

Indian Copyright Law and Digital Technologies

T C James

Department of Industrial Policy & Promotion, Room no 259, Udyog Bhawan, New Delhi 110 001

(Received 25 July 2002)

Paper traces the history of Indian Copyright Act. Describes various amendments carried out in it from time to time. Responses of international community to the challenges of digital technologies in the form of WIPO Copyright Treaty (WCT) and WIPO Performers and Phonograms Treaty (WPPT) are presented. The prominent copyright issues in the digital era are identified. It was found that in the Indian Copyright Act many issues are still left unaddressed. Amendments in the Act to make it compatible with the WCT are suggested.

Copyrights are a set of exclusive rights granted by law to the creators and producers of forms of creative expressions such as literary, artistic, musical and cinematographic works. These rights bestow on the copyright owner the control over the use of his works like their reproduction and distribution for a limited duration. While the concept of copyright is very ancient, the laws granting these rights are of comparatively recent origin. Their genesis can be traced to the chaotic market conditions in culture industries created by the advancements in technology following the Industrial Revolution. There was a felt need to have proper norms to regulate the new business opportunities in the creative arts¹. Laws protecting copyright have been introduced as a response to the widespread commercial

exploitation of literary works as a result of technological developments in printing methods. It was the invention of printing press in the fifteenth century and consequential publication of literary works in multiple copies that led to the enactment of laws in England first prohibiting importation of foreign books in 1534, then granting search, seizure and destruction powers to the “Stationer’s Company” over unauthorised copies in 1556 and finally during the reign of Queen Anne the Copyright Act of 1710 granting “sole right and liberty of printing books” to authors and their assigns for a period of fourteen years². During the next two hundred years, a number of legislations were enacted in Britain granting different exclusive rights to authors and publishers, as the publishing industry expanded and

*Reproduced with permission from *Invention Intelligence*, 36(6) 2001, 262-272.

newer technologies were introduced.

Originally designed to cover printed material, the scope of copyright law progressively expanded to cover newer forms of creative expressions like photographic and cinematographic works and phonograms, made possible by technologies.

In India too modern copyright law emerged consequent to the spread of printing technology. It is true that while the history of printing of books in India goes back to 1557, that of copyright law is only little more than a hundred and fifty years old. This was because the early printing activities were mostly non-commercial and Christian missionary driven. But once commercial publishing picked up, need for a copyright law to protect the interests of authors and publishers was felt. This led to the enactment of the Indian Copyright Act of 1847 on 15 December 1847³. This Act made the English law applicable to the areas under the control of the British East India Company.

Subsequently, when Britain enacted the Copyright Act, 1911, "the first British legislation to bring the various copyrights within a single text"⁴, it was considered appropriate to have a new legislation for India too. Thus was promulgated the Indian Copyright Act of 1914⁵ which was a slightly modified version of the British Copyright Act, 1911, adapting it to the requirements of India. This law remained in force till 1958 when the present Indian Copyright Act of 1957⁶ had come into force.

The vagaries and compulsions of history dragged India into the legal regime of Great Britain for about a hundred

years. This had certain advantages so far as copyright protection was concerned. Great Britain had been one of the founder members of the Berne Convention⁷; its laws on copyright had kept abreast of the international treaties and state of technologies in this area. This naturally ensured that the Indian law was also on par with the same. Thus at the time of its independence, India had a copyright law which was fully compatible with the international treaties on copyright and the technologies in the cultural industries at that time.

It is not only the compulsions of a sovereign state to have a law of its own, which is not merely an appendage or an adaptation of the law of another country, but also the felt need resulting from technological developments such as "new and advanced means of communications like broadcasting, lithography, etc"⁸, which made enactment of a new legislation in 1957 inevitable. This focus on the need for copyright law harmonising itself with the state of technology has never shifted. Whenever need had arisen for suitably arming the law with provisions necessary for tackling new challenges posed by developments in the technological field, necessary amendments had been carried out in the Act. The influence of new technologies is visible in the amendments made in 1983⁹, 1984¹⁰ and 1994¹¹. For example, the 1983 amendment in law inserted new sections and definitions in the Act to take care of broadcasting technology, reprographic technologies and so on. In order to tackle the menace of increased piracy of copyrighted works

due to the introduction of new techniques of printing, recording and fixation of broadcast program, amendments were made in the Act in 1984. The situation created by various technological developments that had taken place in the world in the 1980s and early 1990s was a prime reason for the comprehensive amendments in 1994.

