CHAPTER: TWO

INTELLECTUAL PROPERTY RIGHTS (IPRs):
CONCEPTS, TRENDS AND DEVELOPMENT
INTRODUCTION

Intellectual Property is the creative work of the human mind. The main motivation of its protection is to encourage the creative activities. The law of intellectual property has acquired a degree of international acceptance and recognition. It has importance on all fronts, Economic Social and Cultural on a national canvas. The basic theme of this branch is to promote progress in society by protecting some of the finer manifestation of human achievements. With industrial growth and globalization of excellence in civilization aspects everyday, the horizons of intellectual property law are becoming wider day by day. We are in the company of netizens and this word has become a global village.

1. Traditional Approach:

IPR is not a new phenomenon. The evolution of the concept of IPR at international level dates back to 1883 when Paris convention was adopted for the protection of Industrial Property such as patents, Trademark’s, designs etc. Since then many attempts have been made to address the problem of protection the IPR’s and to put it at rest, but it has been cropping up again and again for the simple reason that the various parameters and approaches to the question have themselves been undergoing changes. Finally, it has been set to rest with the adoption of agreements on trade-related aspects of Intellectual Property Rights (TRIPS) in the WTO regime.

Industrial Property Law under Paris convention 1883 embraces protection of inventions by means of trademark law and law on trade names, and also the law on protection of industrial designs, of plant varieties, etc.

2. Intellectual Property: Its Main Branches:

Intellectual Property consists, in the main, of two branches namely-

i. Industrial property, largely in respect of technological inventions, Trademarks for goods and services, industrial designs, and
ii. Copyright, largely in literacy, musical, artistic, photographic and audio-visual works.

The principal objective in Protecting Intellectual Property is again in the context of the development of developing countries, to encourage creative activity and to provide to the public easily, economically and speedily, the result of such activity.

Encouragement of creative activity requires not only the recognition of the creators per se, but providing for them a means of obtaining a reward for their ideas and inventions. The creator, be it an individual or an enterprise, has also to be accorded the right to prevent others from using his or her, or its ideas without consent and without compensation or remune being paid to the individual creator or the concerned enterprise.

The availability of such an exclusive right also provide legal security as well as the necessary fillip to scientific and technical institutions and enterprises that are washing to do so, to encourage, through material resources and the necessary funding, their employees to use their skills in research and development of worth while new ideas that can be utilized in providing existing products or in making new products.

The existence of such an exclusive right will also be the legal basis for contractual arrangements between the creators or the ones developing the ideas on the one hand and the institution or enterprise wishing to use those ideas in the manufacturing process, on the other.

In the field of copyright, Creative Intellectual Activity is encouraged by according to the authors, as creators of literary and artistic works, the exclusive rights in them. These rights also provide a legal basis for contractual arrangements / agreements between the author and the producer or distributor of the expression of the author’s ideas, whether it be in the form of a book or a play or music performed in a theatre or other public place or as an audio or visual recording or a programme broadcast by radio or television.
The recognition of and encouragement given to, the inventor and creator the protection of his rights and the rights of those who invest in the making of his creations, contribute positively to the socio-economic development of a developing country.

3). Nature of Intellectual Property:

IP of whatever species is in the nature of intangible incorporate property. In each case it consists of a bundle of rights in relation to certain material object created by the owner. In the case of patent the property consist of the exclusive right to use the Invention patented, to grant licences to others to exercise that right or to sell that right to a third person. Patent rights are created by statute and are governed by the patents act 1970(India). The invention may relate to a new product or an improvement of an existing product or a new process of manufacturing an existing or a new product. The acquisition of this monopoly. The conditions to be satisfied for acquisition, its duration, the licensing of this monopoly rights or their assignment to others are strictly governed by the patents act. After the expiry of the term of the patent (which is fourteen years for all products, except in the case of drug and food patents seven years). It becomes public property when anybody can use the patented invention.

In the case of industrial designs the property consist in the exclusive right to apply the design registered under the designs act 1911 now replaced by the designs act 2000, in relation to the class of goods for which is registered for a maximum period of 15 years subject to payment of renewal fees prescribed by the rules. This right can also be licensed for use by third parties or assigned to any person. On expiry of the term of registration anybody can use the design.

In the case of trademark there are two types of rights- one conferred by registration under the trade and Merchandise Marks Act 1958 now replaced by the Trade Marks Act 1999 and the other acquired in relation to a trade mark, trade name or get up by actual use in relation to a some product or service. The rights conferred
by registration are confined to the use of the mark in relation to the actual goods or services for which it is registered. The exclusive rights granted by registration enables the proprietor of the registered mark to prevent others from not only using the mark as registered but also marks which are deceptively, similar to the registered mark i.e. marks which so nearly resemble the registered mark as to be likely to receive or cause confusion among the customers of the goods or services covered by registration. In the case of an unregistered mark, set up and other badges. If good will of business the production is given to the goodwill of the business in relation to which such trade mark, or set up is used. Such protection may also extend, in appropriate cases, to allied goods or business. Unlike patents, designs or copyright the rights conferred by registration of a trade mark can be aviated of for an indefinite period by periodic renewal of registration and the proprietor, being able to ward off rectification of the register on the ground under the act.

In the case of an unregistered trademark the right to protection of the goodwill continues indefinitely provided the owner of the goodwill uses the mark lawfully and prevents other persons infringing those rights by appropriate timely action (passing off) in courts of law against the infringes.

Copyright like patents and industrial design is purely a creation of the statute, the Copyright Act 1957 as amended from time to time. But there is no formality required for the acquisition of the time copyright subsists in any original work specified in the act from the moment of its publication during the life time of the author plus sixty years. The copyright (Amendment Act 1999) has effected certain changes in the law. Know-how and confidential information can be protected only so long as the owner is able to keep them secret and takes action against unlawful use of such information by others by an action for breach of confidence or contract.

Although the relevant statute defines the rights conferred on a particular species of Intellectual property as the exclusive right to use the patent / apply the design, use the trade marks or commercially exploit the work in certain forms (as in copyright). In practice what the statute confers is the right to prevent competitors from
commercially exploiting the respective rights to the detriment of the owner of the property.

4). Protection to IPR’s:

In the words of W.R. Cornish, patents gives temporary protection to technological inventions and registered designs to the novel appearance of mass-produced goods, copyright gives longer lasting rights in, for instance, literacy, artistic and musical creations, trade marks are protected against initiation so long at least as they continue to be employed in trade.

