Abstract. Copyright is a form of intellectual property protection granted under Indian law to the creators of original works of authorship such as literary works (including computer programs, tables and compilations, computer databases which may be expressed in words, codes, schemes or in any other form, a machine readable medium), dramatic, musical and artistic works, cinematographic films and sound recordings. The copyright infringement of software or software piracy refers to practices which involve the unauthorized copying of computer software. Pirated software hurts everyone—from software developers to retail store owners, and ultimately to all software users. Furthermore, the illegal duplication and distribution of software has a significant impact on the economy. The paper explains about the effects of the legislative provisions with respect to Indian Copyright Act (ICA) and its compliance of international treaties and conventions concerning copyright law. This paper briefly reviews the protection afforded under the statute and the problems relating to it. The domain of software piracy were considered in this paper to identify the legal effects of the provisions and the role of the courts with respect to enforcement which protects the rights of the copyright owners and an initial approach to propose a reformation to be done safeguarding the interests of the copyright holders absolutely.

Keywords- copyright, software, piracy, infringement.

1. INTRODUCTION

Intellectual Property rights refer to the property that is a creation of the mind: inventions, literary and artistic works, symbols, names, images, and designs used in trade and commerce. About a century ago, Paterson J said, ‘what is worth copying, is prima facie worth protecting’ This is the genesis of all intellectual property rights [1]. The copyright in India has travelled a long way since it was introduced during the British rule. The first law on copyright was enacted in the year 1847 by the then Governor General of India. When Copyright Act 1911 came into existence in England, it became automatically applicable to India, being India an integral part of British Raj. This act was in force in the country until after independence when a new copyright act (the Act of 1957) came into effect in 1958. Thereafter the Act has undergone many amendments. The latest in the series is the 2010 amendment bill pending before Parliament’s ratification. The Year 2006 marked the 30th anniversary of the US Copyright Act 1976, 2008 marks the 40th anniversary of the Australian Copyright Act 1968 and 2010 marks the 300th anniversary of the Statute of Anne [2]. There is no doubt that concepts about how to manage, control and share knowledge, culture and creativity existed in societies well before 1709 but it is the Statute of Anne that is the symbolic birthplace of what we know as modern copyright law [3]. As we enter an era of unprecedented knowledge and cultural production and dissemination, we are challenged to reconsider the fundamentals of copyright law and how it serves the needs of life, liberty and economy in the 21st century.
Pamela Samuelson (1990) listed six of the characteristics which make this such a problem for legal regulation, all of which are applicable today [4]. The current study focuses on software piracy. A computer can be the subject of a crime by being stolen or damaged; the instrument of a crime, such as when it is used to store information illegally (Friedman and Bissinger, 1997). Other forms of computer criminality include the propagation of copyright infringement through software piracy, Internet fraud and marketing scams, identity theft, the creation and transmission of child pornography, and the compromise of network security by hackers (Denning, 1996; Jefferson, 1997; Wolf and Shorr, 1997). The U.S. is the country most affected, as they provide about 80% of the world’s software [5]. Software counterfeiting is claimed to be a large problem by some, resulting in a revenue loss of US $11-12 billion, China and Vietnam are the biggest offenders [6].

2. METHODOLOGY

The paper is conceptual in nature. Research in this area of law involves the analysis of statutes, international treaties, conventions and case laws. The sources of research include both primary and secondary. The statutes are the primary sources while the case laws are the secondary sources. The primary sources include various international instruments such as Berne convention, Universal copyright convention, Trade related aspects of Intellectual Property rights and treaties under World Intellectual Property Organization. The secondary sources are mainly the books and articles written by eminent authors and experts, electronic data made available on the Internal by various websites, periodical and news sources.

3. SOFTWARE PIRACY

Software is defined as a set of instructions which when incorporated in a machine readable form or in capable of causing a computer to perform a particular task. To put it simply, it is a series of commands which can be understood by the machine. There are three essential types of software which help to function the computer, micro code which is a programme which controls the details of execution, the operating system software which controls the sources of a computer and manages routine tasks and which is a necessary requirement for a computer to function; application software which is designed to perform a particular task. Piracy occurs when copyrighted software is made available to users to download without the express permission of the copyright owner. Such illegal software is offered over online sources such as online advertisements newsgroups bulletin board service and auction sites. Piracy hampers creativity, hinders the development of new software and local software industry and ultimately effects e-commerce. Piracy harms consumers and has negative impact on local and national economy. Consumers run the risk of viruses and having corrupted and defective programs. According to Nasscom [7], software piracy involves the use, reproduction or distribution without having received the expressed permission of the software author. Software piracy comes in four common forms. The first is end user piracy, and it occurs when users of software install the software on more machines than they are entitled to under their license agreements. The second is hard disk loading, and it occurs when computer dealers install illegal copies of software onto computers prior to their sale. The third is software counterfeiting, and it involves the illegal reproduction, and subsequent sale of software in a form that is nearly identical to the original product. The fourth is Internet piracy, and it occurs when individuals place unauthorized copies of software on the Internet for download.

