

RASHIKA KAPADIA

FUNDAMENTALS OF INTELLECTUAL PROPERTY RIGHTS AND PATENTS

Fundamentals of Intellectual Property Rights and Patents

Fundamentals of Intellectual Property Rights and Patents

Rashika Kapadia



Published by The InfoLibrary,
4/21B, First Floor, E-Block,
Model Town-II,
New Delhi-110009, India

© 2022 The InfoLibrary

Fundamentals of Intellectual Property Rights and Patents
Rashika Kapadia
ISBN: 978-93-5496-876-1

This book contains information obtained from authentic and highly regarded sources. All chapters are published with permission under the Creative Commons Attribution Share Alike License or equivalent. A wide variety of references are listed. Permissions and sources are indicated; for detailed attributions, please refer to the permissions page. Reasonable efforts have been made to publish reliable data and information, but the authors, editors and publisher cannot assume any responsibility for the validity of all materials or the consequences of their use.

Trademark Notice: All trademarks used herein are the property of their respective owners. The use of any trademark in this text does not vest in the author or publisher any trademark ownership rights in such trademarks, nor does the use of such trademarks imply any affiliation with or endorsement of this book by such owners.

The publisher's policy is to use permanent paper from mills that operate a sustainable forestry policy. Furthermore, the publisher ensures that the text paper and cover boards used have met acceptable environmental accreditation standards.

Table of Contents

Chapter 1	Introduction to Intellectual Property Law	1
Chapter 2	Introduction to Copyrights	19
Chapter 3	Introduction to Patent Law	45
Chapter 4	Introduction to Trade Mark	71
Chapter 5	Introduction to Trade Secrets	88
Chapter 6	Introduction to Cyber Law	103

Introduction to Intellectual Property Law

Introduction to Intellectual Property Law – Evolutionary past – Intellectual Property Law Basics - Types of Intellectual Property - Innovations and Inventions of Trade related Intellectual Property Rights – Agencies Responsible for Intellectual Property Registration – Infringement - Regulatory – Over use or Misuse of Intellectual Property Rights - Compliance and Liability Issues.

1.1 Introduction to Intellectual Property Law

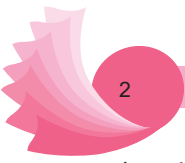
The legal rights build up on the intellectual property created are known as Intellectual Property Rights (IPR).

Types of intellectual property rights

- a. Patents,
- b. Industrial designs,
- c. Trade marks,
- d. Copy rights,
- e. Trade secrets,
- f. Design of integrated circuits
- g. Geographical indications.

Elements of Intellectual Property Rights (IPR's)

The World Trade Organization (WTO) has established seven elements of IPRs, which were agreed by TRIPs. They are:



(Trade Related Intellectual Property Rights System).

I. Patents:

Patents are the legal rights approved for new inventions involving scientific and technical knowledge.

Patent means an official document giving the holder the sole right to make, use or sell an invention and preventing others from copying it.

II. Industrial Designs:

It is the right to safeguard one's industrial designs.

A design is an idea or conception as to the features of shape, configuration pattern ornament of composition of lines or colors applied to any article, two or three dimensional or both by any industrial process or means which in the finished article appeals to and is judged solely by the eye or product.

III. Trademarks:

It means a registered design or name used to identify a company's goods and to indicate the public the origin of manufacture of the goods affixed with that mark.

Examples: Pepsi is a registered trademark in soft drinks and Nestle in food products.

IV. Copy Rights:

It means the legal right, held for a certain number of years, to print, publish, sell, broadcast, perform, film or record an original work or any part of it.

It protects the expression of the idea, not the idea themselves.

Examples: Poems, Paintings and Computer programs.

V. Trade Secrets:

Trade secret means a device or technique used by a company in the manufacturing of its products etc. and kept secret from other companies or the general public.

Trade secrets such as formulas, patterns, methods and data compilations are kept secret in order to gain a competitive advantage over competitors.

Examples: The formula of Fanta soft drink and the formulas for making drugs.

VI. Design of Integrated Circuits:

It is the right granted to the inventor to prevent anybody making use of the design of integrated circuits, semiconductor devices and other electronic devices.

Example: Invention of a new microprocessor chip.

VII.Geographical Indications:

It identify goods as originating in the territory of a country, an origin or a locality in that territory, where a specific quality, reputations or other characteristics of the goods is essentially attributed to their geographical origin.

Examples: Tirunelveli halwa, Dindugal locks, Sivakasi crackers, Kancheepuram sarees.

Examples of Discrimination

- Discrimination is a morally unjustified treatment of people on arbitrary or irrelevant grounds.

i.Unequal treatment among employee based on religion.

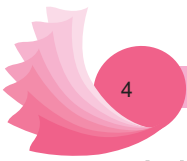
ii.Communal classifications.

Benefits of IPRs:

- The IPRs promote technological, industrial and economical development of a country.
- IPRs provide incentives for the inventions and ensure adequate returns on commercialization of the invention.
- IPRs prevent the competitors from using one's invention.
- IPRs are useful in identifying unprotected areas to avoid violation.
- IPRs grant exclusive rights to the inventors.
- IPRs provide use the invention for the public purpose.
- IPRs are useful in identifying an explored areas for identifying and undertaking research so as to become a leader in that area.


Intellectual Property Law In India

There are many big and small intellectual property law firms worldwide, like in India, USA, UK, Chicago etc, providing qualitative help to inventors and creators of product. In India, the intellectual property rights are safely protected and controlled by a well-established statutory and judicial framework. Moreover, there are many attorneys and law firm of the intellectual property in India in various states. Intellectual Property is a property that arises from the human intellect. It is a product of the human creation. Intellectual Property comprises 2 distinct forms:



- **Industrial Property**
- **Literary & Artistic Works**

Literary & Artistic Works

They are books, paintings, musical compositions, plays, radio/tv programs, performances, movies, & other artistic works. 

Industrial Property

Industrial Property describes physical matter that is product of an idea or concept for commercial purposes.

1.1.1 Evolutionary past

The World Intellectual Property Organization (WIPO) will hold its annual meeting beginning September 24, at which time representatives of its 184 member countries will likely endorse so-called WIPO Development Agenda. WIPO rejected the ideas expressed in the Development Agenda just two years ago, but leading industrialized countries appear rather suddenly to have changed their positions. As a result, this agenda will reflect a fundamental change in how intellectual property rights (IPR) will be viewed globally in the future decades.

History of Intellectual Property Law

Intellectual property law dates back to medieval Europe. Those days associations of artisans in a industry, were granted authority to control the regulation and conduct of the various industries by the governments. These associations in turn exercised control over items that could be imported, marketed and produced and the way in which new inventions, devices and procedures be introduced. As the authorities for these guilds were given by the governments and they also concentrated the power to regulate an industry and moreover these were not earned by innovation, skill or creativity, these guilds did far better to stifle creativity and invention than to encourage it.

Intellectual property law at that time was not driven by an interest in creation and innovation, but by political and religious motivations. For example, the 1556 establishment of the Stationers' Company's monopoly in England largely intended to help limit the Protestant Reformation movement to assume power. By putting the entire printing industry in the control of this company, the church and government were able to prevent the dissemination of ideas.

Most notably, the Statute of Anne was enacted in 1710, granting 14 year protection period initially and after which it can renewed for another 14 years. Among other points, the statute did not protect authors against the import of foreign-language translations of their works, and it also permitted people to make formal complaints in case the printers or booksellers attempt to set their prices high.

The history of intellectual property is not only fascinating but complex as well. It begins in 500 BCE when a Greek state Sybaris, allowed their citizens to obtain a one year patent for new refinement in luxury. Patent, trademark and copyright laws have become more complicated in the ensuing centuries. Countries establish intellectual property laws to foster creativity and to make the inventor reap the benefits of their ingenuity. Reference to copyrights, patents and other matters of intellectual property law are rare in early history. Only in medieval Europe some major and well-known legislation was passed. First of these was the Statute of Monopolies. This law was established in 1623.

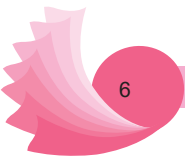
At the time, guilds controlled all major industries. Each guild had considerable power, with the government endowing them the ability to dictate what products and raw materials could be imported as well as how those items would be sold and produced. The guilds were responsible for bringing all new innovations to the marketplace, giving them ownership and control over inventions even though they had nothing to do with their creation.

Intellectual property rights are institutional devices used to protect creations of the mind like inventions, art and literature works and designs. They also include marks on products to differentiate them from similar ones sold by competitors. At present IPRs consist of patents, copyright and related rights, industrial designs, trademarks, trade secrets, plant breeders' rights, geographical indications and rights to layout-designs of integrated circuits. Out of these, patents, copyright and trademarks are the most economically significant. IPRs have been never economically and politically important than they are today. Patents, copyrights, trademarks and geographical indications are frequently mentioned in discussions and debates hence there is no doubt that an understanding of IPRs is indispensable in policy making of all areas of human development.

For the past 40 years, the world's largest economies have enforced their position globally that the intellectual property rights are sacrosanct. The 1994 World Trade Organization (WTO) agreement on Trade on Intellectual Property Rights (TRIPS) added some exclusions for emergencies, but in general WIPO and TRIPS rules have been reflexively protective of the patents and copyrights.

In the past 10 years, however, this approach has come under increasing fire from governments in developing countries (including WIPO members), human rights and humanitarian groups, relief organizations and anti-capitalist groups. These entities argue that the system retards the economic growth of the developing countries and even results in deaths because citizens cannot access medicines and other patented life-saving technologies. Most detractors of the current regime argue that the absolute protection of intellectual property rights is doing far more harm than good — economically and socially and some of them are calling for a radical shift that will essentially do away with recognition of IPR entirely.

As production of goods becomes more and more efficient, especially with modern industrial processes reaching low-wage countries such as China, goods are becoming less expensive. On the other hand, the Intellectual property, is coming to be seen as expensive. Whether in drugs, music, seeds or even designer handbags, price gap between patented products and the raw cost of the materials — that is, the price of the intellectual property — is growing. With that growth, intellectual property rights are more frequently being abrogated. Any government tax authority will



attest that amount of cheating is directly related to the perception that the cost of a product is unfairly high.

Though the change is afoot, the world is nowhere near doing away with intellectual property protection. Still, tide has shifted the WIPO stance, as well as the outlook of a number of other players. Most important, the fairly absolute approach to the intellectual property protection looks shaky. The coming regime will likely give corporations a rationale for protecting IPR in some cases, but not others. In doing so, it will force changes in a number of industries and business models.

1.1.2 Intellectual Property Law Basics

Intellectual property is found almost everywhere – in creative works like books, films, records, music, art and software and in everyday objects such as cars, computers, drugs and varieties of plants, all of which have been developed thanks to advances in science and technology. The distinctive features that help us choose the products we buy, like brand names and designs, can fall within the scope of the intellectual property.

Even the place of origin of a product can have rights attached to it, as is the case with Champagne and Gorgonzola. Much of what we see and use on the Internet, be it a web page or a domain name, also represents some form of intellectual property.

The intellectual property system is designed to benefit society as a whole, striking a delicate balance to ensure that the needs of both the creator and the user are satisfied. Intellectual property rights generally allow the right shoulder to exercise rights over the use of his or her work for a limited period of time.

In return for granting such rights, the intellectual property system contributes to society by:

- Enriching the pool of public knowledge and culture
- Maintaining fair competition and encouraging the production of a wide range of the quality goods and services
- Sustaining innovation and creation
- Underpinning economic growth and employment and
- Promoting technological and cultural advances and expression.

Where suitable or sufficient intellectual property rights are unavailable or are difficult to enforce, innovators and innovative enterprises may need to rely to a greater extent on other means for protecting themselves from unfair competition, such as through trade secrets, contractual agreements or technical means of preventing copying. Such means can be less effective in promoting the goals set out above.

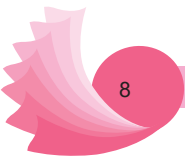
In general, intellectual property is protected by giving the creator of a work or an inventor exclusive rights to commercially exploit his creation or invention for a limited period of time. These rights can also be licensed, sold, or otherwise disposed of by the rightsholder.

Intellectual property rights are granted under the national laws of each country or region. In addition, various international agreements on intellectual property rights harmonize laws and procedures or allow intellectual property rights to be registered at the same time in several countries. Different types of intellectual property - literary and artistic creations, inventions, brand names and designs, to name a few - are protected in different ways:

- Distinctive features - such as words, symbols, smells, sounds, colours and shapes - that distinguish one product or service from another, can be protected by trademark rights
- Technological inventions are typically protected by patents
- Creations in the fields of literature and arts, such as books, paintings, music, films and records as well as software, are usually protected through copyright or so-called related rights
- The specific external appearance given to objects, such as furniture, car body parts, tableware or jewellery, may enjoy design protection
- Rules to prevent unfair competition in the commercial world also help protect trade secrets and other types of intellectual property
- Geographical indications and trade secrets are also considered to be types of intellectual property and most countries provide some form of legal protection for them
- Specific legal protection is provided in some countries for integrated circuits and databases.
- Plant varieties are protected mainly by a specific IP protection regime called plant variety rights and may also be protected by patents or by a combination of the two systems and

IP Enforcement

We are responsible for enforcing our intellectual property (IP) rights. We may though be able to resolve our dispute without taking any legal action. As an IP right owner we should also try to show our IP is protected. We should seek advice from a legal professional (such as a Patent or Trade Mark attorney) before entering into any disputes. Depending on the type of dispute, we may file patent proceedings in the Intellectual Property Office (IPO) or with the Courts. We may also ask the IPO to take action in relation to some trade mark issues and design issues. If we have not registered our IP rights, we may be able to take action under common law of passing off. We can take legal action through the civil courts by for instance applying for an injunction and/or claiming damages if our IP right is infringed, that is it is used without our permission. We can safeguard against legal costs by taking out an insurance policy.



1.1.3 Types of Intellectual Property

Entrepreneurs and business owners need to understand the basics of intellectual property law to best protect their hard-earned creations and ideas from unfair competition. Here are main types of intellectual property that we can use to protect our business.

- **Patents**
- **Trademarks**
- **Copyrights**
- **Trade Secrets**
- **Right of publicity**

1. Copyrights

Copyrights protect original works of authorship, such as literature, music, artistic works and computer software. As the holder of a copyright, we have the exclusive right to reproduce, adapt and distribute the work. A copyright exists from the moment the work is created, so registration is voluntary.

However, registered works may be eligible for statutory damages and attorneys fees in a copyright infringement suit, so it is recommended that we register at the U.S. Copyright Office. We can register our copyright online by completing an application, submitting a non-refundable fee of \$35 and sending in a non-returnable copy of our work.

The average processing time for e-filed and paper applications is 2.5 months and 5.6 months, respectively. The duration of the copyright depends on several factors, but generally for works created after January 1, 1978, the copyright lasts for the life of the author plus an additional 70 years and is non-renewable. We can visit the U.S. Copyright Office for more information.

2. Patents

A patent grants property rights on inventions, allowing the patent holder to exclude others from selling, making, or using the invention. We obtain a patent by filing an application with U.S. Patent and Trademark Office (USPTO).

There are 3 types of patents: utility, design and plant. A utility patent is most common type and it covers any process, machine, article of manufacture or composition of matter or any useful and new improvements thereof.

To qualify for a utility patent, the invention must be novel, non-obvious and has some usefulness.

A design patent covers any new original and ornamental design for an article of manufacture, while a plant patent covers any new variety of asexually-produced plant. A design patent lasts 14 years and a utility or plant patent lasts 20 years.

The patent application process is complicated and could cost thousands of dollars, so the USPTO recommends that we hire a qualified patent attorney or agent to file our patent. To maintain the force of the patent, we must pay fees due at 3.5, 7.5 and 11.5 years after the patent grant. The total amount of maintenance fees for a small entity is \$4,430, while for others the total is \$8,860. The USPTO website has more information about patent applications.

3. Trademarks

A trademark is a word, phrase, symbol or design that distinguishes source of the goods of one business from its competitors. For example, the Nike "swoosh" design identifies shoes that are made by Nike.

Although rights in trademarks are acquired by use, registration with the USPTO makes it easier to enforce those rights. Before we register our trademark, we should conduct a search of federal and state databases to ensure a similar trademark doesn't already exist.

To apply, we must have a clear representation of the mark, as well as an identification of class of goods or services to which the mark will apply. We can submit an online application and filing fees vary according to several factors, including the form type and the number of classes of goods or services. Filing of an application is complicated, so most applicants hire an attorney who specializes in trademarks. For more information, visit the USPTO website.

4. Trade Secrets

A trade secret is a formula, process, device or other business information that the companies keep secret to give them an advantage over their competitors.

Examples of trade secrets are: soda formulas, customer lists, survey results and computer algorithms. Unlike the other types of intellectual property, we can't obtain protection by registering our trade secret. Instead, protection lasts only as long as we take the necessary steps to control disclosure and use of the information.

Businesses use non-disclosure agreements, restricted access to confidential information, post-employment restrictive covenants and other security practices to maintain trade secrets.

To be considered a trade secret, the information must meet the following requirements:

- It must be genuine and not obvious: Any unique method of accomplishing a task would constitute a trade secret, especially if it is backed up by patented, copyrighted, or copyrighted proprietary software or methods that give an organization a competitive advantage.

- Must be reasonably protected from disclosure: This doesn't mean that it must be kept absolutely and exclusively secret, but the owner must exercise due care in its protection.
- Must provide the owner a competitive or economic advantage and, therefore, have value to the owner: the Google's indexing algorithms aren't universally known. Some secrets are protected.

Right of publicity

An example is that we have the right to prevent my name and photo from being used to promote someone else's service, unless they obtain my permission. This right is not recognized everywhere and in some places is pieced together from other laws, such as in right to privacy laws, trademark law and truth-in-advertising regulations.

1.2 Innovations and Inventions of Trade related Intellectual Property Rights

The TRIPS Agreement is Annex 1C of the WTO Agreement, which entered into force on 1 January 1995. The TRIPS Agreement is binding on each Member of the WTO from the date WTO Agreement becomes effective for it. However, the TRIPS Agreement gave original Members transitional periods, which depend on level of their development, to bring themselves into compliance with its rules. The Council for TRIPS administers TRIPS Agreement and is open to all WTO Members. The Council reports to the WTO General Council.

The TRIPS Agreement is to date the most comprehensive multilateral agreement on intellectual property. It contains specific provisions in the following areas of the intellectual property: copyright and related rights, trademarks, industrial designs, geographical indications, patents, including protection of the new varieties of plants the layout-designs of integrated circuits and undisclosed information, including the trade secrets and test data.

General Provisions and Basic Principles

Minimum standards agreement

TRIPS Agreement sets out the minimum standards of protection to be provided by each Member. Article 1.1 makes it clear that Members may, but are not obliged to, implement in their law more extensive protection than required by Agreement, provided that such protection does not contravene its provisions. Article 1.1 further clarifies that the Members are free to determine the appropriate method of implementing the provisions of TRIPS Agreement within their own legal system and practice.

Beneficiaries

As in main pre-existing intellectual property conventions, the basic obligation on each WTO Member is to accord the treatment in regard to the protection of intellectual property provided for under the Agreement to persons of other Members. Article 1.3 defines who these persons are.

These persons are referred to as “nationals” but includes persons, natural or legal, who have a close attachment to other Members without definitely being nationals. The criteria for determining which persons must thus benefit from the treatment provided for under Agreement are those laid down for this purpose in the main pre-existing intellectual property conventions of WIPO, applied of course with respect to all WTO Members whether or not they are party to those conventions.

National and MFN treatment

Rules on most-favoured-nation (MFN) and national treatment of foreign nationals can be found in Articles 3-5 of the TRIPS Agreement. These rules are common to all categories of intellectual property covered by the Agreement.

National treatment and exceptions

According to Article 3 on national treatment each member should accord treatment to the nationals of other member that should not be less favourable than the treatment accorded to their own nationals with regard to the protection of intellectual property. In respect of the national treatment obligation, the exceptions allowed under four pre-existing WIPO treaties (the Paris and Berne Conventions, the International Convention for Protection of Performers, Producers of the Phonograms and Broadcasting Organizations (“Rome Convention”) and Treaty on Intellectual Property in Respect of Integrated Circuits (IPIC)) are also allowed under TRIPS.

MFN and exceptions

Article 4 on MFN treatment requires that, with regard to protection of intellectual property, any advantage, favour, privilege or immunity granted by the Member to the nationals of any other Member shall be accorded immediately and unconditionally to nationals of all other Members. Where exceptions to the national treatment allow material reciprocity, a consequential exception to MFN treatment is permitted under Article 4(b) and (c).

Further limited exceptions to MFN are allowed under Article 4(a) concerning international agreements on the judicial assistance or law enforcement of a general nature and under the Article 4(d) concerning international agreements related to intellectual property that entered into force before 1 January 1995. In addition, Article 5 of TRIPS Agreement provides that national and MFN treatment obligations do not apply to procedures provided in multilateral agreements concluded under the auspices of WIPO relating to the acquisition or maintenance of the intellectual property rights.

Exhaustion

The term “exhaustion” refers to the generally accepted principle in intellectual property law that a right owner’s exclusive right to control the distribution of a protected item lapses after the first act of distribution. In many countries, once a item has been put on the market by or with the consent of the right owner, exclusive distribution right is “exhausted” (the principle is referred to in some jurisdictions as “first-sale doctrine”) and further circulation of that item can no longer be controlled by the right holder.

National exhaustion means that distribution right of the IPR owner is only considered exhausted if he has put the protected item on the market in that country. His distribution right will not be considered exhausted with regard to protected items that he had put on market in another country, so that he can still control the sale or import of such items into the first country. Thus, parallel imports of products first sold on other markets are illegal in a country with a national exhaustion regime.

1.2.1 Agencies Responsible for Intellectual Property Registration

In India, the intellectual property rights pertaining to trademarks and patents are controlled by the Controller General of Patents Designs and Trademarks, the Department of Industrial Policy and Promotion, the Ministry of Commerce and Industry. Copyrights are handled by the Copyright Office, Copyright Societies, Government of India. According to the type of intellectual property right that has to be registered, application must be made to the concerned authorities in the prescribed form.



Trademark Registration

Trademark is the most common type of the intellectual property right with more than 2 lakh trademark registration applications filed in India during the year 2013-14. Trademark registration and trademark protection in India are governed by the Trademark Act, 1999. A trademark is used by an entity on goods or services or other articles of commerce to distinguish it from the other similar goods or services originating from various entity. Names, word signature, logo, slogans, label, device (product shape), numerals or even a combination of colors can be trademarked in India. However, most popular form of trademark registration is that of a trademark registration for a business logo or name. Once the trademark registration application is filed with the Registrar of Trademarks, the TM symbol can be used next to the logo. Once, the trademark is registered, R symbol is placed next to the logo for the indication that the mark is registered.

For a mark to be trademarked, it must be:

- Capable of being graphically represented (that is in the paper form).
- Capable of being proposed or used to be used as a mark in relation to goods or services to indicate a connection between the goods or services and an entity that has the right to use the mark.
- Capable of distinguishing the goods or services of one entity from those of others.

Copyright Registration

Copyright registrations are handled by the Copyright Office acting under the Indian Copyright Act, 1957. Copyright is a legal right given by the law to the creators of literary, dramatic, musical and artistic works and the producers of cinematograph films and sound recordings. Unlike the trademark and patent, copyright protects the expression and not the idea or creation of mind. Further, copyright registration cannot be obtained for titles or names, slogans, short phrases, short word combinations, - as the same can only be trademarked.

One of the most popular type of copyright registration in India is copyright registration of website or software. Websites and software's can be copyrighted as they are both observed to be literary works" under the Indian Copyright Act, 1957. To copyright a website, many separate applications for copyright registration may have to be filed, as a website could contain many different literary works, artistic works (photographs etc.), sound recordings, video clips, cinematograph films, broadcastings and computer software. For a copyright registration of a software, the "Source codes" of the software must be submitted to the copyright office along with the application of copyright for software products.

Patent Registration

Patent registration in India can be obtained for any invention relating to a product or process that is new, involving inventive step and capable of the industrial application. The following items cannot be patented, as they are not considered as inventions under the Patent Act, 1970:

- An invention the primary or intended use or commercial exploitation of which could be contrary to public order or morality or which causes serious prejudice to human, animal or plant life or health or to the environment.
- An invention that is frivolous or which claims anything obviously contrary to well established natural laws.
- The mere discovery of a new form of known substance that does not result in the enhancement of the known efficacy of that substance or the mere discovery of any new property or new use for a known substance or of the mere use of a known process, apparatus or machine unless such known process results in a new product or employs at least one new reactant.
- The mere discovery of a scientific principle or the formulation of an abstract theory or discovery of any living thing or non-living substance occurring in nature.
- Any method of agriculture or horticulture.
- Any substance obtained by a mere admixture resulting only in the aggregation of the properties of the components thereof or a process for producing such substance.

- Any process for the medicinal, surgical, curative, prophylactic diagnostic, therapeutic or other treatment of human beings or any process for a similar treatment of animals to render them free of disease or to increase their economic value or that of their products.
- The mere arrangement or re-arrangement or duplication of known devices each functioning independently of one another in a known way.
- Topography of integrated circuits.
- A mathematical or business method or a computer programme per se or algorithms.
- Plants and animals in whole or any part thereof other than micro organisms but including seeds, varieties and species and essentially biological processes for production or propagation of plants and animals.
- A presentation of information.
- A literary, dramatic, musical or artistic work or any other aesthetic creation whatsoever including cinematographic works and television productions.
- A mere scheme or rule or method of performing mental act or method of playing game.
- An invention which in effect, is traditional knowledge or which is an aggregation or duplication of known properties of traditionally known component or components.

1.2.2 Infringement - Regulatory

“Infringement” is a legal term for an act that means breaking a law. IP rights are infringed when a product, creation or invention protected by IP laws are exploited, copied or otherwise used without having a proper authorisation, permission or allowance from the person who owns those rights or their representative.

It can range from using a technology protected by a patent to selling counterfeit medicines/software or copying a film and making it available online.

All of these acts will constitute a civil infringement but some copyright and trade mark infringements may also be a criminal offence like the sale of counterfeits including clothing.

Trading standards are primarily responsible for enforcing the criminal IP laws, with support from the police and with investigative assistance from the IP rights owners. Private criminal investigations and the prosecutions may also be launched by the right owners in some cases.

