is Intellectual Property Rights?

These are (legal) rights which are granted for creations of the mind. Just as you have rights over your car, house etc. (property) because you have paid for it and have valid documents to prove it, so also in case of IPR. If you have created something e.g. a song, poem or a book or even a new invention in biotechnology which has commercial application or value, you are entitled to get "rights" for it.

Why is the word 'Property' used in case of Intellectual Property?

Intellectual Property or "creations of mind or intellect" are like "property" that have commercial value. They can be bought and sold just like conventional property e.g. a house or a car. Example: If Lata Mangeshkar has sung a song and a company wants to make cassettes out of it for sale, the company pays money to the singer to get the rights. In other words, the song becomes an "Intellectual Property" for the singer. Similarly, if a biotechnologist has developed a new process for making an enzyme, it has a lot of commercial value for a company making that enzyme. The biotechnologist will first have to create rights over his work e.g. by filing a patent. Then he can sell it to the company. Since, IPRs can be bought and sold just like property, we use the terms "intellectual property".

What is the need for IPRs?

Intellectual Property Rights are needed to reward original effort. The fundamental concept behind all forms of IP, be it patents or copyright or industrial design etc. is that the person who has put in original effort must have rights over his creation and must get reward for it. He must not be cheated. Example: as cited earlier, if a biotechnologist has developed a new process for making an enzyme having lot of commercial value for a company making that enzyme, he can get paid for his effort e.g. through cash down payments or royalties. He is thus stimulated to go in for more innovations. However, if his efforts just get copied, he may not put much effort again for more innovations and developments. Thus, IPRs lead to progress and development by ensuring rights and recognition for people who put in original effort.

Will IPRs hinder research?

IPRs are not barriers to research. Nothing prevents researchers from using information in patents for further research. Also, patents are valid only in the country where they are filed. Researchers in other countries can freely use these patents, even for commercial purposes, legally and without any hindrance. On the other hand, if there were no IPRs, how will you protect the researcher who has put in original effort? E.g. if a scientist has worked on a project and come up with a breakthrough technology and it just gets copied, will he be motivated? No. It is very important to protect the rights of people who put in original effort and hard work. That is why IPRs are needed.

How important are IPRs for a biotechnologist?

As mentioned earlier, IPRs are of different types. The category of IPRs most important for researchers is patents. Knowledge of IPRs (Patents) is important for researchers in several ways.

- Prevents duplication of work: Search of patent databases reveals what has already been done before, thus saving precious time and money. Quite often, the industry may just file patent for an innovation, and not publish it.
- Helps researchers to focus on commercially relevant research: Patents are for work having commercial value. For researchers formulating research projects, a review of patent databases quickly reveals what is 'hot' and what is not!
- Prevents exploitation of workers: By enabling researchers to have 'legal rights' over their work, IPRs prevent exploitation of workers and ensure proper remuneration, in case their work is used for commercial purposes.

- Helps in revenue generation: Licensing of patents helps to earn money â€“ for researchers and also the institute and departments. This in turn leads to financial freedom- better research facilities, scholarships, improved infrastructure.

- Important source of technical information: Patents are the only source regarding detailed technical information, which is unlikely to be available anywhere else. While number of journals may be in hundreds, the patent database per country is only one, making consultation much easier.

- Prevents infringements and helps avoid litigation: A basic knowledge of IPRs enables researchers to respect others rights and decide whether their work is infringing or not, especially in commercial segment.

- Stimulates creativity: By enabling researchers to see at a glance the level of technological achievement in a particular field, patents stimulate creativity. They impose challenges as to how to take achievements even further.

Does one need a legal background for making use of IPRs?

No. Just as you don't have to be a mechanical engineer to drive a car, so also for making use of IPRs you don't have to be a legal expert.

What is required is a technical background, which you already have. Just as in driving a car, you pick up the fundamentals- steering wheel, clutch, brake, so also in IPR what you need are fundamentals whether the work you are doing is really original. Is it infringing upon somebody's rights or not? What is the global technology status of the research work you are about to start? Whether what you have achieved in the lab is patentable or not? What are the basic requirements for filing a patent and so on. For all this, you really don't need a legal background. Yes, you might seek the "assistance" of lawyers and legal experts, in case you are filing a very important patent. Lawyers in IPR are quite often people with technical backgrounds with a degree in law. They can help you in "polishing" your patent, making it difficult for anybody to copy or break it easily. It is always a good idea to seek professional help, but it is not wise to "block" any initiative on your part for knowing about IPRs just because you don't have a legal background.

How can one start building knowledge about IPR?

For a start, you can join the free online courses by the World Intellectual Property Organization (WIPO), Switzerland. Founded in 1974, WIPO is a specialized agency of the United Nations. Details of the courses are available at http://academy.wipo.int. One is an intellectual property primer course of just three hours (DL 001) which you can easily complete online. It consists of 12 sections followed by a series of self-assessment questions. The second course DL-101 (General Course on Intellectual Property) is comparatively more advanced, requiring about 50 hours of study over a six-week period. It includes audio segments, self-assessment questions and also multiple-choice end of module tests. It is an excellent course for building IPR basics.