4. PROTECTION UNDER INTERNATIONAL INSTRUMENTS AND THE NATIONAL LAW

4.1 Trade Related Aspects of Intellectual Property Rights (TRIPS):

This is the first international treaty to explicitly include computer programs within the illustrative list of copyrighted works. TRIPS set forth three different forms of protection for software: copyright, patent and trade secrets. TRIPS includes a specific provision in Article 10 that expressly requires member states to protect software, whether in source or object code, as literary works under the Berne Convention. However, the member countries have a right to provide more extensive protection of intellectual property rights within their national legal systems.
Article 27.1 recognizes patent protection for software related invention for the member states so long as the invention satisfies the other requirements (6) for patentability which are country specific. Therefore, software may be granted patent protection in a particular country if it fulfills the specific conditions set forth under the laws of that country. Article 39 of TRIPS provides an alternative to copyright protection. It talks about protection for undisclosed information and offers a trade secret regime for software protection. Trade secret regime is applicable for the protection of trade secrets which may include software. A particular software may contain lot of valuable and confidential information about a company which forms its trade secret. Civil and criminal actions are provided for in most legislation against the unauthorized disclosure or use of confidential information. In this case, there is no exclusive right, but an indirect type of protection based on a factual characteristic of the information (its secret nature) and its business value. Unlike patents, trade secrets are protected as long as the information is kept secret. Thus, TRIPS does not preclude additional forms of protection for computer programs and a member can offer patent, copyright and trade secret protection for computer programs. Keeping in mind the higher standards of creativity required by patent law the software developer can choose any form of protection which is most desirable to him. As the source code is comprehensible only by a trained programmer and not by normal persons, the proprietors generally protect the source code under the trade secret regime and the object code is protected as a copyright.

4.2 Berne Convention (BC):

The Berne Convention does not explicitly mention computer programs in its illustrative list of copyright works. However, as per TRIPS, member states should recognize computer programs (software) as literary works. Article 2 (7) of the Berne Convention makes the protection of works of applied art dependant on domestic legislation i.e. the extent to which protection may be granted and the conditions under which such works will be protected is dependant on the statute of the particular country where the work originated. Works enumerated in Article 2 of the Berne Convention are mere illustrations of the kinds of works to which copyright might extend. These illustrations are not exhaustive. Therefore, works such as computer programs that exhibit utilitarian characteristics and also contain expressive elements can be brought under the ambit of work of applied art. However, Article 7 (4) of the Berne Convention exempts, inter alia, the works of applied art from the general term of protection and sets up a minimum term of only 25 years from the making of the work. As article 2 (7) makes the protection of works of applied art dependant on domestic legislations, the term of protection may be applicable accordingly with respect to different countries.

4.3 Universal Copyright Convention (UCC):

Under the UCC’s national treatment provisions, software created by a U.S. author or first published in the US is protected in other UCC member countries to the extent that the member country’s copyright laws protect software. The UCC provides that any member country that requires, as a condition of copyright protection, compliance with formalities (such as registration, deposit or notice) must treat such formalities as satisfied if all published copies of a work bear the symbol “©”, the name of the copyright proprietor and the year of first publication. This provision applies, however, only to works that (i) were first published outside the country requiring the observance of the formalities, and (ii) were not authored by one of that country’s nationals. In contrast to Berne Convention, formalities such as registration are permitted under the UCC in order to bring an infringement suit. India being a member to the UCC, authors of software in US will get protection in India also as per the terms and conditions laid down in the Indian copyright law.

4.4 World Intellectual Property Organization (WIPO):

In 1996, two copyright treaties were negotiated under the auspices of WIPO. These treaties are: WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT). The WCT of 1996 is a special agreement to the Berne Convention and requires compliance with Berne Convention. This treaty makes explicit that computer programs are protected as literary works under Berne Convention. It also states that compilations of data for which the selection or arrangement of the contents are sufficiently original are protected as compilations.

