

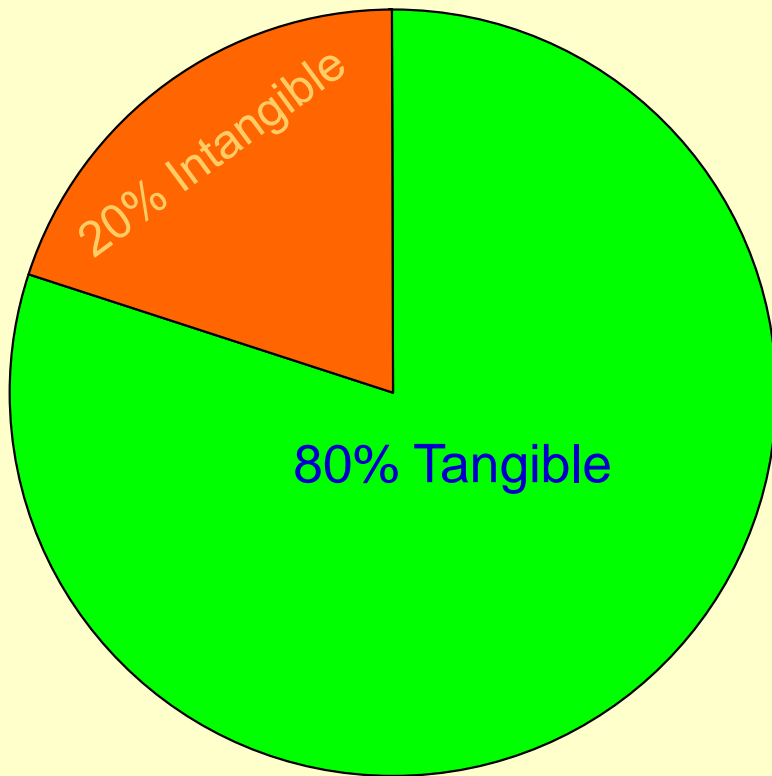
# Intellectual Property Rights (IPR)

**Tapan Ray**

**OPPI Academia Programme  
August 2, 2008, Mumbai, India**

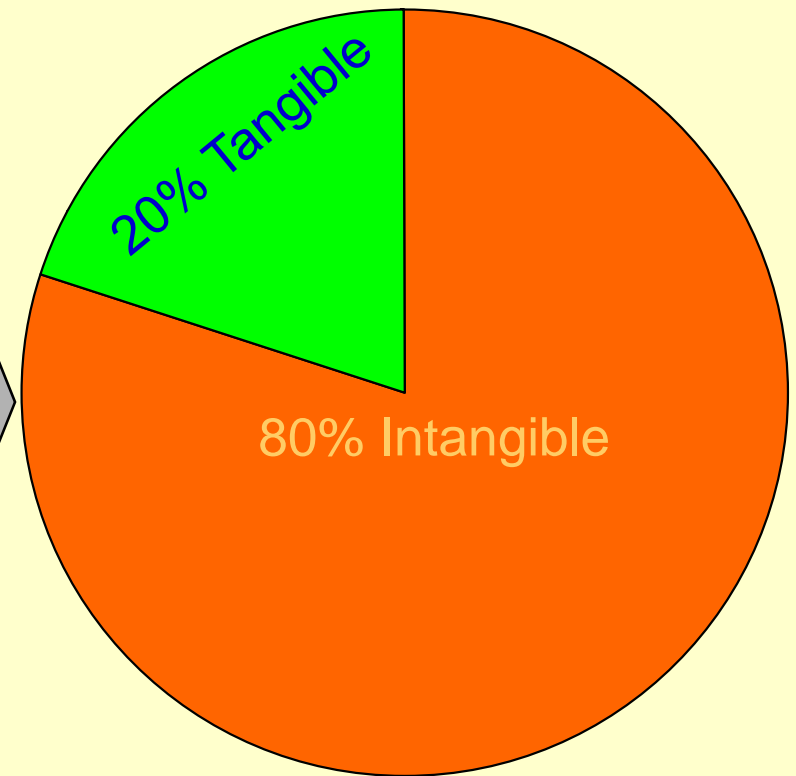
# Transition to Knowledge Economy

## Industrial Age Economy



(e.g. Ford, Boeing)