Criminal IP offences may be taking place in our workplace in a variety of ways. These include:

- Using unlicensed software on business computer systems with the knowledge of management
- Employees selling copies of protected works or supplying fake goods within the working environment
- Using the work intranet to offer for sale infringing products to colleagues
- Company servers and equipment being used to make available infringing content to the internet with the knowledge of management
- External visitors entering our premises, to sell counterfeit and pirated items

Not only can IP crime make we and our business liable to a potential fine of up to £50,000 and a custodial sentence of up to 10 years, counterfeiting and piracy can affect our business security and reputation, threaten our IT infrastructure and risk the health and safety of our staff and consumers.

Protecting Against Infringement Infringement refers to the unauthorized use of intellectual property. To protect against infringement, owners should take steps to put the world on notice that their rights exist. Providing notice helps deter infringement by making the owner’s rights more visible to people who might inadvertently violate them. It also triggers additional legal benefits and puts the owner in a better position to prosecute an infringement in court, if that becomes necessary. Inventors can give notice of their rights by giving a mark on their product with the patent number assigned to it by the Patent and Trademark Office. The label “patent pending” can also be used to discourage others from copying the design before the patent is awarded. Notice of the trademarks and copyrights is given by placing the appropriate symbol (™, ©, etc.) on the material

and then registering the mark or copyright, so it can be added to the government's database. If infringement does occur, rights to intellectual property can be enforced in the federal court. Before filing a lawsuit, however, owners will want to consult with an attorney and carefully consider whether litigation is in their best interests. Infringement cases are very expensive to prosecute and there is always a risk that the owner's rights, once held up to the scrutiny of a court proceeding, would be revealed as invalid or less extensive than the owner believed. In the event an owner of intellectual property does sue and the lawsuit is successful, a number of remedies will be available. The court can order an injunction, meaning the infringer must stop what it is doing. Substantial money damages may also be available. In addition, once the owner's rights are established in court, infringer may agree to a license agreement. This allows use of the intellectual property to continue, with payments going to owner. Rights to intellectual property can be incredibly lucrative, making individuals huge sums of money. Infringement claims have also bankrupted large, profitable companies without warning. With so much at stake, anyone dealing with the issues in this area of the law should seek the advice of an attorney. Firms specializing in intellectual property law are available to help owners who are looking to establish, profit from or defend their rights.

Types of IP infringement

If we use someone else's intellectual property (IP) without their permission, we may be infringing their IP rights and they may be able to take legal action against us. There are also a number of exceptions in copyright law which allow limited use of copyright works without the permission of the copyright owner.

Patent infringement

If we make, use, sell or import something protected by a patent, without permission, we may be infringing the owner's rights.

Design infringement

If we use, sell or import something that is identical or similar to a design registration, without permission, we may be infringing the owner's rights.

Copyright infringement

If we use works, which are protected by copyright without permission, we may be infringing the owner's rights.

Trade mark infringement

If we use a mark, which is identical or similar to a registered trade mark, without permission, we may be infringing the owner's rights.

1.3 Over use or Misuse of Intellectual Property Rights

Intellectual Property Rights enable the right holder to prevent others from engaging in certain activities related to the subject matter of the rights so as to gain competitive advantage. The scope of each of these rights varies as per the national statutes in different countries. It also follows that the rights be accompanied by a set of responsibilities and duties to be performed by the right holder.

IPR may be considered as a contract between the right holder and the society in which:

- Protection through statutory rights is granted to the innovator for his creations so that the creator is benefited and economically compensated and
- Simultaneously makes it obligatory on the right holder to exploit the creation for public good. This includes making the creation available to public (with due compensation to the right holder) so as to promote human creativity, fair competition and ensuring market accessibility.

Regulatory provisions in the international agreements dealing with IPR are aimed at creating and maintaining competitive open markets with freedom to operate by appropriate protection of intellectual property rights (industrial property rights). Such provisions are introduced with the hope of catalysing the evolution of openly legitimate contestable markets with transparent and justifiable regulations, coupled with appropriate incentives for fair and dynamic competition. The agreements therefore build in features to avoid the concentration and abuse of market power, resulting from such exclusive IPRs that may tend to exclude potential competitors or put others to unfair disadvantage.

It also stipulates measures for the purpose of achieving enhanced social goals. This calls for well-balanced national competition policies that compliment their IPR laws. The subject needs to be examined in the context of "Inter-dependent Economies" and "National Frames of References" and a holistic appreciation of the dynamic linkages between factors such as monopoly, facilitation of barrier-less international trade and public interests. Compulsory licensing is a government instrument to intervene in the market and limit patent and other intellectual property rights in order to correct market failures.

1.3.1 Compliance and Liability Issues.

Intellectual Property ebbits is likely to produce or use may intangible assets, such as computer programmes, literary or artistic works (e.g., images or literary descriptions), databases, valuable raw data, algorithms, industrial recipes etc.,. The Intellectual Property legal framework is thus crucial for ebbits in order to, on the one hand, secure its own investment and on the other, to avoid the infringement of Intellectual Property of others. As regards protection of valuable intangible assets generated by an ebbits system, one needs to consider traditional IP protection, such as patents and copyright.

Additionally, the legal framework for the protection of business confidential information and trade secrets is important. Intellectual Property rights are regulated at the international and national levels. The European Union (EU) has adopted a number of legislative acts relating to the IP.

European law complies with the obligations imposed by international law, but at the same time harmonises IPR further and often provides for a higher standard of protection than international conventions, in particular in the field of copyright. In the area of copyright protection, harmonisation at EU level is provided mostly by Council Directive 2001/29/EC of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society (Information Society Directive), Directive 96/9/EC on the legal protection of databases (Database Directive) and Directive 2009/24/EC on the Legal Protection of Computer Programs (Computer Programmes Directive).

Copyright grants an exclusive right to control reproduction and communication to the public of literary and artistic works, as far as they are original and fixed in some material form. In the context of ebbits, the copyright may provide protection in respect of ebbits software, structure of database(s), other literary works (such as ebbits website or promotional material). No formalities are required for copyright protection. Copyright lasts for the limited period of time (in the EU, 70 years after the death of the author or from the date of first publication). In the area of patent protection, currently there is no binding EU law on patents. Therefore the legal framework is comprised of regulation arising from both national and international laws (the most relevant act being the Council of Europe European Patent Convention of 1973).

The patent will protect any invention that has a technical character, providing that it is new, that it involves an inventive step and is susceptible of industrial application. The patent protection lasts for a limited period of time (20 years under the European Patent Convention). It requires formal filing with competent authorities. Filing implies disclosure of information regarding the invention in question, ebbits D3.8 Legal, IPR and liability issues Document version: 1.0 Page 7 of 77 submission date: 16 December 2013 and may involve significant costs. Certain subject matters are excluded from patent protection.

In Europe (under European Patent Convention) the most significant exclusions from patentability in the context of ebbits relate to scientific theories, mathematical methods, business methods and ordinary computer programmes. The patentability of computer-related inventions is controversial. The patent application requires formal filing. As far as data and knowledge ownership are concerned, patents and copyright do not provide for ownership of data or knowledge. Hence, neither patents nor copyright will protect algorithms, mathematical methods, know-how, industrial recipes or valuable raw data.

Introduction to Copyrights

Introduction to Copyrights – Principles of Copyright – Subject Matters of Copyright – Rights Afforded by Copyright Law – Copyright Ownership – Transfer and Duration – Right to Prepare Derivative Works – Rights of Distribution – Rights of performers – Copyright Formalities and Registration – Limitations – Infringement of Copyright – International Copyright Law Semiconductor Chip Protection Act.

“The exclusive right which is given by law for a certain term of years to an author, composer etc. (or his assignee) to print, publish and sell copies of his original work” .

Copyright is an automatic right that applies to the following types of work:

- Dramatic such as plays, dance, etc.
- Musical such as recordings and score.
- Literary like song lyrics, manuscripts, manuals, computer programs, commercial documents, leaflets, newsletters & articles etc.
- Artistic like photography, painting, sculptures, architecture, technical drawings/diagrams, maps, logos.
- Typographical arrangement of published editions such as magazines, periodicals, etc.
- Sound recording such as recordings of other copyright works, e.g. musical and literary.
- Film like video footage, films, broadcasts and cable programmes.

The Copyright Act provides statutory protection for the creators of musical, dramatic, artistic or literary works such as books, newspapers and periodicals. However, to be protected, the work should be original and must be “fixed in any material form”. In other words, the copyright does not protect ideas but rather the expression of those ideas.

Under the Copyright Act, a distinction is made between the author and the copyright owner (or rights holder). In general, the creator of a work is the author and the first owner of the copyright. In this case, the rights holder is an individual.

The copyright owner may also be a body corporate or legal person, i.e. an employer or the assignee of the copyright (like a publisher). This distinction between the author and the copyright owner is especially important when it comes to protecting moral rights.

The copyright owner has sole right to the following:

- Perform the work or any substantial part thereof in public.
- Produce or reproduce the work or any substantial part thereof in any material form whatever.
- Publish the work or any substantial part thereof (if the work is unpublished).

The following sole rights are also included (non-exhaustive list):

- Convert a dramatic work into a novel or other non-dramatic work.
- Produce, reproduce, perform or publish any translation of the work.
- Convert a novel or other non-dramatic work or an artistic work, into a dramatic work, by way of performance in public or otherwise.
- Communicate any literary, dramatic, musical or artistic work to the public by telecommunication.
- Make any sound or cinematographic recording of a literary, dramatic or musical work.
- Authorize any such acts.
- Reproduce, adapt and publicly present any literary, dramatic, musical or artistic work as a cinematographic work.
- Present at a public exhibition an artistic work created after June 7, 1988.

2.1.1 Principles of Copyright

The copyright law of the United States (Title 17, United States Code) provides legal protection for authors of original works, including literary, dramatic, musical, artistic and other intellectual products. An author's copyright in a work arises at the moment the work is created. The publication is not essential for copyright protection. The copyright symbol (©) is also not required for copyright protection to occur, although use of the symbol does grant certain advantages to an author in event of litigation. An author may transfer copyright ownership to another party.

The copyright law grants the owner of a copyright ability to control the reproduction of an original work. Note, too, that authors of works of fine art have certain other rights including the right to prevent intentional distortion, mutilation or modification of their works. These rights are specific to author of the work and are not transferable.

The right to control the reproduction of an original work, however, is not permanent, nor is it absolute. With certain exceptions, the term of copyright is the life of author plus 70 years, during which time the right to control reproduction is subject to "fair use" limitations, which apply to all media and medium-specific limitations.

Outside of these limitations, making copies without first seeking permission from the copyright owner is considered copyright infringement and is against the law.

- (1) No copyright in an idea. Violation of the copyright confined to form, manner and arrangement, as well as expression of idea by the author.
- (2) Safest Test: Does the reader/viewer/spectator have the opinion or get the unshakeable impression that the second work is a copy of the original? ("the viewer test").
- (3) Where same idea developed in different manner, similarities happen. Court to rule on whether the similarities are merely substantial or fundamental.
- (4) Same theme, different presentation → Completely new work, no infringement.
- (5) Copyright infringement = piracy it must be clearly proven .
- (6) Where there are only incidental similarities, there is no copyright infringement.
- (7) Very difficult to prove violation of copyright of stage play by a film producer: the "viewer test" is applicable.

2.1.2 Subject Matters of Copyright

Copyright protection automatically applies to "original works of authorship" that are "fixed in a tangible medium of expression." The definition is less complicated than it sounds. If we create a blog post, podcast or article, our work is covered by copyright the instant it is created in a tangible form, such as on paper, in a blog post, email or video. We do not need to do anything more, such as signing or filing any papers or provide specific notice to the world that the work is covered by copyright. Assuming it meets the requirements for protection, a work is automatically copyrighted in the U.S. and in over 160 other countries from the moment of its creation.

The subject matter of copyright as specified by the section 102 includes compilations and derivative works, but protection for a work employing preexisting material in which the copyright subsists does not extend to any part of the work in which such material has been used unlawfully.

The copyright in a compilation or derivative work extends only to the material contributed by the author of such work, as distinguished from the preexisting material employed in the work and does not imply any exclusive right in the preexisting material. The copyright in these kinds of work is independent of and does not affect or enlarge the scope, duration, ownership or subsistence of, any copyright protection in preexisting material.

(a) Copyright protection subsists, in accordance with this title, in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be reproduced, perceived, or otherwise communicated, either directly or with the aid of a machine or device. Works of authorship include the following categories:

- (1) Pictorial, graphic and sculptural works.
- (2) Literary works.
- (3) Dramatic works, which includes any accompanying music.
- (4) Musical works, including any accompanying words.
- (5) Motion pictures and the other audiovisual works.
- (6) Sound recordings.
- (7) Pantomimes and choreographic works and
- (8) Architectural works.

(b) In no case does the copyright protection for an original work of authorship extend to any idea, procedure, process, system, concept, method of operation, principle or discovery, regardless of the form in which it is described, explained, illustrated or embodied in such work.

Unpublished Works:

The works specified by the sections 102 and 103, while unpublished, are subject to protection under this title without the regard to the nationality or domicile of the author.

(b) Published Works:

The works specified by sections 102 and 103, when published, are subject to protection under this title if:

1. The work is first published in the United States or in a foreign nation that, on the date of first publication, is a treaty party or
2. On the date of the first publication, one or more of authors is a national or domiciliary of the United States or is a domiciliary, national or sovereign authority of a treaty party or is stateless person, wherever that person may be domiciled or
3. The work is a pictorial, graphic or sculptural work which is incorporated in a building or other structure or an architectural work that is embodied in a building and the building or structure is located in the United States or a treaty party or

4. The work is first published by United Nations or any of its specialized agencies or by the Organization of American States or
5. The work is a sound recording that was first fixed in a treaty party or
6. The work comes within the scope of a Presidential proclamation. Whenever President finds that a particular foreign nation extends, to works by authors who are nationals or domiciliaries of the United States or to works that are first published in the United States, copyright protection on substantially same basis as that on which foreign nation extends protection to works of its own nationals and domiciliaries and the works first published in that nation, the President may by proclamation extend protection under the title to works of which one or more of authors is, on the date of first publication, a national, domiciliary or sovereign authority of that nation or which was first published in that nation. The President may revise, suspend or revoke any proclamation or impose any conditions or the limitations on protection under a proclamation.

For purposes of paragraph (2), a work that is published in the United States or a treaty party within 30 days after the publication in a foreign nation that is not a treaty party shall be considered to be first published in United States or such treaty party, as the case may be.

Effect of Berne Convention.

No right or interest in a work eligible for protection under this title may be claimed by virtue of or in reliance upon, the provisions of Berne Convention or adherence of the United States thereto. Any rights in a work eligible for the protection under this title that derive from this title, other Federal or State statutes or the common law, shall not be expanded or reduced by virtue of or in reliance upon, the provisions of Berne Convention or the adherence of the United States thereto.

Effect of Phonograms Treaties.

Notwithstanding provisions of subsection (b), no works other than the sound recordings shall be eligible for protection under this title solely by virtue of the adherence of the United States to Geneva Phonograms Convention or the WIPO Performances and Phonograms Treaty.

2.1.3 Rights Afforded by Copyright Law

The U.S. Copyright Act grants certain exclusive rights to the owner of a copyright in a work. These exclusive rights are different from rights given to a person who merely owns a copy of work. For example, when a person purchases a book at a bookstore, they have gained a property right in a copy of a copyrighted work. The book owner may then resell the book or can even destroy it, since they own the book. However, the book's owner did not receive any copyright rights when they purchased the book. All copyright rights are held by the book's author until the author specifically transfers them. Consequently, the book owner will not make any copies of the book, as the right to copy a work is one of the exclusive rights granted under the Copyright Act. This distinction allows a copyright owner to sell the copies of a work or even the original work itself, without forfeiting her rights under the Copyright Act.

The Copyright Act grants five rights to a copyright owner, which are described in more detail below:

- The right to prepare derivative works based upon the work
- The right to reproduce the copyrighted work
- The right to perform the copyrighted work publicly
- The right to distribute copies of the work to the public
- The right to display copyrighted work publicly

These rights are not without limit, though, as they are specifically limited by "fair use" and various other specific limitations set forth in the Copyright Act.

Reproduction:

Reproduction right is perhaps the most important right granted by the Copyright Act. Under this right, no one other than the copyright owner may make any reproductions or copies of the work. Examples of unauthorized acts which are prohibited under this right include photocopying a book, copying a computer software program, using a cartoon character on a t-shirt and incorporating a portion of another's song into a new song.

It is not necessary that the entire original work be copied for an infringement of the reproduction right to occur. All that is necessary is that the copying be "substantial and material."

Derivative Works

The right to make a derivative work overlaps somewhat with the reproduction right. According to the Copyright Act, a derivative work is a work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation or any other form in which a work may be recast, transformed or adapted.

A derivative work usually involves a type of transformation, such as the transformation of a novel into a motion picture. In the computer industry, a second version of a software program is generally considered a derivative work based upon the earlier version.

Distribution

The distribution right grants to the copyright holder the exclusive right to make a work available to the public by sale, rental, lease or lending. This right allows the copyright holder to prevent the distribution of unauthorized copies of a work. In addition, the right allows the copyright holder to control the first distribution of a particular authorized copy. However, the distribution right is limited by the "first sale doctrine", which states that after the first sale or distribution of a copy, the copyright holder can no longer control what happens to that copy. Thus, after a book has been purchased at a book store (the first sale of a copy), the copyright holder has no say over how that

copy is further distributed. Thus, the book could be rented or resold without the permission of the copyright holder.

Congress has enacted several limitations to the first sale doctrine, including a prohibition on the rental of software and phonorecords.

Public Performance

The public performance right allows the copyright holder to control the public performance of certain copyrighted works. The scope of the performance right is limited to the following types of works:

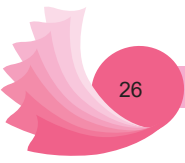
- Literary works,
- Musical works,
- Dramatic works,
- Choreographic works,
- Pantomimes,
- Motion pictures and
- Audio visual works.

Under the public performance right, a copyright holder is allowed to control when the work is performed "publicly." A performance is considered "public" when the work is performed in a "place open to the public or at a place where a substantial number of persons outside of a normal circle of a family and its social acquaintances are gathered." A performance is also considered to be public if it is transmitted to multiple locations, such as through television and radio. Thus, it would be a violation of the public performance right in a motion picture to rent a video and to show it in a public park or theater without obtaining a license from the copyright holder. In contrast, the performance of the video on a home TV where friends and family are gathered would not be considered a "public" performance and would not be prohibited under the Copyright Act.

The public performance right is generally held to cover computer software, since software is considered a literary work under the Copyright Act. In addition, many software programs fall under the definition of an audio visual work. The application of the public performance right to software has not been fully developed, except that it is clear that a publicly available video game is controlled by this right.

Public Display

The public display right is similar to the public performance right, except that this right controls the public "display" of a work. This right is limited to the following types of works:



- Literary works
- Musical works
- Dramatic works
- Choreographic works
- Pantomimes
- Pictorial works
- Graphical works
- Sculptural works and
- Stills (individual images) from motion pictures and other audio visual works.

The definition of when a work is displayed "publicly" is the same as that described above in connection with the right of public performance.

2.2 Copyright Ownership

One of the most important concerns in copyright law is the determination of copyright ownership. The general rule is that the creator of the work is the owner of all copyright interests in the work. However, where two or more parties create a work together, copyright ownership becomes a more difficult issue. In addition, copyright ownership is more difficult to determine when the creator of a work is being paid by a third-party to create the work.

There are several exceptions to the general rule that the creator of a work owns the copyright to the work.

Work for Employer: If an employee creates a work in the course of his or her employment, the employer owns the copyright.

Work "Made for Hire": If an independent contractor creates a work which qualifies as a work "made for hire," then the hiring person or firm owns the copyright if the work is one of the following:

- Part of a larger literary work, such as an article in a magazine or a poem or story in an anthology,
- Part of a motion picture or other audiovisual work, such as a screenplay
- A translation,
- A supplementary work such as an afterword, an introduction, chart, editorial note, bibliography, appendix or index,
- A compilation,
- An instructional text,
- A test or answer material for a test or
- An atlas.

Works Sold to Another: If the creator sells the entire copyright to another person or business, that buyer becomes the copyright owner.

Copyright Ownership in Joint Works

When two or more authors prepare a work with the intent to combine their contributions into inseparable or interdependent parts, the work is considered joint work and the authors are considered joint copyright owners.

The common example of a joint work is when a book or article has two or more authors. The U.S. Copyright Office considers the joint copyright owners to have an equal right to register and enforce the copyright. Unless the joint owners make a written agreement to contrary, each copyright owner has the right to commercially exploit the copyright, provided that the other copyright owners get an equal share of the proceeds.

Rights Belonging to the Copyright Owner

The Copyright Act of 1976 grants number of exclusive rights to copyright owners, including the:

- Performance and display rights -- the rights to perform a protected work (such as a stageplay) or to display a work in public.
- Distribution right -- the right to sell or otherwise distribute copies to the public.
- Right to create adaptations -- the right to prepare new works based on the protected work (called derivative works).
- Reproduction right -- the right to make copies of a protected work.

These bundle of rights allows a copyright owner to be flexible when deciding how to realize commercial gain from the underlying work the owner may sell or license any of the rights.

Transfer of Copyright Owner's Rights

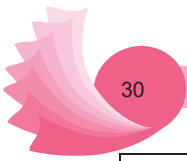
When a copyright owner makes a wish to commercially exploit the work covered by the copyright, the owner typically transfers one or more of these rights to the person or entity who will be responsible for getting the work to market, such as a book or the software publisher.

Ways Copyright Ownership Can Be Transferred:

- **Mortgage or security.** A copyright can be mortgaged or used as security for an obligation.
- **Assignment or license.** An assignment is a transfer of ownership interest in the copyright, a license is a grant of only some of the rights comprising copyright.
- **Involuntary transfer.** Under certain circumstances (for example, bankruptcy, mortgage foreclosure, divorce), a court can order the transfer of copyright.
- **Transfer upon death.** If an owner of copyright dies with a valid will, the copyright will be transferred to a designated beneficiary. If an owner of copyright dies without a will, transfer of ownership will occur according to the rules of intestate succession.

Rights of a copyright owner

Literary, dramatic and musical works	<p>Authors enjoy the exclusive rights to:</p> <ul style="list-style-type: none"> • publish the work • reproduce the work • communicate the work to the public • perform the work in public and • make an adaptation of the work.
Artistic works	<p>Artists enjoy the exclusive right to:</p> <ul style="list-style-type: none"> • communicate the work to the public • publish the work and • reproduce the work.
Published editions of literary, dramatic, musical or artistic works	<p>The publisher has the exclusive right to make a reproduction of the edition.</p>
Sound recordings	<p>The producer of a sound recording enjoys the following exclusive rights to:</p> <ul style="list-style-type: none"> • rent out the sound recording • make a copy of the sound recording • publish sound recording if it is unpublished and • make available to the public a sound recording by means or as part of the digital audio transmission.* <p>* Where the sound recording is made available to the public through a non-interactive digital audio transmission, the producer of the recording shall be entitled to equitable remuneration. This remuneration can be agreed between the parties or determined by the Copyright Tribunal.</p>
Films	<p>The producer of a film enjoys the exclusive rights to:</p>



	<ul style="list-style-type: none">• cause the film to be seen in public• communicate the film to the public and• make a copy of the film.
Television and radio broadcasts	<p>The broadcaster enjoys the exclusive rights to:</p> <ul style="list-style-type: none">• rebroadcast• make a recording of the broadcast• cause the broadcast to be seen or heard by a paying audience and• communicate the broadcast to the public
Cable programmes	<p>The producer of the cable programme enjoys the exclusive rights to:</p> <ul style="list-style-type: none">• cause the cable programme to be seen or heard by a paying audience• make a recording of the cable programme and• communicate the cable programme to the public.
Performances	<p>The performer has the right to authorise the following uses:</p> <ul style="list-style-type: none">• allow the performance to be seen and heard or seen or heard, live in public• sell, rent, offer for sale, distribute or import such recordings for these purposes• make a direct or indirect sound recording of his live performance• make available a recording of the performance to the public in such a way that the recording may be accessed by any person from a place and at a time chosen by him• publish a recording of a performance (if not previously published) and• communication of the live performance to the public (including internet dissemination, broadcasting, and inclusion of the performance in a cable programme).

2.2.1 Transfer and Duration

Transfer of Copyright

Copyrights are a type of personal property right that grants the copyright owner control over the use and transfer of the copyrighted work. Copyrights are important because they allow an author to create original works without the fear of later having it stolen by another author. Although registering our copyright typically makes it much easier to defend our copyrighted works, it is not necessary. The work is considered to be protected by copyright upon its creation. There are instances where an author may want to transfer some or all of his or her copyright to other person or entity.

A copyright owner's exclusive rights (either in whole or in part) can be transferred to another party, but it must be in writing and signed by the copyright owner to be considered valid. An authorized agent of the copyright owner (such as an attorney or business associate) can also sign the writing. If owner is transferring nonexclusive rights, however, a written agreement is not required.

Duration Of Copyrights

The duration of copyright protection is governed by the Sonny Bono Copyright Term Extension Act of 1998. The easiest rule to state is that the Copyrights have expired on all United States works registered or published prior to 1923. As a result, all such works have entered into the public domain. Beyond that, however, it is complicated to determine when a copyright will expire. Like the old provisions, the duration of copyright protection under the new provisions depends upon when the work was created and first published.

The three relevant time frames are:

- Works created and first published before January 1, 1978.
- Works created before January 1, 1978, but not published until after this date.
- Works created on or after January 1, 1978.

Created On Or After January 1, 1978

This is governed by statutory section 17 U.S.C. 302. According to this section, a work that is created on or after January 1, 1978 is normally given a term enduring for the author's life, plus an additional 70 years after the author's death. In the case of "a joint work" prepared by two or more authors which was not a "work made for hire," the term lasts for 70 years after the last surviving author's death. For works made for hire and for anonymous and pseudonymous works, duration of copyright will be 95 years from publication or 120 years from the creation, whichever is shorter.

Created Before 1978, But Not Published

This is governed by statutory section 17 U.S.C. 303. Works that were created but not published or registered for copyright before January 1, 1978, has been automatically brought under the statute and are now given the Federal copyright protection. The duration of copyright in these works will generally be computed in the same way as for works created on or after January 1, 1978: the life-plus-70 or 95/120-year terms will apply to them as well. Law provides that in no case will the term of the copyright for works in this category expire before December 31, 2002 and for works published on or before December 31, 2002, the term of copyright will not expire before December 31, 2047.