4.5 Protection and Compliance of International Instruments under Indian Law:
The protection to computer software is derived out of two acts, the Indian Copyright Act, 1957 and the Information Technology Act, 2000. While the Copyright Act grants protection to the computer program as it is granted to other forms of copyrighted work, the technological and complex nature of the computer programs calls for technically effective protection. The Indian Copyright Act, 1957 accords a special status to computer software as compared to other forms of copyrighted work. The Copyright Act regards the computer programs as literary works and in addition to the general exclusive rights provided to other literary works, it grants extraordinary exclusive rights to the owners of the computer programs like right to sell or offer for sale, and the right to give on commercial rental or offer for commercial rental. The Act has also exempted computer programs from ‘fair dealing exception’ (i.e. private use for research, criticism or review of that work or any other work) which is available in case of other copyright works. The IT Act, 2000 provides for punishment for tampering with the ‘source code’ of a computer program but this protection applies to computer source codes “which are required to be kept or maintained by law for the time being in force”. Hence, the protection accorded by the IT Act is only for ‘source code’ of computer programs of government agencies and the ‘source code’ of computer programs of private users still stand unprotected. With the amendment of the Copyright Act in 1994, the situation with regard to copyright enforcement in India has improved. Since the changes which make copyright violation cognizable offence it has been possible to use the legal mechanism as a ‘deterrent’. Section 64 of the Indian Copyright Act 1957 provides that "Any police officer, not below the rank of a sub-inspector, may, if he is satisfied that an offence under Section 63 in respect of the infringement of copyright in any work has been, is being, or is likely to be, committed, seize without warrant, all copies of the work, wherever found, and all copies and plates used for the purpose of making infringing copies of the work, wherever found, and all copies and plates so seized shall, as soon as practicable, be produced before a magistrate."

Section 65A adopts the anti-circumvention provision of Article 11 of the WCT and Section 65B adopts Article 12 of the WCT. On a closer analysis of the proposed amendments in the Copyright Act, 1957, it is observed that the provisions introducing anti-circumvention measures and Digital Rights Management (DRM) have been closely guarded to include several exceptions and limitations that concerns India. The proposed amendments have not dealt with the ‘preparatory acts’ concept of the internet treaties and has only provided for ‘anit-circumvention only’ provision under section 65A. Section 52 of the Copyright Act, 1957 includes in itself the principle of limitation and exception as envisaged under Article 10 of WCT. The acts expressly allowed under Indian law include fair dealing with a literary, dramatic, musical or artistic work (not including a computer programme) for the purposes of private and personal use including research, criticism or review.

The Union Government of India introduced the Copyright Amendment Bill, 2010, in the Parliament with some major amendments over the Copyright Act, 1957 in place. The Bill is going to have far-reaching implications for the music and film industry if it gets passed as it seeks to give independent rights to lyricists, composers and singers as the authors of literary and musical works in films [8]. The NASSCOM have proposed the setting up of a National Committee to provide helping hand to government and private agencies to combat against software piracy. Though the Indian copyright law has incorporated appropriate provisions as mentioned above in line with international treaties and conventions, there exist no binding mechanisms for settlement of disputes or strict enforcement mechanism before national courts, even the international instruments also remain silent about the dispute resolution. The jurisdiction to try an IP claim is still a challenging issue before the courts in most cases. Alternatively, existing laws should be amended as per the requirements of the situation. The existing law can also be supplemented with newer ones, specifically touching and dealing with the contemporary issues and problems. The IT Act, 2000 requires a new outlook and orientation, which can be effectively used to meet the challenges posed by the “Intellectual Property Rights” regime in this age of information technology.