It is true that through one of the basic ideas of Intellectual property law is to protect the interest of the society as a whole in its economic and cultural development, yet at the same time this branch of law is necessitated and aims to promote and protect the interests of an individual to secure a fair value for his Intellectual effort or investment of capital or labour.

This protection of individual right is to encourage ship, initiative and individual attainments as also to support status, prestige and position of the inventor and creator.

Without being oblivious of moral contours of protection to the Intellectual property rights, aspects of economic consideration also weighs for grant of protection to progenitors of Intellectual property a right. Grant of economic rights is in recognition of creators and labour as also of investment of his time, energy and money. It is also an endeavor to set off his entrepreneurial risk in producing and marketing his creation. Non-protection of exclusive ownership of such property rights. Would not only be an encouragement but rather would be granting a license to plagiarists and initiators to reproduce copy and hack sabotage and hijack such Intellectual property with much less enterprise and coasts. Another aspect of protection of such rights in public interest i.e. an interest that serves the people at large.
5). Emerging Trends in IPR's:

However, in the recent past, India has witnessed a remarkable revolution in the field of computer and information technology. With the globalization of trade and commerce as also with the fast marching computer technology, internet, cyberspace and electronic communication system in India, now the most important question which arises it as to whether these new developments are covered by the traditional Intellectual property regime? It is noteworthy here that these emerging technological developments are engulfed within the horizons of modern intellectual property regimes. We are encountering cyber laws accosting the IPR's as well. The chart-I will show that these new developments are the off shoots still remaining within the domain of intellectual property law & therefore, it is submitted that cyber law.

So far as it concerns IPRs, is not a genre different, distinct and set apart from the IPRs proper but is an important hue and shade of intellectual property law itself.

Chart I.
Another important question to be debated and discussed is as to whether the copyright, trademark, design and patent laws are sufficient to meet this new challenge or should Indian legal system of intellectual property be shaped to meet the new challenges. Indians have taken a lead in computer and information technology in global perspective and have made a distinct place for themselves. As already mentioned, these creative efforts of human intellect need protection.

**Pigeon-holding of IPR’S**: Pigeon-holding of IPR’S is explained in the following chart.

**Chart – 2**

**Pigeon – holding of IPR’S**

<table>
<thead>
<tr>
<th>Spread of computerization and advent of information technology</th>
<th>These areas of intellectual property</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attracts</td>
<td></td>
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</table>

- Computer programmes
- Hardware engineering
  Drawings.
- Hardware
- Software
- External feature of Hardware
- Confidential information,
  Know-know and technology

<table>
<thead>
<tr>
<th>Copyright</th>
<th>Patent</th>
<th>Design</th>
<th>Trade Secret</th>
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It is manifestly clear from the above chart-2 that the area of computer programmers and hardware drawings attracts the domain of copyright law where as the hardware and software simpliciter invokes the patent laws, external features of
hardware are taken care of by the design legislation and know-how, technology and confidential information from part of trade secrets.

The copyright act, 1957, was amended in the year 1994. However, there amendments have been enacted in complete oblivion of the advent of internet and its implication. The internet technology incidentally has partially been covered by this amendment in copyright law.

The TRIPs agreement provision for patentable subject-matter states. That patent shall be available for any inventions, whether products or processes in all fields of technology provided they are new, involve an inventive step and are capable of industrial application. At international level, in 1981, in the diamond V. Diehr case, the U.S. Supreme Court ordered the PTO to grant a patent on an invention even through computer software was utilized. In several case laws there after it has been held that a computer-controlled process could be patentable even if the process when controlled by other means was already known as long as the application of the programmer used to the process was not obvious. (Annie George, ‘computer software protection- the legal challenges’. Paper presented at the national seminar on challenges of internet / cyber law held by ILI, New Delhi at Vigyan Bhavan, New Delhi on March 3-4, 2001).

The question of the grant of patent to the computer software has not been appropriately addressed by the Indian courts. As stated above, the other areas of this latest technology are related to design and copyright.

At this stage, we would like to mention that the cyber crimes inter alia also consist of crimes against intellectual property heights.

6). Intellectual Property and Economic Development:

The contribution of Intellectual Property to the economic and cultural development of a country is substantial. The granting of patent monopoly in
consideration of the disclosure of the invention enables competitors in the field to manufacture new products improved products or effect improvement in the process of manufacture but for a patent system much of the technological information would have remained secret and lost to the world. As it is the patent specifications which are available to the public contains practically all the information relating to any field of technology. What is not available in the patent literature consists of confidential information industrial and business secrets and what is called Know-how which others have no free access but which could be obtained by negotiation with the owner of such information for a price.

Industrial design protection encourages people with creative faculty to devote their talent and energy in developing new designs for products. This is particularly so is the case of consumer products including toys, garments, furniture and so on.

Protection of trade marks enables consumers to obtain their products of the right quality which they are accustomed to get identifying the product by the mark. If trade marks can not be protected from infringement the market will be flooder with shoddy and spurious goods by unscrupulous persons by copying well known trade marks.

Today copyright affects every industry conceivable. This printing, publishing and entertainment industries like the film and recording industry are almost completely development on copyright protections. The manufacture of any kind of machinery or machine is based on industrial drawings which enjoy copyright protection.

Copyright law was included and organized under Berne convention 1886. Copyright law can be divided into:

(i) Copyright law in the strict sense of the world, i.e. the protection of Intellectual Creativity and

(ii) The law on neighboring rights. [International Bureau of WIPO, “protection of neighboring rights (rights of performers, producers of phonograms and
broadcasting organization): international conventions in the field of neighboring rights”.

7). New Bills / Acts relating to Intellectual Property:

In Dec. 1999 various bills relating to Intellectual property have been introduce in the parliament of which a few have been passed and the remaining still pending. These are -

II. The Designs act 2000, passed by parliament but not yet brought into force.
III. The Trade Marks act 1999, passed by parliament but not yet brought into force.
IV. The Semiconductor Integrated circuits layout design bill 2000, pending.
V. The Geographical indication of goods (registration and protection) act 1999 passed by the parliament but not yet brought into force.
VI. The Protection of plant verities and farmer’s rights bill 1999, pending.
VII. The Information Technology Act 2000, passed by the parliament but not yet brought fully into force.

I. The Patent Bill (second amendment) Bill 1999:

Salient features:

The above bill which contains substantial changes in the Patents Act 1970, was introduced in parliament but has not yet been passed. The salient features of this bill are as follows:

I. Creation of an appellate board to hear and decide appeals from the decision of the controller.

II. Invention redefined to mean a new product or process involving an inventive step and capable of industrial application. Inventive step means a feature that makes the invention not obvious to a person skilled in the art.

