



ISSN Print: 2394-7500  
ISSN Online: 2394-5869  
Impact Factor: 5.2  
IJAR 2015; 1(9): 485-489  
www.allresearchjournal.com  
Received: 20-06-2015  
Accepted: 21-07-2015

**Jasdeep Kaur**  
Assistant Professor, PGCCG-  
42, Chandigarh, India.

**Meenu Pathania**  
Assistant Professor, PGCCG-  
42, Chandigarh, India.

## Intellectual property rights and its importance in software industry: A case study

**Jasdeep Kaur, Meenu Pathania**

Intellectual Property (IP) is a class of property emanating primarily from the activities of the human intellect. Any property, movable or immovable, is legally protected to prevent it from being stolen. Similarly, the rights in an intellectual property created need also to be protected to prevent infringement; patents, designs, trademarks and copyrights are few examples of it. The legal rights accrued on the intellectual property created are termed Intellectual Property Rights (IPR). These rights are governed by the law on intellectual property rights of the country which grants such rights<sup>[1]</sup>.

Merriam Webster says "intellectual property: property (as an idea, invention, or process) that derives from the work of the mind or intellect: an application, right, or registration relating to this. "The intellectual property rights definition gives the creator or holder exclusive rights to the intellectual property for varying lengths of time, depending upon the type of intellectual property.

Worldwide, the officiating body is the World Intellectual Property Organization, for all those countries participating. Intellectual property is property of the mind, according to WIPO, World Intellectual Property Organization and they say:

Intellectual property is divided into two categories: Industrial property and Copyright. Industrial Property which includes inventions (patents), trademarks, industrial designs, and geographic indications of source; and Copyright, which includes literary and artistic works such as novels, poems and plays, films, musical works, artistic works such as drawings, paintings, photographs and sculptures, and architectural designs. Rights related to copyright include those of performing artists in their performances, producers of phonograms in their recordings, and those of broadcasters in their radio and television programs<sup>[2]</sup>.

### Need in a globalized world

In the twenty first century, where boundaries of the world are shrinking with the advent of Information Technology and Internet; piracy, counterfeiting and the theft of intellectual property assets pose a serious threat to all businesses. Exporters face unfair competition abroad, non-exporters face counterfeit imports at home and all businesses face legal, health and safety risks from the threat of counterfeit goods entering their supply chains.

Most small businesses are not aware that their patent or trademark does not protect them in other countries. If you are an exporter, or think you might want to export in the future, you will need to seriously consider securing protection for your intellectual property (IP) in those foreign markets of interest to you. It is a good idea to get the appropriate forms of IP protection before you start doing business in another country.

Some companies have found that foreign manufacturers have copied their products, packaging and business plans, even though they had never done business abroad. Foreign counterfeiters can easily steal your product pictures, brochures and logos from your website and register the material as their own inventions in their country, if you have not registered it there already. For this reason, some small companies seek trademark and patent protection in large potential markets well in advance of actually exporting to those markets<sup>[3]</sup>.

### Evolution of Intellectual Property Rights

Modern usage of the term *intellectual property* goes back at least as far as 1867 with the founding of the North German Confederation whose constitution granted legislative power

Correspondence  
**Jasdeep Kaur**  
Assistant Professor, PGCCG-  
42, Chandigarh, India.

over the protection of intellectual property to the confederation. When the administrative secretariats established by the Paris Convention (1883) and the Berne Convention (1886) merged in 1893, they located in Berne, and also adopted the term intellectual property in their new combined title, the United International Bureaux for the Protection of Intellectual Property. The organization subsequently relocated to Geneva in 1960, and was succeeded in 1967 with the establishment of the World Intellectual Property Organization (WIPO) by treaty as an agency of the United Nations. According to Lemley, it was only at this point that the term really began to be used in the United States (which had not been a party to the Berne Convention) <sup>[4]</sup>, and it did not enter popular usage until passage of the Bayh-Dole Act in 1980.