While the contours of copyright law has always been drawn by the developments in the technological world, the emergence of digital technologies towards the concluding decades of the twentieth century as the defining paradigms of new age communication raised a whole new set of challenges to copyright regimes. The traditional notions of the basic concepts of copyright such as rights of reproduction and distribution have become inadequate and even irrelevant in the digital age. A host of intangibles have arisen in the world of 'property incorporeal'. All works can now be digitalized whether they comprise texts, images, sound or diagrams and once digitalized the various elements such as images are all 'equal' and can be merged, transformed, manipulated or mixed to create an endless variety of new works. Earlier rights of reproduction and distribution affected tangible physical copies only of a work. The new technologies brought in non-material reproduction and distribution. Physical reproductions were replaced by digital reproduction. While initially the intellectual property right community got bewildered at these developments, slowly they learnt the tricks of the new game and found out ways to regulate the rights in the new media.

The concerted effort of the international community to respond to the challenges of digital technologies mostly took place under the aegis of World Intellectual Property Organization (WIPO). This special agency of the United Nations Organisation responsible for the promotion of the protection of intellectual property throughout the world¹² began in 1989 to examine the revisions needed in the multilateral conventions, specifically in the Berne Convention for the Protection of Literary and Artistic Works (the Berne Convention) (1886) in the light of the new technologies¹³ and concluded two new treaties in a Diplomatic Conference in December 1996, namely, the WIPO Copyright Treaty (WCT)¹⁴ and the WIPO Performances and Phonograms Treaty (WPPT)¹⁵. These treaties are popularly known as they are intended to address the issues of copyright protection on the Internet, the worldwide communication system possible by advancements in digital technologies. The WCT and WPPT address the issues in three ways, namely, (a) by clarifying the existing provisions in the Berne Convention and in the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organisations (the Rome Convention) (1961) and in some cases, reaffirming the interpretations already generally adopted, (b) giving new interpretations to the existing provisions widening their scope, and (c) adding new provisions on rights and obligations. While the negotiations in WIPO had been going on, the Uruguay Round of Multilateral Trade Negotiations had concluded the Agreement on Trade-Related Aspects

of Intellectual Property Rights (TRIPS) in 1994¹⁶. This Agreement though covered only two products of the new technology, namely, computer software and databases.

The following paragraphs look at the major challenges to copyright generated by advancements in digital technologies in the recent years, the provisions in the TRIPS Agreement and the WCT having a bearing on those issues and the position of the Indian law.

The prominent copyright issues in the digital era can be classified into three groups:

- (i) Issues relating to a whole new set of work, namely, computer programs, databases and multimedia works;
- (ii) Issues relating to reproduction, distribution and communication to the public of a work through digital media; and
- (iii) Issues relating to the management and administration of copyright in the digital environment.

New Works

Technology had in the past given birth to new forms of creative expressions in the creative arts which were subsequently brought under the purview of copyright protection. Thus, the invention of photography resulted in 'photographs', that of analogue technology in the new class of works named 'phonograms' and that of 'cinematography' in a whole new set of works such as cinematographic films, video films and so on. The widespread application of digital technologies has also given birth to certain identifiable

new works like computer programs, databases, and multimedia works which initially raised many doubts about their coverage under copyright laws.

Computer Programs

Computer programs are generally understood as a set of instructions capable of, when incorporated in a machine readable medium, causing a machine having information-processing capabilities to indicate, perform or achieve a particular function, task or result¹⁷.

The issue of appropriate intellectual property right regime for protecting computer programs had exercised the international community for quite long. Arguments were advanced in favour of and against patent regime and copyright regime and even a *sui generis* system to protect computer software. Discussions at the Uruguay Round of multilateral Trade Negotiations finally put a seal on these debates when the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) incorporated the provision, "computer programs, whether in source or object code, shall be protected as literary works under the Berne Convention"¹⁸. This was subsequently reiterated in WCT when it stated that protection applies to computer programs whatever may be the mode or form of their expression¹⁹.