III. The complete specification should be accompanied by an abstract to provide technical information on the invention.
IV. Provision for dealing with international application for patents made in accordance with the patent cooperation Treaty (PCT).

V. An application for a patent will be examined only if a request for examination is made by the applicant or any other interested person within 48 months before the date of application failing which the application will be treated as withdrawn.

VI. Time for putting application in order for acceptance reduced.

VII. Section 25 Anticipation of invention can be based on knowledge, oral or otherwise, available with in any local or of indigenous community.

VIII. Section 45 Every patent will be dated as of the date of filing the application.

IX. Section 48 Rights of patentee.

Product Patent : Exclusive right to prohibit third parties without consent, from making, using offering for sale selling or importing for those purpose that product in India.

Process Patent : Exclusive right to prohibit third parties without consent to use the process and offering for sale or selling in India or importing for those purpose the product obtained directly by that process, provided that the product obtained in not patentable under the Act.

X. Section B The team of every patent will twenty years from the date of filing the application.

XI. In a suit for in fragment of a patent for a process for obtaining a new product the burden of proof, in certain circumstances, to show that the product is not made by the process used will lie on the alleged infringer. In discharging this burden the manufacturing and business secrets of the defendant will be protected.

XII. The following mentions are not patentable :

a) An invention contrary to law or morality or which causes serious prejudice to human, animal or plant life or health or to the environment.
b) Discovery of any living thing or non living using substance occurring in nature.

c) Computer program or algorithms.

d) Plant and animal other than micro organism in whole or any part there of including seeds. Varieties and species and essentially biological process for production or propagation of plants and animals.

e) A literary, dramatic, musical or artistic work or any other artistic creation what so ever including cinematographic works and television production.

f) Presentation of Information.

g) Topography of integrated circuits.

II. Designs Act 2000:

‘Design’ means only the feature of shape configuration, pattern ornament or composition of lines or colours applied to any article whether in two dimensional or in three dimensional or in both forms by any industrial process or means whether manual, mechanical or article appear to and are judged solely by the eye but does not include any mode or principle of constitution or any thing which is in substance a mere mechanical device. It does not include a trade mark or property mark or an artistic work. A design in order to be registerable must be new or original not previously published in India or anywhere in the world.

A design may be the shape of a was basin, a motor car, a locomotive engine or any material object, it may be the shape embodied in a sculptured or a plastic figure, which is to serve as a model for commercial production. A design not distinguishable from known designs or which consists of scandalous or obscene matter is not registerable.

In industrial design is different for a trade mark if after the expiry of the monopoly period, the design not used by other traders it might in course of time
become distinctive of the goods of the original proprietor and acquire significance as a trade mark (get-up). In such circumstances it can be protected from copying by other by a passing off action.

The Designs Act 2000 was passed by Parliament, but not yet brought into force. It has many new features. The following is a brief summary of the new provisions of the Act :-

1) The definition of “design” has been enhanced to include combination of lines or colours, article whether two dimensional or three dimensional or in both forms and any artistic work as defined in Cl. (C) of S.(2) of the copyright Act 1957 – S.2 (d).

2) The design applied for registration must not be previously published in any country and which is not contrary to publish order or morality.

3) The application for registration of a design will be examined by an examiner in respect of the registrability of the design.

4) When the application is refused by the controller, the applicant may appeal against the decision of the High Court.

5) The design after registration will be published by the Controller in the prescribed manner.

6) In respect to cancellation of registration by Controller to more grounds had been added namely

   (i). that the design is not registrable under the Act
   (ii). that it is not a design as defined under the Act.

7) Penalty for piracy of a design is enhanced to a maximum of fifty thousand rupees.

8) The following designs are not registrable :-

   a). A design which is not original.
   b). A design disclose to the public anywhere in the world by publication in tangible form or by use or in any other way prior to the filing date or priority date.
c). A design which is not significantly distinguishable from Known design or combination of known designs.
d). A design comprising or containing scandalous or obscene matter.

III. **The Trade mark Act 1999:**

The statute law of Trade marks in India till now was governed by the Trade and Merchandise Marks Act 1958. This Act has now been replaced by the Trade Marks Act 1999 which has not yet been brought into force. There is a brief summery about the new Act of Trade Mark. :

1) Trade must be a mark which includes a device, brand, heading, level, ticket, name, signature, word, letter, numeral shape of goods, packaging of combinations of colours or any combination there of.

2) The mark must be capable of being represented graphically.

3) It must be capable of distinguishing the goods or services of one person from those of others.

4) It may include shape of goods, their packaging and combination of colours.

5) It must be used or proposed to be used in relation to goods or services.

6) The use must be for the purpose of indicating a connection in the course of Trade between the goods or services and some persons having the right as proprietor to use the mark.

7) The new Acts provides for the creation of an appellate Board to hear and decide all appeals from the decision of the Registrar. It also empowered to entertain original application for rectification of the registrar.

IV. **The Semiconductor Integrated Circuit layout Design Bill 2000:**

The object of this Bill is to give semiconductor integrated circuits layout Designs statuary protection for ten years subject to certain condition. The term integrated circuit is not defined in the Act. But the expression layout designs and
semiconductor integrated circuit are given statutory definitions. These terms are used commonly in computer technology.

**Meaning of Circuit**: A combination channel or path between two devices capable of carrying electrical current. Also used to describe a set of components connected together to perform a special task.

**Integrated Circuit**: A small semiconductor circuit that contains many electric components. An electronic assembly that contains many hundreds, if not thousands, of thousand electric components. "Semiconductor Integrated circuit" means product having transistors and other circuitry elements which are inseparably formed on a semiconductor material or an insulating material or inside the semiconductor material and designed to perform an electric circuitry function.

Prohibition of registration of designs:

A layout design or Semi-conductor Integrated circuit

a) Which is not original

b) Which has been commercially exploited anywhere in India or in a convention country.

c) Which has not inherently distinctive.

d) Which is not capable of being distinguishable from any other registered layout design shall not be registered as a layout design.

**Procedure for Registration**: Any person claiming to be the creator of a layout design may apply to the registrar of semi-conductor integrated circuit layout design for registration in the prescribed form.