"The history of patents does not begin with inventions, but rather with royal grants by Queen Elizabeth I (1558-1603) for monopoly privileges. Approximately 200 years after the end of Elizabeth's reign, however, a patent represents a legal right obtained by an inventor providing for exclusive control over the production and sale of his mechanical or scientific invention. The evolution of patents from royal prerogative to common-law doctrine" <sup>[5]</sup>

In an 1818 collection of his writings, the French liberal theorist, Benjamin Constant, argued against the recently introduced idea of "property which has been called intellectual." The term intellectual property can be found used in an October 1845 Massachusetts Circuit Court ruling in the patent case *Davoll et al. v. Brown.*, in which Justice Charles L. Woodbury wrote that "only in this way can we protect intellectual property, the labors of the mind, productions and interests are as much a man's own...as the wheat he cultivates, or the flocks he rears." (*1 Woodb. & M. 53, 3 West.L.J. 151, 7 F. Cas. 197, No. 3662, 2 Robb. Pat. Cas. 303, Merw. Pat. Inv. 414*). The statement that "discoveries are...property" goes back earlier. Section 1 of the French law of 1791 stated, "All new discoveries are the property of the author; to assure the inventor the property and temporary enjoyment of his discovery, there shall be delivered to him a patent for five, ten or fifteen years" <sup>[6]</sup> In Europe, French author A. Nion mentioned *propriété intellectuelle* in his *Droits civils des auteurs, artistes et inventeurs*, published in 1846.

Until recently, the purpose of intellectual property law was to give as little protection possible in order to encourage innovation. Historically, therefore, they were granted only when they were necessary to encourage invention, limited in time and scope <sup>[7]</sup>. The concept's origins can potentially be traced back further. Jewish law includes several considerations whose effects are similar to those of modern intellectual property laws, though the notion of intellectual creations as property does not seem to exist – notably the principle of *Hasagat Ge'vul* (unfair encroachment) was used to justify limited-term publisher (but not author) copyright in the 16th century <sup>[8]</sup>.

The need for international protection of intellectual property became evident when foreign exhibitors refused to attend the International Exhibition of Inventions in Vienna in 1873 because they were afraid their ideas would be stolen and exploited commercially in other countries. In 1883 marked the birth of the Paris Convention for the Protection of Industrial Property, the first major international treaty designed to help the people of one country obtain protection in other countries for their intellectual creations in the form

of industrial property rights, known as inventions (patents), trademarks and industrial designs. The Paris Convention entered into force in 1884 with 14 member States, which set up an International Bureau to carry out administrative tasks, such as organizing meetings of the member States.

In 1886, copyright entered the international arena with the Berne Convention for the Protection of Literary and Artistic Works. The aim of this Convention was to help nationals of its member States obtain international protection of their right to control, and receive payment for, the use of their creative works such as:

- *novels, short stories, poems, plays;*
- *songs, operas, musicals, sonatas; and*
- *drawings, paintings, sculptures, architectural works.*

Like the Paris Convention, the Berne Convention set up an International Bureau to carry out administrative tasks. In 1893, these two small bureaux united to form an international organization called the United International Bureaux for the Protection of Intellectual Property (best known by its French acronym BIRPI). Based in Berne, Switzerland, with a staff of seven, this small organization was the predecessor of the World Intellectual Property Organization of today - a dynamic entity with 184 member States, a staff that now numbers some 938, from 95 countries around the world, and with a mission and a mandate that are constantly growing.

As the importance of intellectual property grew, the structure and form of the Organization changed as well. In 1960, BIRPI moved from Berne to Geneva to be closer to the United Nations and other international organizations in that city. A decade later, following the entry into force of the Convention Establishing the World Intellectual Property Organization, BIRPI became WIPO, undergoing structural and administrative reforms and acquiring a secretariat answerable to the member States.

In 1974, WIPO became a specialized agency of the United Nations system of organizations, with a mandate to administer intellectual property matters recognized by the member States of the UN. In 1978, the WIPO Secretariat moved into the headquarters building that has now become a Geneva landmark, with spectacular views of the surrounding Swiss and French countryside.