Created And Published or Registered Before 1978:

This is governed by statutory section 17 U.S.C. 304. Under the law in effect before the year 1978, copyright was secured either on the date a work was published or on the date of registration if work was registered in unpublished form. In either case, the copyright endured for a first term of 28 years from the date it was affixed. During the last (28th) year of the first term, the copyright was eligible for a second renewal term of an additional 28 years. If no application was filed for renewal, the work would enter the public domain after initial 28 year term.

Current copyright law has extended the renewal term from 28 to 67 years for copyrights that existed as of January 1, 1978, making these works eligible for a total term of protection of 95 years. There is no longer a need to make the renewal filing in order to extend the original 28-year copyright term to the full 95 years. Though, some benefits accrue to making a renewal registration during the 28th year of the original term.

In other words, if a work was published between 1923 to 1963, the copyright owner was required to have applied for a renewal term with Copyright office. If they did not, the copyright expired and the work entered into the public domain. If they did apply for renewal, these works will have a 95 year copyright term and hence will enter into public domain no sooner than 2018. If the work was published between 1964 to 1977, there is no need to file for a renewal and these works will automatically have a 95 year term.

2.2.2 Right to Prepare Derivative Works

A derivative work is a work derived from or based on one or more already existing works. Common derivative works include translations, musical arrangements, motion picture versions of literary material or plays, abridgments, art reproductions, and condensations of preexisting works. Another common type of derivative work is a “new edition” of a preexisting work in which the editorial revisions, annotations, elaborations or the other modifications represent, as a whole, an original work. A derivative work to be copyrightable must incorporate some or all of the preexisting “work” and add new original copyrightable authorship to that work. The derivative work right is often referred to as the adaptation right.

The following are examples of the many different types of derivative works:

- A motion picture based on a play or novel

- A revision of a previously published book
- A drawing based on a photograph
- A translation of an novel written in English into another language
- A sculpture based on a drawing
- A drama about John Doe based on letters and journal entries of John Doe
- A lithograph based on a painting
- A new version of an existing computer program
- An adaptation of a dramatic work
- A musical arrangement of a preexisting musical work
- A revision of a website.

Copyright Protection in Derivative Works

The copyright in a derivative work covers only the additions, changes or other new material appearing for the first time in the work. Protection does not extend to any preexisting material, that is, previously published or previously registered works or works in public domain or owned by a third party.

As a result, it is not possible to extend the length of protection for a copyrighted work by creating the derivative work. A work that has fallen into public domain, that is, a work that is no longer protected by the copyright, is also an underlying “work” from that derivative authorship may be added, but the copyright in the derivative work will not extend to the public domain material and the use of the public domain material in a derivative work will not prevent anyone else from using the same public domain work for another derivative work.

2.2.3 Rights of Distribution

The distribution right grants to copyright holder the exclusive right to make a work available to the public by sale, rental, lease or lending. This right allows the copyright holder to prevent the distribution of unauthorized copies of a work. In addition, the right allows copyright holder to control the first distribution of a particular authorized copy. However, the distribution right is limited by the “first sale doctrine”, which states that after the first sale or the distribution of a copy, the copyright holder can no longer control what happens to that copy. Thus, after a book has been purchased at a book store, the copyright holder has no say over how that copy is further distributed. Thus, the book can be rented or resold without the permission of the copyright holder.

Congress has enacted several limitations to the first sale doctrine, including a prohibition on the rental of software and phonorecords.

Many laws include a right specifically to authorize distribution of copies of works. Obviously, the right of reproduction would be of little economic value if owner of copyright could not authorize the distribution of copies made with his consent. The right of distribution generally terminates upon first sale or transfer of ownership of a particular copy. This means, for example, that when the copyright owner of a book sells or otherwise transfers ownership of a copy of the book, owner of that copy may give the book away or even resell it without the copyright owner's further permission.

2.3 Rights of performers

The need for the protection of Performers' Right arose with the passage of time. The fundamental reason was the technological development that enabled recording & broadcasting of the performers' right. But earlier these rights were not present and according to Adam Smith, there could be mainly two reasons for not recognizing performers' rights.

1) Social and historical:

During the formative period of copyright, the actors or strolling players were regarded as 'vagrants' by law. The players, buffoons, musicians, opera-singers, opera dancers and the like were classical examples of 'unproductive labour'.

2) Historical and technological:

The work of all performers used to perish in the instant of its production.

The Copyright Act divides the performers into three categories:

1) Performers giving live performances.

The performer when he performs in front of the audience or engages in any performance he has right over that performance.

2) Performers in a cinematograph film with credits in the film.

The performer when gives his rights to the person with any written agreement to make it a part of any commercial use, the performer shall be entitled to have royalties or some monetary benefit.

3) Performers in a cinematograph film without credits in the film.

There are many performers in supporting cast which are commonly termed as "extras" in any film, play, etc. The Copyright Act till now doesn't give any protection to people except moral rights which might be prejudicial to their reputation.

Performers Right in India under Copyright

The Section 2(q) "performance" includes any mode of the visual or acoustic presentation, including any such presentation by exhibition of a cinematograph film or by means of radio-diffusion or by the use of a record or by any other means and in relation to the lecture, includes delivery of such lecture

Section 2 (qq) "performer" includes an actor, singer, musician, dancer, acrobat, juggler, conjurer, snake charmer, a person delivering a lecture or any other person who makes a performance

The performers' Right is result of amendment of the Copyright Act in 1994, there was no protection of the rights of performances as explained in section 2(qq). The amendment introduced the recognition to rights of the Performer under section 38. These sections gave birth to the 'Performers Rights'.

2.3.1 Copyright Formalities and Registration

Copyright protection in United States is automatic upon the fixation of an original work of authorship. However, even though it is not required, it is highly advisable that a work protected by copyright contain a copyright notice and be registered with the U.S. Copyright Office. The use of copyright notice and the registration of a work are referred to as formalities and were formerly requirements for copyright protection.

Importance Of Copyright Notice

Copyright notice is no longer required for a work to be protected under copyright law. For any work published after March 1, 1989, the copyright notice is strictly optional, though highly recommended. However, if a work was first published before March 1, 1989, copyright notice was necessary for the work to be protected under copyright. Works that were published without a copyright notice prior to this date may have lost all right to copyright protection.

Even though the copyright notice is no longer required, it must still be placed on all published works. Use of the notice is recommended for the following reasons:

- It informs the public that the work is protected by copyright
- It prevents a party from claiming the status of "innocent infringer," which may allow a party to escape certain damages under the Copyright Act and
- It identifies the copyright owner and the year of first publication.

There is no need to register the work with the Copyright Office or to seek any other kind of permission before using the copyright notice.

Form And Placement Of The Copyright Notice:

The copyright notice generally consists of three elements:

1. The symbol © (the letter C in a circle) or the word "Copyright" or the abbreviation "Copr."
2. The year of first publication of the work and
3. The name of the owner of copyright in the work.

Example: © 1996 Jane Doe

If the work is unpublished, the appropriate format for the notice includes the phrase "Unpublished Work" and year of creation.

Example: Unpublished Work © 1995 John Doe

The "C in a circle" notice is used only on "visually perceptible copies." Certain kinds of works--for example, musical, dramatic and literary works--may be fixed not in "copies" but by means of sound in an audio recording. As audio recordings such as audio tapes and phonograph disks are "phonorecords" and not "copies," under the Copyright Act, the "C in a circle" notice is not used to indicate protection of the underlying musical, dramatic or literary work that is recorded. As an alternate, a symbol composed of the letter "P" in a circle is used. Since computer software and apps for mobile devices are considered to be visually perceptible (with the aid of a machine), the copyright notice for software and apps must use the C in a circle format.

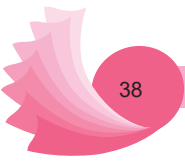
The notice should be affixed to copies or phonorecords of the work in such a manner and location as to give reasonable notice of the claim of copyright. For computer software, the copyright notice is usually placed on the medium of distribution. If physical media is used to distribute the software, the notice should be placed on the disk that contains the software. If the software is downloaded, such as a mobile device app that is downloaded from an app store, a copyright notice should appear on the page or screen that is displayed when the product is downloaded. In addition, it is wise to make the copyright notice visible on the screen when the program is executed. One way of doing this is to include notice on a splash screen that is temporarily shown when the program is initially executed.

Copyright Registration

Copyright registration is the process by which a formal claim of copyright is filed on a work with U.S. Copyright Office. Registration is not a condition of copyright protection, although it is a prerequisite for filing a copyright lawsuit on U.S. origin works. However, it is possible to file a lawsuit on a previously unregistered work by merely filing an application for registration immediately prior to initiating the lawsuit.

Even though registration is not a requirement for copyright protection, the Copyright Act does provides several inducements or advantages to encourage the copyright owners to file for copyright registration. Among these advantages are the following:

- If registration is made within 3 months after the publication of the work, it is possible to collect statutory damages and the attorney's fees in infringement actions
- If made before or within 5 years of publication, registration will establish prima facie evidence in court of the validity of the copyright and of the facts stated in the certificate
- Registration establishes a public record of the copyright claim and allows for the recordation of the transfers of ownership of the copyright and
- Registration allows the copyright to be used to prevent the importation of infringing copies.



Procedure For Copyright Registration

An application for copyright registration may be made at any time during the life of the copyright . An application to register a work is made by submitting the following three items to the U.S. Copyright Office:

1. A properly completed application form
2. A nonrefundable filing fee and
3. A nonreturnable deposit of the work being registered.

There are a variety of copyright registration forms which can be used the correct form depends upon the type of work being registered:

- Form TX: for published and the unpublished nondramatic literary works
- Form G/DN: for a complete month's issues of a daily newspaper
- Form SE: for serials such as periodicals or newspapers
- Form VA: for the visual arts and
- Form PA: for the performing arts
- Form SR: for sound recordings.

The deposit is generally one or two copies of the best edition of the work. For computer programs, deposit requirement is one source code print out of the first and last 25 pages of the program. For a program of fewer than 50 pages, the deposit is a copy of the entire program. In addition, provisions are included for blocking out the important portions of the source code in order to protect trade secrets.

2.3.2 Limitations

Though copyright law provides a creator with several critical and powerful rights over their work, those rights are not unlimited. The law has always recognized need to balance the rights of the copyright holder with the good of the public and provisions in the law have aimed to do exactly that.

Here are some of the critical ways in which our copyright is limited:

Expiration

One of the obvious and important limitations to copyright is that it is not perpetual and expires after a set amount of time. The length of a copyright on work created during or after 1978 is the life

of the author plus seventy years. For works of the corporate authorship, the term is 95 years from date of publication or 120 years from date of creation, whichever is shorter.

When a copyright expires, the work falls into the public domain. In the public domain, the work is considered to be a part of the cultural heritage and is not subject to any copyright limitations. This means that anyone can exploit a work for both commercial and non-commercial gain.

Copyright holders do have the ability to place works into public domain themselves, the Creative Commons organization offers a license to do just that, but once that step is taken, it cannot be undone.

Orphan Works

Though the orphan works legislation is currently just a bill significant limitations it places upon copyright and the likelihood of it passing make it a worthwhile topic.

Many times, when someone wishes to use a copyrighted work, the person or entity that holds that right either can not be located or discovered. Even though work is assumed to be protected by copyright, there is no way for someone wishing to reuse it to obtain the permission to do so, thus leaving the work in a form of limbo.

The orphan work legislation addresses that by allowing the use of copyrighted work where the owner cannot be determined so long as

- A) The user has performed a “reasonable search” and
- B) The work is attributed as well as possible or listed as an orphan work.

Orphan works can be used for both commercial and non-commercial use as well as to create the derivative works. Should the copyright holder of a work surface after the work has been used, he or she can stop the usage almost immediately but it is only entitled to a reasonable license fee in the event that the use was commercial.

While not designed to place any of the new limitations of an owner’s copyright it does mean that we can lose several key elements of copyright protection if we can not be determined to be the copyright holder of the work or can not be located.

Thus, it is important to take these elements into the consideration when looking at limitations of copyright law.

Fair Use

Fair use is probably the best-known limitation to an owner’s copyright and also the least clear.

There is no set rule that defines what is and not fair use. Rather, fair use is defined by a framework that is applied on a case-by-case basis. Whether or not a use is “fair” may only be effectively determined by a court.

Despite that, when one takes a look at elements that make up a fair use case, either for or against, it's usually easy to tell where such a use would fall.

1. The nature and character of the use. Fair use strongly favors education, commentary, criticism and news-related uses of a work and disfavor purely commercial uses.
2. The nature of the copyrighted work. Copyrighted works that are fictional and unpublished, generally, get a higher level of protection than works that are factual in nature and widely available.
3. The amount and substantiality of the portion used. With fair use, less is more. Generally, the law favors uses that involve some portion of a work that is very small in relation to the whole. Exceptions are often made for works that can not easily be broken down, for example photographs and Haiku.
4. The effect of the use upon the potential market for or value of copyrighted work. Finally, fair use looks at the impact the use had on the market or value for the work and favors instances where the use had either a positive impact or a minimal negative one.

In general, when trying to build fair use case, it's a good idea to take only what we absolutely need, make sure that our use is for some kind of public good and that the use damages the copyright holder as little as possible.

It is also worth noting that, usually speaking, attribution is viewed as a requirement in building a fair use case. Though it is generally viewed as just one element in a fair use argument, it is weighed so heavily that almost any non-attributed use becomes a copyright violation.

Parody

Parody is a subset of the fair use limitation that protects works that protects the use of a copyrighted work in order to poke fun at it. Generally, fair use favors parody, using a work to make fun of the work itself, over satire, by using the work to make fun of something else. However, both parody and satire cases have been found to be fair use.

It's important to note though that all claims of fair use under parody law are still subject to the ordinary fair use test. It's generally a good idea to follow all ordinary fair use precautions when using a work for parody.

Can't Be Copyrighted

Finally, there are many things which simply can not be copyrighted. Though a full list would be far too long to publish, it includes things such as titles, facts, ideas, phrases and other items which are too small or short to have any unique value.

It's important to remember that copyright does not protect an idea, just expression of an idea. It can only protect that which is fixed into a tangible form. Copyright law can prevent someone from

creating a story based upon Star Wars characters but can not prevent anyone from creating a science fiction story on an evil empire with a chosen hero to vanquish it.

Copyright also does not protect works that are too small or short to be unique. Titles, phrases and sentences generally can not be copyrighted by themselves but, instead, only as part of larger work. Even then, we can not infringe upon a copyright by copying such a short portion as it could easily have been a unique creation.

2.3.3 Infringement of Copyright

Copyright infringement occurs when someone other than copyright holder copies the “expression” of a work. This means that the idea or information behind the work is not protected, but how the idea is expressed is protected. For example, there have been many movies about Pirates, but one Jack Sparrow only.

Copyright infringement can occur even if someone does not copy a work exactly. This example of copyright infringement is most easily apparent in music and art. Copyright infringement occurs if the infringing work is “substantially similar” to copyrighted work.

The rights owned by the owner of a copyright include:

The Right to Reproduce the Work. This is the right to reproduce, copy, duplicate or transcribe the work in any fixed form. Copyright infringement may occur if someone other than the copyright owner made a copy of the work and resold it.

The Right to Derivative Works. This is the right to modify the work to create a new work. A new work that is based upon an existing work is "derivative work." Copyright infringement would occur here if someone wrote a screenplay based on his favorite John Grisham book and sold or distributed the screenplay or if someone releases or remixes of one of our songs without our consent.

The Right to Distribution. This is simply the right to distribute work to the public by sale, rental, lease or lending. The music industry lawsuits targeting file-sharing web services claim that the services violate the right to distribution held by record labels.

The Public Display Right. This is the right to display a copy of the work to the public directly by hanging up a copy of the work in a public place, putting it on film, displaying it on a website, or transmitting it to the public in any other way. Copyright infringement occurs here if the someone other than the copyright holder offers a work for public display.

The Public Performance Right. The right to recite, play, dance, act or show the work at a public place or to transmit it to the public. Copyright infringement would occur here if someone decided to give performances of the musical "Oliver!" without obtaining the permission from the owner.

In order to bring a lawsuit for copyright infringement, the author or creator must first register his or her copyright with the U.S. Copyright Office. This requires filing an application and paying the fee. A

registered copyright is designated with a circle r symbol. Generally, it allows the author or creator the exclusive right to control the use of the material for his or her entire lifetime. A registered copyright will not expire for another 70 years after the author's death. The author can designate the owner of the copyright through his or her will, just like the any other property right.

Like an unregistered copyright, these rights include:

- The right to reproduce, copy or distribute the original work
- The right to create new works based on the original work
- The right to perform the work and
- The right to publicly display the work.

The registered, copyrighted material becomes an official government record. Once a copyright is registered, the author is protected under the Federal Copyright Act. This is main set of laws that govern copyright infringement. Copyright infringement is a federal tort. A registered copyright holder can bring a lawsuit for copyright infringement and ask for an injunction, attorney's fees and money damages should any of the author's copyright privileges be violated. This is considered to be an added level of protection over that afforded for an unregistered copyright, as these are additional remedies provided to an author holding the registered copyright. For these reasons, registration is recommended.

Copyright Infringement Penalties

Copyright infringement is the act of violating any of a copyright owner's exclusive rights granted by the federal Copyright Act. There are three elements which must be in place in order for the infringement to occur.

1. The person who is allegedly infringing must have access to the copyrighted work.
2. The copyright holder must have a valid copyright.
3. The duplication of the copyrighted work must be outside the exceptions.

The legal penalties for copyright infringement are:

1. Infringer pays for all attorneys fees and court costs.
2. The Court can issue an injunction to stop the infringing acts.
3. The law provides a range from \$200 to \$150,000 for each work infringed.
4. The Court can impound the illegal works.
5. The infringer can go to jail.

6. Infringer pays the actual dollar amount of damages and profits.

2.3.4 International Copyright Law Semiconductor Chip Protection Act.

International Copyright Law

- Based on treaties
- Attempts to ensure the uniformity among member states

Creators and users of copyrighted works should be aware of the differences in the intellectual property law between nations.

Many works are now distributed internationally or use components from authors in other nations.

No international copyright law exists that will protect a work in every country of the world. Though, several key international treaties that the US has signed protects works from and within member nations.

Determine international protection To determine the protection that a work has within a country that has not signed a treaty, of which the US is a member, we will need to consider the copyright laws of that nation.

Semiconductor Chip Protection Act

(1) A “semiconductor chip product” is the final or intermediate form of any product —

(A) Having two or more layers of metallic, insulating or semiconductor material, deposited or otherwise placed on or etched away or otherwise removed from, a piece of the semiconductor material in accordance with a predetermined pattern and

(B) Intended to perform the electronic circuitry functions

A “mask work” is a series of related images, however fixed or encoded —

(A) Having or representing predetermined, three-dimensional pattern of metallic, insulating or semiconductor material present or removed from the layers of a semiconductor chip product and

(B) In which series the relation of the images to one another is that the each image has the pattern of the surface of one form of semiconductor chip product

(3) A mask work is “fixed” in a semiconductor chip product when its embodiment in the product is sufficiently permanent or stable to permit mask work to be perceived or reproduced from the product for a period of more than the transitory duration

(4) To “distribute” means to sell or to lease, bail or otherwise transfer or to offer to sell, lease, bail or otherwise transfer

(5) To “commercially exploit” a mask work is to distribute to the public for the commercial purposes a semiconductor chip product embodying mask work except that such term includes an offer to sell or transfer a semiconductor chip product only when the offer is in writing and occurs after the mask work is fixed in semiconductor chip product

(6) The “owner” of a mask work is the person who created mask work, the legal representative of that person if that person is deceased or under a legal incapacity or a party to whom all the rights under this chapter of such person or the representative are transferred in accordance with section 903(b) except that, in the case of a work made within the scope of a person's employment, the owner is employer for whom the person created the mask work or a party to whom all the rights under this chapter of the employer are transferred in accordance with the section 903(b)

(7) An “infringing semiconductor chip product” is a semiconductor chip product which is made, imported or distributed in violation of the exclusive rights of the owner of a mask work.

(8) An “innocent purchaser” is the person who purchases a semiconductor chip product in good faith and without having the notice of protection with respect to the semiconductor chip product

(9) Having “notice of protection” means having actual knowledge that or reasonable grounds to believe that, a mask work is protected under this chapter and

Limitation on exclusive rights: innocent infringement

(a) Notwithstanding any other provision of this chapter, an innocent purchaser of an infringing semiconductor chip product –

(1) Shall be liable only for a reasonable royalty on each unit of infringing semiconductor chip product that the innocent purchaser imports or distributes after having notice of protection with respect to the mask work embodied in the semiconductor chip product.

(2) Shall incur no liability under this chapter with respect to importation or distribution of units of the infringing semiconductor chip product that occurs before the innocent purchaser has the notice of protection with respect to mask work embodied in the semiconductor chip product and

(b) The immunity of an innocent purchaser from liability referred to in subsection (a)(1) and the limitation of remedies with respect to an innocent purchaser referred to in subsection (a)(2) shall extend to any person who directly or indirectly purchases an infringing semiconductor chip product from an innocent purchaser.

(c) The amount of the royalty referred to in subsection (a)(2) shall be determined by the court in a civil action for infringement unless the parties resolve the issue by voluntary negotiation, mediation or binding arbitration.

(d) The provisions of subsections (a), (b) and (c) apply only with respect to those units of an infringing semiconductor chip product that an innocent purchaser purchased before having notice of protection with respect to the mask work embodied in the semiconductor chip product.

Introduction to Patent Law

Introduction to Patent Law – Rights and Limitations – Rights under Patent Law – Patent Requirements – Ownership and Transfer – Patent Application Process and Granting of Patent – Patent Infringement and Litigation – International Patent Law – Double Patenting – Patent Searching – Patent Cooperation Treaty – New developments in Patent Law- Invention Developers and Promoters.

3.1 Introduction to Patent Law

A patent is a grant from the government to an inventor or their assignee for a limited period of time by giving the inventor the right to stop others for particular period from exclusive privilege of making, using or selling the invention without their permission in exchange for a public disclosure of an invention.

In case a patent is granted, the invention becomes the property of the inventor, that is like any other form of property or business asset can be bought, sold, hired or rented.

The patents are territorial rights. For instance, a UK patent shall only give the holder rights in the UK and rights to stop others from importing the patented products into the UK.

The term patent generally refers to a right granted to anyone who invents or discovers composition of matter, any new and useful process, article of manufacture, machine, or any other new and useful improvement.

Patent law:

A patent law is a specific area of law which encompasses the legal regulation, enforcement and jurisprudence of specific intellectual property rights termed as patent rights .

This law is a government issued right that is granted to individuals or groups which protects their original inventions from being made, used, or sold by others without their permission for a particular period of time.

History of patent law:

In 500 BC, in the Greek city of Sybaris was held out to all who must discover any new refinement in luxury, the profits arising from that were secured to the inventor by patent for the particular time of a year. The patents in the modern sense was originated in 1474, during the Republic of Venice enacted a decree where new and inventive devices after put into practice need to be communicated to the Republic in order to obtain the right to prevent others from using them.

In USA, several states adopted this patent systems of their own. In 1790, the Patent Act was adopted by the first Congress and then the first patent was issued under this Act on July 31, 1790.

First Patent Law of India

Based on the British Patent Law of 1852, the Act VI of 1856 on Protection of Inventions in India was enacted on 28 February 1856.

Objectives of law:

It acts as an encouragement of inventions of new and useful manufacture.

For securing the knowledge of the invention from being lost

It was made available for any person with the invention on expiry of the exclusive privilege 14 year period.

THE INVENTIONS & DESIGNS ACT 1888

The Act V of 1888 was replaced by an Act XV of 1859 and its amendments.

Due to the Patent applications that is 33 applications under the 1856 Act and 3417 under the 1859 Act of which 234 were from Indians and there was design application.

This made cheap and graduated fee for corresponding with increasing value as the invention becomes popular. It also ensure for Compulsory licences and the Provisions for protection of “New or Original Designs.”

THE INDIAN PATENTS & DESIGNS ACT , 1911

This Act incorporated the provisions of 1907 Act of United Kingdom. It substituted the expression ‘exclusive privileges’ with ‘patent’. Then it made the duration of Indian patent independent of duration of UK patent and also it established a Patent Office under a Controller of Patents and Designs.

Patents Enquiry Committee 1948-1950

Invention’ to include processes No product patent for chemicals, food, medicine except when made by the invented process ‘ Novelty’ to be based on prior knowledge or prior user in India ‘ Inventive step’ to be an essential prerequisite ‘ Usefulness’ to be judged on technical advancement also

Towards Patents Law 1970 Based on the Ayyangar Committee recommendations, a Patents Bill introduced on 21 September 1965 Referred to a Joint Parliamentary Committee (JPC) on 25 November 1965 Amended Bill introduced in November 1966 Lok Sabha passed, but lapsed in Rajya Sabha Revised Bill introduced in 1967 Passed in 1970.

1970 Act

This act ensure these are not for the product patent for chemicals, food and medicine as well as agriculture and horticulture products. Then compulsory licences must be taken where the patents can only be worked in India.

Patent Applications in India 1970-2001 Domestic and Foreign Patent Applications in India, 1970-1999

Necessity for patent:

- In order to enjoy the exclusive rights over the invention.
- It ensures the commercial returns to the inventor for the time and money spend in the generating a new product.

In order to be patentable , an invention must pass four tests:

1. The invention must fall into one of the five “statutory classes’: Processes, Machines Manufactures Compositions of matter, and New uses of any of the above.
2. The invention must be “useful”.
3. The invention must be “novel”
4. The invention must be “nonobvious”.

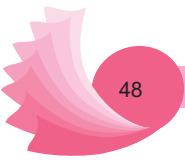
Type of Patent application

- Provisional applications
- Standard application
- Divisional applications
- Continuation applications

Types:

Utility Patent

- Works to produce a useful result.



- Most common type granted.

(a) Process (ex. making a new chemical or a new business method)

(b) Machine (ex. camera)

(c) Article of Manufacture (ex. carpet)

(d) Composition of matter (ex. adhesive).

Plant Patent

- Can also be protected by a utility patent if it meets those requirements.
- Not by tuber propagation, found in an uncultivated state or by seeds.
- Distinct & new variety of asexually propagated plant.
- Ex. hybrid rose plant with a novel color.

Design Patent

- Can also be protected by a utility patent if it meets those requirements.
- Design and the applied object are inseparable .
- Ornamental appearance of an article of manufacture.
- Ex. surface ornamentation of flatware.