Even though it was only in the TRIPS Agreement of 1994 that a clear position emerged about protecting computer programs as literary works under the copyright laws, India's was one of the early legislations, which had extended copyright protection to computer programs

much before that Agreement. This was in consonance with Berne Convention definition of literary and artistic works as including “every production in the literary, scientific and artistic domain, whatever may be the mode or form of its expression”²⁰. In 1984 an inclusive definition of ‘literary works’ was inserted in the Copyright Act to include computer software. Subsequently, in 1994 the definition was further clarified to include “computer programs, tables and compilations including computer databases”²¹.

In Section 2 (ffc) of the Act ‘computer program’ has been defined as “a set of instructions expressed in words, codes, schemes or in any other form, including a machine readable medium, capable of causing a computer to perform a particular task or achieve a particular result”. In the case of ‘computer’, the Act gives an inclusive definition, namely, “computer includes any electronic or similar device having information processing capabilities”²². These are technology neutral definitions and thus capable of absorbing future developments in digital technologies.

Although the Act categorized ‘computer program’ as being part of the class of literary works, in the matters of rights and infringements it made separate provisions for computer programs. Thus in section 14 (b), the Act bestows upon computer programs all the rights enjoyed by a literary work and in addition, sale and rental rights. Through an amendment in 1999²³, the Act provided that commercial rental rights will not apply in respect of those computer programs where the program itself is not the essential object

of the rental²⁴. This is in accordance with the Article 11 of the TRIPS Agreement. Since digital technologies are not being used in a wide spectrum of areas affecting daily life such exception is considered appropriate as, otherwise, one may end up paying for technologies that one had no intention of using in the first place. Keeping in view the requirements of the software industry and the need for giving an impetus to development of digital technologies in the country, the 1999 amendment to the Copyright Act also permitted decompilation and reverse engineering of a computer program in certain circumstances²⁵.

It is also interesting to note that the Act separately defines the author of a computer-generated work “as the person who causes the work to be created”²⁶. This removes any doubts about the legal authorship of a computer program where a number of persons are engaged, as is the normal case.

The law taking into account the special features of computer programs as distinct from other literary works, particularly the effect of its use, has made the knowing ‘use’ of an infringing copy of a computer program an offence under the Act for which mandatory minimum punishments are prescribed²⁷.

Databases

Another group of works which were affected in a major way by the development of the digital technologies is databases. In the digital context,

‘Database’ means a collection of independent works, data or other materials arranged in a systematic or

methodical way and capable of being individually accessed by electronic or other means²⁸.

Manual collection and development of a database were very cumbersome and time-consuming processes. Digital technologies made development of databases much easier and user friendly than in the past. Traditionally databases were protected as compilations under literary works. In a computer database there are two structural parts: the program, which is used to control and manage the data and the data itself. The program, no doubt, gets protected as literary work. Doubts persisted among many about protection for the content part, despite the provisions on compilations in the Berne Convention. Therefore, the TRIPS Agreement categorically provided that:

Compilations of data or other material, whether in machine readable or other form, which by reason of the selection or arrangement of their contents constitute intellectual creations shall be protected as such²⁹.

The WCT also reaffirmed this position in Article 5. The crucial element in the above provision is the insistence on the database qualifying as an 'intellectual creation' which is, in fact, the fundamental principle of copyright protection. The database should be the result of an original intellectual effort and should not have been copied from some other work or database.

The norm of 'originality' is not prescribed in any copyright treaty and it generally depended on the case law position that is available in a country. In countries where the courts insisted upon a high

level of 'originality' for copyright protection, many databases were wanting in 'originality' although much investment had been made in the making of it. This was a major issue in the *Feist Publications vs Rural Telephone Service Company* case in the USA. The US Supreme Court, while reaffirming that most, although not all, commercially significant databases satisfy the 'originality' requirement for protection under copyright, emphasized that this protection is 'necessarily thin'³⁰.

Computer databases are specifically covered by the definition of literary works in the Indian Act and thus all original computer databases enjoy protection in India. Since the standard of originality accepted by the courts for entitlement of copyright protection is a low one, almost all compilations enjoy copyright protection. Expending of labour and skill in the creation is the only criterion that is applied to judge the eligibility of a work for copyright protection and based on that computer databases enjoy protection in India.

The problem posed by the *Feist* judgement in the USA may not be materially relevant in India because of the liberal interpretation of originality adopted by the Indian courts. Be that as it may, as more and more databases get created with massive investments and parallel databases on related topics get generated with lots of common material, questions may arise as to the use which can be made of copyright material to establish and maintain a database and on the originality of newly created and constantly changing databases. Self perpetuating and auto-

matically upgrading databases on computer networks may also be leaving question marks on the effectiveness of copyright protection in preventing misappropriations of such data.