## Knowledge Economy



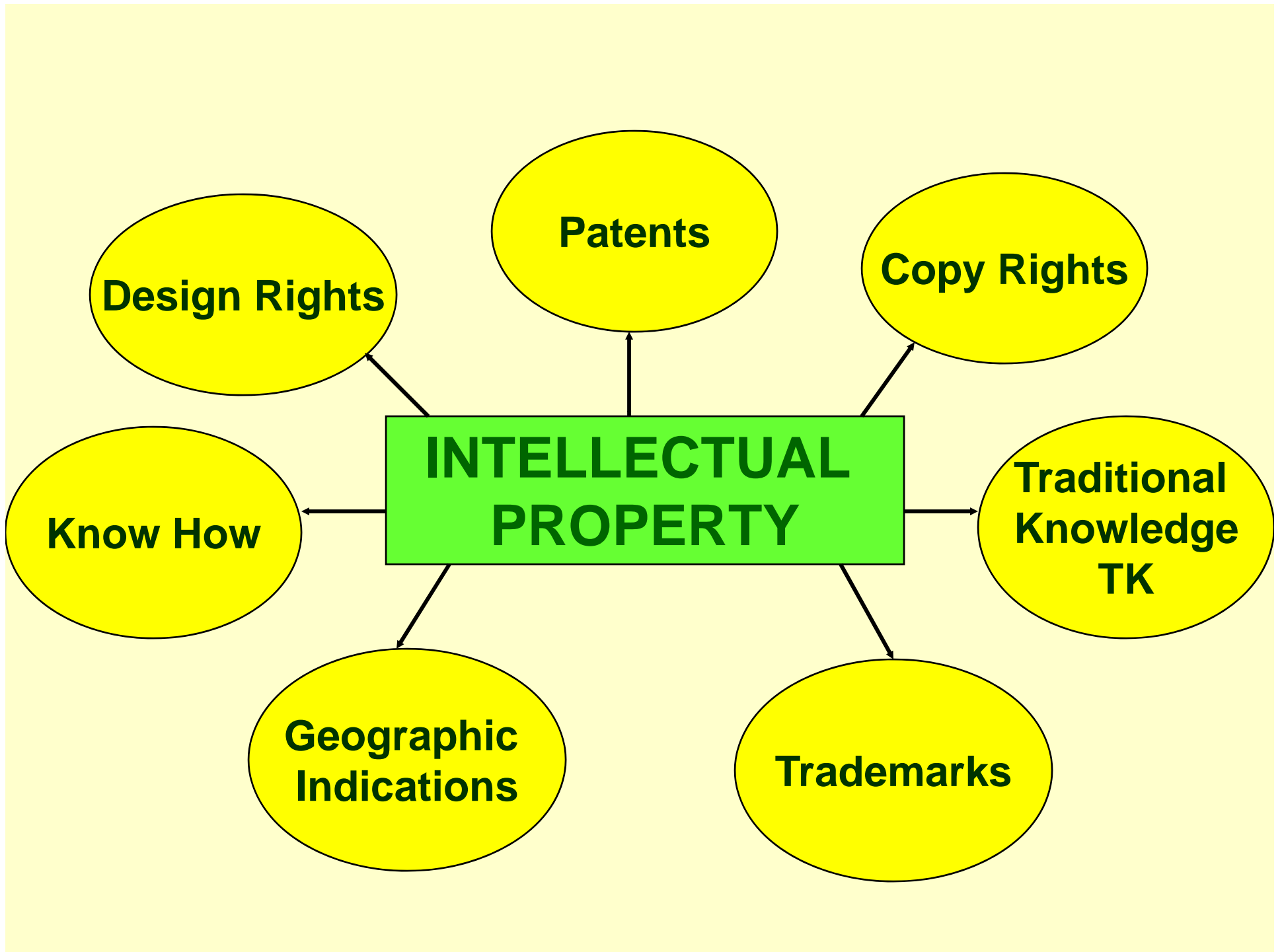
(e.g. Google, Microsoft, Infosys)

# What is Intellectual Property Rights (IPRs)

- Creative people who disclose their work for benefit of mankind get ownership right over their creation.
- Protects their work from being copied or imitated without their consent.
- IPR can be used, sold, loaned, gifted, stolen.
- IPR encourages innovation.
- Contract between Government & Inventor.
- Government promises to protect invention from copying by others for specific time.
- Inventor commercializes invention for Society's benefit.