The procedure for application, consideration by the registrar, advertisement of application opposition to registration and other incidental requirements in connection with the above closely resemble the corresponding provisions under the Trade marks Act 1999.
V. The Geographical indication of Goods (Registration and protection) Act 1999:

In the Geographical indication of Goods Act is a new concept of geographical names free from the concept of distinctiveness is introduced. In this Act, geographical indication is defined as an indication used to identify the goods, whether natural or manufactured goods emanating from a particular area or territory known for particular quality or characteristics of the goods. Such geographical names is used by any person in relation to goods originating from entirely different place is likely to cause confusion or deception. The geographical Indication of Goods Act is designed to protect the use of such Geographical Indication from infringement by others and protect the consumers from confusion and deception through the process of registration of such indication by law.

Procedure of registration etc: The procedure for registration, renewal, removal and restoration are exactly same as those for a trade mark registration under the Trade marks Act, 1999.

Protection of Marks registered under the Trade Marks Act: Geographical indication is not registrable as trade mark under the Trade Marks Act 1999. However, trade marks consisting of geographical indication already registered before the commencement of this Act or before the date of filing the application for registration under this Act are protected.

Appeals: Appeals from the decision of the Registrar of the geographical indication will lie the Appellate Board Constituted under the Trade Marks Act, 1999.

Offence & Penalties: The provision relating to offences and penalties under this Act are similar to those under the Trade Marks Act 1999.
The other provision of this Act relating to powers of registrar, filing of suit for infringement or passing off and relief’s in such suits are the same as the corresponding provisions under the Trade Marks Act 1999.

**Prohibition of Registration**: The following geographical indications are prohibited from registration as indications –

a) The use of which would be likely to deceive or cause confusion or
b) The use of which would be contrary to any law for the time being in force.
c) Which comprises or contains scandalous or obscene matter.
d) Which comprises or contains any matter likely to hurt the religious susceptibilities of any class or section of the citizen of India.
e) Which would otherwise be disentitled to protection in a court.
f) Which are determined to be generic names or indications of goods in a country and are therefore not or ceased to be protected in that country of origin or which have fallen into disuse in that country.
g) Which although literally true as to the territory, region or locality in which the goods originate, but falsely represented to the persons that the goods originate in another country, region or locality as the case may be.

Examples of geographical indication: Basmati rice, Banaras Silk, Kancheepuram Silk, Champagne Scotch, Whisky and Swiss Chocolates are some well known geographical indications.

**VI. The protection of plant varieties are farmer’s Right Bill 1999**:

In view of the ever increasing population all over the world, the necessity for increasing agricultural production has become very important. This can be made possible only by creating new varieties of plants which will produce qualitatively and quantitatively higher yields of all varieties creations of such varieties has become possible by scientific research which involves expenditure of money labours and Intellectual effort. To encourage, scientific research and create incentive for producing
new plant varieties the persons or organizations which produce such varieties should be rewarded either by granting them patent rights by an effective Sui generic system. This will be in conformity with the TRIPS agreement. This is the genesis of the above noted Bill.

The bill provide for registration of new plant varieties satisfying certain criteria in the name of a person claiming to be the breeder of the variety having a particular denomination. Registration gives an exclusive right to the breeder to produce, sell, market, distribute, import or export the varieties of three year which may be renewed at a time for three years. This right may be extended to a maximum period of eighteen years by periodical renewals from the date of registration in respect of trees and rivers and fifteen years in respect of extant variety and others from the date of registration.

The creation of new plant varieties and their use for agricultural production is a matter of great public interest. In order to implement the provisions of the bill when passed into Act, provision is made for the establishment of an authority a plant varieties registry manned by a registrar general and number of registrars when their respective power and duties specified. This organizational set up will be under the general control of the Central government.

**Person who can apply for Registration**:

a) Any person claiming to be the breeder of the variety or

b) Any successor of the breeder of the variety or

c) Any assignee of the breeder of the variety in respect of the right to make such application may make an application for registration.

**Prohibition of Registration**: A new variety will not be registered if the denomination given to such variety –

I. Is not capable of identifying such variety.

II. Consists solely of figures or
III. Is liable to mislead or liable to cause confusion concerning the characteristics, value or identity of such variety or the identity of breeder of such variety.

IV. Is not different from every denomination which designates a variety of the same botanical species or of a closely related species registered or

V. Is likely to deceive the public or cause confusion in the public regarding the identity of such variety.

VI. Is comprised of any matter likely to hurt the religious sentiments respectively of any class or section of the citizens of India.

VII. Is comprised of scandalous or obscene matter.

VIII. Is prohibited as a name under the Emblems and Names (Prevention of improper use) Act 1950 or

IX. Comprised of solely or partly of geographical name provided that the use in respect of such variety is an honest use.

Infringement, Suit, Relief’s, Offences and Penalties: Any person without authorization of the registered breeder has the exclusive right commits an infringement of the breeder’s rights. A suit for infringement can be instituted in a District Court. The relief’s available are an injunction and either damages or an account of profits.

The unauthorized use of the denomination of the registered variety is also an offence punishable with imprisonment and fine.

The Bill also provides for various matter madental to the implementation of the provisions contained in the Bill and the administration of the organizational setup for implementation.

VII. The Information Technology Act, 2000:

New communication system and digital technology have made dramatic changes in the way we live. A revolution is occurring in the way people transact
business. Business and consumers are increasingly using computers to create, transmit and store information in the electronic form instead of traditional paper documents. Information stored in electronic form has many advantages. It is cheaper, easier to store, retrieve and speedier to communicate. Although people are aware of these advantages they are reluctant to conduct business or conclude any transaction in the electronic form of due to lack of appropriate legal framework. The two principal hurdles which stand in the way of facilitating electronic commerce and electronic governance are the requirements as to writing and signature for legal recognition. At present many legal provision assume the existence of paper based records and oral testimony. Since, electronic Commerce eliminates the need for paper based transactions, hence to facilitate e-commerce the need for legal changes have become an urgent necessity. International trade through the medium of e-commerce is growing up rapidly in the past few years and many countries have switched other from traditional paper based commerce to e-commerce.

The information technology act 2000 has been designed in the model law adopted by the United Nations commissions on international trade law (UNCITRAL).

**Authentication of documents**: The act deal with authentication of electronic records by affixing his digital signature. The authentication of the electronic record will be effected by the use of asymmetric cryptosystem and Hash function which envelop and transform the initial electronic record into another electronic record.

Hash function means an algorithm mapping or translation of one sequence of bits into another generally smallness set known as Hash result such that an electronic record yields the same Hash result every time the algorithm is executed with the same electronic record as its input making computationally infeasible:

a) To derive or reconstruct the original electronic record from the Hash result produced by the algorithm.

b) That two electronic records can produce the same Hash result using the algorithm.
Any person by the one of a public key of the subscriber can verify the electronic record.