One problem that confronted the copyright community during the run-up to the Diplomatic Conference, which finalised the WCT, was the protection of non-original databases. Preparation of any database in a digital format involves considerable investment, both in financial and physical resources. But when a database is compiled purely or wholly of non-copyrightable material, the problem of protecting the same arises³¹.

Multimedia Works

Digital technologies have created works with much more versatility than in the past. A work may now consist of literary, artistic, musical and dramatic elements and may also include a phonogram and a cinematographic film. The user can 'interact' with the work in a way a past generation could not do. He can make changes and alterations and even create a new work out of an existing one. Multimedia works by their basic premises are works combining different elements, such as text, sound, still visuals and moving images, of different classes of works. The resultant work defies existing classification³². If the rights for all classes of works were the same, then perhaps, this would not have been a major issue. But the law as it stands in India, distinguishes between different classes of works in the matter of rights. For example, the rights in a literary work and those in a cinematographic film are different. There is

no rental right in a literary work, whereas there is such a right in cinematographic film³³. The authorship may raise another problem, as the criterion of authorship is different between literary, dramatic, musical and artistic works on the other hand³⁴. There is a view that multimedia works being a digital product be classified as computer programs. Since there are separate provisions for rights and authorship of a computer program as distinct from literary works in the Copyright Act, this could be a possible solution. However, issues may arise on the retention of separate copyrights in the works incorporated in the multi-media, in terms of section 13 of the Act³⁵ and the rights of performers³⁶ in the product. At present, large number of multimedia works is created by combining pre-existing works. The problem will get accentuated when more and more multimedia works will be created as new complex ones. The classification of multimedia works is an issue, which needs to be looked into in-depth.

Right of Reproduction

Digital technologies have brought in a new form of transmission of copies of a work. Traditional transmission of a work was material copy based which could be on paper or tape as in the case of a book or a tape or film as in the case of a phonogram or a motion picture. This has not been replaced by material-less transmission, through computer bytes.

Right of reproduction is the most basic of the copyrights. It, however, was a problem to define it even in the pre-digital days. The Berne Convention had specifically included a right of reproduc-

tion only as late as 1967. In the Stockholm Revision of 1967 a new text of Article 9(1) was inserted, which in the words of Stuart, "is both lapidary and embracing both present and future processes"³⁷. This article provides "the exclusive right of authorizing the reproduction of these works in any manner or form"³⁸. It is this most basic of copyrights which has posed the maximum difficulties in the digital environment also. The mute question was whether a digital copying is a reproduction or whether right covers only material reproduction. This question was settled through an Agreed Statement in WCT that reproduction right fully applies in the digital environment, in particular to the use of works in digital form. The Agreed Statement further clarified that "the storage of a protected work in digital form in an electronic medium constitutes a reproduction within the meaning of Article 9 of the Berne Convention"³⁹.

So far there is no problem in recognizing the right of reproduction in digital medium. The problem arises, however, on the issue of transitory or incidental reproduction that takes place in Internet communication. When a prospective buyer of a book goes to a bookstore, he can browse through the book deciding on whether to buy or not the book. In the case of Internet this browsing can take place only after a digital reproduction of the book in the Random Access Memory (RAM) of the buyer's computer. Whether such a reproduction should be covered under the scope of the right of reproduction? The WCT did not finally resolve the issue and seem to have left it to the practices to emerge to determine the norms.

In the Indian Copyright Act, digital reproductions are already covered in the cases of literary, dramatic and musical works where the expression 'reproduction' includes "the storing of it in any medium by electronic means"⁴⁰. The definitions of cinematograph film⁴¹ and sound recording⁴² to a great extent seem to take care of digital copying of those works. However, the artistic works are not covered as the right of reproduction bestowed upon artistic work is only "in any material form"⁴³. There is a need for law to address this lacuna and also for clarifying the position in regard to cinematograph films and sound recordings to remove any doubts about digital copying of such works being covered by the right to make copies.