WIPO expanded its role and further demonstrated the importance of intellectual property rights in the management of globalized trade in 1996 by entering into a cooperation agreement with the World Trade Organization (WTO). The impetus that led to the Paris and Berne Conventions - the desire to promote creativity by protecting the works of the mind - has continued to power the work of the Organization, and its predecessor, for some 120 years. But the scope of the protection and the services provided have developed and expanded radically during that time.

In 1898, BIRPI administered only four international treaties. Today its successor, WIPO, administers 24 treaties (three of those jointly with other international organizations) and carries out a rich and varied program of work, through its member States and secretariat that seeks to:

- harmonize national intellectual property legislation and procedures,
- provide services for international applications for industrial property rights,
- exchange intellectual property information,
- provide legal and technical assistance to developing and other countries,

- facilitate the resolution of private intellectual property disputes, and
- Marshal information technology as a tool for storing, accessing, and using valuable intellectual property information [9].

### **World Intellectual Property Organisation (WIPO)**

The World Intellectual Property organization (WIPO) was established by WIPO convention in 1967. The convention entered into force on April 1970. Headquartered at Geneva, Switzerland, WIPO became a UN specialized agency in 1974. The concept of protection of intellectual property dates back to Paris convention for the protection of industrial property (1883) and the Berne convention for the protection of literary and artistic works (1886). In 1893, the Paris union and the Berne union set up a combined united International Bureau for Protection of Intellectual Property (BIRPI). WIPO was intended to replace BIRPI, but because some BIRPI members have not ratified the Stockholm convention, BIRPI still exists as a legal entity.

WIPO has two main objectives, first is to promote the protection of intellectual property worldwide. Second is to ensure administrative cooperation among the intellectual property unions established by the treaties that WIPO administers. It is basically concerned with five strategic goals:

1. The promotion of an intellectual property culture;
2. The integration of intellectual property into national development policies and programs;
3. The development of international intellectual property laws and standards;
4. The delivery of quality services in global intellectual property protection systems;
5. To enhance the efficiency of WIPO's management and support.

World Intellectual Property Organisations handles the administration of 24 international treaties 16 on industrial property; 7 on copyright; plus the convention creating WIPO.

### **India's Effort**

The foundation stone for a National Institute of Intellectual Property Management was laid in August 2007 at Nagpur. The Institute is expected to be of global standards and would cater to training, research, education and would serve as Intellectual Property think tank.

The rising trend has also been witnessed in the area of Industrial Designs where a record number of over 5000 applications were received last year. In the area of Geographical Indications as on date 46 GIs have been registered and over 100 applications are in pipeline. Some of the most important GIs registered are Darjeeling tea, Chanderi saree, Pochampalli Ikat and Kangra tea.

The Government of India has taken a decision to accede to the Madrid Protocol –an international system for registration of trademarks. India's membership of Madrid protocol will help Indian companies to register their trademarks in 80 member countries through a single application.

### **Types of IPR**

#### **Fields of Intellectual Property Protection**

Intellectual property rights as a collective term includes the following independent IP rights which can be collectively used for protecting different aspects of an inventive work for multiple protection:-

- Patents

- Copyrights
- Trademarks
- Registered (industrial) design
- Protection of IC layout design
- Geographical indications
- Protection of undisclosed information

### **Intellectual Property Rights in Software: What They Are and How the Law Protects Them**

Intellectual property rights are at the foundation of the software industry. The term refers to a range of intangible rights of ownership in an asset such as a software program. Each intellectual property "right" is itself an asset, a slice of the overall ownership pie. The law provides different methods for protecting these rights of ownership based on their type.

There are essentially four types of intellectual property rights relevant to software: patents, copyrights, trade secrets and trademarks. Each affords a different type of legal protection. Patents, copyrights and trade secrets can be used to protect the technology itself. Trademarks do not protect technology, but the names or symbols used to distinguish a product in the marketplace. We'll save a discussion of trademarks for a later issue.

