Creating intellectual property organizational policies and practices

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Who's perspective?

- Government
- University
- R&D institution
- Industries

Purpose

- Licensing (commercial, further R&D)
- Assignment
- Partnership
- Joint venture
- Launch your own company
- Mergers / takeovers
- Enhancing market value
- Raising funds

Reasons for patenting (US experience-1994)

 Prevent copying 	98.9%
 Prevent others from patenting 	80.3%
 Prevent lawsuits 	72.3%
 Use for negotiations (cross licensing) 	
	55.2%
 Enhance reputation 	38.3%
 Generate license revenue 	29.5%
 Measure performance 	7.8%

Statement of purpose

 Develop a pool of well informed and trained human resource, deploy sufficient facilities(hardware & software) and create and promote an enabling environment for generating, protecting and managing intellectual property for progress of science, technology and arts leading to growth of trade and industry.

Points to remember

- IPR are one of many parameters in scientific, technological and economic growth.
- Important component of knowledge capital
- Innovations are key to generating intellectual property.
- IPR play dominant role in licensing and buying technology, joint ventures, mergers and acquisitions.

Points to remember

- Competitiveness comes through creating, protecting and maintaining IPR
- Packaging R&D products and technology in such a way that it makes sense to all stakeholders, creditors, customers, suppliers, regulatory authorities, financial analysts and so on. Esoteric view point will no longer be acceptable.

All round capacity building

- Academic institutions
- Research and development institutions
- Industry (goods and service)
- Government departments and ministries (law making, regulating, funding for research)
- Attorney firms
- Courts
- NGO

Important steps

- Awareness
- Follow up by technical and financial support
- Longer duration training (certificate, diploma, degree)
- Development of IPR policy and policy research
- Implement policies

Important steps

- Management skill development
 - **Portfolio**
 - licensing
 - defending
 - direct exploitation
- Build environment for promotion of innovation

Patent Facilitating Centre (PFC)

- Promote culture of using patent information in R&D planning
- Extend technical and financial assistance to scientists for protecting their innovative work
- Create awareness
- Act as watch dog

- Different levels and means
- IPR bulletins
- IPR/Patent workshops
- Direct mailers
- Advisory services
- Easy to read and understand material
- Participate in seminars, meetings etc.

IPR Bulletins

- Case studies
- Case laws
- Current global issues
- International treaties
- Analyses on patenting trends
- News

- Lot of efforts are on in the country
- Many agencies are involved

Patent Facilitating Centre: has the broadest mandate, covers all segments.

CSIR: own labs

DRDO: own labs

MHRD: provides funds for workshops

Ministry of Commerce and Industry
Ministry of Small Scale Industry
CII
FICCI

- Total no. workshops by PFC and PIC: 325
- Cities covered more than 125
- Scientists, policy makers, students sensitized:
 About 40000, may be more

- 130 universities, 500 industries, 300 R&D institutes
- Workshops held in Mauritius, Namibia and Sri Lanka
- Children from schools and degree colleges are being brought in the net: special sessions at Children Science Congress at state and national levels
- IPR camps at schools, ITI, polytechniques

Easy to read and understand material

- FAQs (Questions and Answers on Patents, Copyrights, Designs and Geographical Indications)
- Sources of Patent Information
- Note on Patent Agents and Forms for patent/copyright filings
- Lecture Notes
- CD/Video on Patents Made Easy
- Different languages
- Telecast

- PFC provides full technical, legal and financial support to all educational institutions in the country for protecting IP generated at these places in India and other countries.
- The above support is also available to other government departments, R&D institutions, autonomous bodies. These organizations have to share cost.

- Technical support includes extensive patent and sometimes, literature searches for determining novelty and inventiveness in consultation with the inventor.
- Patent search entails long hours and accessing expensive databases.
- Technical support also includes discussions with inventors to identify the real invention.

- Information about Indian patent applications filed and accepted was not available. PFC brought two CDs Ekaswa A and Ekaswa B in 1998 to help Indian scientists to carry out elementary searches on Indian patents. We consider it a good contribution.
- A new CD would soon be available Ekaswa C giving information on published applications. It is a searchable database. On line access would be free; CDs will cost some money.

- Legal support includes services of attorneys, prosecution of patent applications till grant of patents, taking care of office actions, maintaining patents.
- A panel of attorneys has been maintained for the last twelve years. Through administrative innovation, lowest cost obstacle removed.

- Financial support includes all fees, attorney charges, cost of patent searches etc.
- IPR will belong to institution concerned;
 PFC retains no rights.
- State governments have been helped to register geographical indications- Kulu shawl, kangra tea, Muga silk.

Patent applications

Total : 350

Granted: 60

Coverage : 60 Universities/

Academic Institutes

Many copyright and design applications.