# TRIPS

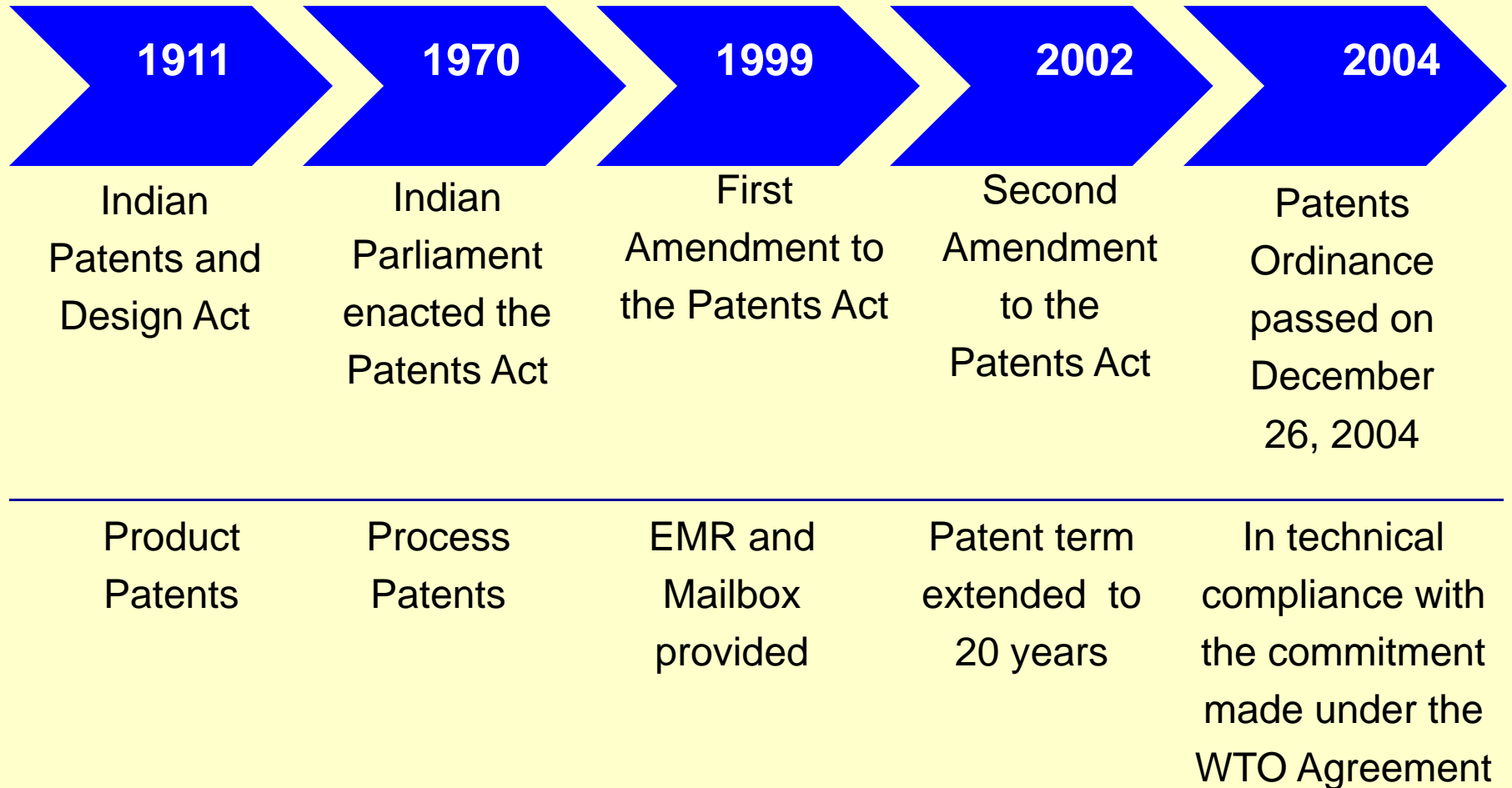
- Trade Related Aspects of Intellectual Property Rights came into force on January 1, 1995.
- Establishes minimum levels of protection Government must grant to IP of fellow WTO (World Trade Organization) members.
- Strikes a balance between long term benefits and short term costs to Society.
- Provides for a Dispute Settlement Body (DSB) which is final authority on all IPR disputes.
- India's laws cannot be different for Indian or foreign companies in India.



# Legally Recognized IP

- Patents:
  - Protect inventions – awarded to novel, non-obvious industrial applications.
- Copyrights:
  - Protect artistic and literary works and offer strict protection for form and substance.
- Designs & Trademarks:
  - Protect brand names/designs for identification of goods and services.