5. JUDICIAL PRONOUNCEMENTS:

Indian courts have presently come forward to acknowledge and compensate aggrieved parties when their IP rights are infringed. There are few cases decided by the courts by making precedents with respect to imposing a strict liability on the part of the infringers relating to software piracy. In Microsoft Corporation v Yogesh Popat CS [9], the Delhi High court took an extremely serious view of the defendants’ infringing
activities. The court relied on the principles adopted in various jurisdictions for assessing the quantum of damages and granted Rs. 1,975 million to the plaintiff by way of damages. The court used this precedent in *Microsoft Corporation v Kamal Wahi* [10], when it granted damages of Rs. 2.3 million in favour of the plaintiffs. This award of damages is highest ever in India’s IP history. The issue of copyright infringement was considered by the Delhi High Court in *Microsoft Corporation v Deepak Rawal (2006)* [11]. In this case, the plaintiff, Microsoft Corporation, is a company under the laws of the state of Washington, United States. It has a global presence for business software such as Microsoft Windows and Microsoft Office, which is installed globally, including in India. The software developed and marketed by the plaintiff is classified as computer programs within the meaning of Section 2(fic) of the US Copyright Act 1959; it is also covered by Section 2(o) of the same act as literary works. Although Microsoft's employees created these programs, under US copyright law Microsoft owns the copyright in these works. The copyrights are registered in the United States. Since India and the United States are both signatories to the UCC and the BC, Microsoft's works are protected in India under Section 40 of the Copyright Act 1957, read with the International Copyright Order 1999. As Microsoft owns the copyright in the software programs, it is thus entitled to all the exclusive rights this ownership entails, as set out by the copyright laws. Microsoft claimed that it had suffered incalculable damage to its IP rights and business as a result of various forms of copyright piracy. The court held that as Microsoft owns the registered trademark Microsoft, the defendant had no right to use this trademark and trade name in respect of related goods. Therefore, Microsoft successfully proved that the defendant had infringed its copyright in Microsoft Dos and Microsoft Windows, as it had not granted the defendant a licence for this purpose. In addition, the defendant also infringed the Microsoft trademark. In the course of its judgment, the Indian court discussed various other cases worldwide in which Microsoft had sued for piracy and counterfeiting, and cases in which the Indian courts had considered damages for infringement. For example, in *Time Incorporated v Lokesh Srivastava* [12], the court granted punitive and exemplary damages of Rs500,000 even though the defendant chose to remain *ex parte*. To meet the ever increasing challenges, as posed by the changed circumstances and latest technology, the existing law can be so interpreted that all facets of copyright are adequately covered. This can be achieved by applying the “purposive interpretation” technique, which requires the existing law to be interpreted in such a manner as justice is done in the fact and circumstances of the case. Though the courts were given enormous discretionary power to make appropriate principles concerning protection of software, they are highly reluctant to exercise their powers to punish the violators of IP with award of damages. Among the judicial pronouncements made in the Indian courts concerning copyright infringements, majority were from the High court of Delhi which originated only from the year 2005. Although, these verdicts can be regarded as legal principles (Stare decisis) to be applied in future cases, which has the same effect as a legislative rule, it is highly persuasive for the other States High Courts. Though the country has such a sound and strong legal base for the protection of IPR, the judiciary should play an active role in the protection of these rights, including the copyright.

6. CONCLUSIONS AND IMPLICATIONS

Software piracy can be argued as a consequence of technological innovation and the need to protect those from their unauthorized reproduction remains an important objective for copyright owners. Recently, the director of World Intellectual Property Organisation [13] observed, “copyright must be developed to meet the development of new technologies otherwise it will become irrelevant on the theory and practice. The central issue is how to maintain a balance between availability of cultural works at affordable prices while assuring a dignified economic existence for creators and performers”. An important aspect to be considered is statutory provisions concerning amount of compensation to be determined for infringement claims. Though owners of the software programs have civil and criminal remedies available to them in the event of violation, the damages recovered through courts is uncertain. It is the court’s discretion to assess the quantum of compensation based on the circumstances of each and every case. There exist no statutory damages provided under the legislation. As for criminal sanctions to the infringers, it is good that the government has constituted special copyright enforcement units in almost majority states in India, but the enforcement mechanism in the country is weak. The Government has also set up a statutory body, ‘The Copyright Enforcement Advisory Council’ for the purpose of boosting the enforcement but is inactive in performance. The copyright laws of
India are as good as those of many advanced countries where concern for copyright is at a high level. Punishments imposed for infringers are quite strict but the only problem is that it lacks enforcement. Laws can do little justice unless properly implemented. This includes police personnel, who can play a major role in combating piracy, are not fully aware of various provisions of the law. There is also a lack of adequate number of personnel who can fully devote to copyright crimes alone. The police are more concerned with usual law and order problems and copyright related crimes are attached least priority. The awareness level among end-users is also very low. Software piracy can be reduced effectively at a higher rate only if the enforcement and the procedure are made strong and the judiciary should be pro active. The Government should take initiative to set up special courts to deal with IP cases exclusively as existing in Malaysia since 2007. Appropriate amendments to be made in the Copyright Act to include provisions concerning statutory damages. There is an urgent need to reform the law where the government can avoid frustration in the mind of software owners with respect to damages available to them and which will for sure protect the interests and the efforts of many software companies. To combat copyright piracy absolutely, the main industry to be considered would be colleges and universities in India where the piracy rate is high. The next stage of research would be to conduct a study through a survey among students to analyse the incidence of the copyright piracy on the campuses, specifically in the form of software and music piracy and to propose a legal framework to curb piracy effectively.

7. REFERENCES:

[7] The National Association of Software and Service Companies
[8] News source: Times of India, Thursday April 22, 2010
[12] (3) PTC 3 (Delhi), 2005