The private key and the public key are unique to the subscriber and constituting a functioning key pair. Key pair in an asymmetric cryptosystem means a private key and the mathematically related public key. Which are so related that the public key can verify the digital signature created by the private key.

**Electronic Governance**: The acts provide for legal recognition of electronic records and digital signature. It permits the use of electronic records and digital signature in govt. and its agencies. Documents which have to be retained for any specific period may be retained in the electronic form.

Rules, regulations etc will be published in the official gazette or electronic gazette. There is no compulsion to accept any document in electronic form.

The central govt. has power to make rules in respect of digital signature. The act provides for attribution, acknowledgement and dispatch of electronic records and the time and place of dispatch and dispatch of electronic records.

The acts provides for security of electronic records and of digital signature.

**Implementation of the provisions of the Act**: to implementation the provisions of the act the central govt. will appoint a controller of certifying authorities and sufficient number of deputy controllers and assistant controllers.

The functions of the controller are specified in the act.

There is provision for recognizing foreign certifying authority as a certifying authority under the act. The controller can issued to any person licence to issue digital signature certification by following the procedure laid down in the Act. The Act also
provides renewal of the licence, procedure for grant or rejection of licence and suspension or revocation of licence.

The certification authority should follow the procedure laid down by the Act and ensure the compliance of the Act etc. it should disclose, its digital signature certificate, and any certification practice statement notice of revocation or suspension of its certifying authority certificate, if any, other fact materially and adversely affecting the reliability of a digital signature certificate which the authority has issued or the authority ability to perform its services.

**Digital Signature Certificate**: Digital signature certificate will be issued by the certifying authority by following the procedure prescribed by Central Govt. for the purpose. There is provision for suspension of digital signature certification and also for revocation of digital signature certification in certain circumstances.

**Duties of Subscriber**: A subscriber means a person in whose name the digital signature certificate issued. The Act has imposed certain duties on him. The subscriber, interalia should retain control of the private key corresponding to the public key listed in the digital signature certificate.

**Penalties and adjudication**: If any person without authority accesses any computer or computer system or computer networks downloads copies of extracts, information introduces any computer contaminant or virus damages my computer system or computer data or programme etc. he will be liable to pay rupees not exceeding one crore of rupees to the person affected. Failure to furnish information, records etc by a person who is required by the Act or Rules to furnish the send material is punishable with a penalty not exceeding ten thousand rupees for everyday during which the failure continues.

The Central Govt. will appoint suitable persons to adjudicate matters relating to any contravention of all provision of the Act or the Rules formed there under.
Cyber Regulations Appellate Tribunal: The Central Govt. will establish Appellate tribunals to deal with appeals from any person aggrieved by any order of the controller or adjudicating officer. An appeal from the decision of this tribunal will lie to the High Court.

Offences and Penalties: Tempering with computer source documents hacking with computer systems publishing of Information which is obscene under the in electric form, all offences under the Act and punishable with imprisonment and fine.

Penalties of imprisonment and fine: Penalty of imprisonment and fine is also provided for mispresentation, breach of confidentiality and privacy, publishing of digital signature certificate false in certain particulars, publication etc. of a digital signature certificate for fraudulent purpose.

Network service provided and offences: Network service providers are not liable under the Act and rules and regulations for any third party information or data made available by him if he proves that the offence or contribution was committed without his knowledge or that he had exercised all due diligence to prevent the commission of such offence to prevent contravention.

Power of Police officer, to enter search etc: Certain Police officers have been given the power to enter any public place and search and arrest without any warrant any person, found therein who is reasonably suspected or having committed or of committing any offence under the Act.

Cyber Regulation Advisory Committee: The Central Govt. will constitute a Cyber Regulations Advisory Committee to advice the Central Govt. as regards any rules or any other purpose connected with Act. The controller may after consultation with Act. The controller may after consultation with this committee and with the approval of Central Govt. make regulation constituent with the Act and the rules made there under.
Sophisticated methods of commission of different crimes adopted by the criminals in every branch of criminal law have not left the field of Intellectual property rights (IPR’s) untouched, cracking of websites, hacking of Internet demolishing of security, use of common trade names as domain name without permission from there owners is done regularly and unscrupulously by highly trained professional in order to make unlawful economic gains at the expense of Intellectual property rights of others.

Cyber Crimes and IPR’s:

Seeing in retrospective problem of infringement of Intellectual property rights was not very acute because there were no photocopies, no computers, no Internet. Now the canvass has changed, the million is different. The highly complex information technology advancements and cybernetics with application of sophisticated tools have provided handle to intelligent criminals to commit cyber crimes at times to make quick gains and at time merely for the heck of it. These crimes are much head of the traditional concepts of crime the domain of trade marks and patents.

Infringement of Trade Marks through Domain Name:

Registration of domain names on the Internet is done on the first come first saved basis without any direct governmental control. Mostly registration of domain names is done by private organizations without any territorial limits and without any prior checks of earlier trade marks registered under municipal law of different countries. Registration of trade marks is governed by the Trade Marks Act, 1999. lot of heat has been generated by this controversy in the copyright Act, 1957 and Trade Marks Act, 1999 provides for criminal liability but sanctions are highly deficient and ineffective.
Major drawback in these statutes is that violation of intellectual property rights (IPR's) is normally not treated as criminal Act. Wherever they do, stress is on means area is one of the essential ingredient of such offences. It will not be out of place to mention that the patents Act, 1970 and the Designs Act, 2000 provide merely for civil liability.

There is trail of court cases regarding infringement of trade marks through domain name registration in UK, Italy, Spain, and France and in other countries.

Depending on the nature of the infringements in the absence of any standard terminology, these violations have been called by various names like cyber-squatting, name grabbing, passing off etc. in India, when a website called http://marksandspencer.co.uk.cameup marks and Spencer, a private limited company had to seek judicial remedy against ‘One in a Million’ a British company for an injunction order. It was held that the name and spencer could not have been chosen for any other reason except that it was a well reputed brand name associated with a well known company. In another case, it was held that the internet domain names are of importance and can be valuable corporate asset and that a domain name is more than an internet address. A company carrying on business through the Internet, carried a domain name “REDDIFF” which had been widely published. The defendant company also started using the same domain name transcripting it as “REDDIFF”. It was found that the only object is adopting this domain name was to trade upon the reputation of the plaintiffs domain name. an injunction was ordered against the defendant in use of the said name.

Global Enormity of the problem:

Trade marks of reputed concerns as also names of well known personalities were being registered as domain names. Situation had become alarming even the US Govt. had to issue a white paper as a policy statement on management of Internet
names and address. International support was sought. As a consequence, the Internet society, incorporated in the US (ISOC) took initiative and Internet Assigned Number Authority (IANA) also joined which led to the establishment of International Adhoc Committee (IAHC).