# PATENTS IN INDIA – HISTORICAL PERSPECTIVE



# Patents

- Exclusive right granted for an invention which must be
  - novel
  - have an inventive step
  - must be useful
- Invention can be product or process.
- Process patent is a weak protection.
- Patent provides protection to the owner for a limited period like 20 years.
- Inventor does not get monopoly but only exclusivity for 20 years in exchange for full disclosure of invention.



# Patents

- Gives the owner Exclusive Right to:
  - Make the Invention
  - Use the Invention
  - Sell the invention
  - Distribute the Invention
- These Exclusive Rights are obtained after grant of patents by Registrar of Patents.

# Why are Patents Necessary?

## **In Pharmaceuticals**

- Over 90% prescription medicines which are generic evolved out of patented medicines.
- Encourages researchers to take risk to develop new products and therapies.
- Strikes right balance between inventor's legitimate concerns about compensation and Society's need for more scientific developments.
- Provides innovator time to educate medical professionals about proper use of new molecule.

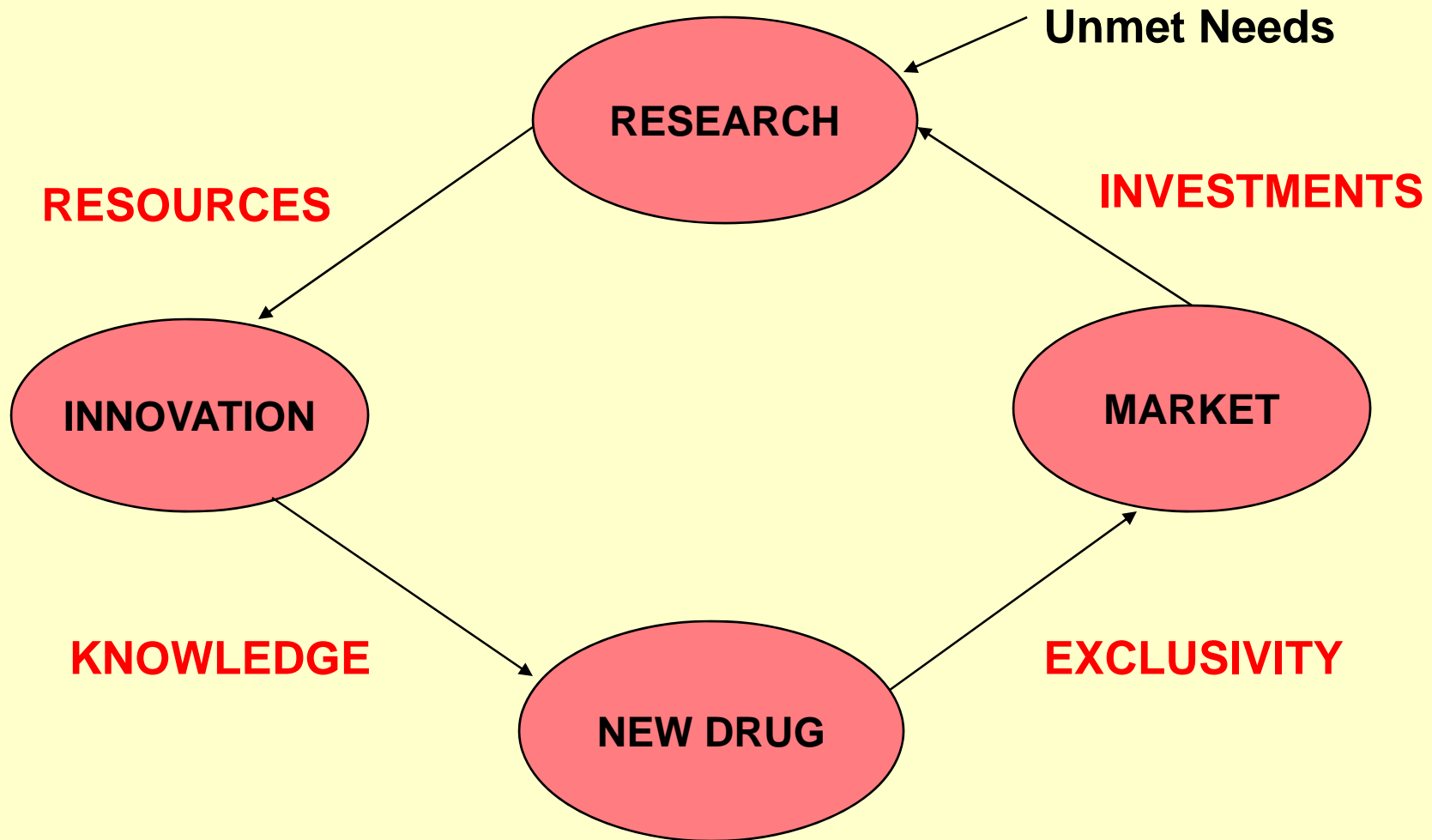
# How long & costly is Pharma R&D

- Takes 8 to 12 years after patenting to launch product – time consuming
- Costs about U.S.\$ 1 Bn. – costly
- Odds 1 in 10,000 of new drug getting to market – risky
- Reward: Innovator gets exclusivity for the product until patent expires

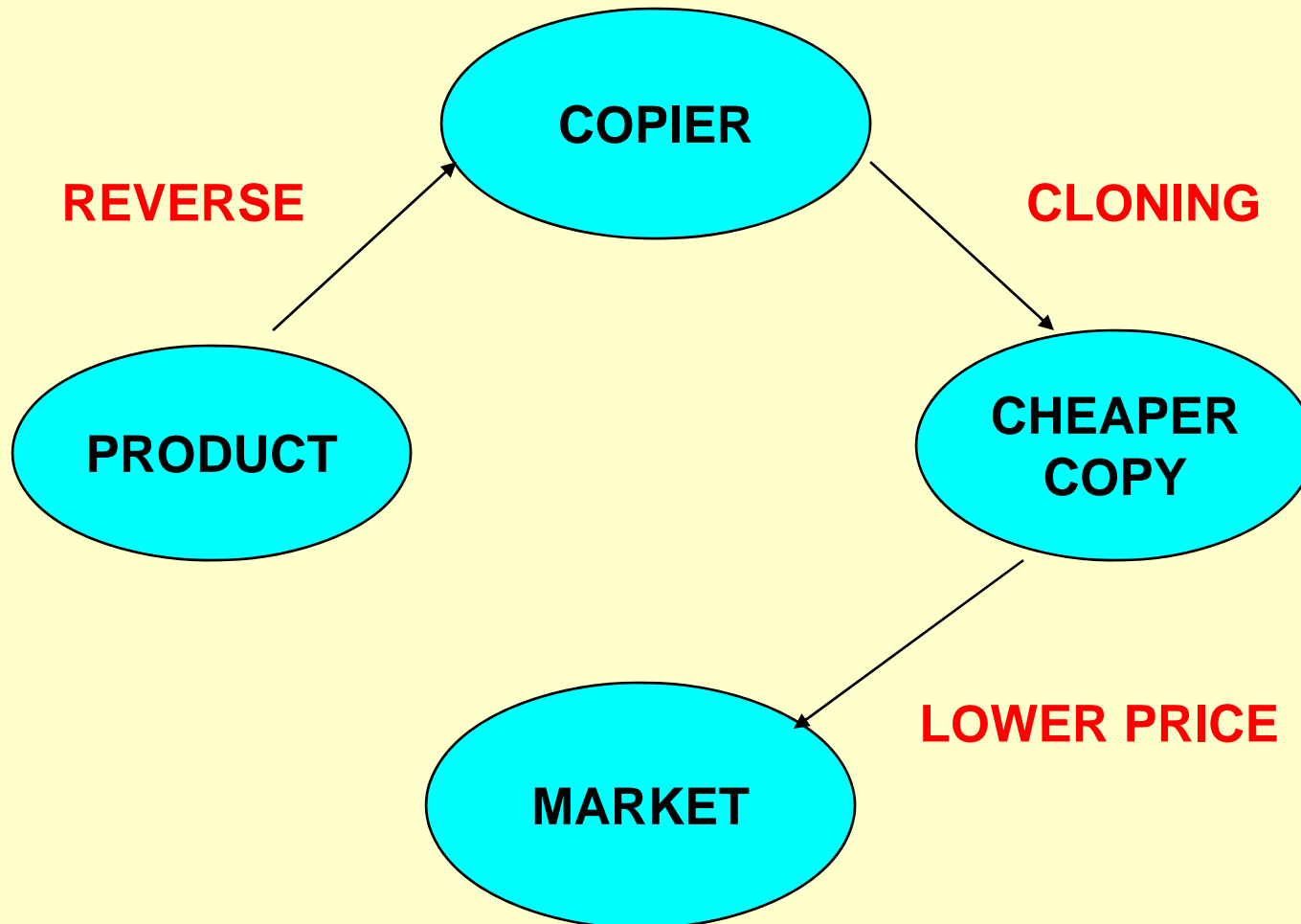
# Will IP Protection Promote Research in Third World Diseases