In addition, distance learning courses are also offered by National Law School of India University (NLSIU), Bangalore (http://www.nls.ac.in) and NALSAR University, Hyderabad (http://www.nalsarpro.org). Both universities offer one-year post-graduate diploma in Intellectual Property Rights Law. Any graduate, irrespective of age or marks can join these courses.

Other useful free resources on the net offering basic information about IPR can easily be located by using the Google search engine. A good site is www.patentmatics.org. The government site on patent related information e.g. www.ipindia.nic.in is quite informative.

What are the career opportunities for a biotechnologist and how does one polish his/her IPR skills?

Knowledge of IPRs is critical for the biotech industry as well as teaching institutes. It is also very important in case you are going in for higher education. The planning of your research project, its success and ultimately acceptance by industry - all depends upon your knowledge of IPR. Regarding career opportunities, first and foremost candidates having a working

knowledge of IPR e.g. even those who have completed basic courses of WIPO get preference during interviews and placements. Second, your placement opportunities get broadened. Candidates with a technical background along with IPR qualifications are also sought after by patent attorney firms and also leading consultancy firms. IPR are a part of every industry affecting a wide variety of segments- R&D, production, marketing and strategic planning. In addition, more and more institutes are introducing IPR as a subject and openings at faculty level in these areas are coming up.

What will be the job profile of a biotechnologist with IPR qualifications?

Firstly, as mentioned above candidates with IPR qualifications over and above their technical qualifications are likely to get faster placements and also better pay packages in any industry they join e.g. biotechnology industry. Since industries are gradually realizing the immense importance of IPR in enhancing business profits, IPR cells are being created in Industry. Professionals with IPR skills stand to join these departments and have stronger chances of promotions as compared to conventional departments in which manpower is readily available.

So, your first and foremost job profile can be joining an IPR cell in a biotech industry. Your activities are likely to include networking with R&D people and finding out whether any of their work is patentable, identifying technological advances of relevance to your industry vide regular monitoring and search of patent databases, guiding your R&D colleagues to avoid any research work which is infringing and go in for work which is free from infringements, identification of new and emerging technologies which can benefit your industry and so on. IPRs rely heavily on technical skills which you already have. Legal skills are needed for filing of patents, infringement cases etc. for which services of qualified professionals can always be hired. However, the amount of work required in the background before you actually seek the services of a patent attorney is considerable and that is where you are needed.

Second, you can also be hired directly by an attorney firm. Filing of biotechnology patents requires a sound technical knowledge and most firms are happy hiring MSc/ PhD candidates having biotechnology background. Legal and related skills will be gradually built up once you join a firm and start working.

Third, you also have career opportunities in leading consulting firms. Lastly, IPR strong candidates always have good opportunities abroad. It is a niche area, in which trained human resources are not that readily available!

How are IPRs and technology management linked? Are there any career opportunities in technology management?

IPRs and technology management are like the two wheels of a bicycle - both are important. Patents filed but not commercialized are a tremendous loss of time, money and effort. Hence, their commercialization aspects are also important. Technology management in a layman's term is the sum total of all the efforts which result in the practical application of research. As a biotechnologist, you are working in very applied areas and knowledge of technology management can help in the practical application of that research. Filing a patent is in fact the first step in technology management. Once rights over the work are created, inventors can freely contact and interact with industry professionals, disclosing details of their work without any fear that their work will be copied. In fact TOT (Transfer of Technology) is a term you will frequently encounter once you start working in this area.

Regarding career opportunities in technology management, there is a lot of demand abroad for technology professionals. In fact almost every university abroad has an office of technology transfer and licensing. Hence, there is a demand for technically qualified people e.g. biotechnologists who can work in this area. It doesn't matter if you are just a science professional because that is a fundamental requirement. However, it is important that you do an MBA after your MSc or PhD. A degree in law after PhD is also a very good combination for technology professionals. By now you must have realized the power of "hybrid degrees" e.g. MSc Biotechnology followed by MBA or LLB or PhD with LLB, for technology professionals. It is a different career but being different is what results in faster promotions and better packages. If you are doing whatever everybody else is, don't expect higher salaries.

IPRs and technology management as subjects are yet to be introduced in the syllabus in many institutions. Can any help be provided in this direction to facilitate teaching of these subjects in the institutes?

Yes, help can be provided. NIPER has taken the lead in designing and offering a dedicated one-semester course in IPRs and technology management as a compulsory subject for almost all MPharma disciplines in the institute.

In case any institute would like to introduce the above for teaching in their institute, a dedicated faculty training program can be provided by the author. The training program is very intensive, highly practical oriented and of only two days (16 hours) duration. It is based on several years of practical experience. Under this program, teaching manuals, aids such as CDs etc. can be provided to facilitate the teaching of these vital subjects at the institute level by the faculty undergoing training.

By Dr Parikshit Bansal