The International Adhoc committee which is an International multi organization body is specifying and implementing policies, process and procedures concerning top level domain names. Membership of the IAHC is highly broad based and even companies administrating Top Level Domains name (TLD’s), developing internet technology and products and providing Internet services are also its members. The main steps taken by the authority, which works under the charter include –

I. Internet trade market domain name spaces to be created.

II. User friendly directories to got published and LKHC report to be implemented.

The Intellectual property right in the global context have been protected and regulated through various International efforts like World Trade Organization (WTO) World Intellectual Property Organization (WIPO) and Agreements on Trade Related aspect of Intellectual Property rights (TRIP’s). In brief, TRIP’s Agreement has involved certain standardized norms regarding Intellectual property rights and also prescribed uniform procedures for satisfying states to implement through their national laws. India being a signatory of such Agreements is obliged under Article 253 of the Indian constitution to implement the same through appropriate national laws. Earlier, the foreign parties (Recommendation and Enforcement) Act, 1961 has been enacted to provide for the enforcement of arbitration awards involving foreign parties. The merit of the TRIP’s Agreement is that it seeks to universalize the Intellectual property rights and to bring about procedures without undermining the national legal systems. Thus such agreements enable the member states to meet the challenges of cyber crimes against intellectual property rights. Needless to add that member states have yet to respond to the initiative through appropriate legislation.
Internet service Providers (ISPs):

An other area of serious conflict is position of Internet Service Providers (ISPs) in making various encroachments on intellectual property rights of others. The question is whether the ISPs are merely carriers acting as postmen in Canman Parlance or they are publishers. If they are in the former category, no liability can be fastened on them, if they are in the former category, they are liable for violation of IPRs if they fall in the latter category, they are liable for violation of IPRs as any other publisher is. The law is also fast developing on the count.

Search for Remedies:

Municipal laws in member states are attuning them selves to the changed scenario. However, the approach has not been wholes one, rather it has been fragmentary and of cosmetiz value. No long term planning or state has been thought of global scene is no better. The approach has been peace meal. Orientation of trade and commerce has been blurring the visions in formulating in comprehensive global plan to combat crimes against intellectual property rights. There is need to identify and fix the definitive domain of such crimes. Half heated approach on this front is likely to prove counter productive, it may even boomerang.

9. Technological Challenges to Intellectual Property Rights (IPRs):

Intellectual property rights are constantly destabilized by technological advance. Patent law, evolving primarily around machines and chemical processes, has had to absorb the emergence of electrical Engineering, microbiological production techniques and now biotechnology. Copyright, initially a rather belated response to the printing press, had then to address the performance of plays and music, photography, sound recording film, broad easting and now the extraordinary prospects of digital recording and transmission.
As the pre history of copyright makes plain, the demand for new forms of protection is dependent upon many factors including the expansion and liberation of an economy to a point where new entrants to a market can no longer be excluded by local cartels in the form of guild’s and corporations. When the London stationers found in the later seventeenth century that they could no longer control, they were obliged to press their author’s case for a copyright in what they published and they produced by improvements in typesets which cheapened the coast of imitation and improvements in transportation, which made it possible to ship copies in to the capital from around the kingdom.

In other words, it is not the initial technology so much as the technology of initiation which stimulates the strongest demands for intellectual property. The early computer industry was content with contract and secrecy as the legal weapons of its development, but the opening of mass markets made possible by micro-computer technology and its astonishing ability to copy programs, rapidly reserved such perceptions. The greater the differential between initial development coasts and those of easy and accurate initiation, the more exigent the case for legal protection becomes.

Intellectual property rights are the result of idealistic and utilitarian perceptions. In some traditions, aesthetic and cultural values are held to justify these rights (or some of them—particularly the rights of authors, performers and inventors) quite apart from any role which they may have as incentives to production and so to economic expansion and enhanced consumer choice. These non-economic values also express the wrongness of allowing one person to takeover and reap rewards from the intellectual or the marketing efforts of another.

Today’s great advances-in computing, telecommunications, biotechnology and so on require very considerable investment indeed in order to be made, but are often taken over by others quickly, efficiently and cheaply. This makes the case for some intellectual property protection very hard to resist. It explains why in the 1950’s the copyright system was roughly manipulated so as to provide a degree of protection for
computer programmes and why semi-conductor layouts acquired their own form of rights. It explains why there is currently a strong drive to protect database compilations, multimedia, new forms of electronic distribution and even DNA structures whether uncovered in a natural state or varied by genetic engineering. Now, as perhaps never before, policy makers are having to react to demands for new or adapted protection before there is real time to contemplate desirable conditions and qualifications. as the sleigh carriers forward, one can only look anxiously for the restraining hands on the veins.

10. Evolution of the IPRs:

The evolution of the concept of Intellectual Property Rights at international level started during the last quarter of the 19th century. (Some land marks in the world IPR scene is given in Annexure – I). They are:


Paris convention was the first international convention on Intellectual property Rights guaranteeing the protection of industrial intellectual property. Signed by the member countries on March, 20, 1883. The convention was later on revised on July 14, 1967 at Stockholm. At present, it has 139 member countries. The convention protects patents, trademarks, service marks, trade names, utility models and industrial design. Besides these, it also protects the indication of source or appellation of origin and provides for the repression of unfair competition. The convention permits non-exclusive compulsory license if a patent is not working. In other words, if a patentee does not industrially use his / her patent, the govt. may grant another person the right to use such patent without such patentee’s permission end / or consent and without compensating such patentee.

ii). Berne Convention, 1886:
Berne convention for protection of literary and artistic works, 1886 was entered into to protect the non-industrial Intellectual property rights such as copyrights relating to literary and artistic works. It was revised on July 24, 1971. Berne convention is signed by 119 countries and it is based on the principals of discrimination and national treatment.

iii). Madrid Agreement, 1891:

Madrid Agreement, 1891 calls for the international registration of trademarks thereby allowing imported goods bearing a false origin indicating to be seized on importation. According to this agreements an applicant who has registered a trademark in his home or business country has to get a international registration with an international office, i.e. WIPO. The trade mark then to be registered in other member states that are designated unless a state raises an objection under its normal law with 12 month.

iv). Universal Copyright Convention, 1952:

This is another treaty on copyright accommodating US statutory requirements and is based upon the principals of non-discrimination and national treatment. The treaty has been signed by 57 countries and is administered by UNESCO.