#### **Patents**

A patent is a twenty year exclusive monopoly on the right to make, use and sell a qualifying invention. This legal monopoly is considered a reward for the time and effort expended in creating the invention. In return, the invention must be described in detail to the Patent Office, which publishes the information, thus increasing the amount of technological knowledge available to the public.

To obtain a U.S. patent, an inventor must apply to the Patent Office and demonstrate that the invention is new (as compared to prior technology), useful, and "non obvious." An invention is nonobvious if it is more than a trivial, obvious next step in the advance of the technology.

Software patents can be extremely powerful economic tools. They can protect features of a program that cannot be protected under copyright or trade secret law. For example, patents can be obtained for ideas, systems, methods, algorithms, and functions embodied in a software product: editing functions, user-interface features, compiling techniques, operating system techniques, program algorithms, menu arrangements, display presentations or arrangements, and program language translation methods.

Since patent rights are exclusive, anyone making, using or selling the patented invention without the patent owner's authorization is guilty of infringement. Penalties are stiff and include triple damages. Once a patent for an invention is granted, subsequent "independent" (i.e., without access to the patented technology) development of the invention by another inventor is still considered infringement.

#### **Copyrights**

While a patent can protect the novel ideas embodied in a software program, a copyright cannot. Copyright protection extends to the particular form in which an idea is expressed. In the case of software, copyright law would protect the source and object code, as well as certain unique original elements of the user interface.

As discussed in last month's issue, the owner of a copyrighted software program has certain exclusive rights

(with some exceptions): the right to copy the software, create derivative or modified versions of it, and distribute copies to the public by license, sale or otherwise. Anyone exercising any of these exclusive rights without permission of the copyright owner is an infringer and subject to liability for damages or statutory fines.

As with patents, the exclusive rights afforded under copyright law are intended to reward the creative and inventive efforts of the "author" of the copyrighted work. The exclusive right to control duplication protects the owner of copyrighted software against the competition that would result from verbatim copying of the program's code. Copyright law also protects against indirect copying, such as unauthorized translation of the code into a different programming language.

Copyright protection arises automatically upon the creation of an original work of authorship. There is no need to "apply" for a copyright or register the copyrighted work in order for protection to exist. Generally, the duration of a copyright is the author's life plus fifty years. In the case of software created by an employee in the course of his or her employment, the resulting "work made for hire" would be protected by copyright law for seventy-five years from publication.

In contrast with patents, independent development of a copyrighted work is a defense to an allegation of copyright infringement. Imagine, though, how unlikely it would be for the same thousands of lines of code to be created independently by one not engaged in unauthorized copying. Unlike patents, copyright law affords no protection to the ideas underlying the program. Ideas and concepts are fair game for competitors to the extent they are not protected by patents or trade secrets.

### **Trade Secrets**

A trade secret is any formula, pattern, compound, device, process, tool, or mechanism that is not generally known or discoverable by others, is maintained in secrecy by its owner, and gives its owner a competitive advantage because it is kept secret. The classic example of a trade secret is the formula to Coca-Cola.

A trade secret can theoretically last forever -- for as long as its owner uses reasonable efforts to keep it secret and someone else doesn't independently create or "discover" it.

Many features of software, such as code and the ideas and concepts reflected in it, can be protected as trade secrets. This protection lasts as long as the protected element retains its trade secret status. Unlike patents, trade secret protection will not extend to elements of software that are readily ascertainable by lawful means, such as reverse engineering or independent development.

Trade secrets are not subject to being "infringed," as with patents and copyrights, but are subject to theft. Their legal status as a protectable intellectual property right will be upheld if the owner can prove the trade secret was not generally known and reasonable steps were taken to preserve its secrecy.

Maximizing the economic value of a software asset critically depends on understanding the nature of the intellectual property rights involved and how best to use the available forms of legal protection to protect those rights.