Rights of Distribution and Communication to the Public

This, again, is an area greatly affected by the digital revolution. Here, the issues are messier than in the case of right of reproduction. This is because the two rights really get merged in the digital world, as copies are transmitted not materially. The Berne Convention had envisaged only traditional models of communication for these rights. It had not bargained for the online, interactive communication and distribution models. Therefore, need was felt to protect the interest of copyright owners in the new environment.

The WCT looked into these issues and decided to extend right of distribution to 'fixed' copies and a wide scope of right of communication to the public as a separate one. As per the WCT, subject to cer-

tain provisions of Berne Convention, authors of literary and artistic works shall enjoy exclusive right of authorising any communication of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access those works from a place and at a time individually chosen by them⁴⁴.

This provision is wide enough to include within its scope interactive communications as well as all kinds of Internet communication. When works are stored in a computer memory, as at a website, accessible to the public, at their convenience, that is a communication to the public.

The definition of 'communication to the public' in the Indian Copyright Act, surprisingly, had already been compatible with the above definition in the WCT. It reads:

'communication to the public' means making any work available for being seen or heard or otherwise enjoyed by the public directly or by any means of display or diffusion other than by issuing copies of such work regardless of whether any member of the public actually sees, hears or otherwise enjoys the work so made available⁴⁵.

The main thrust in both the article in WCT and in the definition quoted above is on the fact of making something available for public access, irrespective of time and place of access to the same by the public.

Management of Copyright in Digital Environment

Another field where digital technologies have brought in revolutionary changes is that of management and administration of copyright. The new technologies have made the administration and protection of copyright quite difficult. It has made reproduction, distribution and communication of works easier and within the competence of ordinary individual. Now copies can be made at an amazing speed with absolute fidelity to the original and transmitted over past distances and dispersed to millions of people in a few minutes or even seconds. This has opened up the possibilities of widespread unauthorised copying and distribution of copyrighted works materially affecting the economic interest of the owners. When such activities can be done from the privacy and safety of one's home, law becomes an impotent, mute witness. The problems created by technologies need to be tackled by technologies. As Charles Clark put it, "the answer to the machine is the machine"⁴⁶. However, the solutions devised up by technologists need to be protected by law as otherwise those solutions would be modified by counter technologies, with impunity.

Technological solutions were found for the problems posed by the new technologies through access control or copy control mechanisms such as encryption technology or water marking incorporated into works distributed over digital networks with a view to protecting them from illegal exploitations. However, counter-technologies were developed to

defeat those protection technologies. The copyright community, therefore, felt the need for legal mechanisms to protect against the hacking of technological protections applied to copyrighted products in the digital environment. This resulted in the WCT making it obligatory for member states to:

provide adequate legal protection and effective legal remedies against the circumvention of effective technologies measures that are used by authors in connection with the exercise of their rights⁴⁷.

As per the Copyright Act knowingly making or possessing any plate for the purpose of making infringing copies of copyrighted work is a punishable offence. The definition of 'plate' is very wide indeed. It includes:

any stereotype or other plate, store, block, mould, matrix transfer, negative duplicating equipment or other device used for or intended to be used for printing or reproducing copies of any work, and any matrix or other appliance by which sound recording for the acoustic presentations of the work or are intended to be made⁴⁸.

This definition to a great extent provides protection for the technological measures adopted by a copyright owner.

Digital technologies will have to be used widely for administration of copyright in the digital environment. Licensing and fee collection may have to be automated. Efficient functioning of an automated system presupposes prompt registration of any request for or transmission of a work along with all data

necessary for transfer of agreed payments to the appropriate right owners. This will be possible only if certain data like information about rights ownership or licence terms, which are necessary for licensing and payment of licence fee, are embedded in the work. This data is classified as "rights management information" in the WCT. The Treaty defines rights management information as:

information which identifies the work, the author of the work, the owner of any right in the work, or information about the terms and conditions of use of the work, and any numbers or codes that represents such information, when any of these items of information is attached to a copy of a work or appears in connection with the communication of a work to the public⁴⁹.

Any kind of the removal or alteration of any of the above information as well as distribution or communication to the public of copies of work with such removals or alterations will create havoc with the rights management.

Section 52A of the Copyright Act provides for certain information to be displayed on sound recording and cinematographic film. The information, while definitely part of rights management information, is not adequate for the administration of the rights in the digital environment and further it is limited to two classes of works only. Also in this case, the onus is on the copyright owner. Provision needs to be made either in the Copyright Act or some other Act making it an offence to remove or alter any rights management information used in a copy-

righted work.