- AstraZeneca has a R&D centre in Bangalore dedicated to TB research
- Novartis has a Research Institute for Tropical Diseases in Singapore

# What is Medical Research



..... and what is not



# Will IPR “Kill” Local Generic Industry

- Without patents there are no new medicines and hence dries up pipeline for generic products.
- Generic industry relies on new medicine to copy after patent expiry.
- IPR is essential for growth of generic industry.

# Will Prices of Essential Life-saving Medicines Increase due to Patents?

- Patent protection is prospective for discoveries made after 1<sup>st</sup> January, 1995.
- 97% of drugs on WHO Essential List are off patents.
- Most patented products have equivalent therapeutic generics.
- These exert pressure on patented products price.



# Are Patented Products Costly?

- After 2005, hardly 3% of drugs are under patent protection, 97% are off-patent medicines.
- Most patients pay out of their pockets for medicines.
- Limited purchasing power will be a check on high prices for patented products.
- Low priced generic therapeutic equivalents will also keep prices of patented products in control.
- Government also keeps a watchful eye on prices.

# What happens when there are no Substitutes for Patented products

- Happens rarely.
- Government will ensure that these medicines reach the needy at affordable prices through proper distribution and subsidies.
- Manufacturers will also have special programs and prices for those who cannot afford, for eg. Glivec is given free to needy patients and Merck discovered a cure for river blindness and donated medicine free of charge to Africa and other afflicted countries.

# Advantages of Licensing Patents

- Total global licensing revenue estimated to be U.S.\$ 100 Bn.  
(Source: Economist)

# Examples of Licensing Revenue

<b>Company</b>	<b>U.S.\$ per year</b>
IBM	1.4. Bn.
Texas Instruments	800 Mn.
Digital Equipment (from Intel for dropping its patent infringement suit)	1.5 Bn.

- Cost of ignoring Patents
  - Xerox lost U.S.\$ 500 Mn. by not patenting its GUI technology

# Applying for Patent

- India grants the patent right on the first-to-apply basis.
- The application can be made by either:
  - the inventor
  - the assignee
  - the legal representatives of the inventor
- The foreign applicants are given national treatment.

# Registration Process

- Patent rights in respect of any invention are created only on grant of patent by the IPO following procedures established by the Patents Act & Rules.

# Career Training

1-year Post Graduate Diploma in Patent  
Law and Practice (PGDPLP)

# Course Curriculum

The course educates the student in the different aspects of patent protection including -

- Legal (The Indian Patent Act, comparative perspectives in different jurisdictions),
- Technical (prior art searching & drafting),
- Practical (filings, oppositions, infringement litigations etc),



# Course Curriculum

- Economic (Technology Transfer & Licensing)
- Management of patents for creation of greater wealth and value for corporates / individuals
- Significance of a patent regime as a tool for technology innovation and transfer

# Career Options

## Research :

- Prior Art Search
- Technology/Patentability Analysis
- Patent Drafting
- Infringement / Overlap Analysis
- Patent Proof-reading

# Career Options

## **Legal :**

- Licensing Analysis
- IPR Trainer
- IP Auditing
- Litigation
- Legal Research
- Legal Counseling

# Career Options

## **Consulting :**

- Strategy Formulation
- Patent Valuation
- Portfolio Analysis
- Business Research
- Patent Analytics

# Qualities Needed to Succeed

- Ability to analyze & reason
- Think laterally
- Interpret law
- Good command over written & spoken English
- Sound pharmacy / technical background

# Salary Status

## Fresher – Patents :

<b>Organization</b>	<b>Bachelors</b>	<b>Masters</b>
➤ IT company	3.0 - 5.5	4.0 - 6.5
➤ Biotech/Pharma company	3.0 - 4.5	4.0 – 6.0
➤ Legal company	3.0 - 5.5	4.0 - 6.0
➤ Consulting	4.0 - 7.0	

All in Rs.L / year

**Thank You**