3.1.1 Rights and Limitations

A patent is an arrangement of restrictive rights which is conceded by the administration that presents on the certification for having an extraordinary benefit of making, offering and utilizing the innovation for which a patent has been allowed in a constrained timeframe.

The creation must be novel, non-clear and valuable to be patentable. The sorts of developments that can be protected incorporate new items, new procedures of assembling, enhancements to a current item or procedure, new chemical compounds or compositions, new techniques or procedures identifying with the testing or control of a current assembling process and so forth. A patent is a type of Intellectual Property (IP) which energizes the monetary and innovative advancement by compensating intellectual creativity.

Types of Exceptions & Limitations:

The article 30 of TRIPS considers restricted special cases to the elite rights gave by a patent. The special cases must not unreasonably bias the honest to goodness interests of the patent proprietor.

Private and Non-commercial Use Exception

Over business action, in the event that a patentee is neither utilizing nor distributing the development for benefit, the Government has the ability to give a permit known as Compulsory License (CL), to an outsider to utilize the protected creation in order to confine the privileges of the patentee with the end goal of keeping the misuse/abuse of the rights by the property holder and to keep the negative impact of such activity on the general population. The idea of CL becomes possibly the most important factor when the protected innovation is not popularized in India or the creation is not accessible to general society at sensible costs or the development is not fabricated in essential sum. The procurements of private and non-business use exemption have been given under Section 84 (Compulsory licenses), Section 85 (Revocation of licenses by the Controller for non-working) and Section 92 (Special procurement for mandatory licenses on warnings by Central Government) of Patents Act, 1970 (in this after "the Act"). Presently, the procurement of CL is seen as the main ideal arrangement of enhancing access to unreasonable protected medications in India while making an air that outfits R&D.

Experimental / Scientific Use Exception

The trial use exclusion is consolidated under Section 47 of the Act. Under sub area 3 of the said segment, the stipend of a patent is liable to the condition that any item or procedure, in admiration of which the patent is in all actuality, might be made or utilized by any individual for the reason simply of investigation or exploration including the giving of guidelines to understudies.

This is a standout amongst the most broadly known special cases to patent rights and it grew up out of the worry that patent rights ought not hamper the "bona fide" examinations and exploratory procedures. This type of exploratory use special case allows outsiders to do test or experimental exercises identifying with the topic of the patent without encroaching the patent holder's rights.

Regulatory-use/ Prior-use Exemption

The patent rights, from one perspective, give monetary motivations to develop, however then again, the selective rights they present result into restraining infrastructure and excessively expensive pharmacEuropeantical items. Subsequently, the Indian Patents (Amendment) Act, 2005 fused the administrative use or earlier utilize exception under segment 107A to offer an exchange off between motivations to the trailblazers and constrained get to and expenses to shoppers.

This exclusion is likewise alluded as Bolar Provision and is a statutorily made exception to patent rights that permits the makers of nonexclusive medications to embrace steps sensibly identified with the improvement and accommodation of data required for acquiring showcasing endorsement anyplace on the planet in appreciation of a protected item without the assent of the patentee. A few nations allow the non specific medication makers to utilize the innovation of a licensed medication to create information and to show bioequivalence that would help with the administrative or advertising endorsement of the non specific item, while the patent is still in power.

This procurement permits the non specific makers to market and fabricate their merchandise when the patent term terminates. Bolar Provision has been maintained as adjusting to the TRIPS understanding and is utilized as a part of a few nations to propel science and innovation. Be that as it may, exclusion under Section 107A of the Act does not take into account the utilization of protected medication to acquire the permit to make and convey the non specific medication before the expiry of the term of patent.

Foreign Vessels, Aircraft or Land Vehicles Exception

According to Article 5 of the Paris Convention, rights gave by a patent should not reach out to the utilization of the protected innovation on leading body of vessels when such vessels incidentally or inadvertently enter the waters, gave that the development is utilized only for the necessities of the vessel.

As this special case is not discretionary for nations gathering to the Paris Convention, Indian Patents Act, with a specific end goal to consent, consolidated the said exemption under Section 49. As per the said area, the patent rights are not encroached when the protected development is utilized solely for the necessities of remote vessels, flying machine or land vehicles and different adornments thereof, when such outside vessels, air ship or land vehicles briefly or unintentionally comes into India.

The expression "Incidentally" incorporates the unplanned and unexpected section as well as the deliberate and normal going into a port, gave that the vessels, air ship or land vehicles does not remain for all time in the regional waters or the region of the nation. This special case is valuable in encouraging continuous worldwide travel and decreasing strains between nations over the treatment of vessels flying their banner.

Exhaustion of Patent Rights

The Doctrine of Exhaustion or First Sale Doctrine refers to the exhaustion of the exceptional rights of the patent holder as soon as the patented invention is sold without any restriction. As per this Doctrine, the first unrestricted sale of a patented object exhausts the patentee's in addition manage over that unique item.

The cause in the back of the patent holder exhausting their rights once they have sold the patented product is that, with the aid of first sale of the patent invention the Patent holder has already used the specific rights to prevent others from making, using, promoting, offering for sale within the territory of patent grant or uploading an invention into the territory of patent supply and therefore has already reaped the benefits conferred with the aid of a patent.

3.1.2 Rights under Patent Law

Patents issued through the U.S. Patent and Trademark office confer upon the patent holder the right to exclude others from making, using or promoting the discovery in the course of america, as well as the proper to prevent others from uploading the discovery into the us (see 35 U.S.C. 271). This addresses:

- The scope of this right
- The infringement of this proper

Scope Of Right To Exclude

Note that a patent does not give the patent proprietor any privilege to make their own particular development. Or maybe, the patent gives the patent proprietor the privilege to bar others from making, utilizing, offering or importing the creation. The patent holder's entitlement to make their own particular innovation is reliant upon the privileges of others and whatever general laws may be relevant. Another gathering may claim a patent that will keep the patentee from using her/his own innovation. What's more, government laws, for example, antitrust laws or FDA directions, may confine the routes in which a patent holder can use her/his development.

Since the substance of the privilege allowed by a patent is the privilege to reject others from business abuse of the innovation, the patent holder is the special case who may make, utilize or offer the creation. Others may do as such just with the approval of the patent holder. Such approval is generally given through a patent permit assention.

The rights conceded under patent law are altogether different than rights allowed under copyright law. For instance, under patent law it is superfluous whether the infringer autonomously built up the same innovation - the only thing that is important is that the infringer is encroaching no less than one case in the patent. Interestingly, copyright law keeps the replicating of the statement of thoughts. Free formation of the same expression is not an infringement of copyright law, in light of the fact that no replicating occurred. Moreover, copyright law does not ensure thoughts themselves, just expression. Accordingly, copyright law does not keep somebody from perusing around an incredible thought in a copyrighted work and after that utilizing that thought themselves.

Infringement

Infringement of a patent is the unauthorized making, using, selling or importing of the patented invention within the territory of United States,, at some point of the time period of the patent. The scope of this right is governed by the claims discovered in the issued patent. In maximum cases, a patent will difficulty with more than one claims. most effective one declare needs to be infringed in order for the entire patent to be infringed.

If a patent is infringed, the patent holder may sue for relief in the right Federal court docket. The patent holder may additionally ask the court for an injunction to prevent the continuing infringement and might also ask the courtroom for an award of damages. In such an infringement fit, the defendant might also query the validity of the patent, that's then determined with the aid of the court docket. The defendant can also claim that its movements do not represent infringement. As explained above, infringement is decided with the aid of comparing the language of the patent claims in opposition to the allegedly infringing device: if what the defendant is making does not fall in the language of any of the claims of the patent, there is no infringement.

Fits for infringement of patents follow the policies of technique of the Federal courts. From the decision of the district courtroom, there is an enchantment to the courtroom of Appeals for the Federal Circuit. The excellent court can also thereafter take a case by means of writ of certiorari. If the us government infringes a patent, the patent holder has a remedy for damages within the U.S. Claims court docket. The authorities might also use any patented invention without permission of the patent holder, however the patent holder is entitled to gain repayment for the use by using or for the authorities.

3.1.3 Patent Requirements

1. In order for our invention to qualify for patent eligibility, it should cover concern count that Congress has described as patentable. The USPTO defines patentable challenge rely as any "new and useful" technique, machine, manufacture or composition of be counted. Machines or tactics are patentable subject count number, but the laws of nature are not. So, we can patent a device for sorting packages, however we can not get a patent for daylight.
2. The invention have to have a "application," or in other words, be beneficial. be aware that this requirement is handiest for utility patents.
3. The invention must be "novel," or new.
4. The discovery have to be "non-obvious," which means its use or characteristic can't be something this is truely the next logical step of an already patented invention. much of the argument among the USPTO and patent candidates revolves round the problem of non-obviousness.
5. The discovery must no longer were "disclosed" to the general public prior to the software for the patent. for example, if we have written a piece of writing describing the discovery earlier than we observe for the patent, the USPTO may also deny the utility due to the fact we have already disclosed the patent and therefore it's public knowledge.

Novelty

The primary requirement for any invention is that it's far novel within the absolute experience. This is changed into now not to be had to the public in any manner before the filing date of the patent and became now not described in any guide earlier than that date either. a few countries, most considerably the us, have a so-known as "grace length". Publications by the inventor at some stage

in the grace period, that can range to up to 365 days earlier than the filing of the patent application, are not appeared when determining the novelty of the discovery.

The newness requirement is reasonably strict where the entire invention must be described in one single report for that document to be considered novelty-destroying. To take the canonical instance, if the invention describes that some thing is connected to a wall with a nail and the publication describes the very same gadget except with the use of a screw in preference to a nail, then the invention is novel with respect to that publication.

In some instances, the willpower of novelty can get extremely picky. as an instance, if a ebook describes a chemical procedure regarding using between five and 15% of a particular substance and the invention lies inside the use of precisely 10% of that substance, then the discovery is novel due to the fact the value of 10% turned into now not mentioned inside the publication. Then again, if the discovery lies within the use of exactly 15% of that substance, then the invention is not novel.

Of path, a skilled man or woman will typically keep in mind that a nail can without difficulty be replaced by way of a screw or that he ought to pick, as an example, a fee of 10% inside the approach. However, in patent regulation, is it taken into consideration to be a depend of obviousness and now not of novelty. In some instances, this difference may be very essential.

Obviousness

Even though an invention is determined to be novel in the strict sense, it is able to nonetheless be unpatentable due to the fact it's far considered to be obvious to someone professional in the art. It ought to be careworn that the time period apparent is a prison time period of artwork and is utilized in a sense pretty different from the everyday meaning of the word. in addition, the criminal interpretation of the term obviousness varies from country to country.

Usually, it can be stated that something is obvious if it is able to be validated that the literature at the time of the invention incorporates a suggestion or a touch to apply that measure in a state of affairs in which it was carried out inside the invention. It isn't approved to use hindsight when assessing obviousness. The invention could lie inside the perception that several measures are to be blended and in hindsight the combination could then seem apparent. But it became best obvious after the inventor made the aggregate.

So, for instance, some thing is plain when it is noted in a preferred text book or while a file explicitly refers to every other report, which different document absolutely describes the additional measure. It's far, however, in fashionable now not apparent simply whilst became in truth described in a publication. It ought to be proven that the professional individual could be led to that book and might apply it in a situation as it occurred in the patent.

The European Patent office has a barely more strict interpretation of this requirement and uses the time period "creative step" to strain this. An invention includes an imaginative step if it presents a way to a technical trouble which may be discovered in the kingdom of the artwork and this answer is not apparent for a person professional within the art. If no technical problem may be observed, there's no inventive step. The requirement for an ingenious step is likewise gift within the Patent

Cooperation Treaty (PCT) however a footnote remarks that the term "innovative step" can be study as "not being apparent".

Industrial application

The third requirement for patent protection in particular targets to distinguish among aesthetical and clinical inventions. The time period "industry" should be interpreted very widely, it is usually agriculture. It does exclude methods for remedy of the human or animal body by way of surgical procedure or therapy and diagnostic strategies practice at the human or animal body. Perpetual motion machines additionally fail to fulfill this requirement.

In US, the 0.33 requirement is called "utility" but, interpretation and scope of this time period is usually similar to that of the industrial software. Worldwide patent treaties frequently use "utility" and "commercial software" as synonyms.

Requirement	What it means	
1. The innovation is patentable subject matter	Patentable	Not patentable
	New products such as toys, appliances, tools, medical devices, pharmaceutical drugs	Artistic creations
	New process, such as a manufacturing process or an industrial method or process	Mathematical algorithms or models
	Software	Abstract intellectual or mental concepts or processes
	Business methods	Plans or schemes
	Some types of biological materials	Principles or theories

2. The innovation is new (called 'novelty')	<p>We cannot patent something that is already publicly known, as it would be unfair to confer the economic benefits of a patent in relation to something that is already publicly known. The test of 'novelty' is assessed as at the date we file our application for the patent.</p> <p>For this reason, if we intend to disclose our product, process or invention to someone, it is critical that we have a confidentiality agreement signed beforehand.</p>
3. The innovation is inventive	<p>This requirement of an inventive step relates to the 'obviousness' of the new product, process or invention. If it is 'obvious' to a skilled person, it is not patentable.</p>
4. The innovation is useful (called 'utility')	<p>This requirement does not relate to whether the new product, process or invention is 'useful' in terms of whether or not someone would buy it. Instead, it relates to whether the invention is capable of being made in accordance with the claims and information in the patent.</p> <p>From April 2013, there has been a requirement to disclose a specific, substantial and credible use for the invention in the patent specification.</p>
5. The innovation must not have prior use	<p>If we have been selling the product, using the process in our business or if we have licensed it, this prior use disqualifies it from being patentable.</p>

3.2 Ownership and Transfer

Patent Ownership Basics

Ownership of a patent is important because the proprietor of the patent enjoys all the rights, name and hobby granted by the patent. Normally patent rights are held via the inventors till those rights are assigned in a written Patent undertaking settlement, despite the fact that the employee created

the invention inside the scope of employment. It's miles critical to establish possession of a patent earlier than filing a patent application to avoid future troubles.

The proprietor of a patent can do the following with their patent rights:

- License the patent rights to at least one or more third-events to gather royalties
- promote the patent rights
- Sue a patent infringer or
- Manufacture, provide for sale, promote or use a product protected by way of the patent without infringing the patent.
- If an inventor isn't always the proprietor of the patent, the inventor will have none of these rights.

Transfer:

Two mechanisms to transfer rights to a patent:

- License (a transfer of much less than all rights to the patent)
- Mission (a switch of title to the patent).

Patent License

- Conveys limited rights to the licensee .
 - It's miles a waiver by using the patent proprietor of its proper to exclude the licensee from making, promoting, providing for sale or uploading the patented invention .
 - Can be restrained in time and space, i.e. can restriction geographical vicinity and/or length.
 - Also can be limited via subject of use, category .
 - Parties are free to specify phrases of license,
- (a) Contractual negotiation to reflect business priorities
- (b) However there are pitfalls to don't forget
- (c) Special case of cross-Licensing.

Patent mission

- An project is the switch of the whole right to make, use and promote the invention .

- Gives assignee proper to sue infringers with out grantor's (authentic patent proprietor) participation (In standard, a licensee can not sue an infringer with out joining the licensor).
- Not mandatory to report an undertaking in USPTO .
- USPTO does no longer evaluate validity of assignments, grants and comparable units, simplest looks at accompanying shape.
- However, should file to be effective against third events now not having real know-how of task.
- If no longer recorded within 3 months, void in opposition to a next client for a valuable consideration with out word, unless recorded prior to the acquisition.

3.2.1 Patent Application Process and Granting of Patent

Type of Patent Applications

1. Normal software, i.e., an utility which has been filed at once within the Indian Patent office.
2. Conference software.
3. PCT application.
4. Divisional utility, which can end result from division of a Patent utility.
5. Patent of Addition, which may be filed subsequent to the filing of an software for Patent, for an development or modification.

Filing of a patent application

A patent application shall be filed on shape-1 along side Provisional / complete Specification, with the prescribed fee as given in First agenda at an appropriate workplace. but, a provisional specification can not be filed in case of a convention software.

Ordinary charge will be applicable for packages containing upto thirty pages in specification and upto 10 claims. If the specification exceeds thirty pages or claims are greater than ten in variety, additional fee as given in First schedule is payable.

Contents of Patent Application

A patent application have to incorporate:

utility for supply of patent in shape-1.

Applicant has to acquire a evidence of right to report the software from the inventor. The proof of right is either an endorsement at the cease of the application shape-1 or a separate venture.

Provisional / whole specification in shape-2.

Declaration and project beneath phase 8 in shape-three, if applicable.

An applicant have to file shape 3 both in conjunction with the utility or within 6 months from the date of software.

Statement as to inventorship will be filed in shape five for programs accompanying a complete Specification or a convention software or a PCT utility designating India. But, the Controller may additionally allow shape-5 to be filed within one month from the date of filing of application, if a request is made to the Controller in form-four.

Strength of authority in shape-26, if filed via a Patent Agent. In case a preferred power of authority has already been filed in every other utility, a self attested replica of the same can be filed by the Agent. In case the unique preferred power of authority has been filed in every other jurisdiction, that reality can also be stated within the self attested copy.

Precedence file is needed inside the following cases:

- a. Convention application (below Paris convention).
- b. PCT country wide phase utility in which necessities of Rule 17.1(a or b) of guidelines made beneath the PCT have not been fulfilled.

The concern file may be filed together with the utility or before the expiry of eighteen months from the date of precedence, if we want to enable ebook of the application. In case of a request for early publication, the priority report will be filed earlier than/along with such request.

Each utility shall endure the Signature of the applicant or authorized character / Patent Agent in conjunction with call and date in the proper space supplied inside the bureaucracy.

The Specification shall be signed via the agent/applicant with date on the closing web page of the Specification. The drawing sheets need to bear the signature of an applicant or his agent within the proper hand backside corner.

If the utility pertains to a biological material acquired from India, the applicant is needed to post the permission from the national Biodiversity Authority any time before the provide of the patent. But, it might be sufficient if the permission from the countrywide Biodiversity Authority is submitted before the supply of the patent.

The software form shall also indicate sincerely the source of geographical origin of any biological cloth used within the Specification, anyplace applicable.

Publication of Patent software in India:

As soon as the application for patent is filed, it's miles published 18 months after the date of filing or the date of precedence, (whichever is earlier). However for the right to initiate infringement court cases, the Indian Patent Act gives comparable rights to the applicant on and from the date of guide of utility, as that provided to the Patentee.

Examination of Patent application in India:

India follows deferred exam machine in accordance so the application for patent is not tested unless a request for examination is filed with the Patent office to initiate exam lawsuits.

To provoke the exam lawsuits the applicant is required to document a request with the Patent workplace. If the exam file is unfavourable to the supply of Patent, the same is communicated to the applicant. As per the provisions of the Patent Act the applicant has to comply with the

necessities imposed on him within a duration of one year from the date on which objections are forwarded to him otherwise the application is deemed to be deserted by using the Patent office.

Grant of Patent software in India:

While the application for Patent is discovered in order of supply, the patent is granted as expeditiously as viable with the seal of the Patent workplace. The supply of patent is posted in the Patent journal and Letters Patent is issued.

Terms for Patent Rights in India:

The time period of patents in India is two decades from the date of application or priority date, whichever is in advance.

3.2.2 Patent Infringement and Litigation

Patent Infringement Litigation: The basics

Patent infringement takes place when any other celebration makes, uses or sells a patented object with out the permission of the patent holder. The patent holder may pick out to sue the infringing party to prevent his or her sports as well as to obtain reimbursement for the unauthorized use. On the grounds that intellectual belongings is ruled via federal regulation, the patent holder must sue the unauthorized birthday celebration in federal district court.

Patent holders have to convey infringement moves inside six years from the date of infringement, if the in shape isn't delivered in this time restriction, it's time-barred, ratifying the infringement. While patent litigation proceeds much like some other federal case, the complicated criminal problems surrounding patent validity and infringement are reserved for the courtroom's determination, despite the fact that a few patent litigation cases use juries for other components of the overall case.

Defenses to a Patent Infringement Lawsuit

The alleged infringer commonly counters the patent holder's healthy by way of alleging that the patent isn't valid. Patents are invalid if the holder protected fraudulent information in the U.S. Patent and Trademark office software, if the patent resulted from anticompetitive commercial enterprise sports or if the alleged infringer can display that the patent did not meet the necessities of novelty and nonobviousness required for patent safety. Novelty requires that the discovery be totally new, whilst nonobviousness way that the discovery cannot be a variation or an apparent improvement of an current invention.

The patent holder bears the weight of proof to show that the defendant infringed the patent. The plaintiff have to show infringement by using a preponderance of the evidence. This popular way that the more weight of the proof have to display that the patent is infringed.

Different methods of Patent Infringement

There are distinctive methods another celebration may also infringe on our patent, including:

Direct Infringement: This takes place whilst a product included by using a patent is manufactured without permission.

Indirect Infringement: An indirect infringer might also result in infringement by encouraging or aiding every other in infringing a patent.

Contributory Infringement: This takes place while a celebration supplies an immediate infringer with a part that has no massive non-infringing use.

Literal Infringement: This exists if there may be a right away correspondence between the words inside the patent claims and the infringing tool.

Although an invention does now not actually infringe the patent, it may still infringe below the doctrine of equivalents. A tool that performs the extensively same mission in considerably the equal way to obtain substantially the same result infringes the patent under this doctrine. If the court unearths infringement, it ought to nevertheless decide whether or not the infringement became willful.

Willful Infringement

Willful infringement entails intentional disregard for another's patent rights and encompasses both direct and intentional copying and continued infringement after be aware. Patent customers and inventors need to rent patent attorneys to make sure that the usage of a patent is legitimate and noninfringing. Even supposing infringement is later determined, the try to comfortable a legal opinion is evidence that the infringement was now not willful.

If the courtroom finds that the infringement became willful, the infringer faces a enormous economic penalty, a willful infringer might also become paying triple the amount of actual damages suffered by way of the patent holder, in addition to the plaintiff's attorneys' fees.

Patent Infringement: penalties

While a courtroom reveals infringement, the infringer normally have to pay damages to the patent holder, both inside the form of real damages or an affordable royalty for the unauthorized use. Actual damages encompass misplaced income the patent holder might have found out however for the infringement, even as an inexpensive royalty relies upon at the kind of product, different royalty preparations, time closing at the patent and different problems. In addition to damages, the triumphing birthday celebration is also entitled to prices. Prices consist of court filing charges and related litigation fees.

Similarly to infringement damages, a patent proprietor may stop the infringer from continuing to supply infringing products. The court docket typically, as a be counted of route, problems a everlasting injunction after the infringer is held responsible for violating the patent.

In a few instances, the patent holder will be trying to find a preliminary injunction at the outset of the lawsuit in which he or she will show no detriment to the general public if the injunction is granted, a considerable probability of achievement on the merits of the case and extra compelling problem for the patent holder if the infringer keeps his or her sports at the same time as the case proceeds. The patent holder will find it tough to get a preliminary injunction unless a previous adjudication proved the validity of the patent.

Get expert legal assist with our Patent Infringement claim

The combination of federal court docket jurisdiction, complex challenge rely and technical underpinnings of patent law imply that patent holders and accused infringers must be seeking for quite skilled criminal assist. Patent attorneys can assist litigants in growing their cases and in securing competitive litigation services.

3.2.3 International Patent Law

The European Patent conference (EPC) is an global treaty among European nations.

For the Contracting States, the EPC establishes a European Patent organization ("EPO") and a uniform system for the filing and furnish of patents. Such "European Patents" have in each of the Contracting States the impact of a national patent granted through that state and is situation to the same national conditions.

The technique in case of an infringement of a European Patent follows the national legal system of the Contracting nation involved.

The Patent Cooperation Treaty (PCT) is an international treaty and gives the opportunity to document one unmarried patent utility that has the identical effect as a national patent utility in extra than one hundred twenty States, rather than submitting a couple of countrywide or local patent applications. Handiest after a postpone of at least 30 months, the countrywide or regional approaches are to be commenced in the favored States or areas. Inside this period, the applicant gets an legit opinion regarding patentability of the invention and has time to determine whether and wherein nations respectively he desires to enter the countrywide or local segment. therefore, the prosecution prices in the desired States or areas are delayed.

The IPO global Patent law & exercise Committee will recognition on growing IPO positions for the harmonization and simplification of the patent laws of the world regarding the acquisition and enforcement of patents. The closing aim is to gain a machine that gives uniform, goal, predictable and value powerful acquisition and enforcement of patents globally.

The international Patent law & exercise Committee will preserve to study proposals from and provide enter to, USPTO, WIPO, EPO, JPO and Non-Governmental agencies (NGOs) to boost the harmonization of world patent laws. It'll preserve to wait and provide input to the WIPO Patent Cooperation Treaty (PCT) Reform discussions in Geneva, which preserve to paintings on further enhancements to the PCT to find the money for an improved, efficient and giant platform from which a "global patent" might be filed and examined.

That allows to acquire those goals, this committee will preserve its support of efforts to barter a restricted basket of harmonization provisions through the substantial Patent law Treaty (SPLT) and in any other case. It will also work closer to the enactment of appropriate protocols for IP enforcement. Similarly, the committee will work to teach judges and different experts around the world.

The committee will continue to specific IPO set up views at these fora and could suggest for adoption by using the IPO Board as new proposals are supplied.

3.3 Double Patenting

The double patenting doctrine prohibits issue of a couple of patent that says the equal or substantially the equal invention to the same inventorship entity or to a commonplace assignee of several inventorship entities. The doctrine's purposes are to save extension of the time period of patent safety and to defend ability accused infringers from multiple patent fits. A terminal disclaimer in a 2nd or subsequent patent removes a double patenting objection unless the two patents declare the identical invention.

[i] Declare evaluation

Double patenting evaluation compares the claims of patents. subject count disclosed but no longer claimed inside the first patent isn't utilized in figuring out double patenting. Don't forget the subsequent instance:

1. A documents utility M, disclosing X, Y and Z and claiming X.
2. A documents application N, claiming Y.
3. A patent troubles to A on software M, claiming X.

Double patenting prohibits a 2d patent on utility N claiming Y if, but simplest if, Y is an apparent variation of X. The first patent's disclosure of Y and Z isn't previous art in making this dedication.

[ii] Same inventions

Double patenting in reality prohibits issue of multiple patent claiming identical problem depend to the same inventorship entity or a commonplace assignee of numerous inventorship entities. A terminal disclaimer can't get rid of identity-type double patenting. If there is any workable product or process that could fall actually inside one patent's claims with out falling in the other patent's claims, the two patents do not declare the same invention. A declare language distinction will no longer triumph over identity-type double patenting if there's no scope change, however there's no identification-kind double patenting if the respective patents' claims have unbiased scope.