Fair Use Provisions

The basic principle of copyright like other intellectual property rights is the balance of the interests of the individual creator and that of the society at large⁵⁰. Therefore, the laws while granting exclusive rights to authors or producers of creative works limit those rights in time. Even during the period of copyright, certain special uses allowed without any specific permission from the copyright owners such as for private, academic, educational, judicial or legislative purposes.

When new interpretations are made on existing provisions and new provisions are added to existing laws of copyright for protecting the rights of owners of copyright, it is but fair to consider the effect of such extensions on the interest of the society, and, wherever necessary to clarify permitted acts. The WCT provides for such limitations and exceptions subject to the three-step test, namely, only in certain special cases that do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interest of the author. New exceptions and limitations that are appropriate in the digital network environment can also be devised⁵¹.

A major challenge posed by digital technologies to a user who is a member of the public is to the right to “informed decision making”. When works are to be bought through the digital network, the purchaser has a right to view, peruse or at least browse through the work before taking a decision on whether to buy the same

or not. Lawmakers may have to devise methods to ensure this.

Also at issue is the existing provision of the Indian Copyright Act, which permits a fair dealing with a literary, dramatic, musical or artistic work for the purpose of private or academic use. The issue, however, is fraught with serious, almost insurmountable, difficulties. Most of the fair use provisions are dependent on the distinction between private use and public use. Law permits fair dealing for private non-commercial use whereas the public, commercial use can ordinarily be done only with the permission of the right holder. This distinction gets eroded in the digital environment where an individual is able to transmit over the Internet a work to millions of users scattered over the entire globe and who may download the same in the privacy of their homes.

Adequate provisions will have to be made to ensure that the expansion of rights of copyright owners to the new digital media does not result in an unreasonable curtailment of the public’s right to access and use cultural resources of humanity as otherwise that may adversely affect cultural and technological progress.

Conclusion

It is evident from the above analysis that while the Indian copyright law is equipped to face a number of new challenges posed by digital technologies, it, in keeping with its own past history, needs to include new provision also as there are still many issues left un-addressed. Amendments in the Act to make it compatible with the WCT should be able to take care of most of these issues. Since

digital technologies have brought in a convergence of computers, telecommunication, and the copyright industries, in the times ahead this convergence will grow stronger and stronger, a day may come when it may also become necessary to have a convergence in the laws regulating the provision of both the content and service in all these areas to ensure that copyright protection will function adequately in the networked digital environment. It is also necessary to watch out the developments in other countries, particularly on those vexed questions for which universally acceptable solutions have not yet been evolved. These include the issue of liability of service providers and trans-border infringement liabilities.

References

- 1 This is true of all intellectual property rights. In a recent book, *Ruling the Waves: Cycle of Discovery, Chaos, and Wealth from the Compass to the Internet*, Debora L Spar identifies the stages of a process from innovation to law. First comes the laboratory stage of a new invention, then the commercialisation when pirates follow the pioneer investors, third, a stage of creative anarchy where lack of rules leads to disputes and finally the stage of norm setting or enactment of laws.
- 2 See Cornish W R, *Intellectual Property*, 3rd ed, 1996, pp 297-299.
- 3 Act XX of 1847. See Thairani Kala, *How Copyright Works in Practice*, Bombay, 1996, p 2.
- 4 Cornish, *supra*, p 302, Earlier there were separate Acts governing copyright in engraving, printing, sculpture, dramatic works, lectures, fine arts, music and so on.
- 5 Act III of 1914.
- 6 Act XIV of 1957.
- 7 See Stewart S M, *International Copyright and Neighbouring Rights*, 2nd ed, 1989, p100.
- 8 Statement of Objects and Reasons of the Copyright Bill introduced in the Rajya Sabha on 1 October 1955.
- 9 Act XXIII of 1983.
- 10 Act LXV of 1984.
- 11 Act XXXVIII of 1994.
- 12 See WIPO *General Information*, WIPO Publication No 400 (E)
- 13 For a brief background of WIPO's efforts see WIPO document No CRNR/DC/4.
- 14 WIPO Publication No 226(E).
- 15 WIPO Publication No 227(E).
- 16 WIPO Publication No 223(E).
- 17 WIPO, *Model Provisions on the Protection of Computer Software*, quoted in Stewart, *supra*, p 305.
- 18 Article 10.1 of TRIPS Agreement.
- 19 Article 4 of WCT.
- 20 Article 2 of Berne Convention.
- 21 Section 2(o) of Copyright Act, 1957, as amended up to December 1999 (hereafter Act).
- 22 Section 2(ffb) of Act.
- 23 The Copyright (Amendment) Act, 1999.
- 24 Proviso to Section 14(b)(ii) of Act.
- 25 Section 52(1)(ab) and (ac) of Act.
- 26 Section 2(d) (vi) of Act.
- 27 Section 63B of Act.
- 28 Definition proposed in Draft Article 2 of *Basic Proposal for the Substantive Provisions of the Treaty on Intellectual Property in Respect of Databases to be considered by the Diplomatic Conference*, WIPO Document No CRNR/DC/6. This treaty has not yet been finalized.
- 29 Article 10.2 of TRIPS Agreement.
- 30 See Statement of Objects of U.S. Congress bill (H.R. 3531) for proposed 'Database Investment and Intellectual Property Antipiracy Act 1996'.
- 31 In the European Union and in the United States of America attempts were made towards protecting such databases where investment of time, money and efforts were made by the maker of the database, irrespective of the innovativeness of the database itself. See European Union directive on the Legal Protection of Databases (No. 96/9/EC) and U.S. Congress Bill H.R. 3531. There was also a move in the WIPO for a treaty on intellectual property in respect of databases where