### **International Norms Concerning Copyright Protection of Computer Programs**

The international consensus regarding copyright protection

of computer programs has been reflected in two international treaties, namely Article 10(1) of the TRIPS Agreement and Article 4 of the WIPO Copyright Treaty (WCT). While slightly different in wording, these two provisions both state that computer programs should be protected as literary works, and that the protection should be the same as that granted to such works under the Berne Convention. This does not exclude that national laws may categorize computer programs as a separate category of works, provided that the level of protection is not lower than that granted to literary works under the Convention. The TRIPS Agreement also clarifies that the protection applies to computer programs "whether in source or object code", while the WCT expresses the same in a less technical form: "Such protection applies to computer programs, whatever may be the mode or form of their expression". It is a clear trend today that national laws expressly include computer programs as protected works of a kind, more precisely as writings, and thus there is no doubt that copyright protection applies to such programs, provided that they are original. Not all national laws define computer programs, and some of the definitions differ in their wording, but a fairly generally applicable definition would be "a 'computer program' is a set of instructions expressed in words, codes, schemes or in any other form, which is capable, when incorporated in a machine-readable medium, of causing a computer an electronic or similar device having information-processing capabilities to perform or achieve a particular task or result." This definition reflects all the essential elements of the notion of computer programs.

Industrial progress is desirable. Inventions and their exploitation are necessary to secure industrial progress. Neither invention nor the exploitation of invention will be obtained to any adequate extent unless investors and capitalists have hopes that successful ventures will yield profits which make it worthwhile to make their efforts and risk their money. These profits will not be hoped for unless special measures are taken. The simplest, cheapest and most effective measure is protection of Intellectual Property Rights.

### **Case Study**

#### **Revolutionizing Digital Content Distribution using Patented Technology**

##### **Background**

Tribeka Ltd. is revolutionizing the way people buy and sell digital content. The company has created the Soft Wide® technology which allows customers to walk into a store, choose from a wide range of software or digital entertainment products, and instantly walk away with a secure copy, identical to the traditionally distributed version. Tribeka's Soft Wide system is revolutionary because it is "virtual": it operates by taking advantage of Tribeka's licensing agreements with digital content publishers to manufacture their products to factory standards on-demand and on-site. This allows Soft Wide to eliminate stock and its associated problems (inventory, out-of-stock situations, unsold or obsolete products) and take full advantage of display space, whilst minimizing physical distribution costs and the potential for technical piracy or physical theft. By exploiting these advantages to the full, the system allows retailers, publishers and customers to reap the financial benefits.

### Patents and Trademarks

The Soft Wide platform manufactures physical packages of digital content “on demand” and/or “just in time”: as soon as a customer makes a purchase in a retail outlet using the Soft Wide platform, the system automatically and instantaneously obtains authorization from Tribeka’s remote control center via secured license release and starts in-site replication of the product. The software or digital entertainment content is pressed onto disc and the final package can even be personalized for gifts. The entire process, including the printing of a user manual and color inlay, all to factory quality, is completed within minutes.

At present, the platform is capable of delivering PC, Macintosh, mobile/smart phone, DVD and audio book products. Similar technology for console games is being developed.

To protect their ingenuous manufacturing, distribution and retailing technology, the company has taken out several regional and international patents covering secure production, audited manufacture, shrinkage protection, ordering facility and distribution of digitized information on demand and at point of sale.

### Business Results

Tribeka is growing fast and has secured licensing agreements for worldwide distribution with more than 250 leading software and digital content publishers including ABBYY, Activision, Atari, AVG, Corel, Cyber Link, Eidos, McAfee, Microsoft, Oxford University Press, Roxio, Symantec, Take 2 Interactive and Xara. Their Soft Wide technology is used in Europe, Australia and the United States and is in the process of being deployed in South Africa and several Asian countries. Retailers who have adopted the platform include Carrefour and Tesco.