[iii] Apparent version

Double patenting conditionally prohibits difficulty of more than one patent claiming obvious changes of the identical situation remember to the identical inventor or a not unusual assignee of numerous inventors. A terminal disclaimer removes obviousness-kind double patenting.

The take a look at for obvious variation is similar to the nonobviousness patentability circumstance, i.e., whether the concern count number of the declare inside the next patent or application could had been apparent to someone of normal talent within the artwork in view of the prior artwork and the concern rely of the declare of the prior patent. One declare can be an obvious variation of another declare even though the 2 claims are jointly exclusive in scope.

[iv] Layout and application Patents

Double patenting applies, in limited instances, to layout and application patents on associated situation count.

Layout and application patents cowl conceptually distinct difficulty count. A layout patent claims an editorial's ornamental look, a application patent claims an article's practical aspects. Separate design and application patents may be acquired overlaying the identical article. Design-utility double patenting exists simplest if the claimed layout is an apparent version of the application patent's claimed concern matter and the utility patent's claimed situation matter is an obvious variant of the claimed layout. there may be no double patenting if the utility components do not flow unavoidably from the design even though the layout is apparent in view of the claimed utility factors.

[v] Terminal Disclaimers

An applicant or patentee can also disclaim any "terminal a part of the time period" of a patent applied for or issued to get rid of obviousness-type double patenting. The applicant or patentee disclaims the time period of the second one patent could in any other case be in force past expiration of the first patent and situations the second patent's enforceability on its being owned with the aid of the first patent's proprietor.

Remember the following instance:

1. On January 10, 2000, A files a patent claiming X that later problems.
2. A seeks a patent claiming Y, an obvious amendment of X.
3. A documents a disclaimer that gives the term of protection of any patent claim to Y shall terminate upon expiration of the patent on X (in 2020) and the patent declare to Y will be enforceable most effective throughout such period because the patent is usually owned with the patent claiming X.

The disclaimer eliminates any grounds for a double patenting rejection.

A terminal disclaimer eliminates the evils double patenting seeks to save i.e., extension of the patent time period and ability harassment of accused infringers by means of a couple of patent owners. allowing a 2nd patent benefits the public through supplying disclosure of extra beneficial facts on the primary patent's invention.

[vi] Special Inventors' typically Assigned programs

Double patenting applies to associated packages and patents by special inventorship entities owned by using the equal man or woman or enterprise, but does no longer practice if the associated applications are not normally owned. Within the latter scenario, three guides of action are viable: the PTO will

- (a) Declare an interference intending to clear up invention priority.
- (b) Reject one software's claims due to the alternative patents' prior art effect or
- (c) Permit associated patents.

Double patenting rejections follow in commonplace ownership situations despite the fact that one inventorship entity's disclosure is not prior artwork as to a 2nd inventorship entity's claims. don't forget the subsequent instance:

1. On January three, 1991, A documents an utility in Japan claiming X.
2. On January four, 1991, B files an utility in Japan claiming X + Y.
3. On January 7, 1991, C files an utility in Germany claiming X + Y + Z.
4. On January 2, three and 7, 1992, A, B and C respectively report within the U.S packages similar to their earlier foreign filings.
5. company J owns the A and B programs. agency G owns the C application.
6. The inventions X, X+Y and X+Y+Z are distinct however unpatentably apparent in view of each different.

If A obtains a patent, the common assignee J have to report a terminal disclaimer as to B's software. Agency G need not record a disclaimer as to C's utility because there may be no commonplace possession with the A and B packages. Due to the Hilmer doctrine, the A and B patent disclosures will now not constitute previous artwork as to C. The PTO may also are trying to find to keep away from issuing patents with intently associated claims through affirming an interference between the A, B and C applications, the use of a typical "phantom" matter and designating diverse claims in A, B and C's programs as similar to the count number.

3.3.1 Patent Searching

Patents also can be used as a ready reference source in addition to the end result of a literature or nation of the artwork search. With much less call for for difficulty searching than for seek by inventor, assignee or patent number, using one of the net-primarily based patent search websites is regularly perfect. Patent-related websites ought to contain general patent records, lists of instructions and subclasses, abstracts and complete-text patents. relying at the facts want of the patron, the abstract or "the front page" statistics (patent range, title, date, inventor, assignee utility quantity, software date, summary, figures, range of claims and references mentioned) of the patent may also suffice. Selected web sites for patent looking and patent facts are listed below, with emphasis on the ones web sites with unfastened get entry to.

Patent looking websites:

Chemical Patents Plus - [<http://casweb.cas.org/>]

Despite the fact that a CAS account person identification and password are required to apply Chemical Patents Plus, all searching is unfastened. show of patent titles and abstracts is also free. other patent and associated facts may be displayed for a fee.

EDS Shadow Patent office - [<http://www.spo.eds.com/>]

Affords a searchable database of full-text patents from 1972 to the present, updated weekly. loose offerings encompass browsing the modern-day fifty two weeks of patent titles and numbers and access to the guide of category.

IBM Patent search website online - [<http://www.delphion.com/>]

IBM makes use of its personal relational database technology to offer unfastened searchable get right of entry to to patents from 1971-. Patents can be searched by using variety, easy text seek, Boolean textual content search in a single or two patent fields or advanced textual content search in any searchable subject. Searchers have referred to that the server can be sluggish and that occasionally patents or pages are missing from the database.

MicroPatent - [<http://www.micropat.com/>]

Presents loose get admission to to the web Gazette that offers quick summaries of patents issued in that week. facts include patent range, identify, assignee, inventor, declare, summary and drawing.

USPTO Patent Bibliographic and AIDS database - [<http://patents.cnidr.org/>]

It consists of each the united states Patent Bibliographic Database and the AIDS Patent Database. The Patent Bibliographic database affords loose looking of "the front-web page" records from US patents issued from January 1, 1976 to the most current difficulty date. The AIDS Patent Database a

freely searchable database of the entire text and snap shots of AIDS-related patents issued by america, jap and ecu patent workplaces.

3.3.2 Patent Cooperation Treaty

The PCT is an worldwide treaty with more than 145 Contracting States. The PCT makes it possible to are looking for patent protection for an invention simultaneously in a big wide variety of nations by means of filing a unmarried “worldwide” patent software as opposed to submitting numerous separate countrywide or regional patent packages. The granting of patents stays beneath the manipulate of the national or regional patent workplaces in what's referred to as the “country wide phase”.

The PCT manner includes:

Submitting: We document an worldwide utility with a country wide or nearby patent office or WIPO, complying with the PCT formality necessities, in a single language and we pay one set of costs.

Global seek: An “global looking Authority” (ISA) (one of the global’s main patent places of work) identifies the published patent files and technical literature (“previous artwork”) which may have a power on whether our invention is patentable and establishes a written opinion on our invention’s potential patentability.

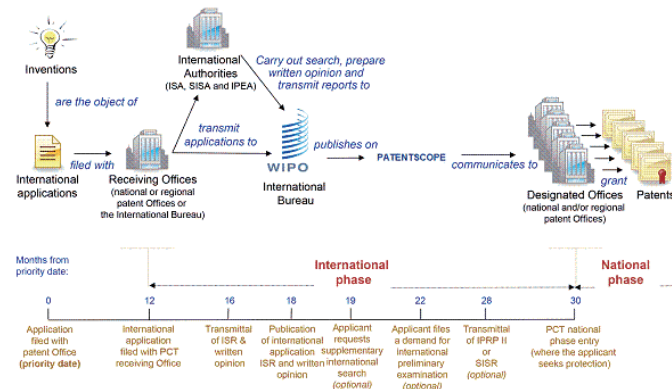
International publication: As quickly as viable after the expiration of 18 months from the earliest submitting date, the content of our worldwide application is disclosed to the world.

Supplementary international search (non-obligatory): A second ISA identifies, at our request, published files which may not had been discovered by the first ISA which executed the principle seek due to the variety of previous art in distinct languages and specific technical fields.

Worldwide preliminary examination (optionally available): one of the ISAs at our request, includes out an extra patentability evaluation, normally on an amended version of our application.

national segment: After the give up of the PCT technique, normally at 30 months from the earliest submitting date of our initial software, from which we declare precedence, we start to pursue the supply of our patents immediately earlier than the national (or nearby) patent offices of the nations wherein we need to achieve them.

Overview of the PCT System



3.3.3 New developments in Patent Law- Invention Developers and Promoters

Recent tendencies in Indian Patent law

The very last modifications to Indian patent law were made for compliance with India's duties below the TRIPS settlement. The pharmaceutical merchandise at the moment are patentable concern count number at the same time as laptop software program is not patentable subject matter. Every person resident in India is illegitimate from filing for a patent outside of India until they first record for the same invention in India or they gain permission to accomplish that six weeks earlier. A conventional knowledge digital Library documents centuries-vintage restoration treatments and clinical remedies as a way to save the patenting of ancient indigenous practices and strategies

Restrictions on filing Patent programs outdoor of India

India has reintroduced an old repealed provision wherein no person resident in India could make or cause to be made any utility outdoor India for the provide of a patent for a purpose until: a patent application for the identical invention has been filed in India or the inventor has acquired the Controller's permission inside six weeks previous to the software abroad.

Laptop-implemented inventions (aka software & business strategies)

Although maximum of the controversy around the brand new regulation associated with the pharmaceutical industry, there was also considerable lobbying with regard to carry out innovations. Previously, a mathematical approach, enterprise technique, computer software or algorithms had been non-patentable concern be counted. But, for pc software program, the Indian patent office accompanied the exercise of allowing a patent declare if the computer software program become incorporated in hardware (embedded software program). This exercise become given formal reputation via allowing 'technical utility of laptop program to enterprise' or 'a combination with hardware' as exceptions to non-patentability of computer packages.

Some information of modifications in Indian Patent regulation

The duration for filing a request for examination has been extended from 36 months to forty eight months from the date of earliest precedence or date of filing of the utility, whichever is earlier.

The time to amend an application to area it in situation for furnish has been improved from 6 months to nine months and can be prolonged to twelve months. This is applicable most effective to instances so one can be examined after the policies got here into effect.

The new Act affords for expedited prosecution of a patent software wherein a patent may be granted within a duration of simply six to nine months. To offer an opportunity of any third celebration to submit objections, no patent will be granted until the after the six months from the date of booklet of the application.

The time for crowning glory of formalities has been elevated from three months to six months and may be prolonged further if required.

Guide of Patent practice & technique

The Indian Patent workplace published a draft manual of Patent practice & procedure in an try to create uniformity in the way patent programs are treated. Formerly the Indian Patent office became inconsistent, in examinations concerning problems relating to the structure and capabilities of claims were handled very subjectively. Missing precedents regarding patent regulation and exercise in India, the 14 chapters and 3 annexes of the draft guide depend closely on enjoy within the US, European and Japan. The manual includes a detailed rationalization of patentability standards, that's critical because the new regulation redefined essential standards consisting of the inventive step. A very last model of the manual have to be published in 2006.

Traditional knowledge digital Library

A traditional information virtual Library is being compiled to report centuries-vintage restoration treatments, formulas, compounds and medical remedies on the way to prevent patenting of historical indigenous practices and strategies. The virtual Library may be available in 5 languages - English, French, German, jap and Spanish. The Indian authorities asserts that the digital Library will serve not simply as a supply of protection for highbrow property, but also as a way by using which its researchers can similarly observe and record the scientific underpinnings of the medicines and remedies inside the series. at some point this year, India plans to supply comfortable web access of the virtual Library to overseas patent places of work as a aid by which the ones offices can determine whether or no longer proposed "herbal remedies" can be assigned a patent.

The digital Library will comprise statistics on the traditional drugs, consisting of exhaustive references, images of the plants and scans from the unique texts.

Invention Promotors And developers

Many individual inventors do no longer have the finances vital to perform a seek, prosecute a patent application, make the discovery and sell it. To keep away from Or mince these prices, many inventors attempt to promote or license their rights to hooked up groups. An evaluation agreement

is usually signed by using the events to defend the discovery throughout the period of negotiation and to ensure that data disclosed about the discovery is used totally for the motive of discussing a possible enterprise transaction.

As an alternative, there are some of private corporations or people, generally known as invention promoters or invention developers, that help inventors in bringing a discovery to market and negotiating with others for venture or licensing of an inventor's patent rights. Even though a lot of those developers are legit, others have negative prices of success in bringing inventions to the marketplace. Inventors have to exercising warning in handling invention promoters or builders, mainly people who call for good sized increase bills or assure achievement.

In fact, due to the bad song file of invention advertising corporations. the Inventors' Rights Act of 1999, a part of the yank Inventors safety Act of 1999, enables shield inventors towards misleading practices of invention promoters. The artwork calls for invention promoters to disclose in writing, among other gadgets, the range of high-quality and terrible opinions of innovations they have given over a fare-year length and their clients' achievement in receiving net monetary profit and license agreements as a direct end result of the invention merchandising services. In March 1999, the USPTO hooked up an office of bale independent Inventor programs and a web website entitled "Inventor assets" to meet the special wishes of character, independent, novice inventors.

Individuals injured with the aid of a promoter's failure to reveal the desired facts or with the aid of any fabric fake or fraudulent representation by way of the invention promoter may additionally convey a civil motion to get better statutory damages upto \$five,000 or actual damages. Damages of up to a few times the quantity awarded are to be had for intentional or willful violations of the act.

Introduction to Trade Mark

Introduction to Trade Mark – Trade Mark Registration Process – Post registration procedures – Trade Mark maintenance – Transfer of rights – Inter parties Proceedings – Infringement – Dilution of Ownership of Trade Mark – Likelihood of confusion – Trade Mark claims – Trade Marks Litigation – International Trade Mark Law.

4.1 Introduction to Trade Mark

The trademark is used or intended to be used for identifying the goods of one manufacturer from the goods of others. Generally, it is a brand name. The trademarks are an important business tools as they allow companies to establish their product's reputation without having to worry that an inferior product might diminish their reputation or profit by deceiving the consumer. It include words, names, symbols and logos. Therefore, anything which distinctly identifies the company can be a trademark, provided that it is for goods.

Similar to trademark is a service mark except it is been used to distinguish the services in the stream of commerce. Even a service mark includes words, names, symbols and logos. Generally, the trademarks appear on the actual product or its packaging whereas service marks appear mostly in advertising for the services.

Trademark will provide protection to the owner of the mark by ensuring to identify goods or services, the exclusive right to use it or to authorize another to use it in return for payment. But a trademark can be renewed indefinitely on payment of additional fees though the period of protection varies.

The trademark protection is enforced by the courts, where in most legal systems, it has the authority to order a party to cease infringing a registered trademark. In other words, trademarks promote initiative and enterprise worldwide by rewarding the owners of trademarks with the recognition and financial profit. The trademark law can also be used to hinder the efforts of unfair competitors such as counterfeiters, who attempts to use a similar distinctive signs to the market inferior or different products or services. Therefore the system enables people with skill and enterprise for producing market goods and services in the fairest possible conditions so that it facilitates international trade.

It is important because it helps the businesses to build and retain demand for their products and services which enables the consumers to quickly identify and make a purchase based on the recognized trademark.

Hence, UAE has laws and regulations for regulating registration of a trademark and protect it. The registration of a trademark should be stipulated by the law in order to gain protection or else it is not be recognized. So, the trademark registration request has to be submitted before UAE Ministry of Economy. since stipulated through UAE law those requests shall be submitted by an UAE citizen or a foreigner, who is practicing industrial, commercial, profession acts inside UAE, in addition to UAE public bodies.

Any how, a trademark will not be registered if it is identical or similar to another trademark which is used for similar of product or service. Though, it is provided through UAE law and courts, when a trademark is removed from the Ministry's records a third party has a right to use it for its business or services. Then the Third Party should file a request at the Ministry for using the trademark after three years from the date of deletion.

In case, when the registration request is rejected, it shall be challenged within thirty days from the date of rejection by the person or entity who submitted the request. Hereafter when that grievance is rejected, the requesting party will have the right to challenge that decision before the court within sixty days from the date he was notified with it.

However, if the Ministry of Economy accepted the request, according to the law, they should publish the trademark in two daily newspapers before registering it. Thus, the reason for publishing is giving an opportunity to any party who can wishes to contest the registration of trademark. So that, the third party should file a challenge within thirty days from the date of publication in the newspaper. In addition, the party who submitted the original request has the right to challenge the third party's objections within thirty days from the date of notification.

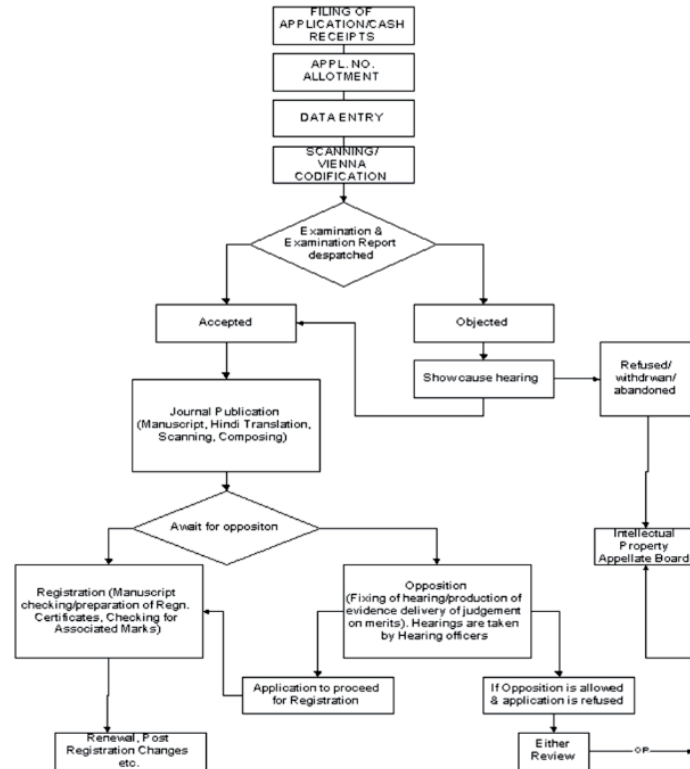
The benefits of registering a trademark

The federal registration will provide several advantages, including giving them a legal presumption of ownership and exclusive rights to use the mark nationwide in connection with the goods or services. Also, it gives the right to bring a federal suit against anyone who may be infringing on the mark and allows them to use the coveted ® symbol.

4.1.1 Trade Mark Registration Process

The trademark registration shall be obtained for words, slogan, numerals, logo, device and more in India. This provides a legal right of exclusivity for use of the mark to the owner of the trademark. However, it is a long process involving multiple steps.

Trademark Registration Flow Chart



Trademark Search

Before starting the trademark registration process, the entrepreneur or a trademark professional should conduct a trademark search of the trademark database. This will provide information about identical or similar trademark which has already been filed with the trademark registry. It can be conducted by visiting the Trademark Registrar Website.

Trademark Filing

After the trademark search is completed, the application for trademark registration may be filed with the Trademark Registrar. The application for registration of trademark should be made in the prescribed manner and filed along with the fee for trademark registration. The trademark application shall be filed at one of the five Trademark Registrar Office while having jurisdiction over the State or online and also by India Filings.com or lawyer or a trademark agent .

Trademark registration application should contain the following information:

- Logo or the Trademark
- Classification or Trademark Class

- Name and address of the trademark owner
- Description of the goods or services
- Trademark used since date

Trademark Application Allotment

After the Trademark registration application is filed with the Trademark Registrar, a trademark application allotment number will be provided within one or two working days. Then the trademark application shall also then be tracked online through the Online Trademark Search facility. Generally, on obtaining trademark application allotment number, the owner of the trademark shall affix the TM symbol next to the logo.

Vienna Codification

It is also termed as Vienna Codification, which is established by the Vienna Agreement (1973). It is an international classification of the figurative elements of marks. After the trademark registration application is filed, the Trademark Registrar may apply the Vienna Classification to the trademark based on the figurative elements of marks. Usually, when this work is in progress, the trademark application status will reflect as "Sent for Vienna Codification".

Trademark Examination

After the Vienna Codification is completed, the trademark registration application can be allotted to a Trademark Officer in the Trademark Registrar Office. Then the Trademark Officer will then review the trademark application for correctness and issue a trademark examination report. Thus, a Trademark Officer has the ability for accepting the trademark registration application and allow for trademark journal publication or object the trademark registration application.

When the trademark registration application is objected by the Trademark Officer, then the trademark applicant has the right to appear before the Trademark Officer and address the objections whereas if the Trademark Officer is satisfied with the justifications of the trademark applicant, then the trademark will be allowed for trademark journal publication. But, when the Trademark Officer is not satisfied with the justifications, then the trademark applicant will have the right to appeal the decision of the Trademark Officer before the Intellectual Property Appellate Board.

Trademark Journal Publication

After the trademark registration application is accepted by the Trademark Registrar, then the proposed trademark is being published in the Trademark Journal. This trademark journal is published weekly which contains all the trademarks is already been accepted by the Trademark Registrar. After the trademark is published in the trademark journal, then the public shall have an opportunity to object the trademark registration, when they believe they might be damaged by that

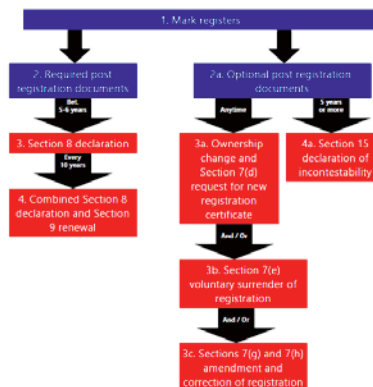
registration. But, when there are no objections filed within 90 days of that publication, then the mark will typically be registered within 12 weeks i.e. months time.

When the trademark registration application is opposed by a third-party, then a hearing may be called for by the Trademark Hearing Officer. Both the trademark applicant and the opposing party will have the chance to appear at the hearing and provide justifications for the registration or rejection of the trademark application. Thus, based on the hearings and the evidence presented, the Trademark Hearing Officer shall determine whether the trademark registration application must be accepted or rejected. Therefore the decision of the Trademark Hearing Officer may also be challenged by escalating to the Intellectual Property Appellate Board.

Trademark Registration

After there are no objections or oppositions for the trademark registration application, the trademark manuscript and the trademark registration certificate shall be prepared and sent to the trademark application. Similarly, after the trademark registration certificate is issued, the trademark will be considered as a registered trademark of the owner, by granting the trademark owner exclusive use of the mark. Now, the symbol can be placed next to the logo or trademark.

4.1.2 Post registration procedures



Step 1: Mark registers

Once the registration issues is done, in order to keep the registration “alive” or valid, the registration owner should file specific documents and pay fees at regular intervals. Therefore the deadlines for filing these documents will be calculated from the registration date shown on the registration certificate. In case, failure to file these documents can result in the cancellation or expiration of our registration. Then, proceed to step 2 for required post registration documents and proceed to step 2a for optional post registration documents.

Step 2: Required post registration documents

In this step, the following documents should be timely filed to maintain a registration. Then, proceed to step 3.

Step 2a: Optional post registration documents

In this step, the following documents are not mandatory to maintain a registration. But, for optional documents which can be filed anytime then, proceed to step 3a whereas for optional documents which can be filed every 5 years or more proceed to step 4a.

Step 3: Section 8 declaration

After 5 to 6 years from the registration date, the owner must file a Declaration of Use or Excusable Nonuse under Section 8 which requires a fee. Also, the filing can be made within a 6-month grace period after the expiration of the 6th year with the payment of an additional fee. In case, failure to file this declaration shall result in the cancellation of the registration. Then Section 8 declaration will be combined with an optional Section 15 declaration of incontestability and then proceed to step 4.

Step 3a: Ownership change and Section 7(d) request for new registration certificate

In this step, an owner can transfer or assign a registered mark to a new owner. Then the new owner is encouraged to record the assignment with the USPTO. When the owner is willing for new registration certificate, then the owner must submit a separate request showing that the assignment will be recorded with the USPTO which requires fee. Then, proceed to Step 3b.

Step 3b. Section 7(e) voluntary surrender of registration:

In this step, the owner of a registration can voluntarily surrender the registration, in its entirety or for a portion of the goods and/or services. No fee is required. proceed to Step 3c.

Step 3c. Sections 7(g) and 7(h) amendment and correction of registration:

A registration owner may file a Section 7 request to amend or correct the registration at any time. The amendment may not materially alter the mark or broaden the goods and/or services. A fee is required, except for corrections due to USPTO error.

Step 4. Combined Section 8 declaration and Section 9 renewal:

After 9 to 10 years from the registration date and every 10 years hereafter, the owner should file a Combined Declaration of Use or Excusable Nonuse and Application for Renewal under the sections 8 and 9 which requires a fee. Also, the filing can be made within a 6-month grace period after the 10th year with the payment of an additional fee. In case, failure to file this declaration shall result in the cancellation or expiration of the registration.

Step 4a. Section 15 declaration of incontestability:

Only after the date of the registration, the Section 15 declaration can be filed for a mark on the Principal Register which has been in continuous use in the commerce for a period of 5 years and

there is no adverse decisions or pending proceedings involving rights in the mark. An “Incontestability” will enhance the legal presumptions the registration receives which requires a fee.

4.1.3 Trade Mark maintenance

A trademark can be maintained right, by proper renewal. Though, maintaining a trademark also consist of other actions other than renewal which must be taken in order to keep a trademark alive. It has **five types of maintenance**:

1. Renewal
2. Tax
3. Affidavit of Use
4. Cautionary Notice
5. Proof Renewal of Basic Registration.

The renewal per se will consists of filing an application with the respective Trademark Office in the form of a document which needs to show the relevant trademark and owner data. This renewal applications must be filed in all countries except in Eritrea, Maldives, Comoro Islands, Myanmar, Nauru, Palau and East Timor, where the cautionary notices should be filed. The cautionary notices are advertisements in the local newspapers by which the trademark owners state like they own the mark so that no third party should use a similar or identical mark.

Trademark Watch:

This is used to guide about the latest and all upcoming, similar to trademark which can affect our reputation and goodwill in the competitive market. Hence, necessary step or action can be taken against the same.

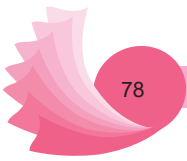
Trademark Infringement:

This is used to bring out all the necessary legal formalities and documentaries which can serve with how to process under trademark infringement.

Trademark Prosecution:

In trademark prosecution, under the act of Trademark 1999 of India, it shall serve with the complete package of trademark prosecution where the attorneys may guide how to revert back with any misuse or TM exploitation.