- proposal was to have a *sui generis* system of protection of non-original databases in which “substantial investment in collection, assembly, verification, organization or presentation of contents of the database” was made. See WIPO Document CRNR/DC/6. The issue at stake, of course, was not intellectual property but investment. Still, it was an attempt to find a legal solution within the intellectual property right regime to a problem created by technological developments. Though the Diplomatic Conference held in December 1996 deferred consideration of the proposal to a later date for want of consensus, with more technological advancements the problem may return to haunt the intellectual property right community.
- 32 It is illuminating to read the following intervention by Paul Vandorea of European commission in the Second Working Session of WIPO World Forum on the Protection of Intellectual Creations in the Information Society held in Naples on 18-20 October 1995: “Now, to come back to the question of definition of multimedia products and its characterization, I am inclined to say that it is now a new type of work to the extent that a multimedia product can fall under one or several, already existing categories. I would like to refer to these different categories. In the first place, there seems to be the possibility of considering and treating multimedia products as works similar to audiovisual works in the sense of Article 2(1) of the Berne Convention. It seems possible to classify and to treat multimedia productions as collections of literary or artistic works in the sense of Article 2(5) of the Berne Convention and they might also fall under the category of compilations of data or other material in the sense of Article 10(2) of the TRIPS Agreement. I think that the actual classification of a particular multimedia product will depend on the type of work and on the different and specific characteristics of each individual multimedia product. Therefore, we will have to decide on a case-by-case basis. The interpretation, of course, will then often be in the hands of the courts. However, having referred to these different categories, what seems to be important is that we are talking about original works”. WIPO Publications No 751(E), pp 58-59.
- 33 See Section 14(a) and (d) of Act.
 34 Section 2(d) of Act.
 35 Section 13(4) of Act provides: “the copyright in a cinematograph film or a sound recording shall not affect the separate copyright in any work in respect of which or a substantial part of which, the film, or as the case may be, the sound recording is made”.
 36 As per Section 38(4) once a performer has consented to the incorporation of his performance in a cinematograph film, his performer’s right in that performance ceases to exist, whereas in the case of other classes of works there is no such provision.
 37 Stewart, *supra*, p 121.
 38 Agreed statement concerning Article 1(4) of WCT.
 39 *Ibid.*
 40 Section 14(a)(i) of Act.
 41 Section 2(f) of Act.
 42 Section 2(xx) of Act.
 43 Section 14(e) of Act.
 44 Article 6 of WCT.
 45 Section 2(ff) of Act.
 46 Clark, Charles, *The Publisher in the Digital World*, WIPO Document No WIPO/CR/Del/96/5, New Delhi, 1996.
 47 Article 11 of WCT.
 48 Section 2(t) of Act.
 49 Article 12(2) of WCT.
 50 See Article 27 of Universal Declaration of Human Rights for understanding the philosophy behind balancing.
 51 See Article 10 and Agreed Statement concerning Article 10 of WCT.