Introduction to Patent System

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Civilization-Sunrise of Knowledge

- 17th century-Scientific Revolution
- 18th Century-Political Revolution
- 19th Century-Industrial Revolution
- 20th Century-Information Revolution
- 21st Century-Knowledge Revolution

For more than a century, the World’s Wealthiest human being has been associated with oil. Now he is a knowledge worker - Lester C. Thurow
Meaning of Intellectual Property

- A kind of **intangible** property
- **Creation of human mind/mental labour**
- **Includes all rights** resulting from intellectual activity in **scientific, industrial, literary, or artistic fields**
  - *E.g.*, Patents, Copyright, Trademarks, Designs, GIS, Traditional Knowledge etc.
- **Covers**- chemical, information, nano and biotechnology etc
- **Transnational in character**
- **Confers limited monopoly rights on creators/owners**
Most creations resulting from human endeavors in various fields of art, literature, science and technology constitute Intellectual Property.
## Monopoly and IPR Protection

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<th>Term of Protection</th>
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<td>Patent</td>
<td>Compulsory</td>
<td>20 years</td>
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<tr>
<td>Trademark</td>
<td>Optional</td>
<td>10 years &amp; renewable</td>
</tr>
<tr>
<td>Designs</td>
<td>Compulsory</td>
<td>10 years + Renewable by 5 years</td>
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<tr>
<td>Geographical Indications</td>
<td>Compulsory</td>
<td>10 years + Renewable</td>
</tr>
<tr>
<td>Copyright</td>
<td>Optional</td>
<td>Lifetime of Author + 60 years</td>
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<tr>
<td>Plant Protection</td>
<td>Compulsory</td>
<td>15/18 years</td>
</tr>
<tr>
<td>Integrated Circuits</td>
<td>Compulsory</td>
<td>10 years</td>
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WIPO Definition of IP

IP Includes rights relating to

- literary, artistic and scientific works
- performances of performing artists, phonograms, and broadcasts
- inventions in all fields of human endeavor
- scientific discoveries
- industrial designs
- TMs, SMs and Commercial Names & designations

and

- Protection against unfair competition resulting from intellectual activity in industrial, scientific, literary or artistic fields
### Classification of IPRs

<table>
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<th>Industrial Property</th>
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Classification of IPR

IPR

- Patents
- Trademarks
- Industrial Design
- Geographical Indications

Industrial Property

Copyright

- Music
- Literature
- Works of Art

Broadcasting
- Dramatics Works
- Sound Recording
- Computer Programs
Industrial Property

- Protection of industrial property has as its object patents, utility models, industrial designs, trademarks, service marks, trade names, indications of source or appellations of origin, and the repression of unfair competition.

- Industrial property shall be understood in the broadest sense and shall apply not only to industry and commerce proper, but likewise to agricultural and extractive industries and to all manufactured or natural products, for example, wines, grain, tobacco leaf, fruit, cattle, minerals, mineral waters, beer, flowers, and flour. [Source: Article 1 of Paris Convention for the Protection of Industrial Property, 1883]
Patents

- Protect inventions
- Inventions - Novel, Useful & Non-obvious
- Term of Protection - 20 Years
- Product & Process patents - Indian Position
- Availability - National & International Protection
- Rights - Not absolute
- Tools of business

The entire Mach 3 system of Gillette, protected by 35 patents, cost $35 billion just to bring to market [See Company Profile of Gillette - at www.managementparadise.com/.../221340-company-profile-gillette.html last visited on 6th April 2016]
History of Patents

- Dates back to 1421, Florence, Italy, when the city-state granted the first recorded patent to Filippo Brunelleschi, for the design and use of a ship, the Badalone ("seagoing monster").
- The Badalone was intended to ferry supplies up the Arno river to the city for the building of the Florentine cathedral dome, which Brunelleschi was the designer of.
- Badalone sank during delivery of a load of white marble intended for use in constructing the dome.
History of Patents

The Venetian Senate passed the first patent law in 1474, granting limited duration monopoly for original devices. This law embodied the principles of patent protection as we know them today.

In England in 1449, King Henry IV granted that country's first patent for stained glass manufacturing. In England during this time, a patent was a government-granted monopoly, so could be as much a right to manufacture or trade as well as the right to deny others to do so.

In the United States, the governmental right to grant patents was enshrined in the constitution in Article 1. The first U.S. Patent Act was in 1790. Throughout U.S. history, the rigor of patent examination has varied widely, from literally granting every patent applied for, to very strict examination.
Subject matter of Patent Protection & TRIPS Obligations

Article 27: TRIPS Agreement: Patentable Subject Matter

1) Subject to the provisions of paragraphs 2 and 3, patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application.