Trademark Renewal:



This shall bring with complete services in the trademark renewal where the application is filed for the same on the behalf of our trademark.

Apart from this, it is also used for trademark registration, trademark search, trademark a name and many more trademark office services in India.

4.2 Transfer of rights

The term of a trademark right will commence during registration and it ends after ten (10) years. Though, the term can be extended every ten years through an application for renewal. Until the trademark rights are in use, they are considered to be semi-permanent.

In order to renew the term of registered trademark rights, an applicant will file an application for renewal within one year before the expiration date. When the term has expired, then the applicant can file an application to renew the term within six months of the expiration date. At that time, the applicant can pay a required negligence fine.

Extinguishment of a trademark right

Trademark rights will be extinguished as a result of the following reasons: the term of the trademark right expires as a result of the owner's failure to renew the term the owner abandons the trademark rights at his/her will or the owner fails to apply for registration of the reclassification of goods within the given period for goods registered under the previous classification of Korean goods. In the case of the passing of the original owner of the trademark rights, if an application to transfer the registered trademark rights is not filed by a successor in title within three (3) years of the death of the original owner of the trademark, the trademark rights are extinguished on the day after the expiry of the three-year period following the death of the original trademark owner.

Transfer of a trademark right

It only replaces the trademark right owner, by keeping the content of the trademark right intact. Though the trademark rights are intangible property rights, they must be freely transferrable like common property rights. But, the transfer of trademark rights can be restricted if necessary for protecting the owner's profit as outlined in the Trademark Act.

Usually, a trademark right can be freely sold or donated without reference to business and divided by each of its designated goods.

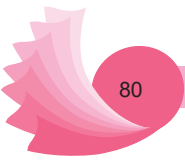
Application to register the reclassification of goods

The trademark rights owner who has obtained a supplementary registration of designated goods, a trademark registration or a registration for renewal of the term of a registered trademark for designated goods in accordance with the Korean Classification of Goods before March 1, 1998, will

reclassify the designated goods that are under the Classification of Goods (NICE Classification) as prescribed by the Ordinance of the Ministry of Commerce, Industry and Energy.

An application to register the reclassification of goods and an application to register the renewal of the term of a registered trademark can be filed through one application. When an applicant fails to register the reclassification of goods within the given period, the trademark rights for the designated goods must be reclassified which will extinguish on the expiration date of the given period.

Any application who wishes to register the reclassification of goods should file within one year before the date on which the term of the trademark right will expire and no later than six months after the expiration date of the term.



4.2.1 Inter parties Proceedings

It is an action like any court action, except that it is before the Trademark Trial and Appeal Board (TTAB) of the U.S. Patent and Trademark Office. This can be one of the following:

(a) Concurrent use proceedings

(b) Cancellation proceedings

(c) Opposition proceedings.

They are governed by numerous sets of rules, including the Federal Rules of Evidence, the Federal Rules of the Civil Procedure, the Lanham Act, 119, the Trademark Rules of Practice and the published cases in federal court and before the TTAB.

It unfolds like most other litigation such as the parties can take discovery, a complaint-type document is filed, the "defendant" files a responsive pleading along with the equitable defenses and any counterclaims, each party briefs its case and the TTAB renders a decision. Oral argument may, but usually does not, take place.

Opposition Proceedings

A party can initiate an opposition proceeding by filing the Notice of Opposition to the registration of a trademark applicant's mark. Then the grounds for opposing registration of a mark are set forth in the Section 2 and Section 14 of the Lanham Act and they are same as the grounds for denial of registration by the Patent and Trademark Office. Thus, the opposer should allege that the mark about to be registered:

- Consists of immoral, deceptive or scandalous matter.
- Consists of the flag or other symbol of the United States or any state or foreign nation.
- Consists of matter which may disparage or falsely suggest a connection with persons (living or dead), institutions, beliefs or national symbols.
- Consists of a mark that so resembles a mark previously registered or used, as to be likely to cause confusion when used in connection with the same goods or services.
- Consists of a name, portrait or signature of a living person without his or her consent.
- Consists of a mark that is primarily a surname.
- Consists of a mark that, as a whole, is functional.

- Consists of a mark which, when used in connection with the goods of the applicant, is merely descriptive or deceptively mis descriptive.

Most of the opposition proceedings are filed on the grounds in which the mark to be registered is likely to cause a confusion with a senior user's mark.

Cancellation Proceedings

In this proceedings, a party shall seek to cancel an existing trademark registration. Then the grounds for moving to cancel a registration will include all the grounds for opposing a registration and also the following additional grounds:

- The registered mark has been abandoned.
- The registered mark has become the generic name for the goods or services for which it is registered.
- The registered mark is being used by or with the permission of, the registrant so as to misrepresent the source of the goods or services on or in connection with which the mark is used.
- The registration was fraudulently obtained.

When the registration has become incontestable pursuant to Section 15, though a registration cannot be canceled for likelihood of descriptiveness, confusion or lack of distinctiveness.

Concurrent Use Proceedings

The concurrent use registration can be issued as a result of the concurrent use proceeding, then the third type of inter partes proceeding before the Trademark Trial and Appeal Board. Therefore Lanham Act allows for concurrent registration of a mark or two confusingly similar marks by the two different parties only if the junior user began its good faith use of the mark prior to the filing of a trademark application by a senior user. Also, the junior user's use of the mark usually should be in a geographic location in which it is entirely different from that of the senior user.

When issuing a concurrent use registration, the PTO shall establish geographic restrictions in the registration itself to ensure that the two uses of the mark must not overlap and create customer confusion like to the source of the goods or services. The court allows the parties to decide where each party must use the mark, as long as the agreement did not result in confusion in the marketplace in re Beatrice Foods .

4.2.2 Infringement

The trademark infringement is an unauthorized use of a trademark or service mark on or in connection with the goods or services in a manner which is likely to cause deception, confusion, or mistake about the source of the goods or services.

Therefore, a trademark owner who believes its mark is being infringed can file a civil action as lawsuit in either state court or federal court for the trademark infringement, depending on the circumstances. But, in many cases, the trademark owners tend to choose to sue for infringement in federal court. Also when a plaintiff chooses state court, it can be possible for the defendant to have the case "removed" to the federal court.

When the trademark owner is able to prove infringement, then available remedies can include the following:

- Monetary relief, including defendant's profits, any damages sustained by the plaintiff and the costs of the action.
- An order requiring the destruction or forfeiture of infringing articles.
- An order that the defendant, in certain cases, pay the plaintiffs' attorneys' fees.
- A court order (injunction) that the defendant stop using the accused mark.

Contrarily, a court can find instead of the following:

- (1) When not infringing the trademark
- (2) A defense bars the plaintiff's claim(s)
- (3) The other reasons exist why the trademark owner is not entitled to prevail.

In order to support a trademark infringement claim in court, a plaintiff should prove which it owns a valid mark, that has priority and the defendant's mark is likely to cause a confusion in the minds of consumers about the source or sponsorship of the goods or services offered under the parties marks. If a plaintiff owns a federal trademark registration on the Principal Register, then there is a legal presumption of the validity and ownership of the mark and also the exclusive right to use the mark nationwide on or in connection with the goods or services that are listed in the registration. These presumptions can be rebutted in the court proceedings.

Usually, the court shall consider evidence addressing various factors in order to determine whether there is a likelihood of confusion among consumers. Then the key factors are considered in most cases as the degree of similarity between the marks at issue and whether the parties' goods and services are sufficiently related in which the consumers are likely to assume that they come from a common source. The other factors that courts generally consider include how and where the parties' goods or services are marketed, advertised and sold where the purchasing conditions with the range of prospective purchasers of the goods or services whether it has any evidence of actual confusion which is caused by the allegedly infringing mark, the defendant's intent in adopting its mark and the strength of the plaintiff's mark.

Then the particular factors that are considered in a likelihood-of-confusion determination and also the weighing of those factors will vary from case to case as well as the amount and quality of the evidence involved may have a significant impact on the outcome of an infringement lawsuit.

Also, while claiming likelihood of confusion, a trademark owner can claim trademark "dilution," asserting which it owns a famous mark and the use of our mark shall diminish the strength or the value of trademark owner's mark by "blurring" the mark's distinctiveness or "tarnishing" the mark's image by connecting it to something that is distasteful or objectionable. Also, if there is no likelihood of confusion.

Then, an experienced trademark attorney, by taking the particular circumstances of our case into consideration, must be able to provide us with an opinion as to the validity and strength of a trademark owner's claims.

4.2.3 Dilution of Ownership of Trade Mark

The trademark dilution is the weakening of a famous mark's ability in order to identify and distinguish the goods or services, regardless of competition in the marketplace or the likelihood of confusion. Typically, dilution occurs as the result of blurring or tarnishment of the famous mark. This is similar to the concept of passing off that involves misrepresenting one's goods as those of another. However, misrepresentation is not an essential component of dilution.

The law protects the famous marks from subsequent marks which can be confusingly similar. If the confusion is being claimed then one must show that the marks being compared are similar in sound, appearance or meaning, combined with evidence in which they are associated with identical, competing similar or related goods or services. By using this analysis, similar and possibly even identical marks that are used with distinguishable goods or services or the goods and services traveling in different channels of trade which can coexist in the same market.

Then the concept of dilution is developed from the idea because some marks are so well known and famous, so they deserve an extra level of protection beyond the likelihood-of-confusion analysis. The dilution theory seeks in order to prevent the coexistence of a mark which is sufficiently similar to the famous mark, regardless of the goods or services which are associated with the allegedly diluting mark. The proponents of the theory argue that it protects the goodwill associated with the well-known mark and it reduces consumer confusion. However, the critics of the dilution theory allege that stringent antidilution laws can stifle market competition.

A fair use is a defense to a dilution claim. During a famous mark, it is used without indicating a source or origin for one's own products and services as well as it must negate the likelihood of confusion. Similarly, the descriptive use is when the mark is being used to describe the characteristics of a product or service and nominative fair use is when the mark was used to describe or refer to a mark owner's products. It can occur when third party reasonably believes that it is necessary to use the mark to identify the product, but the third party cannot suggest the sponsorship or endorsement by the trademark holder. For instance, if a newspaper is using a hotline in order to conduct a survey about who is the sexiest member of New Kids on the Block.

Then, the noncommercial fair use is when the third party uses the mark for identifying and describing the mark where their use is not primarily intended to gain a profit. So, a third party can have a defense against a trademark owner's dilution claim for any fair use of a famous mark by another which is not used as designation of the source of the third party's own goods or services. It includes descriptive and nominative fair use, ads or promotions for identification, for comparing goods or services, criticizing, parodying or commenting purposes and any noncommercial use.

4.3 Likelihood of confusion

The likelihood of Confusion is also said to be Confusing Similarity. It is the legal standard which determines whether or not trademark infringement has occurred. Then the likelihood of confusion test is also one of several examinations which is conducted by the U.S. Patent and Trademark Office in determining whether to approve an applicant's trademark application.

Thus, a specific standard itself is defined by a vast body of law and it shall vary jurisdiction by jurisdiction. An essential ingredient for the likelihood of confusion test is that consumers encountering one trademark are likely to be confused with a different trademark. But, this is not to say how the consumer feels puzzled or befuddled or the like. Generally, the consumer referenced in this body of law is a hypothetical consumer who can be completely unaware that two different companies are using the similar or identical mark. Moreover, the hypothetical purchaser is not expected to make detailed, side-by-side comparisons or to have perfect recall.

Hence, trademark confusion means an incorrect assumption on the part of a hypothetical consumer which the two trademarks belong to the same source and also with likelihood being incorporated into this standard, where a court or the Trademark Office should merely decide which is the propensity for confusion and whether it is strong enough to warrant elimination of the newcomer's use of the mark. So, many trademark infringement lawsuits proceed without a shred of evidence of any actual confusion. Also, evidence of actual confusion can be very influential to the outcome.

4.3.1 Trade Mark claims

Trademark Claims service is an alert procedure for the trademark owners who are registered with the TMCH and registrants who are attempting to register a trademarked domain name.

The service works are as follows:

- A potential domain name registrant will get a warning notice while attempting to register a domain name which matches a trademark term in the TMCH.
- At once receiving and accepting the notice, the domain name registrant will continue to register the domain name and the trademark holder with a corresponding mark in the Clearinghouse that shall receive a notification of the domain name registration, so that they can take any appropriate action if they would like to.

Then the TMCH Claims service is for the trademark owners who are registered with the TMCH. This is used for the first 60 days (minimum) following the Sunrise phase where the trademark owners and registrants shall be alerted to a domain name registration attempt which matches a registered trademark.

Similarly, for trademark holders, the claims service adds further protection against trademark infringement. They might receive a notification when a registrant accepts a claims notice but continues with the registration of a domain name matching with their trademark and then they can take the appropriate action to protect their brand.

Claims check

If an applicant attempts to pre/register a new domain extension during the Landrush phase or the General Availability of the new domain extensions, they are obliged to perform a claims check with the Trademark Clearinghouse. When the applied for domain name matches a trademark registered with the TMCH, then the applicant will receive a claims notification email. Therefore, the registrant might be asked to read and accept the terms and conditions of the claims notice within 48 hours.

After they accept the claims notice, they will stop or continue with the registration. When they continue, the relevant trademark holder shall be alerted and then they can take appropriate action to protect their brand.

4.3.2 Trade Marks Litigation

The litigation is the process of fighting for justice. This can be taken a form of revenge or it might sometimes be proved as demanding for our own rights in terms of legal world. It is opt by an company, individual organization, entity and any other to demand for the legal rights. In this legitimate world, it has various types of legal acts with respect to corporate, civil, family, criminal, labour, tax section and so on. All of these legal acts are too subjected with the litigation during any of the infringement. From the various acts and rules, the trademark litigation is one of the most and highly acceptable litigation forms in this world of judicial contest.

The prestigious and favorability of trademark in the international market brings a sense of safety and security in respect of trademark infringement or any misuse by the third party. Nowadays, in corporate world, every business house also small enterprises are accompanied with their unique and ethical trademark for maintaining their goodwill and reputation in the international market. Then, to protect this goodwill and reputation, it is essential to get with trademark registration in order to make our business mark confident and assured in the corporate world.

During trademark registration, one needs to sign for unique mark. When it gets slightly copied, then there is possibility to face the notice from the concern authority about trademark opposition. Such notice of opposition termed as trademark litigation while one file an application of opposition in order to protect his or her trademark from being misused. When we find any mark similar to our trademark, we can file for trademark litigation.

It has various steps subjected under the trademark litigation process including submitting evidence, preparing for legal documentaries, preparing for hiring and so on. All of these steps and procedures are not lesser compared to any type of tedious job. Hence, it is better to get hire with any of the well experienced trademark firm which can take our business out of these trademark issues. At trademark-registration, India brings with complete services in IPR in varied packages from where client can choose as per his or her business requisites and other corporate legal needs.

4.3.3 International Trade Mark Law

Because of the observance of territoriality as a legal principle, an international protection for trademark rights is not enabled through a single legal statute. Rather, it is enacted through a series of agreements which requires individual nations to adopt compatibly similar to the definitions of trademarks for their jurisdictions, a process termed as harmonization.

Procedure for an International Application

The applications for international registration can be filed only by natural persons or legal entities within a country that is party to the Agreement or the Protocol. Then the Madrid system of international registration shall not be used for protecting a trademark outside the Madrid Union. An international registration may only be filed for a mark which has already been registered in the Office of origin. Similarly, an international application should designate one or more Contracting Parties in which the mark is to be protected. Thus, they can be amended to include further Contracting Parties once the original application for registration has been submitted.

It has three kinds of international application are as follows:]

1. An international application is governed by both the Agreement and the Protocol which means that some of the designations are made under the Agreement and some under the Protocol.
2. An international application is governed exclusively by the Protocol which means that all the designations are made under the Protocol.
3. An international application is governed exclusively by the Agreement which means that all the designations are made under the Agreement.

An international application should be presented to the WIPO International Bureau through the Office of origin and also should at least contain the following:

1. A reproduction of the mark that should be identical with that in the basic registration or basic application.
2. A list of the goods and services for which protection is sought and classified in accordance with the International Classification of Goods and Services.

Then, the United States Patent and Trademark Office (USPTO) is the Office of origin for applications originating in the US. This has electronic forms for the filing of an application for subsequent designation, an international registration and response to a notice of irregularity.

The applications which are governed exclusively by the Agreement should be in French and those which are governed exclusively by the Protocol or by both the Agreement and the Protocol, can be in either English or French, though the Office of origin shall restrict the applicant's choice to one of these languages.

Introduction to Trade Secrets

Introduction to Trade Secrets – Maintaining Trade Secret – Physical Security – Employee Access Limitation – Employee Confidentiality Agreement – Trade Secret Law – Unfair Competition – Trade Secret Litigation – Breach of Contract – Applying State Law.

5.1 Introduction to Trade Secrets

“‘Trade secret’ means the information, including a formula, pattern, compilation, program, device, method, technique or process, that: “(i) derives an independent economic value, actual or potential, from not being generally known to and not being readily measurable by proper means by, other persons who can obtain economic value from its disclosure or use and “(ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.”

Trade secrets exist in mostly every business. Under the traditional, common-law definition, they consisted of virtually any information beneficial to the business, developed by company through the expenditure of time and effort, unknown to others in competing businesses and that gave an advantage to the company over such competition.

Under the recently enacted Florida Uniform Trade Secrets Act ("UTSA"), a trade secret is any information (including, but not limited to, formulae, patterns, devices, methods, compilations, programs, techniques or processes) which meets two criteria:

- (1) It derives "independent economic value, actual or potential, from not being generally known to and not being readily ascertainable by proper means by, other persons" to whom it may be valuable and
- (2) It is subject to "efforts that are reasonable under the circumstances to maintain its secrecy."

According to the legislative history of the Florida UTSA, this new definition is intended to expand the scope of protectable trade secrets to allow a business to protect, due to its potential value, information that it does not presently intend to utilize or which it has not or cannot presently fully develop. In addition to information such as computer programs, formulae and methods of production, trade secrets can also include customer lists, source lists and the like.

If a company wishes to protect information as a trade secret, it must implement sound measures for protection against its disclosure. Under the common law, it was wise to do so not only in order

to maintain competitive advantage, but also to bolster arguments of protectability should trade secret litigation become necessary. Under the UTSA, in order to even meet threshold qualifications as a trade secret, information must be the "subject of efforts that are reasonable under the circumstances to maintain its secrecy."

Trade Secrets on the Internet:

E-commerce over Internet poses significant risks to the protection of trade secrets. The Internet is a universal and open network. Anyone, anywhere in the world can connect to the Internet at any time. Information transmitted through the Internet is not secure and subject to the interception. An especially significant threat to trade secrets is that information can be disseminated through the Internet nearly instantaneously to literally millions of computers around the world. Such dissemination, even if it is unlawful and a misappropriation of such information, operates to destroy the secrecy element necessary for trade secret protection.

While the owner of the information may have a claim against those who misappropriated the information, once information becomes public there will be no protection against anyone else using the information. In many ways this is a unique risk presented by electronic communications. Where dissemination is not instantaneous and universal, it may be possible to put humpty dumpty back together again and preserve the trade secret by recovering misappropriated copies. As noted previously, absolute secrecy is not required. The Internet, however, creates a significant risk that recovering misappropriated copies would not be possible and that trade secret protection would be lost altogether.

5.1.1 Maintaining Trade Secret

There are three basic requirements for any information to be considered a trade secret and thus be legally protected:

1. The information should be secret or shared in a context of confidentiality
2. The information should have commercial value by virtue of being secret
3. The owner of the information should have made reasonable efforts under relevant circumstances to keep the information secret.

A trade secret may be any type of information like formulae, devices, patterns, financial information, business plans, client lists, unannounced products and so on that an enterprise considers to be valuable and offers it an advantage over its competitors.

Below are eight things we should know or steps we can take to help plug intellectual property leaks.

1. Know the Law

Federal and state laws protect trade secrets and many states' laws conform to the standards of the Uniform Trade Secrets Act. But be sure to learn the laws that apply to our business and our state.

The federal government can impose criminal penalties on people who steal trade secrets for economic gain and knowingly harm the original secret owner. Most states allow a company to sue if it believes some valuable secrets have been improperly disclosed and winning parties may obtain significant civil payouts.

In addition to the federal and state laws, courts may also consider other factors in deciding if a trade secret is violated, including how well known the information is both within and outside our business, the value of the information, the degree of difficulty to duplicate the secret and the steps we've taken to safeguard it.

2. Classify our Information

Catalog our trade secrets and sensitive material in a central register or secure computer database. It may also be useful to consider classifying trade secrets based on their value and sensitivity. Specific classifications—"top-secret," "ultra-strict security," or "for internal eyes only"—make it clear who is and is not allowed access to few information. At Krispy Kreme, for instance, only key employees may know the ingredients of the doughnut glaze while the ingredients of the doughnuts may be more commonly known among employees.

3. Disclose Less Information

Statistically speaking, more people who know a trade secret, the more likely it is to be disclosed. Even high-level associates like senior officers, business managers, or board members may not always need to know every piece of intellectual property. Some of the companies compartmentalize different aspects of the trade secret so that only a few key employees know how all the pieces fit together.

4. Get Signed Agreements

Individual secrecy and non-compete agreements make key employees personally liable for an unauthorized disclosures. Requiring such an agreement can remind employees of the continuing need to keep the sensitive information secret. But when it comes to enforcement, many judges will weigh a claim against an employee's right to earn a living based on the industry knowledge and experience. The most effective secrecy agreements take this into account.

5. Keep Good House

Companies must regularly review their trade secret portfolio to remove or reclassify outdated items. Keep the key employees who signed secrecy agreements up to date on a trade secret's status and any recent legal action taken to protect it. It's a great way reinforce the seriousness of maintaining secrecy.

6. Educate our Employees

If employees know the importance of maintaining secret information—and the consequences of leaking it—they'll be more likely to guard our trade secrets. Build a corporate culture of diligence through periodic educational programs on confidentiality.

7. Conduct Exit Interviews

Use the exit interview to remind departing employees of their ongoing obligation to keep the company secrets. Remind employees of the possible consequences of violating secrecy agreements. Think about asking them to sign a written affirmation of our policies.

8. Monitor our Competitors

Web sites, trade shows and white papers are good ways to keep an eye on our competitor's activities in a period of high turnover. If a competitor recruits several of our top engineers in a short time frame, we may have cause for alarm—especially if the competitor's new products bear more than a coincidental resemblance to our own recent releases.

5.1.2 Physical Security

Physical security is the protection of personnel, hardware, programs, networks and data from physical circumstances and events that could cause serious losses or damage to an enterprise, agency or institution. This includes protection from fire, burglary, natural disasters, theft, vandalism and terrorism.

Physical security is often overlooked in favor of more technical and dramatic issues such as hacking, viruses, Trojans and spyware. However, breaches of physical security may be carried out with little or no technical knowledge on part of an attacker. Moreover, accidents and natural disasters are a part of everyday life and in the long term, are inevitable.

There are three main components to physical security. First, the obstacles can be placed in the way of the potential attackers and sites can be hardened against accidents and environmental disasters. Such measures can include fencing, walls, fireproof safes, multiple locks, and water sprinklers. Second, the surveillance and notification systems can be put in place, like lighting, heat sensors, smoke detectors, intrusion detectors, alarms and cameras. Third, methods can be implemented to apprehend attackers and to recover quickly from accidents, fires or natural disasters.

5.1.3 Employee Access Limitation - Employee Confidentiality Agreement

Employers should also take steps to limit access to trade secret information. For example, proprietary information should be shared with employees only on a “need to know” basis. In this age of technology, digital security measures will be paramount. Sensitive documents and files must be password-protected or locked to ensure that they are not accessed by unauthorized employees. Companies should also ensure that their websites do not disclose information that is intended to be trade secret and that their employees are not blogging about information online. Finally, employers should ensure that their policies provide management unfettered access, at any time, to all company-owned computers that are utilized by employees.

For more tangible items, to the extent it is practicable, the proprietary information should be kept in locked files or in the rooms that only certain individuals are permitted to access. Unauthorized employees or visitors should not be permitted into areas where confidential information is kept or developed. Video surveillance can be useful for limiting and monitoring access to the sensitive areas.

Some employees use log books to track employees access to confidential information. Others protect sensitive documents by printing them on specially-colored paper that makes them more identifiable and could also make effective photocopying, scanning or faxing difficult. Document destruction procedures can also be implemented, in order to ensure that proprietary information cannot be gleaned from company trash bins.

Employee Confidentiality Agreement

An employee confidentiality agreement is similar to a non-disclosure agreement. The difference is that a confidentiality agreement is with employees and contractors, where a non-disclosure agreement is with other firms.

An Employee Confidentiality Agreement can Help Retain Secret Information:

- First, simple act of signing the agreement may impress upon person the importance of confidentiality and prevent them from revealing the business's information.
- Second, state laws are present that protect trade secrets, but gain the advantage of these laws the business must be able to show that it attempted to keep their information secret.
- Finally, a confidentiality agreement provides a basis to sue a current or former employee if he or she utilizes or discloses information in violation of an agreement. A confidentiality policy would demonstrate, in court, that some information was meant to be kept confidential.

An employee confidentiality agreement must include broad language that requires employees and other individuals to protect non-public information about the company, its customers and its employees. It should also instruct them not to use this non-public information or disclose this information with others, except as required by their current position with the company.

However, just because information is not explicitly shared that does prevent the information from being used by former employees when making decisions in new positions with other firms. This is why a business may also consider having employees sign a non-compete agreement in addition to a confidentiality agreement.

In order for trade secrets to be protected under an employee confidentiality agreement, we have to be able to provide proof that they are both proprietary and non-public. This means that the information is not known to the world at large but only to a small, select group of people within the company. Also, it should be labeled or otherwise communicated that the information is confidential. For an employee confidentiality agreement to prove effective, it should provide for the following:

- **Assignment** – Since the person can develop valuable data in the course of employment or interaction with the business, this provision ensures that the data belongs to the business. In short, it addresses the question of who owns the resulting trade secret.
- **Restriction** – This clause is generally used only in employee confidentiality agreements. However, some businesses use this clause in all their confidentiality agreements. This provision ensures that the person will not compete with business after leaving the job or once the interaction with the business is over. For example, the agreement may require that the employee not start his or her own company or take a job with a competitor for a specified period after leaving the job.
- **Acknowledgement** – To keep the person from later pleading ignorance and challenging the agreement, agreement should include a clause that stipulates that the person understands and voluntarily consents to the agreement's provisions.