Advanced training programmes

- 1. For industry: Four four-days programmes on IPR held with CII at New Delhi, Chennai, Hyderabad, Kolkatta
- 2. Two days programme on Patent Searches at C-DAC Pune
- 3. Three 3-day programmes on Patent Searches for officials from government departments (DAE, ISRO, MNES, ICMR, ICAR) and Patent Information Centres (PICs)

Advanced training programmes

- Two three days workshops cum retreat for technology managers from about 45 academic institutions, R&D establishments, government departments and industry.
- Topics discussed: IPR in general, IPR policies, practices followed in USA, practices in India in academics, PSUs, R&D establishments and amendments to Patent Act

Patent Information Centres (PIC)

- PFC has set up 20 PICs in as many States
- 1. Andhra Pradesh
- 2. Assam
- 3. Chattisgarh
- 4. Goa
- 5. Gujarat
- 6. Haryana
- 7. Himachal Pradesh

Patent Information Centres (PIC)

- 8. Karnataka
- 9. Kerala
- 10. Jammu and Kashmir
- 11. Madhya Pradesh
- 12. Manipur
- 13. Punjab
- 14. Rajasthan
- 15. Sikkim

Patent Information Centres (PIC)

- 16. Tamil Nadu
- 17. Tripura
- 18. Uttarakhand
- 19. Uttar Pradesh
- 20. West Bengal

PIC set up

- Joint effort by the Centre and States
- Some funding by PFC for staff, equipment, databases, internet
- PIC have developed expertise in patent searches
- PIC advise scientists and others on IPR matters in the state and neighbouring area.
- Conduct awareness workshops

PIC set up

- PIC help scientists in patent filing through PFC and independently.
- IPR literature available in Bengali, Hindi, Nepalese, Gujarati, Malyalam, Kanada, Punjabi, English.
- More PIC will be set up during the Eleventh Plan.

Patent Information Centres

- Continued efforts have led to introduction of a budget line for IPR in the plan of some states having PIC. Some of these are West Bengal, Kerala, Madhya Pradesh, Punjab, Uttar Pradesh, Himachal Pradesh and Rajasthan.
- PICs in Punjab and West Bengal have succeeded in introducing IPR capsules in the curriculum of technical institutions.
- PICs in Himachal and Assam have authorized by respective governments to take care of GI registration.

Procedure

- Institutions have to approach PFC with their requests for protecting their innovative work. Letters are expected from registrars/ directors / deans of universities, institutions and colleges. Letters have to accompany a brief description of inventions.
- Requests can come through PIC as well.
 PIC may send a patent search report.

Procedure

- PFC carries out a patent search and shares the result with inventors. If novel and inventive, it goes to the next stage. Inventor may have to submit additional information and more iterations can take place.
- A committee then decides whether to go for Indian filing or not.
- In case of foreign filing, a larger committee asks for a presentation by the inventor and recommends filing.

Procedure

- An attorney is identified and requested to handle the case.
- Attorney and the inventor sit together and discuss the invention before an application is filed.

Guidelines for IPR and technology transfer

- According to guidelines issued by DST
- Inventions emanating from projects funded by Ministry of Science and Technology and Department of Ocean Development at publicly funded institutions may be owned by the institutions. Inventors must assign the invention to the institute.
- Institutions can undertake technology transfer on exclusive/ non-exclusive basis and retain all the revenue.

Guidelines for IPR and technology transfer

- Institution may determine share of inventors and other persons. Such share will be limited to 1/3 rd of the actual earnings.
- Government will have a March-in-Right and shall have a royalty free license for use of the property by the government in public interest.

Guidelines for IPR and technology transfer

- IPR generated through joint research by institutions and industry can be owned jointly by them as mutually agreed upon.
- The institution and industry may transfer technology to third party for commercialization.
 The third party must manufacture the product in India. The revenue sharing arrangements for inventors remain the same.

Guidelines for IPR and technology transfer

- Each institution should establish a Patent Facilitating Fund by setting aside 25% of such earnings.
- The institutions shall submit information relating to the details of patent obtained, benefits and earnings arising out of IPR and turnover of the products.
- The guidelines will be reviewed after 5 years.

Academic institutions doing well

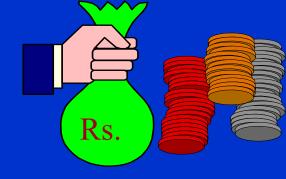
1995

35 patent applications filed by 9 institutes (IITs, IISc, 3 universities)

 2004 169 (estimated) patent applications by 55 institutes

NEW INITIATIVES

- One year IPR Training for Women Scientists
- 43 Women Scientists have been trained in different aspects of IPR including patent searches, drafting, procedures etc. 38 are undergoing training.
- They are placed in PFC, Attorney Firms, Industry for on the job training.



Some Fiscal Incentives

- 1. From April 2002 cost towards filing an Indian patent application will be included in R&D expenditure in the area of drugs and pharmaceuticals. Other expenses would include expenses in clinical trials and market approvals in addition to other R&D expenses.

 Weighted tax deduction @ 150% is available.
- Excise duty exemption for 3 years on goods designed and developed by a wholly owned Indian company and patented in any two countries out of India, USA, Japan and any one country of European Union.

Some Fiscal Incentive Rs.