Subject to paragraph 4 of Article 65, paragraph 8 of Article 70 and paragraph 3 of this Article, patents shall be available and patent rights enjoyable without discrimination as to the place of invention, the field of technology and whether products are imported or locally produced.
Subject matter of Patent protection & TRIPS Obligations

2) Members may exclude from patentability inventions, the prevention within their territory of the commercial exploitation of which is necessary to protect ordre public or morality, including to protect human, animal or plant life or health or to avoid serious prejudice to the environment, provided that such exclusion is not made merely because the exploitation is prohibited by their law.

3) Members may also exclude from patentability:

(a) diagnostic, therapeutic and surgical methods for the treatment of humans or animals;

(b) plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. However, Members shall provide for the protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof. The provisions of this subparagraph shall be reviewed four years after the date of entry into force of the WTO Agreement.
"invention" means a new product or process involving an inventive step and capable of industrial application [Sec.2(1)(j)]

"inventive step" means a feature of an invention that involves technical advance as compared to the existing knowledge or having economic significance or both and that makes the invention not obvious to a person skilled in the art [Sec.2(1)(ja)]
Position under the Patents Act, 1970

- "new invention" means any invention or technology which has not been anticipated by publication in any document or used in the country or elsewhere in the world before the date of filing of patent application with complete specification, i.e. the subject matter has not fallen in public domain or that it does not form part of the state of the art [Sec.2(1)(l)]

- "patentee" means the person for the time being entered on the register as the grantee or proprietor of the patent [Sec.2(1)(p)]

- "true and first inventor" does not include either the first importer of an invention into India, or a person to whom an invention is first communicated from outside India [Sec.2(1)(y)]
Inventions Not Patentable

- **Sec.3. What are not inventions?**
  - **Frivolous inventions,** those obviously contrary to well established natural laws, contrary to public order or morality or which causes serious prejudice to human, animal or plant life or health or to the environment, 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, a method of agriculture or horticulture, 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, 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 mathematical or business method or a computer program per se or algorithms etc.

- **Sec.4. Inventions relating to atomic energy not patentable**

- Almost similar to Art.27(2) & (3) of TRIPS
Law and Regulations

- Patents Act, 1970
  - Amended in
    - 1999
    - 2002
    - 2005

- Patents Rules, 2003
  - Amended in
    - 2005
    - 2006
    - 2012
    - 2013
    - 2014
Legislative Measures - Patents

- **From 1.1.1995**
  - Mail-Box for pharmaceutical and agrochemicals products
  - Exclusive Marketing Rights

- **From 1.1.2000**
  - Patent term increased to 20 years
  - Definition of invention – inclusion of inventive step
  - Reversal of burden of proof – on the infringer
  - Mandatory compulsory licence provision for food, drugs and chemicals removed (License of Right)
  - Right of patentee (importation also included)

- **From 1.1.2005**
  - Product patents for food, chemical and pharmaceutical

We have met our international commitments
Patent Law - Salient Features

- Both product and process patent provided
- Term of patent – 20 years
- Examination on request
- Both pre-grant and post-grant opposition
- Fast track mechanism for disposal of appeals - IPAB
- Provision for protection of bio-diversity and traditional knowledge
- Publication of applications after 18 months with facility for early publication
- Substantially reduced time-lines
Safeguards in the Patent Law

- **Section 3(d)** restricts patenting of a range of incremental drug claims, is among the most prominent examples of an anti-evergreening provision built into a developing country's post-TRIPS patent laws. *(Novartis Judgment, 2012)*

- **Compulsory license** to ensure availability of drugs at reasonable prices *(NATCo v. Bayer)*

- **Provision to deal with public - Health Health-Emergency - Extreme Urgency** *(Sec.92)*

- **Revocation of patent in public interest** and also on security considerations

- **Secrecy Directions**
General principles applicable to working of patented inventions (S.83)

- (a) that patents are granted to encourage inventions and to secure that the inventions are worked in India on a commercial scale and to the fullest extent that is reasonably practicable without undue delay;
- (b) that they are not granted merely to enable patentees to enjoy a monopoly for the importation of the patented article;
- (c) that the protection and enforcement of patent rights contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations;
General principles applicable to working of patented inventions (S.83)

(d) that patents granted do not impede protection of public health and nutrition and should act as instrument to promote public interest specially in sectors of vital importance for socio-economic and technological development of India;

(e) that patents granted do not in any way prohibit Central Government in taking measures to protect public health;

(f) that the patent right is not abused by the patentee or person deriving title or interest on patent from the patentee, and the patentee or a person deriving title or interest on patent from the patentee does not resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology; and

(g) that patents are granted to make the benefit of the patented invention available at reasonably affordable prices to the public.
Scope of Patentability Under The Patents Act

Invention means a new product or process involving an inventive step and capable of industrial application [Sec.2(1)(J)]

**Invention must**
- relates to a Process or Product or both
- be new (Novel)
- involves an inventive step
- be Capable of industrial application
- not fall under Section 3 and 4