- **Confidentiality** – A confidentiality provision would prohibit an employee or someone associated with business from using or disclosing any trade secrets he or she may have had access to in the course of employment or interaction with the business. In short, the person agrees, on pain of legal sanctions, to ensure the confidentiality of the business secrets entrusted to him or her.
- **Severability** – Because one or more provisions of a confidentiality agreement could run afoul of the law, it's a good idea to include a severability clause. This clause would uphold the remaining provisions in the agreement if a court should strike down one or more provisions as illegal or contrary to public policy.

Make sure the employee confidentiality agreement complies with the personnel manual. For an employee confidentiality agreement to be most effective, the personnel manual should delineate company policy on proprietary information. The business should define what constitutes a secret if the agreement is to work. This definition can be accomplished by taking the following steps:

- Periodically searching the employee lockers, desks and PC files for unauthorized storage of information.
- Labeling proprietary information as “secret and confidential”.
- Limiting access to the information to employees with a “need to know” basis.
- Placing notices about company's policy at all photocopying machines, computers and facsimile machines.
- Including an acknowledgment in termination notices that reminds employees of their continued obligation to not misuse corporate trade secrets.
- Limiting access to sensitive, corporate information by unauthorized persons.
- Requiring outside consultants and temporary employees, who have access to sensitive proprietary data, to sign confidentiality agreements.

Although no effort to secure corporate secrets is foolproof, confidentiality agreements are a step in the right direction. They deter misuse of information and place competitors on notice that they run the risk of litigation if they use dishonest insiders to steal secrets.

5.2 Trade Secret Law

A trade secret is information that is important to the business or company and is not known to the public. It is a term often used to cover information that has commercial value. A trade secret may include, for example, a method or technique that would give a business or company an edge over its competitors.

The law on the protection of confidential information protects ideas and information not in the public domain, including the trade secrets. Thus, the law on trade secrets is really about the protection of confidential information.

Under the law, such information is protected as a secret from everyone except certain key individuals within the business or the company. If someone reveals this secret information to others, especially if he is aware that it is a secret, legal action can be taken against him.

Protection of trade secrets

No registration procedures are involved for protection of a trade secret and there is no specified time limit within which the secret may be protected. When a trade secret is leaked out, this breaches the confidence and is an action that may be taken in court, as this leak of the secret is unfair to the business/company and may have harmful consequences.

However, not all information can be considered a trade secret. The court will look into the following when determining whether there has been a breach of confidence:

- The information has been revealed in breach of a promise of confidence
- The information was used in an improper way that has resulted in financial damage to the business or company and/ or
- The information was confidential to the business or company.

How to protect trade secrets

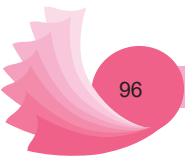
The following are some useful pointers for protecting the confidentiality of information:

- Ensure that any individuals who come into contact with the business or company, such as consultants and vendors, sign non-disclosure agreements
- Keep a clear record of all business deals that may contain any confidential information
- Have employees sign non-disclosure agreements, which provide that they have to maintain confidential specific information that is disclosed to them and
- Limit the number of people who can access such confidential information.

The relationship between patents and confidential information

As a general rule, it is not possible to maintain a patent and ensure non-disclosure of the confidential information for the same invention. This is because, in return for obtaining a 20-year monopoly to exclude others from making, using or selling the invention, owner of the invention will have to make a full disclosure of invention during the patent application process.

The relationship between the copyright and confidential information



Confidential information with copyrightable material will be protected by both the copyright law and the law regarding confidential information. Example, an individual who develops a computer software programme will be able to commercialise it but still keeping confidential the underlying algorithm, architecture and source code of software programme.

Protection of the confidential information outside Singapore

Protection of confidential information varies from country to country. In some countries, trade secrets are protected under separate laws. There are also laws in the EU and the US that governs data protection and privacy. However, protection of the trade secrets is a principle that is widely acknowledged by the World Trade Organization.

5.2.1 Unfair Competition

“Any act of competition contrary to honest practices in industrial and commercial matters”.

General Principles

Freedom to pursue a livelihood, operate a business and otherwise compete in the marketplace is essential to any free enterprise system. Competition creates incentives for businesses to earn customer loyalty by offering quality goods at reasonable prices. At same time, competition can also inflict harm. The freedom to compete gives businesses the right to lure customers away from each other. When one business entices enough customers away from competitors, those rival businesses can be forced to shut down or move.

The law of unfair competition will not penalize a business merely for being successful in the marketplace. Nor will the law impose liability simply because a business is aggressively marketing its product. The law assumes, though, that for every dollar earned by one business, a dollar will be lost by a competitor. Accordingly, the law prohibits a business from unfairly profiting at a competitor's expense. What constitutes an unfair competition varies according to the Cause of Action asserted in each case. These include actions for the infringement of Patents, Trademarks and copyrights actions for the wrongful appropriation of Trade Dress, trade names, trade secrets and service marks and actions for the publication of defamatory, false and misleading representations.

Two common examples of an unfair competition are trademark infringement and misappropriation. The latter involves the unauthorized use of an intangible assets not protected by trademark or copyright laws. Other practices that fall into the area of unfair competition includes: false advertising, "bait and switch" selling tactics, unauthorized substitution of one brand of goods for another, use of confidential information by former employee to solicit customers, theft of trade secrets, breach of a restrictive covenant, trade libel and false representation of products or services.

While trade secret misappropriation is one type of the “unfair competition,” the law recognizes many other claims that can be asserted against bad acts that adversely affect business. For example, unfair competition claims can be asserted against parties that pass off their goods as those of another, make false or misleading advertising claims, use confusingly similar packaging or wrongly interfere with the existing or prospective business relationships. These types of unfair competition claims typically arise ancillary to claims of trade secret misappropriation or intellectual property infringement. As such, our attorneys have a great deal of experience litigating unfair competition claims and can provide excellent representation.

Behaviour classified as unfair competition

To prevent unfair practice certain actions are limited by law. Article 10 bis of Paris Convention classifies unfair business practices into three broad categories:

Acts causing confusionAn act or practice, in the course of industrial or commercial activities, that causes or is likely to cause, confusion with respect to another's enterprise or its activities, in particular, the products or services offered by such an enterprise constitutes an act of unfair competition.

Even the likelihood of the confusion having a detrimental effect comparable to actual confusion constitutes an act of unfair competition and this widely enlarges the scope of protection. For instance, a trademark, whether it is registered or not or a product's appearance may lead to confusion. Appearance of a product includes packaging, shape or other non-functional characteristic features of the product.

Acts that are misleadingA misleading act can create a false impression of a competitor's product or services leading to the consumer, acting on false information, suffering financial damage. Misleading acts can take the form of a statement giving incorrect indications or allegations about an enterprise or its services or products. For example, misleading statements concerning the manufacturing process of a product may relate to a product's safety and create a false impression.

Acts damaging goodwill or reputationReducing the appearance, distinctive character, value or the reputation attached to a product could damage another's goodwill or reputation. For instance, any act that dilutes the effect of a trademark is considered unfair as it could destroy the originality and the distinctive character of a trademark.

Other acts that could be classified as causing unfair competition include discrediting another's enterprise or its activities, industrial or commercial espionage and acting unfairly with respect to the confidential information such as breach of contract or breach of confidence.

5.2.2 Trade Secret Litigation

A company's success is closely tied to its ability to protect its intellectual property and trade secrets. Trade secret litigation often involves "high stakes" or "bet-the-business" cases.

If a trade secret is disclosed in violation of a confidentiality agreement and the parties cannot resolve the dispute themselves, an action for breach of contract may be brought, similar to any other breach of contract action. The plaintiff may add other causes of action as well, for example, for misappropriation in violation of a state trade secret law. If no written agreement exists, the plaintiff must rely upon case law or state statutes protecting trade secrets or both. To protect itself against a lawsuit by another alleging trade secret violations, companies should require new employees who will have access to confidential information to acknowledge in writing that accepting employment with the new company does not violate any other agreement or violate any other obligation of confidentiality to which the employee may be subject.

Additionally, employees should be required to represent that work they perform for the employer will be original work and will not in-fringe any other party's rights. If grounds for federal jurisdiction exist, the action may be brought in federal court. If the action also involves copyright or patent, it must be brought in federal court. Otherwise, the action will be brought in a state court. If the action

is instituted in federal court, a federal court will apply state law inasmuch as there is no general federal trade secret law.

The UTSA provides that an action for misappropriation must be brought within three years after misappropriation is discovered or reasonably should have been discovered. In federal court, the action will be governed by the Federal Rules of Civil Procedure relating to federal civil actions generally. These rules set the times for responding to the complaint, matters pertaining to motions and discovery and any other litigation-related matters. Most states have rules relating to civil procedure that are modeled substantially after the Federal Rules of Civil Procedure and likewise govern the litigation.

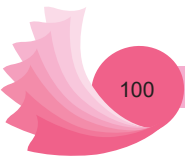
After the complaint is filed, the defendant will respond by filing an answer, usually denying that any breach of agreement or misappropriation has occurred and asserting various defenses. If the defendant has a cause of action to assert against the plaintiff relating to the trade secret, it must be asserted by way of a counterclaim in the litigation so that all disputes between the parties relating to the information can be resolved at the same time.

After the complaint, answer and counterclaim have been filed, various motions may be made. Discovery will commence. The plaintiff and defendant will take depositions to obtain testimony from those who may have information about the case. For example, the plaintiff may depose individuals in the defendant's company to determine whether they were instructed to misappropriate the plaintiff's information.

Interrogatories may be served on either party to obtain information, such as to inquire about experts either side may intend to call, how damages such as alleged lost profits were calculated or to determine the existence of pertinent documents. Ultimately, if the matter cannot be resolved by private agreement, it will proceed to trial. The trade secret owner must prove misappropriation by a preponderance of the evidence. Either party may request a jury trial otherwise, a judge will render the decision. Appeals may follow.

One of the difficult issues in trade secret litigation arises from the fact that the trade secret sought to be protected often must be disclosed in the litigation so the judge or jury can evaluate whether the information is sufficiently valuable that it affords its owner a competitive advantage. Similarly, the owner's methods of protecting the information often must be disclosed so the fact finder can determine whether the owner has taken reasonable measures to protect the alleged trade secrets. Thus, the dilemma faced by trade secret owners in litigation is that they must disclose the very information they seek to protect.

Courts can fashion a variety of means to protect the information, from issuing protective orders, to holding private hearings in the judge's chambers, to closing the courtroom to the public, to sealing court records. As technology progresses and the value of certain communication and entertainment inventions increases, trade secret litigation is becoming an increasingly common and high-stakes occupation. Damage awards may run into the millions. For example, in 2011, a jury awarded MGA Entertainment \$885 million in damages arising out of Mattel's theft of MGA's trade secrets relating to its 'Bretz' line of dolls. The trial judge then reduced the award to \$85 million and also awarded



MGA \$85 million in exemplary damages due to Mattel's willful and malicious conduct. Attorneys' fees and costs were also awarded. At the time of the writing of this text, Mattel stated it planned to appeal the decision.

5.2.3 Breach of Contract

Breach of contract means failing to perform any term of a contract without a legitimate legal excuse. The contract may be either written or oral. A breach may include not finishing a job, failure to make payment in full or on time, failure to deliver all the goods, substituting inferior or significantly various goods, not insuring goods, among others. An anticipatory breach may be made by an act which indicates the party will not complete the work.

A breach of contract in legal terms amounts to a broken promise to do or not do an act. Breaches of a contract are single, occurring at a single point in time or continuing breaches. A lawsuit for the breach of contract is a civil action and the remedies awarded are designed to place the injured party in the position they would be in if not for the breach.

Remedies for contractual breaches are not designed to punish the breaching party. A contract is a legally enforceable promise, either made in writing or orally. However, certain promises should be reduced to writing in order to satisfy the Statute of Frauds, a rule of substantive law, not a rule of evidence, that specifies certain subjects that must be evidenced by a written instrument.

The non-breaching party is relieved of his obligations under contract by the other party's breach. Courts will award damages in the event of a breach, but the intent is not to punish the breaching party, but rather to put the other party in the position they can occupy if the contract had been fulfilled. In cases where money is inadequate to compensate the aggrieved party, the court may award specific performance to force the breaching party to fulfill the terms of the contract.

Remedies for a Breach of Contract

When an individual or business breaches a contract, the other party to the agreement is entitled to relief under the law. The main remedies for a breach of contract are:

- **Specific Performance**
- **Damages, or**
- **Cancellation and Restitution**

Damages

The payment of damages, payment in one form or another, is the usual remedy for a breach of contract. There are many kinds of damages, including the following:

- 1 .Nominal damages are token damages awarded when a breach occurred, but no actual money loss to the non-breaching party was proven.

2. Compensatory damages aim to put the non-breaching party in the position that they had been in if the breach had not occurred.

3. Liquidated damages are specific damages that were previously identified by the parties in the contract itself, in the event that the contract is breached. Liquidated damages should be a reasonable estimate of actual damages that might result from a breach.

4. Punitive damages are payments that the breaching party must make, above and beyond the point that would fully compensate the non-breaching party. Punitive damages are meant to punish a wrongful party for particularly wrongful acts and are rarely awarded in the business contracts setting.

Specific Performance

If damages are inadequate as a legal remedy, the non-breaching party may seek an alternative remedy called specific performance. Specific performance is best described as breaching party's court-ordered performance of duty under the contract. Specific performance may be used as a remedy for the breach of contract if the subject matter of the agreement is rare or unique and damages would not suffice to place the non-breaching party in as good a position as they would have been had the breach not occurred.

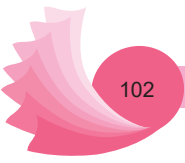
Cancellation and Restitution

A non-breaching party can cancel the contract and sue for restitution if the non-breaching party has given a benefit to breaching party. "Restitution" as a contract remedy means that the non-breaching party is put back in the position it was in prior to the breach, while "cancellation" of the contract voids the contract and relieves all parties of any obligation under the agreement.

5.2.4 Applying State Law

There are 50 states and several commonwealths and territories within the United States. Each has its own system of laws and courts that handle:

- Criminal matters
- Divorce and family matters
- Wills, inheritances and estates
- Welfare, public assistance or Medicaid matters
- Real estate and other property
- Personal injuries such as from a car accident or medical malpractice
- Business contracts



- Workers compensation for injuries at work

The law of trade secrets is governed by state law as opposed to U.S. federal law which governs patents and copyrights. Accordingly, one must check in a particular state to know precisely how the trade secret is defined by law in that state.

However, many states have adopted the "Uniform Trade Secret Act" (UTSA) in an attempt to provide uniformity in trade secret law across the United States. California's adoption of the UTSA defines a trade secret as:

- Generally speaking, if there is any potential demand for a product idea it has economic value.
- Licensed attorneys in the United States have an obligation under the law to keep information they obtain from clients confidential and not to use such information against the client.
- Reasonable efforts to keep information about a product idea or invention secret generally means disclosing the information only to those who have a legal obligation to keep the information secret and not misappropriate the information for their own benefit.
- If someone has agreed to keep confidential information secret and refrain from using it and they then misappropriate or disclose the information, we may have a legal remedy against them. This can include an award of money and also a court order requiring the offender to take certain actions or refrain from certain actions.
- With everyone else we generally must create a legal obligation of confidentiality on their part through a contract that requires them to keep information they receive about the product confidential and not use such information for their own benefit. Such agreements should be in writing.
- Aside from the new products under development, many businesses also have valuable information that they treat as confidential. Such information can include the financial information, market information, customer lists, suppliers, etc.. . Smart businesses will often take the necessary steps to protect such confidential valuable information from becoming public and/or being misappropriated by competitors, by treating it as a trade secret.
- Trade secrets can be very valuable, especially early in the product development process before the product has been publicly launched or the patent protection obtained. Sometimes it is the only thing that can help our business get and keep a very valuable head start over the competition.

Introduction to Cyber Law

Introduction to Cyber Law – Information Technology Act - Cyber Crime and E-commerce – Data Security – Confidentiality – Privacy - International aspects of Computer and Online Crime.

6.1 Introduction to Cyber Law

The cyberlaw is a relatively new field which draws from many areas of the traditional law and it is becoming an increasingly important field in its own right. This is multi-disciplinary that covers criminal and civil issues ranging from financial crimes to cyberbullying to the First and Fourth Amendment rights. The privacy, control and access are the topics with which cyberlawyers regularly engage with. The increasing numbers of HLS students are pursuing careers in cyberlaw. Since rapidly evolving and expanding field, the cyberlaw promises to offer even more diverse opportunities in the future.

It has several major doctrinal areas of cyberlaw, including online privacy, criminal law, civil and human rights, health privacy, net neutrality and regulation and national security.

Criminal Law

Ain criminal law, a wide variety of crimes can be perpetrated on or using the Internet, by including stalking and harassment, financial crimes, human trafficking and child pornography.

Financial Crimes and Fraud:

The computers make both small and large-scale financial crimes and fraud frighteningly easy to perpetrate. The financial crimes involving with cyberlaw range from classic one-off fraud cases to increasingly sophisticated schemes which target specific populations. The identity fraud is also a growing concern, as more and more personal information is stored online and can be vulnerable to theft. The lawyers at the federal and state levels all work to investigate and prosecute such behavior.

Stalking and Harassment:

The social media websites such as Twitter, Facebook and LinkedIn as well as photo sharing programs like Instagram gives information about private individuals more readily accessible than ever. Regrettably, this accessibility sometimes facilitates harassment, cyberstalking or

cyberbullying. Also, the anonymity of the Internet allows some to attack their targets without revealing their own identities. Hence, these issues have garnered attention with several high-profile criminal cases which has involved the suicides of children and teenagers who experienced severe cyberbullying.

Human Trafficking:

This is estimated that there are at least 27 million victims of human trafficking worldwide who are forced to work as slaves, soldiers, sex workers or domestic workers. Today, human trafficking is frequently international in nature and almost, it always involves use of the Internet. The combating human trafficking is a growing legal field. Currently, more than half of U.S. states have statutes which specifically criminalize human trafficking over the Internet.

Child Pornography:

Producing, possessing and transmitting child pornography is illegal and is punishable by incarceration in the United States and many other countries. Since 2008, 94 of the 187 Interpol member states had domestic legislation specifically addressing child pornography and several others had legislation which banned all pornography, regardless of age. Also, the United Nations Optional Protocol on the Rights of the Child requires signatories to outlaw child pornography and the EU requires member states to criminalize all aspects of it.

Online Privacy

The privacy issues are raised only when governments, other organizations or individuals use the Internet for gathering information about individuals or groups. Since people transmit more and more private information through the Internet and store private data on computers not under their physical control, therefore privacy concerns have become increasingly important. It has many challenges to Internet privacy every day. For example, Ad companies use cookies to track the browser history and law enforcement professionals scour Facebook profiles for evidence of criminal activity. The litigation, policy and research opportunities for the lawyers exist at many organizations working for protecting privacy and Fourth Amendment rights online.

The government surveillance of online communications raises extensive political and legal implications. The statutes such as the Foreign Intelligence Surveillance Act (FISA) and the Electronic Communications Privacy Act (ECPA) were originally intended for protecting the privacy of U.S. citizens, but many argue that they do not go far enough and have been weakened by subsequent legislation. Many number of organizations work against efforts to broaden government surveillance, including the ACLU, Amnesty International and the Electronic Frontier Foundation, that represents a coalition of organizations in a case against the NSA in connection with the 2013 surveillance program controversy. Such concerns can rise to Constitutional levels where the Fourth Amendment, that protects people from unreasonable government searches and seizures, can often be implicated by government online surveillance and intelligence gathering and the development of jurisprudence in this area is ongoing.

When not implicating the Fourth Amendment, the privacy concerns are also raised by the actions of corporations such as Facebook and Google, that manage and manipulate a large quantity of online personal data. The nonprofits working on Internet privacy are often engaged with these issues as well.

Health Privacy

The privacy of health information is a specialized area of concern and with the growth of online medical records, it is also an important area of cyberlaw. Thus, 1996 Health Insurance Portability and Accountability Act (HIPAA) protects the privacy of medical records and also regulates the conditions under which the medical providers can release patient information. Then Affordable Care Act (ACA) will include a requirement which all hospitals and healthcare facilities comply with electronic records law by adopting electronic medical records (EMR) by 2015.

The medical providers or businesses that deal with the medical records need attorneys to ensure that they are in compliance with HIPAA and other laws. Such lawyers can work as in-house or outside counsel. Similarly, attorneys are needed to enforce these federal laws. For instance, the Office for Civil Rights in the Department of Health and Human Services (HHS) is responsible for enforcing the three main components of HIPAA are as follows:

- (1) The protection of identifiable information being used to analyze patient safety events and improve patient safety.
- (2) The security of electronic, protected health information.
- (3) The privacy of individually identifiable health information.

Freedom of Expression and Human Rights

Nowadays, the Internet has become vital to freedom of expression and human rights issues. Since the Internet has become one of the primary means of obtaining and distributing information, many have come to see Internet access as a human right, not a luxury. The lawyers in many countries work to expand and protect Internet access and freedom of expression.

Regulation of the Internet and Net Neutrality

The net neutrality refers to the principle in which the Internet Service Providers (ISPs) and governments must not restrict users' access to any online networks. In net neutrality, the network infrastructure owners might not be able to discriminate on the basis of on content, nor would they or governments be able to restrict the access to other networks. The advocates of net neutrality argue it is necessary for protecting free communication and expression online. The Federal Communications Commission (FCC) currently regulates the Internet and debates over the net neutrality and other regulatory issues which are often take place within the context of FCC rulemaking in the United States,.

Therefore the efforts to restrict or regulate the internet access often meet the fierce opposition from the public, where large companies such as Google and small online businesses. For instance, the Stop Online Piracy Act (SOPA) was a 2011 bill favored by interests like the recording industry which would have required ISPs for regulating access to the websites which is hosted or provided links to the pirated content. This was denounced by many as censorship and failed after a concerted internet-based protest. The internet regulation issues are also relevant abroad. For example, the European Union has also considered Union-wide legislation which would mandate net neutrality and Neelie Kroes, the Vice President of the European Commission, has declared the intention to present legislation which might guarantee net neutrality by 2014. Thus, net neutrality is an open, controversial issue that can provide many opportunities for lawyers who are interested in freedom of expression, regulatory issues and communication.

National Security

In all countries, including the United States, are attempting to navigate since Internet poses new challenges to national security. In 2011, Secretary of Defense Leon Panetta warned that “we might face a cyber attack which can be the equivalent of the Pearl Harbor...” this attack, can take down our financial systems in this country, take down our power grid system, take down our banking systems, take down our government systems” and it can also “virtually paralyze the country.” Almost all the agencies of the federal government and also some state and local government agencies, have divisions which deal with cyberlaw and security issues, either directly or indirectly.

6.1.1 Information Technology Act

Information Technology Act 2000, is to provide legal recognition for transactions carried out by means of electronic data interchange and other means of electronic communication, commonly referred to as “electronic commerce”, which involve the use of alternatives to paper-based methods of communication and storage of information, to facilitate electronic filing of documents with the Government agencies and further to amend the Indian Penal Code, the Indian Evidence Act, 1872, the Bankers Books Evidence Act, 1891 and the Reserve Bank of India Act, 1934 and for matters connected therewith or incidental thereto.

- Information Technology Act 2000, is based on UNCITRAL (United Nations Commission on International Trade Law) Model Law.
- Information Technology Act 2000, has 13 chapters, 94 sections and 4 schedules.
- First 14 sections deals with some legal aspects concerning digital signature.
- Further other sections deal with certifying authorities who are licensed to issue digital signature certificate.
- Sections 43 to 47 provide for penalties and compensation.
- Sections 48 to 64 deals with Tribunals a appeal to high court.

- Section 65 to 79 of the act deals with offences.
- Section 80 to 94 deals with miscellaneous of the Act.

Objectives Of The It Act 2000

- This Act may be called the Information Technology Act, 2000.
- It shall come into force on such date as the Central Government may, by notification, appoint and different dates may be appointed for different provisions of this Act and any reference in any such provision to the commencement of this Act shall be construed as a reference to the commencement of that provision.
- It shall extend to the whole of India and, save as otherwise provided in this Act, it applies also to any offence or contravention there under committed outside India by any person.
- Nothing in this Act shall apply to, —
 - A negotiable instrument as defined in section 13 of the Negotiable Instruments Act, 1881.
 - A trust as defined in section 3 of the Indian Trusts Act, 1882. – Any such class of documents or transactions as may be notified by the Central Government in the Official Gazette.
 - A power-of-attorney as defined in section 1A of the Powers-of-Attorney Act, 1882.
 - Any contract for the sale or conveyance of immovable property or any interest in such property.
 - A will as defined in clause (h) of section 2 of the Indian Succession Act, 1925 including any other testamentary disposition by whatever name called.

6.1.2 Cyber Crime and E-commerce

Cybercrime

Cybercrime is a larger risk now than ever before because of the sheer number of linked human beings and devices.

Cyber crimes are any crimes that involve a pc and a community. In a few instances, the laptop may additionally had been used with the intention to dedicate the crime and in different cases, the pc may had been the target of the crime.

Common types of cybercrime include online bank information robbery, identity theft, on-line predatory crimes and unauthorized laptop get right of entry to. more extreme crimes like cyberterrorism are also of giant issue.

Cybercrime features a wide range of activities, however these can generally be broken into classes:

1. Crimes that target laptop networks or devices. these types of crimes consist of viruses and denial-of-carrier (DoS) assaults.
2. Crimes that use computer networks to develop other crook sports. these sorts of crimes encompass cyberstalking, phishing and fraud or identification theft.

The FBI identifies cybercrime fugitives who have allegedly devoted financial institution fraud and trafficked counterfeit devices that get right of entry to personal digital information. The FBI also offers data on the way to file cybercrimes, as well as useful intelligence statistics approximately the trendy cybercriminals.

Types of cybercrime

Cybercrime degrees throughout a spectrum of activities. At one cease are crimes that contain essential breaches of personal or corporate privacy, together with attacks at the integrity of records held in digital depositories and the usage of illegally acquired digital facts to blackmail a company or man or woman. Also at this stop of the spectrum is the developing crime of identification theft. Midway alongside the spectrum lie transaction-primarily based crimes inclusive of fraud, trafficking in toddler pornography, digital piracy, money laundering and counterfeiting. These are particular crimes with precise sufferers, however the criminal hides inside the relative anonymity provided by the net.