Soft Wide has received numerous awards including several Wall Street Journal Europe Innovation Awards, three Deloitte European Retail Solutions Awards and was designated “Innovator of the Month” by the Association of Competitive Technologies (ACT). Tribeka founder and CEO Daniel Doll-Steinberg has gained widespread recognition as an entrepreneur, advises the British Government and European Commission on innovation and small/medium-sized enterprises (SME) policy, and is a regular speaker on innovation and the values of intellectual property (IP) and its protection.

### Early IP Registration as Invaluable Means of Attracting Investment

Timely IP protection proved to be the key to successfully bringing the Soft Wide platform to market: “Protecting our IP early in the process gave our investors a higher level of confidence in our ability to monetize on Soft Wide, and helped us to draw in high-level partners to offer products for PCs, Pocket PCs, and phones. Their investment enabled us to hire the staff necessary to finish developing our technology and bring this innovation to market. By protecting our IP, we gave investors the confidence they needed in our technology and our company”, sums up Tribeka Their IP is now proving invaluable to Tribeka as it licenses Soft Wide to retailers worldwide: it will ensure that they both profit from this revolutionary technology.

In its pursuit to create and maintain its competitiveness in the marketplace, Tribeka fully appreciates the paramount role played by IP policy. Tribeka has presently secured copyright

license agreements with over 200 leading software publishers for the digital rights management of their retail products. The company has 3 patents pending in 21 European countries, mirrored by 5 equivalent patents pending in the United States pertaining to the secure production, audited manufacture, shrinkage protection, ordering facility and distribution of digitized information on-demand and at point of sale. The company also currently holds 3 registered trademarks in the United Kingdom. Tribeka has a profound ongoing commitment to developing, deploying and managing IP stratagems and nurturing tangible as well as intangible proprietary assets so as to integrate them in its overall business endeavors and strategy.

Tribeka states recently that protecting their IP early in the process gave their investors a higher level of confidence in their ability to monetize on Soft Wide®, and helped them to draw in high-level partners to offer products for PCs, Pocket PCs, and phones. Their investment enabled them to hire the staff necessary to finish developing their technology and bring this innovation to market. By protecting their IP, they gave investors the confidence they needed to their technology and their company.

Their IP is now proving invaluable for them as they start to license Soft Wide® to retailers worldwide: it will ensure that both they and Tribeka are able to profit from Soft Wide as it becomes a disruptive technology.

The costs of patenting their innovations were not too large, especially given the collateral benefits they realized because of their patents (investor and partner confidence, increased staff, and eventual licensing revenue). In their case, the total patent costs have been about 2.5% of R&D costs to date

### Conclusion

Over the past 20 years, the international economic policy agenda has increasingly taken the enactment of strong, globally enforced intellectual property rights as a priority. This represents a significant departure for international economic policy, and it remains deeply controversial. Advocates of stronger IPR have asserted, with little evidence that stronger IPR will yield benefits by inducing multinational firms to engage in more technology.

India as software giant in this industry worldwide, this study shows the importance of IPR in this industry. To maintain market competitiveness, to earn the confidence of potential customers and saving the value of Research Development (R&D) the role of Intellectual Rights cannot be undermined.

### Reference

1. <http://www.hindu.com/biz/2003/10/27/stories/2003102700040200.htm>
2. <http://www.brighthub.com/office/entrepreneurs/articles/39140.aspx>
3. [http://www.stopfakes.gov/sf\\_why.asp](http://www.stopfakes.gov/sf_why.asp)
4. Mark Lemley A. Property, Intellectual Property, and Free Riding, Texas Law Review, 2005; 83:1031-1033
5. Moss off A. Rethinking the Development of Patents: An Intellectual History, 1550-1800, Hastings Law Journal. 2001; 52:1255.
6. <http://www.ladas.com/Patents/USPatentHistory.html>
7. Property, Intellectual Property, and Free Riding, Mark A. Lemley, Texas Law Review, 2005
8. <http://www.jlaw.com/Articles/copyright1.html>
9. <http://www.wipo.int/treaties/en/general/>