v). Lisbon Agreement, 1958:

With a 17 countries membership, Lisbon Agreement was entered into in 1958 and provides protection to appellation of origin. The agreement is administered by WIPO.
vi). Rome Convention, 1961:

International convention for protection of performers, producer of phonograms and broadcasting organization, 1961 known as Rome convention was signed by 47 countries. It provides protection for the neighboring rights in relation to performers, producers of phonograms and broadcasting organization. The convention is administered by WIPO, ILO, and UNESCO.

vii). Geneva Convention, 1971:

Genera convention 1971, provides protection to producers of phonograms against the making of duplicates of their phonograms in another country. It has 52 country memberships and is administered by WIPO, ILO, and UNESCO.

viii). IPIC Treaty, 1989:

IPIC treaty, 1989 protects the intellectual property in respect of integrated circuits. There are eight countries as its initial signatories and it is still open for membership.

ix). WIPO, 1967:

World intellectual property organization was established by a convention signed at Stockholm on July 14, 1967 entitled. "Convention establishing the world intellectual property organization". It succeeded united international Bureau for protection of Intellectual Property which was founded in 1893. At present, it is administering nine various conventions. The main objectives of WIPO are:
(i) To promote protection of Intellectual Property throughout the world through co-operation among states and where appropriate, in collaboration with other International Organizations such as ILO & UNESCO.

(ii) To ensure administrative co-operation among the Intellectual Property unions.

WIPO is significantly co-operating with developing countries in their efforts for development of Intellectual Property, WIPO has still not lost its relevance even after TRIP’S Agreement.

x). TRIP’S Agreement:

The agreement on Trade Related aspects of Intellectual Property Rights (TRIPS) agreement, which is binding on all WTO members, came into force on January 1, 1995. The TRIPS agreement makes protection of intellectual property rights on integral part of the multilateral trading system are embodied in the WTO.

TRIPS is the new agreement on IPR’S in WTO region signed at Marrakesh on 1 January, 1995, Unlike the earlier conventions for ten first time trade is linked with Intellectual property rights.

TRIP’S agreement which came into effect on 1st Jan, 1995 is to date the most comprehensive multilateral agreement on Intellectual property.

The area of Intellectual property that it covers are; copy right and related rights (i.e the rights of performers producers of sound recordings and broadcasting organization) trademarks including service marks, geographical indications including appellation of origin, industrial designs, patent including the protection of new varieties of plant, the layout designs of integrated circuits, and undisclosed Information including trade secrete and test data.
TRIP'S Agreement requires each member’s state to apply minimum standard of protection for Intellectual property which, in general, exceed the standards set by Berne and Paris conventions and other principal International agreements on the subject. TRIPS agreement also sets requirements for enforcement of this protection and as part of the WTO package, is equipped with binding dispute settlement procedures. The agreement constitutes a complex legal system provisions of which are as yet almost untested and which for the trade policy officials who operate the other elements of the WTO system, is largely unfamiliar territory.

xi). The General Agreement on Tariff's and Trade (GATT):

GATT originated after World War II (1939-45). The Agreement was originally a part of a draft chapter for an International Trade Organization (ITO). The “Havana chapter” of the ITO contained the GATT, which on governed trade and also wide ranging rules relating to employment, commodity agreements, restrictive business practices, International investment and services. GATT was signed by 23 National at a Trade Conference in 1947 and become effective in January 1948. The 1994 GATT treaty was one of the most ambitious agreements to be signed by such a large number states to 1994 GATT Agreement eventually transferred membership to the WTO.

xii). Biodiversity convention:

The convention which was proposed in 1992 at the Rio Earth Summit, has been ratified by more than 169 countries. Among its key features are:
1) The conservation and sustainable use of different components of bio diversity.
2) Fair and equitable sharing of benefits arising out of the utilization of genetics recourses.
xiii). European Patent Convention (EAPC):

It was formed by the members of the Common Wealth of independent states (CIS) on August 12, 1995 at Moscow. For patenting in all member states of EAPC, an inventor need to file only one patent application with a single payment. The official to file system. The term of patent is 20 years.

xiv). The organization Africaine de la Proprite Intellectuelle (OAPI):

It was formed in 1958 by the twelve former French overseas Territories that gained independence. A single patent granted by OAPI from any of its regional offices became separately effective in all the member states. However, when a member states revokes a patent in its territory, it remains effective in the other member states.

xv). Locarno Agreement:

The locarno Agreement establishing an International classification for Industrial Design concluded in 1968 and then it was amended in 1979. the Agreement establish a classification for Industrial design. It also comprises an alphabetical list of goods with an indication of the classes and subclasses into which these goods fall.

xvi). Neirobi Treaty:

The Nairobi treaty on the protection of the Olympic symbol came into existence in 1981. The treaty is open to any state member of WIPO the Paris union, the United Nations or any of the specialized agencies brought into relationship with the United Nations. All states which are obligation to protect the Olympic – five interlaced ring against use of commercial purpose with out the authorization of the International Olympic Committee. The treaty also provides that, whenever a license fee is paid to the International Olympic committee for its authorization to use the
Olympic symbol for commercial purpose, part of the revenue must go to the interested nation Olympic committee. India is a sign among to the Nairobi treaty.

xvii). Nice Agreement:

The nice agreement concerning the international classification of goods and services for the purposes of the registration of marks calculated on June 15, 1957. The agreement entered into force on April 8, 1961 countries party to the nice agreement are required to include in the official documents and publication concerning the registration of marks which the numbers of the classes of the classification which the goods or services for which the mark is registered belongs.


It is an agreement between three countries namely the USA, Canada and Mexico. Agreement came into force in January 1994 with the objective of harmonizing the Intellectual property rights in the member states by providing a framework for efficient utilisation of resources through trade liberalization.

xix). Strasbourg Agreement:

The agreement established the international patent classification (IPC) which divides technology into eight section with approx. 67,000 sub-divisions. The appropriate symbols are allotted by the national or regional industrial property office that publishes the patent document. Every year over 1,000,000 appropriate symbols are issued.

xx). Vienna Agreement:

The agreement established a classification for marks which consist of or contain figurative elements. The classification consists of 29 categories, 144 divisions

This was created under the Lusaka Agreement on Dec. 7, 1976. It consists of the English speaking African nations. The ARIPO is mainly concerned with pre-patent grant proceedings on behalf of the member states. Once the patent is granted it comes under the Jurisdiction of the national laws of each of the member states.