Any other part of this kind of crime entails people inside businesses or government bureaucracies deliberately changing information for either profit or political goals. At the other cease of the spectrum are the ones crimes that involve attempts to disrupt the actual workings of the internet. These variety from unsolicited mail, hacking and denial of provider assaults in opposition to precise web sites to acts of cyberterrorism—that is, the usage of the net to reason public disturbances and even death. Cyberterrorism focuses upon the use of the net by way of nonstate actors to affect a kingdom's economic and technological infrastructure. Because the 11th of September attacks of 2001, public consciousness of the chance of cyberterrorism has grown dramatically.

Cybercrime: The facts

- Cybercrime has now surpassed illegal drug trafficking as a criminal moneymaker.
- Somebody's identity is stolen every 3 seconds as a result of cybercrime.
- Without a sophisticated security package, our unprotected PC can become infected within four minutes of connecting to the Internet.

Criminals committing cybercrime use a number of methods, depending on their skill-set and their goal. Here are some of the different ways cybercrime can take shape:

- Theft of personal data
- Copyright infringement

- Fraud
- Child pornography
- Cyberstalking
- Bullying

E-Commerce

E-commerce systems are based totally upon the usage of the net, which provides open and clean communications on a worldwide foundation. but, due to the fact the internet is unregulated, unmanaged and uncontrolled, it poses a extensive range of risks and threats to the business community.

The use of the net approach that our internal IT and e-commerce structures are potentially on hand by all people, no matter their area.

Threats from hackers and the risks to business

Some of the extra commonplace threats that hackers pose to e-trade structures consist of:

- Getting access to touchy information - inclusive of fee lists, catalogues and treasured intellectual belongings.
- Changing our internet site contents, thereby negative our photograph or directing our customers to another website.
- Gaining access to financial information about our enterprise or clients, so that it will perpetrating fraud.
- Carrying out denial-of-provider (DoS) attacks that prevent get right of entry to to approved users of our website, so that the site is pressured to provide a reduced level of provider or, in a few instances, ceases operation absolutely.
- The usage of viruses to corrupt our business data, and many others.

Challenges of Cyber Crime to e-Commerce

Fulfillment in e-commerce does now not rely upon get admission to and connectivity by myself as a sturdy legal back up is needed to aid all forms of 'digital'contracting and as well as transactions among events. There must be countrywide laws, in tandem with worldwide legal guidelines and conventions, to boost e-trade via passing applicable laws and establishing regulatory our bodies. E-trade might be especially crucial for the improvement of small- and medium-length organizations if they're safeguarded from the risk of 'unknown' bandits of the net.

Inside the recent years e-commerce has grown fairly with new technologies and improvements have converted the conventional enterprise supply chains and on-line marketplaces. Although e-trade sports are speedy growing across the growing international locations in a way to 'jump-frog' the bodily communication obstacles in shipping and verbal exchange, it is dealing with a number of challenges in marginalized areas and communities, like those in Northeast India.

A number of these challenges consist of low ranges of internet penetration and confined criminal help system. The personal corporations on this area are generally small, medium and micro-sized organisations(SMEs) and inside the informal zone. A lot of them are nevertheless blind to the possibilities supplied by way of e-commerce. E-trade offers massive capability to SMEs for creating new industries, growing new content material and generating employment. Most of those business houses do now not have a presence at the internet and manifestly now not involved in e-commerce.

A new form of e-commerce, which follows the rapid growth of wireless technologies, is mobile trade (m-trade), that's possibly to have huge effect in coming years. it could additionally be used for the main varieties of e-trade – B2B, B2C, B2G and C2C. In South Asian context, India has made a few development in legalizing the electronic contracts layout and digital transactions through authentication of the digital documents and data.

Again, to prevent misuse of the internet in e-trade there are some Indian laws are already in region to address cyber crime into its cyber regulation with stipulated punishment inside the shape of imprisonment and fines. Crime is an act of commission or omission which is prohibited with the aid of the law of the land and the Cyber-Crime is the modern category of the crimes by means of wire brought to this kind of list of crimes. Even though many time dangerous and have an effect on tens of millions of humans in a count of seconds, the quick converting nature of technology associated with it makes it the maximum tough region of human behaviour to be managed by way of regulation. Although cyber crimes travels trans border to hit its sufferers, the maximum putting disadvantage of the cyberlaw situation is the absence of a fixed of all encompassing set of cyber-legal guidelines.

6.1.3 Data Security

In simple terms, data security is the practice of keeping data protected from corruption and unauthorized access. The focus behind data security is to ensure privacy while protecting personal or corporate data.

Data is the raw form of information stored as columns and rows in our databases, network servers and personal computers. This may be a wide range of information from personal files and intellectual property to market analytics and details intended to top secret. Data could be anything of interest that can be read or otherwise interpreted in human form.

However, some of this information isn't intended to leave the system. The unauthorized access of this data could lead to numerous problems for the larger corporation or even the personal home user. Having our bank account details stolen is just as damaging as the system administrator who was just robbed for the client information in their database.

Encryption

Encryption has become a critical security feature for thriving networks and active home users alike. This security mechanism uses mathematical schemes and algorithms to scramble data into unreadable text. It can only be decoded or decrypted by the party that possesses the associated key.

(FDE) Full-disk encryption offers some of the best protection available. This technology enables us to encrypt every piece of data on a disk or hard disk drive. Full disk encryption is even more powerful when hardware solutions are used in conjunction with software components. This combination is often referred to as end-based or end-point full disk encryption.

Strong User Authentication

Authentication is another part of data security that we encounter with everyday computer usage. Just think about when we log into our email or blog account. That single sign-on process is a form authentication that allows us to log into applications, files, folders and even an entire computer system. Once logged in, we have various given privileges until logging out. Some systems will cancel a session if our machine has been idle for a certain amount of time, requiring that we prove authentication once again to re-enter.

The single sign-on scheme is also implemented into strong user authentication systems. However, it requires individuals to login using multiple factors of authentication. This may include a password, a one-time password, a smart card or even a fingerprint.

Backup Solutions

Data security wouldn't be complete without a solution to backup our critical information. Though it may appear secure while confined away in a machine, there is always a chance that our data can be compromised. We could suddenly be hit with a malware infection where a virus destroys all of our files. Someone could enter our computer and thief data by sliding through a security hole in the operating system. Perhaps it was an inside job that caused our business to lose those sensitive reports. If all else fails, a reliable backup solution will allow us to restore our data instead of starting completely from scratch.

Securing Data

Once we draw up a plan and assess our risks, it is time to put our data security system into action. Since data can be compromised in many ways, the best security against misuse or theft involves a combination of technical measures, physical security and a well educated staff. We should implement clearly defined policies into our infrastructure and effectively present them to the staff. Here are things that we may do:

- Protect our office or data center with alarms and monitoring systems.
- Keep computers and associated components out of public view.
- Enforce restrictions on internet access.
- Ensure that our anti-malware solution is up to date.
- Ensure that our operating system is up to date.
- Fight off hacking attacks with intrusion detection technology.
- Utilize a protected power supply and backup energy sources.

Mobile Data Security

Hand-held devices and laptop computers have become popular in the business environment. However, mobile computers are at a much greater risk of data loss through damage and theft. For this reason, different safeguards need to be implemented in addition to the security measures listed above.

- Regularly backup data on removable media and safely store multiple copies.
- Activate password protection whenever the device is left alone.
- Never leave the device alone and visible in a vehicle.
- Protect the device from physical damage by transporting it in protective casing.

Efficient data security involves numerous steps, many of which can be downright time consuming.

6.2 Confidentiality

Confidentiality is one of the core duties of scientific practice. It requires fitness care vendors to maintain a affected person's private health statistics private until consent to launch the statistics is furnished by way of the affected person.

Patients mechanically share personal data with health care carriers. If the confidentiality of this information had been now not protected, trust in the doctor-affected person dating would be diminished. Sufferers might be much less likely to share touchy data, that may negatively impact their care.

The responsibility of confidentiality prohibits the fitness care issuer from disclosing records approximately the affected person's case to others without permission and encourages the carriers and health care structures to take precautions to make certain that simplest authorized get entry to happens. Appropriate care often requires that statistics about patients be discussed among individuals of a fitness care group where all team individuals have authorized get right of entry to to exclusive statistics about the sufferers they care for and expect the duty of protective that records from others who do no longer have get entry to. Digital medical records can pose demanding situations to confidentiality. According with the health information Portability and duty Act of 1997 (HIPAA), institutions are required to have rules to defend the privacy of sufferers' electronic information, including approaches for laptop get right of entry to and protection.

While there can be instances where the medical doctor feels clearly willing to percentage records, inclusive of responding to an inquiring spouse, the requirements for making an exception to confidentiality won't be met. If there isn't always express permission from the affected person to share facts with family member, it's miles generally now not ethically justifiable to achieve this. Except in cases wherein the spouse is at unique risk of damage immediately associated with the prognosis, it remains the patient's, in preference to the medical doctor's, obligation to inform the partner. Confidentiality has numerous unique factors:

- **Privateness of Communications**
- **Comfortable storage of sensitive records**
- **Authenticated users**
- **Granular get entry to manipulate**

Privacy of Communications

Privacy is a totally broad concept. For the man or woman, it entails the potential to govern the spread of private data along with fitness, employment and credit information. Inside the business world, privacy might also contain change secrets and techniques, proprietary statistics approximately merchandise and tactics, aggressive analyses, in addition to marketing and income plans. For governments, privateness entails such issues as the ability to collect and examine

demographic information, at the same time as protective the confidentiality of millions of person citizens. It also involves the capacity to hold secrets that affect the U.S.'s hobbies.

Secure Storage of Sensitive Data

After confidential data has been entered, its integrity and privacy should be protected on the databases and servers where it resides.

Authenticated Users

It is a way of implementing decisions about whom to trust. These methods seek to guarantee the identity of system users that a person is who he says he is and not an impostor.

Granular Access Control

Get right of entry to control is the capacity to cordon off portions of the database, so that get right of entry to the facts does now not turn out to be an all-or-nothing proposition. A clerk inside the Human members of the family department may need a few access to the emp table--but he ought to now not be permitted to get entry to revenue information for the entire enterprise. The granularity of get right of entry to manage is the degree to which facts get entry to can be differentiated for precise tables, views, rows and columns of a database.

Be aware the difference between authentication, authorization and get admission to manage. Authentication is the procedure by which a user's identity is checked. While a consumer is authenticated, he's demonstrated as an authorized user of an application. Authorization is the technique with the aid of which the consumer's privileges are ascertained. Get right of entry to manipulate is the process through which the consumer's get entry to to physical facts in the application is restrained, primarily based on his privileges. Those are critical troubles in disbursed structures. For instance, if JAUSTEN is trying to get admission to the database, authentication would pick out her as a a legitimate person. Authorization would verify her right to connect with the database with Product supervisor privileges. Get admission to control might implement the Product supervisor privileges upon her consumer consultation.

6.2.1 Privacy - International aspects of Computer and Online Crime.

Privacy:

A person's proper to control get admission to to his or her private statistics.

Computer crime is an act completed through a knowledgeable pc user, sometimes called a hacker that illegally browses or steals a organization's or individual's non-public statistics. In a few cases, this man or woman or institution of people can be malicious and wreck or otherwise corrupt the laptop or facts documents.

On account that cybercriminal coordination isn't always constrained by way of country wide obstacles, worldwide cooperation is vital within the combat in opposition to international pc crime

and, in many cases, that cooperation is taking place. But, it'd appear no longer all international locations are similarly proactive in this warfare towards organised cybercrime. One reason is victims of cybercrime are regularly outside the united states where the cybercriminals are working. The cybercriminals may also be generating sufficient coins to buy immunity from their nearby law enforcement. This means the fight against cybercrime have to take area on more than one fronts:

- International cooperation
- Diplomatic stress to convey extra countries on board with such cooperation.
- Home efforts by way of each u . s . to defend its residents from turning into victims.

Examples of computer crimes

Below is a listing of the different kinds of computer crimes today. Clicking on any of the links beneath offers similarly records about each crime.

Child pornography - Making or distributing child pornography.

Challenges in Controlling internet baby Pornography

Internet baby pornography presents a few unique challenges for regulation enforcement groups. these challenges consist of:

The structure of the net: The structure of the internet makes manipulate of infant pornography very hard. The net is a decentralized gadget without a unmarried controlling company or storage facility. Due to the fact it is a network of networks, even though one pathway is blocked, many opportunity pathways may be taken to attain the same vacation spot. In addition, if one internet site or newsgroup is closed down, there are numerous others that can straight away take its area. The decentralized nature of the net and resultant problems in proscribing the distribution of baby pornography, is exemplified by way of P2P networks regarding direct connections among computers with out the need for a valuable server. It's been argued that the net is the closing democratic entity and is basically ungovernable.

The uncertainties of jurisdiction: The net is an worldwide communicate device that crosses jurisdictional boundaries. no longer simplest is cooperation amongst law enforcement groups necessary to tune offenders throughout jurisdictions, it's miles required to coordinate resources and avoid duplication of effort. Parallel operations run from different jurisdictions may unknowingly target the equal organization or wrongdoer. Equally intricate is the problem of who's answerable for investigating infant pornography at the internet while there is no clue as to in which the photographs originate. There is a ability for pornography crimes to go un investigated due to the fact they do not fall inside a specific law enforcement jurisdiction.

The lack of regulation: The internet, by using its nature, is hard to alter, but many jurisdictions are reluctant to introduce legal guidelines that would help control internet use. There are debates about the right weight to give to the network's protection on the one hand and to freedom of

speech and industrial interests on the other. There is additionally legal ambiguity about whether ISPs need to be responsible for the cloth they bring about (as are television stations) or merely regarded because the conduits for that fabric (similar to the mail service). The stop result is that ISPs' criminal responsibilities with respect to internet toddler pornography are frequently doubtful and, for the most element, the emphasis has been on self-law.

The variations in regulation: To the extent that there were attempts to modify the internet, control efforts are hampered by using pass-jurisdictional differences in legal guidelines and levels of permissiveness concerning child pornography. For example, in the America a infant is defined as someone under 18 in Australia the age is 16. Furthermore, international locations range in their dedication to put in force legal guidelines and act in opposition to offenders, both for cultural reasons or due to corruption.

The knowledge of offenders: As the typology of internet offending conduct suggests, offenders vary in the degree to which they hire complex security measures to keep away from detection. There may be a middle of veteran offenders, a number of whom had been lively in pedophile newsgroups for extra than twenty years, who possess excessive stages of technological understanding. Pedophile bulletin forums frequently incorporate technical recommendation from antique fingers to newcomers. It's been argued that many internet sting operations be successful only in catching inexperienced, low-degree offenders.

The sophistication and version of internet era: The information of offenders is greater by using the rapid advances in net generation. Further to P2P networks, latest traits consist of remailers (servers that strip the sender's identification from e mail) and report encryption (a way of hiding or scrambling records). A technological race has developed between net pornographers and regulation enforcement agencies.

The quantity of internet hobby: The sheer amount of visitors in toddler pornography makes the assignment of monitoring down all and sundry who visits a toddler pornography website online impossible. Many offenders comprehend that realistically their chances of being stuck are pretty faraway. Similarly, while perhaps worthwhile activities, catching peripheral offenders or disrupting character networks may additionally have little usual effect on the size of the hassle.

Cyber terrorism - Hacking, threats and blackmailing closer to a business or individual. not like a nuisance virus or laptop attack that consequences in a denial of service, a cyberterrorist attack is designed to purpose physical violence or extreme monetary damage. According to the U.S. commission of essential Infrastructure safety, feasible cyberterrorist goals include the banking industry, military installations, energy vegetation, air traffic manipulate centers and water systems. Cyberterrorism is now and again referred to as digital terrorism or records battle.

Cyberbully or Cyberstalking - Harassing others on-line. as a substitute called a cyberstalker, a cyberbully is a person who posts inappropriate or undesirable things approximately some other individual or in any other case harasses them in e-mails, IMs or SMS.

Creating Malware - Writing, creating or dispensing malware (e.g. viruses and spyware). Alternatively called scumware, malware is malicious software program designed to alternate our settings, delete software program, reason errors, watch browsing behavior or open computer to assaults.

Protecting a computer from malware

A laptop can be inflamed by way of malware by way of travelling an infected website, downloading inflamed software program or installing infected software program. most antivirus applications can clean malware but it's also a terrific concept to run an anti-malware or malware purifier such as Malwarebytes.

Denial of service attack - Overloading a device with so many requests it can not serve regular requests.

1. Brief for Disk working machine, DOS is an acronym often used to explain MS-DOS and the windows command line.
2. Quick for Disk running machine, DOS refers to any operating system that runs from a disk force. Nowadays, all working systems may be considered disk working structures.
3. Short for Denial of provider, a DoS attack is a technique of attacking a networked pc via sending it an abnormally excessive variety of requests, inflicting its community to gradual down or fail. Due to the fact that a single man or woman cannot generate enough site visitors for a DoS assault, these assaults are commonly run from more than one computers infected with the aid of worms or zombie computers for a DDoS.

Espionage - Spying on a person or enterprise. The hazard of espionage (spying) did not stop with the fall apart of Soviet communism within the early 1990s. Espionage against uk pursuits nonetheless maintains and is probably very unfavorable. Maximum governments rely on more than a few records being collected to guide their decisions. This isn't always similar to espionage. Espionage is the system of acquiring facts that is not typically publicly available, the usage of human resources (marketers) or technical approach (like hacking into laptop systems). It is able to also involve seeking to influence selection-makers and opinion-formers to gain the pastimes of a foreign strength.

Fraud - Manipulating facts, e.g. converting banking data to transfer cash to an account. Laptop fraud is defined as any act the use of computer systems, the internet, net gadgets and internet offerings to defraud human beings, companies or authorities organizations of money, revenue or internet get admission to. There are numerous methods used to carry out those unlawful activities. Phishing, social engineering, viruses and DDoS attacks are some examples used to disrupt service or gain get admission to to another's funds, however this list isn't always inclusive. See our laptop crime page for a listing.

Americas government first enacted the comprehensive Crime manipulate act on October 12, 1984, which has been amended and updated in many instances in an try to prevent computer fraud. The

maximum latest update became in 2008. This act is supposed to penalize violators with stiff consequences however, there are many opponents of this act who feel it's far too extensive and leaves an excessive amount of leeway in the regulation's jurisdiction. This view complains that by no longer being particular sufficient, that many human beings are punished that in general could now not be considered violators.

Harvesting - collect account or different account related records on other people. A harvester is a software program or bot designed to parse through big quantities of statistics, including web pages at the net, to extract precise facts. for instance, a harvester may be designed to grab debts, addresses, electronic mail addresses, names and phone numbers.

With account harvesting a person or program statistics login and password facts from a valid consumer to illegally benefit get entry to to their account(s). The hacker who is running to harvest accounts may additionally use sniffing software to find information on a network, phishing scams or shoulder surf to collect account data. Once multiple accounts have been harvested, hackers can scouse borrow private or sensitive statistics, junk mail different users or use the account for illegal monetary gain.

Identity theft - Pretending to be a person we aren't. Identity theft is the act of someone acquiring information illegally about a person else. Thief try to locate such facts as complete call, maiden call, deal with, date of beginning, social protection range, passwords, smart phone number, e mail and credit card numbers. The thief can then use this facts to advantage get right of entry to to bank money owed, e mail, cellular phones, discover themselves as us or sells our data.

Hints on preventing identification theft

1. When getting into any private statistics on the net make certain we're coming into it on a relaxed page, indicated with a lock.
2. While shopping something over the internet except we plan on shopping for something from that same enterprise again do now not store our credit card or private data on that website.
3. Ensure to have an lively and up to date spy ware protection application and antivirus protection program.
4. Be privy to faux e-mails and phishing e-mails that declare to be a agency consisting of our bank inquiring for any private information or login facts.
5. Make sure our laptop is secure.
6. If we are a victim of a stolen pc, study through the steps on what to do if a computer or computer turned into stolen or misplaced.
7. When getting into solutions to the secret question or forgot password query, don't enter something that can be located online.

Intellectual property theft - Stealing some other people or agencies intellectual assets. highbrow property is any innovation, commercial or inventive, any new approach or components with monetary fee, or any specific call, image or brand that is used commercially. Intellectual property is protected by patents on innovations, logos on branded gadgets, copyrights on track, movies, styles and different varieties of expression and state and federal laws.

Phishing - Deceiving individuals to advantage private or private records approximately that individual. reported like fishing, phishing is a time period used to describe a malicious person or group of people who rip-off users. They do so by way of sending e-mails or growing net pages which can be designed to acquire an man or woman's on-line bank, credit card or different login facts. Because these e-mails and internet pages appear to be valid corporations customers believe them and enter their non-public facts.

Salami slicing - Stealing tiny quantities of cash from every transaction. In trendy, salami reducing refers to something reduce into small movements or fractions. For example, with digital transfers salami reducing is the movement of taking tiny fractions of each transaction that builds right into a huge sum of illegally gained cash. If we stole fractions of a penny on a transaction it can pass omitted and if we had been to thief this small amount from hundreds of transactions it could quickly add up.

Scam - Tricking people into believing something that is not real. A scam is a time period used to describe any fraudulent business or scheme that takes cash or other goods from an unsuspecting man or woman. With the sector becoming more linked thanks to the net, on-line scams have improved and it is often up to we to help live careful with people at the net.

Forms of laptop and internet associated scams

There are heaps of styles of scams today, but most boil all the way down to stealing money, property or data. Below is a top level view of not unusual scams.

(i) Phishing

Obtain an e mail from a person pretending to be our financial institution indicating we're overdrawn or made a buy we truly did not make and asking us to log in and verify the statistics. However, the link inside the email in reality factors to a fake website online that logs our username and password data. See our phishing page for further information, actual examples and related links.

(ii) public sale Fraud

Someone promoting some thing on a web public sale web page inclusive of E-bay or Craigs list that appears to be something it without a doubt isn't. For instance, a person may additionally declare to be promoting tickets for an upcoming concert that absolutely aren't official tickets.

(iii) Donation scam

Someone claiming they've or have a baby or a person they recognize with an infection and need financial help. Even though a lot of those claims can be real there are also an alarming quantity of those who create fake debts on donation sites in the desire of scamming people out of money.

(iv) Catfish

A person who creates a faux online profile with the intention of deceiving a person. For example, a female should create a faux profile on an internet courting internet site, create a relationship with one or extra human beings and then create a fake scenario that asks others for cash.

(v) bloodless-call rip-off

Someone claiming to be from technical help from a laptop organization like Dell claims they have obtained information that our laptop is inflamed with a virus or has been hacked and gives to remotely connect with our computer and attach the trouble. Extra records approximately this type of rip-off is located on our does Dell name us report.

(vi) 419

419 or the Nigeria scam offers the affect we will benefit a huge amount of cash and only calls for financial institution records to deposit the money into our account. In truth, the bank records is used towards the individual or the deposits are saved with no praise.

(vii) Chain mail

Commonly harmless, this scam is usually spread through email and tells human beings to ahead the email to all their buddies to get cash back from a person which includes bill Gates. See the chain mail definition for extra information and examples.

(viii) Online Survey Scams

Online survey scams are survey websites that say they provide cash or present vouchers to contributors.

Spamming - Distributed unsolicited e-mail to dozens or masses of different addresses. as an alternative referred to as UCE (Unsolicited business electronic mail) and bulk electronic mail, spam, now not to be burdened with the beef product, is slang normally used to explain junk e-mail on the internet. Unsolicited mail is email dispatched to thousands and occasionally hundreds of thousands of humans without earlier approval, promoting a selected product, provider or a scam to get other human's money. The primary unsolicited mail email changed into dispatched with the aid of Gary Thuerk in can also 1, 1978 an employee at digital who was advertising the brand new DECSYSTEM-2020, 2020T, 2060 and 2060T on ARPA internet.

In a few cases replying to that e mail shows that our email cope with is valid and our e mail cope with can be sent to different unsolicited mail lists, although that is prohibited in many nations.

when receiving any email that is virtually junk mail it is usually secure to click on the unsubscribe or dispose of links.

Spoofing - Deceiving a gadget into wondering we're a person we genuinely are not. In wellknown, the time period spoof refers to hacking or deception that imitates some other individual, software program application, hardware device or computer, with the intentions of bypassing safety features. One of the most commonly regarded spoofing is IP spoofing.

(i) IP spoofing

A method of bypassing safety features on a community or a method of having access to a community by means of imitating a one-of-a-kind IP cope with. Some protection systems have a technique of assisting to identifying a person by means of his or her IP deal with or IP address range. If the attacker spoofs their IP deal with to healthy this standards it may help pass safety features. This technique is likewise used to misinform an internet web page, ballot or different net contest into wondering the user is someone else allowing her or him to get greater hits or falsely increase a votes rank.

(ii) E-mail or address spoofing

Technique of faking a senders electronic mail deal with. This form of spoofing is used to fool the recipient of the email into thinking a person else dispatched them the message. This is generally used to bypass junk mail filters or to trick the user into wondering the email is safe when in reality it consists of an attachment this is inflamed with a plague or spam.

(iii) Smartphone variety spoofing

Each person can fake the quantity or region code of from in which they may be calling. This kind of spoofing is achieved by way of tele markers to cover their real identification and with the aid of hackers to advantage get entry to to unprotected telephone voice mail messages.

(iv) Net page spoof

A fake net web page or spoof on some other normally visited page. as an example a malicious user can also create a spoof page of Microsoft's, eBay, PayPal or Google's domestic page that appears identical however is hosted on a special server. These pages are typically utilized in phishing e-mails to extract records from the person which includes usernames and passwords or to ship malicious files to them. Net page spoofing may also be performed via IP cloaking.

Unauthorized access - Gaining access to structures we don't have any permission to get admission to. Unauthorized get entry to is while a person profits get entry to to a website, program, server, provider or different system using a person others account or other techniques. For instance, if a person kept guessing a password or username for an account that became not theirs till they won access it's far considered unauthorized access.

Unauthorized get entry to can also occur if a consumer attempts to get right of entry to an area of a system they must now not be getting access to. While attempting to access that place, they would be denied get right of entry to and likely see an unauthorized access message.

Some gadget administrators set up indicators to allow them to understand while there is an unauthorized get right of entry to try, in order that they'll look at the cause. Those alerts can assist prevent hackers from having access to a at ease or private system. Many cozy structures might also lock an account that has had too many failed login tries.

Wiretapping - Connecting a tool to a telephone line to concentrate to conversations.

Worldwide factors of computer Crime

- International dimensions are an increasing number of likely.
- Securing electronic evidence is very difficult.
- Court cases dropped, but losses have risen.
- Council of European Cybercrime conference.