**Invention must not be**
- Published in India or elsewhere
- In prior public knowledge or prior public use within India
- Claimed before in any specification in India
Stages from filing to grant of a patent
Formality Check

- An Examiner checks the formal requirements before accepting the application and the fee – this is done immediately
- Issue of application number and the cash receipt – this is done the same day
- In case of receipt of application by post, cash receipt, application number is sent by post within 2-3 days
Publication

- Application is kept secret for a period of 18 months from the date of filing
- In 19th month, the application is published in the official journal – this journal is made available on the website weekly
- Applicant has an option to get his application published before 18 months also
- In that case, application is published within one month of the request
Request for Examination

- Application is examined on request
- Request for examination can be made either by the applicant or by a third party
- A period of 48 months, from the date of filing, is available for making request for examination
Examination

- Application is sent to an Examiner within 1 month from the date of request for examination.
- Examiner undertakes examination w.r.t.
  - whether the claimed invention is not prohibited for grant of patent.
  - whether the invention meets the criteria of patentability.
Issue of First Examination Report (FER)

- A period of 1 to 3 months is available to Examiner to submit the report to the Controller
- 1 month’s time available to Controller to vet the Examiner’s report
- FER containing gist of the objections is issued within 6 months from the date of filing of request
Response from the Applicant

- 12 months’ time, from the date of issue of FER, is available to the applicant to meet the objections

- If objections are met, grant of patent is approved by the Controller – within a period of 1 month
Pre-grant Opposition

- After publication, an opposition can be filed within a period of 6 months

- Opportunity of hearing the opponent is also available
Examination of Pre-grant Opposition

- Opposition (documents) is sent to the applicant

- A period of 3 months is allowed for receipt of response
Consideration of Pre-grant Opposition

- After examining the opposition and the submissions made during the hearing, Controller may
  - Either reject the opposition and grant the patent
  - Or accept the opposition and modify/reject the patent application
- This is to be done within a period of 1 month from the date of completion of opposition proceedings
Grant of a Patent

* A certificate of patent is issued within 7 days
* Grant of patent is published in the official journal

- **More than 2 lakhs Patent Applications are pending at the Indian Patent Office** [by the end of July 2015]

- Based on statistics provided, Delhi patent office tops the list with 83,291 pending requests of examinations. Mumbai patent office is having the least number of pending cases at 28,100. Chennai and Kolkata patent offices are the second and third with 74,390 and 40,558 pending cases for disposal.
Stages – filing to grant of patent

1. **Filing of Application**
   - Complete Spec
   - Provisional Spec

2. **Publication (18M)**

3. **Request for Exam (48M)**

4. **Examination Report**
   - 12M

5. **Objections Complied?**
   - Y
     - **Grant of Patent**
     - 12M
       - **Post Grant Opposition**
       - **Controller Decision**
         - F
           - **Grant**
         - A
           - **Revoked**
   - N
     - **Refused**

6. **Appeal**
   - IPAB
Renewal Fee

- To be paid within 3+6 months from date of recording in the register [Sec 142 (4)]
- No fee for 1\textsuperscript{st} and 2\textsuperscript{nd} year
- Renewal fee, on yearly basis, is required to be paid for 3\textsuperscript{rd} to 20\textsuperscript{th} for keeping the patent in force
- Delay upto six months from due date permissible on payment of fee for extension of time
- Patent lapses if renewal fee is not paid within the prescribed period
Sources of Patent Information System in India

- Office of the Controller General of Patents, Designs & Trade Marks, Boudhik Sampada Bhavan, Near Antop Hill Post Office, S.M. Road, Antop Hill, Mumbai – 400 037 Phone: (91)(22) 24123311, Fax: (91)(22) 24123322 E-mail: cgpdtm@nic.in

- National Informatics Center, Patent & Info. Division, A Block, GO Complex, Lodhi Road, New Delhi-110003

- Patent Mgmt. Dvsn, CSIR, 14, Sansad Vihar Marg, Spl. Institutional Area, New Delhi-110067

- National Chemical Laboratory, NICHEM/NCL, Pune-411 008

- National Research & Dev. Council (NRDC), 20-22, Zamroodhpur, Kailash Colony, New Delhi-110048

- Patent Information System (PIS), CGO Complex, C Block, Seminary Hills, Nagpur-440006

Website: www.ipindia.nic.in
www.patentoffice.nic.in

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Challenges to the Indian Patent System

- **Issues in Patent Administration**
- **Compulsory Licences**
- **Patentability Criteria**
- **Patent validity** - As per the provision of section 13(4) of the Patents act, the grant of patents by the patent authority does not confirm the validity of a patent and as such no liabilities are incurred by the central government or any agencies thereof
- **Petty Patents or Utility Model of Patents**
- **Awareness and capacity of stakeholders**
- **Academic patents**
Conclusion

Thank you