PCT come into force on Jan. 14, 1978. it becomes operational with 18 contracting states on June 1, 1978. the treaty speaks to simplify the filling and processing of patent application world wide. PCT becomes relevant only. When one is interested in filling patent applications in several countries. As on March 23, 2003 there were 108 contracting states party to the PCT. India joined the PCT with effect from Dec. 7, 1998.

xxvii). The Hague Agreement Concerning the International deposit of Industrial Designs:

It was adopted within the framework of Paris Convention on Nov. 6, 1925. the agreement entered into force on June 1, 1928. its main aim is to enable protection to be obtained for one or more industrial designs in a number of states through a single deposit filed with the international Bureau of WIPO.

xxviii). The Treaty on International Registration of Audio-visual Works (Geneva):

This treaty was held on April 20, 1989 genera and brought into force in 1992. The treaty is primarily concerned with the registration of audio-visual works at the international level.
Annexure I

Some Landmarks in the World IPR Scene

⇒ Paris Convention 1883 (to facilitate protection of industrial property); revised several times – in 1900 at Brussels, in 1911 at Washington, in 1925 at Stockholm, the last amendment in 1979. India became a member of the Paris Convention on Dec. 07, 1998.

⇒ Berne Convention, 1886 (for the protection of literary and artistic work); revised from time to time in 1896, 1908, 1928, 1948, 1967, 1971 and amended in 1979 (for protection of artistic works).

⇒ Hague Agreement, 1925, (concerning the international deposit of industrial designs). This agreement is now being implemented by the WIPO.


⇒ Madrid Agreement, 1991. (for repression of false or deceptive indications of source of goods). The agreement covers both trademark and service marks.


11). IPRs Law in India:

In India, the Intellectual Property Rights (IPRs) of computer software is covered! under the copyright law. Accordingly, the copyright of computer software is protected under the provisions of Indian Copyright Act, 1957. Major changes to Indian copyright law were introduced in June 1994. This has made the Indian copyright law, one of the toughest in the world. The amendments to the
copyright act in June 1994, clearly explains the rights of copyright holder, position on rentals of software, the rights of the user to make backup copies and the heavy punishment and fines on infringement of copyright of software.

According to section 14 of the copyright act, it is illegal to make or distribute copies of copyrighted software without proper or specific authorization. The only exception is provided by section 52 of the act which allows a backup copy purely as a temporary protection against loss, distribution or damage to the original copy.

The 1994 amendment to the copyright act also prohibits the sale or to give on hire, or offer for sale or hire, any copy of the computer program without specific authorization of the copyright holder.

Software creates unique problem because it is so easy to duplicate and the copy is usually as good as the original (although many a times plagued with computer virus). This fact, that the copy is as good as original however, does not legitimate piracy the copyright law makes no distinction between duplicating software for sales or for free distribution.

Indian law prohibits unauthorized duplication of software, making multiple copies for use by different user within an organization, and giving an unauthorized copy to another individual. If caught with pirated software, the copyright infringer may be tried under both civil and criminal law. IPR's in India, administered by MHRD (Annexure) – II).
Annexure II
Administration of IPRs in India

<table>
<thead>
<tr>
<th>Forms of IPRs</th>
<th>Legislation Covering IPRs in India</th>
<th>Administered by</th>
</tr>
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<tbody>
<tr>
<td>ii) Designs</td>
<td>ii) The Design Act, 1911 (A new Design Act, 2000 has been enacted superseding the design Act, 1911; enforcement pending.)</td>
<td></td>
</tr>
<tr>
<td>iii) Trade marks</td>
<td>iii) The Trade and Merchandise Mark Act, 1958 (A new Trademark Act, 1999, has been enacted superseding the earlier Trade and Merchandise Act, 1958; enforcement pending)</td>
<td></td>
</tr>
<tr>
<td>iv) Copyright</td>
<td>iv) The copyright Act 1957 (Last amended in 1999) and the Copyright Rules, 1958.</td>
<td>iv) Ministry of Human Resource Development</td>
</tr>
<tr>
<td>vii) Know-how/Undisclosed information.</td>
<td>vii) No exclusive legislation exists but the matter would be generally covered under the Contract Act, 1872.</td>
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</tbody>
</table>

A civil and criminal action may be instituted for injunction, actual damages (including infringer’s profit), or statutory damages per infringements etc. More ever, with the amendments to Indian Copyright Act in 1994, even the criminal penalties have substantially increased. According to section 63 B, now there is a minimum jail
term of 7 days for copyright infringement. The act further provides for fines up to Rs. 2,00,000 and jail term up to three years or both.

The Indian government has been an active participant in protecting the rights of copyright holder. Both department of electronics and ministry of human resource development have actively helped in bringing amendments to the Indian Copyright Act. These agencies are now helping to enforce the law. Today, officers of these government agencies, NASSCOM officials, police and various other law enforcement officers of government of India are committed to enforce copyright laws and eradicate the menace of software piracy. Raids jointly facilitated by NASSCOM and business software Alliance with active cooperation from law enforcing authorities over last one year at some of the major metro cities have already had salutary effect.

NASSCOM has launched many initiatives to deter discourage piracy over the past few years. Some of these are

- Lobbying with the government for reduction of Import duty on software to 10%.
- Extensive Media campaign against piracy.
- Software Management Seminars for EDP managers at metro cities.
- Strict implementation of Code of conduct for member companies of NASSCOM.
- Awareness and training of police officers and law enforcement authorities.
- Distribution of brochures explaining about “Software Piracy and the law”.
- Anti piracy Billboards, stickers etc.

It is generally agreed that one of the most important factors in legalization a market is providing public access to information. NASSCOM has established a special anti-piracy (Hotline) telephone number (011 6114971) at New Delhi. It provides the following services:-

- It provides the caller all possible information on sources and retail outlets, wherein the caller can purchase legal copy (ies) of particular software.
The hotline provides information on various aspects of Copyright Act in India.
- It provides the caller, information on legal use of software.
- It receives information on suspected incidents of software piracy. This information is assed on to the affected/concerned member company.
- The callers can also book an EDP Audit Kit on the hotline.

In a 20 month period since the launching of anti-piracy Hotline on 12 August 1994, more than 10,000 calls have been received at NASSCOM. An analysis of these calls is very interesting:-
- 32% callers sought information about sources to obtain legal software.
- 41% calls related to suspected cases of software piracy.
- 10% callers sought information on registration process of copyrighting software.
- 2% callers sought information on legal use of software in India.
- 5% were miscellaneous calls.

During 1996, NASSCOM is setting up Anti-Piracy Hotlines at Mumbai (Bombay), Bangalore and Madras.