- Accelerated depreciation allowance for investment on plant and machinery made on the basis of indigenous technology.
- 4. Exemption from Drug Price Control Order for drugs developed indigenously or produced through an indigenously developed process developed through indigenous R&D.
- 5. Custom duty and excise duty exemption to public funded R&D institutions and publicly funded scientific and research organizations on capital equipment and consumables for R&D

- Definition of IP: An intangible knowledge product resulting from the intellectual output of the inventors namely, faculty, staff and students. (visiting faculty / scientists not covered.)
- Any product of human intellect which is unique, novel and unobvious and qualifies for protection (patents, copyrights etc.) belongs to the institute. (Copyright governed by originality.)

 IP can be of the following forms know-how and other proprietary concepts, solutions, processes, including an invention, scientific and technological development and computer software, GMO, business models and other forms as the need arises. (Undefined terms like development should be avoided. It is not good to keep things open- --as the need arises.)

- Institute will seek protection in India and elsewhere and the task would be undertaken by the IP Cell.
- Ownership
 - In house research: all IPR belong to the institute.
 - 2. Sponsored research: (i) IPR to be shared equally with funding agency provided funding agency shares all cost towards obtaining and maintaining patents.

- (ii) If funding agency does not share cost, the institute will bear cost and own the property.
- (3) Collaborative R&D: Share jointly the IPR as per agreement.

- Copyright:
 - 1. Institute shall be the owner of copyright on all teaching material developed by the institute personnel as part of any of the academic programmes at the institute. (Formula, equations etc. are not copyrightable items.)

If generated on behalf of a funding agency, the copyright will be shared equally with the funding agency. (Not in line with the Indian Copyright Act which stipulates the copyright will belong to the funding agency, unless there is a separate agreement to this effect.)

3. As an exception, the institute will not claim ownership on copyright on books and publications authored by institute personnel. (Not a simple issue. Who handles litigation in case of dispute? What happens in case of sponsored projects? What if formula or concepts developed in institute are used in books?)

 Any IP generated when an inventor from the institute works in a university or a company abroad /in India on EOL/ Sabbatical / earned leave, will be jointly owned by the institute and the university / company. (very difficult to implement because most foreign universities may not accept this formulation.)

- Revenue sharing: shared in the ratio of 60:40 between inventor and the institute.
- Institute and inventor to be indemnified from any legal proceedings.

- Missing aspects
 - No mention of taxes to be paid on licensing.
 - 2. Contract research is not covered.
 - 3. Confidentiality of thesis not included.
 - 4. What happens if research scholar has left and tech. transfer takes place later on or IPR application is filed later?

- Maintenance of log books and recording of test and experimental results.
- Material transfer agreements and non-disclosure agreements.
- 7. Invention disclosure procedure
- 8. Procedure for patent portfolio management
- 9. Sourcing funds for obtaining patents

SME sector

- Vibrant sector
- Contributes about 35% to GDP
- Contributes about 35% to exports
- Main industries

1.	Readymade goods	27%
2.	Engineering goods	14%
3.	Chemicals and Pharma.	11%
4.	Electronics and computers	11%
5.	Processed food	11%

SME sector

 As per the Micro, Small and Medium Enterprises development Act 2006, investment in plant and machinery, which defines the size of the industry, does not include cost of pollution control, R&D, industrial safety devices and such other items.

This opens up scope to obtain finances for R&D at easier terms and some privileges may be available later on.

- Long term perspective is required.
- Prepare a statement of purpose for yourself like growth, market share, diversification.
- Define objectives such as develop new or improved products for new market niche or competing with others or better market share in the existing space.

- Learn to respect your own IP and IP of others as well.
- Keep away from infringement by studying IP of your competitor e.g., study patents granted in India and abroad where you sell your products, look at trademarks granted and drop the temptation of passing off existing trademarks.

- Learn to use IP of others after proper due diligence and licensing. May look for professional help. It is a time consuming and intricate task.
- Make your employees aware about protecting internal and external IP. (Trade secrets, know how details)

- Recall IPR are not only patents; they could be in the forms of copyright, design, trademark, trade secrets and GI. Enterprises dealing with traditional products such as handicrafts must look for GI.
- Most SME, at this stage, may not have the need and resources for a full IP cell or an office like seen in big industries. Have one person to start with to continually study patents, designs etc. filed and granted in your area in India and other countries.

- Approach institution for R&D to fulfill your objectives. Benefits:-
 - 1. Access to new ideas
 - 2. Access to multidisciplinary skill base
 - 3. Leveraging on public research money
 - 4. Gaining on opportunity cost and reducing risk.
 - 5. Good for medium term and long term.

- In case of R&D to be done an educational institution, keep following in mind:-
 - 1. Ensure confidentiality of research is maintained.
 - 2. Study IP policy of the institution before hand and sign an appropriate agreement to avoid future conflicts.
 - 3. Ensure lab records are kept.
 - Ensure all papers, experiment papers etc are available to you and handed over to you after the contract.

- Avoid going to an institution not having a culture of record keeping.
- 6. Explore the possibility of long term association with the researcher if he has done a good job for you.
- 7. Negotiate hard to keep the IPR with you. If you have the IPR you can attract investors.

Thank you.