

Workshop for High Court Justices on IPR

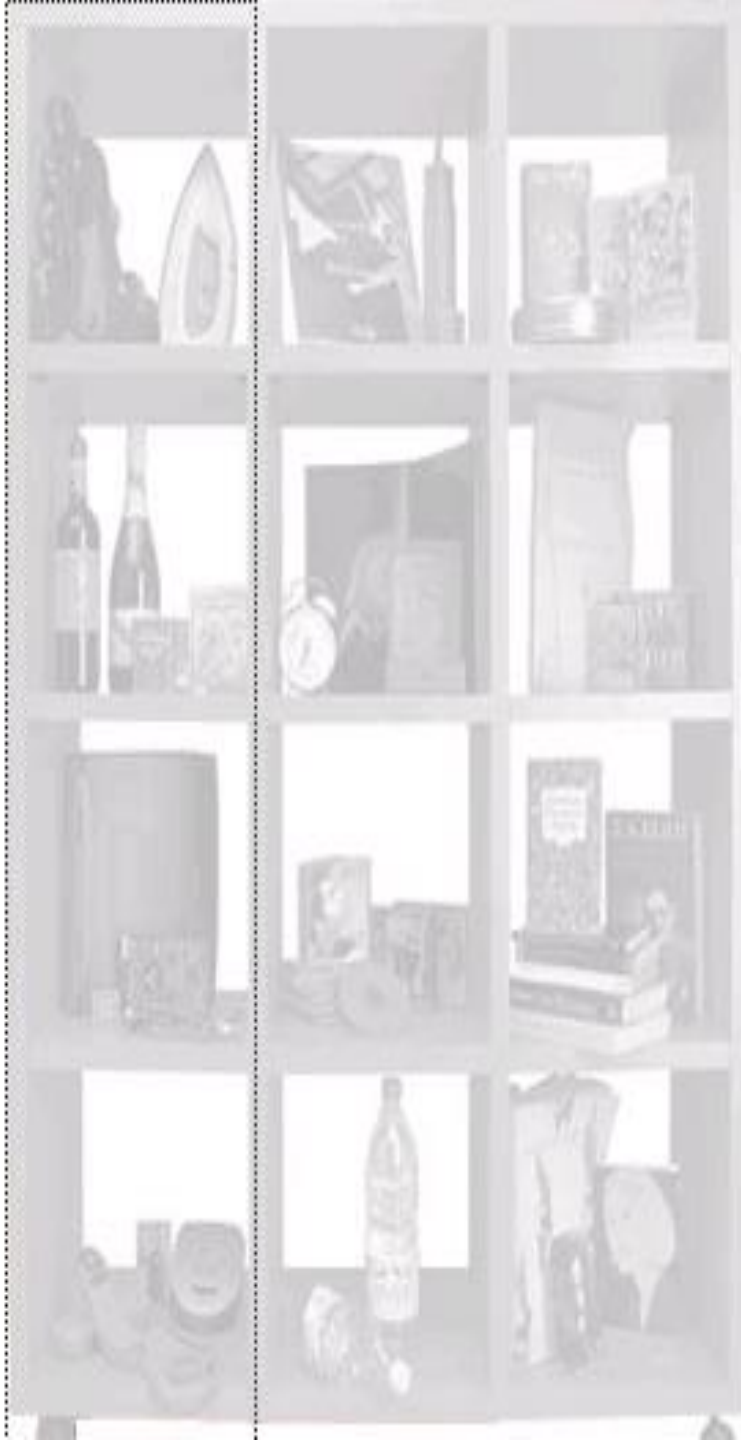


IPR: Genesis, Benefits and Importance

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**National Judicial Academy, Bhopal
November 2 and 3, 2019**

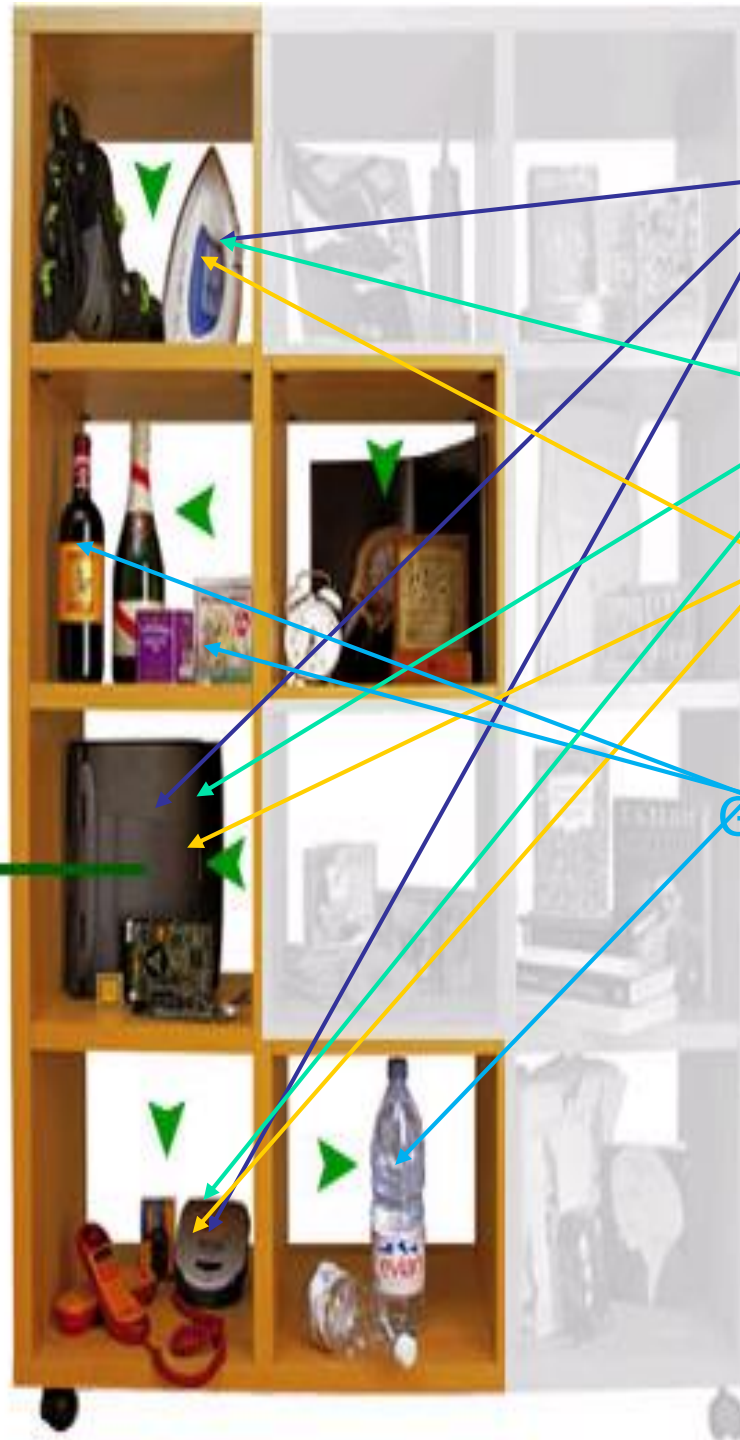
INDUSTRIAL
PROPERTY



COPYRIGHT

Intellectual property - the fruits of human creativity and invention - is divided into two categories. The first is **industrial property**, which includes inventions, trademarks, industrial designs, and geographic indications of source.

INDUSTRIAL
PROPERTY



Patent

Trademark

Industrial Design

Geographical Indications

COPYRIGHT

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Patent

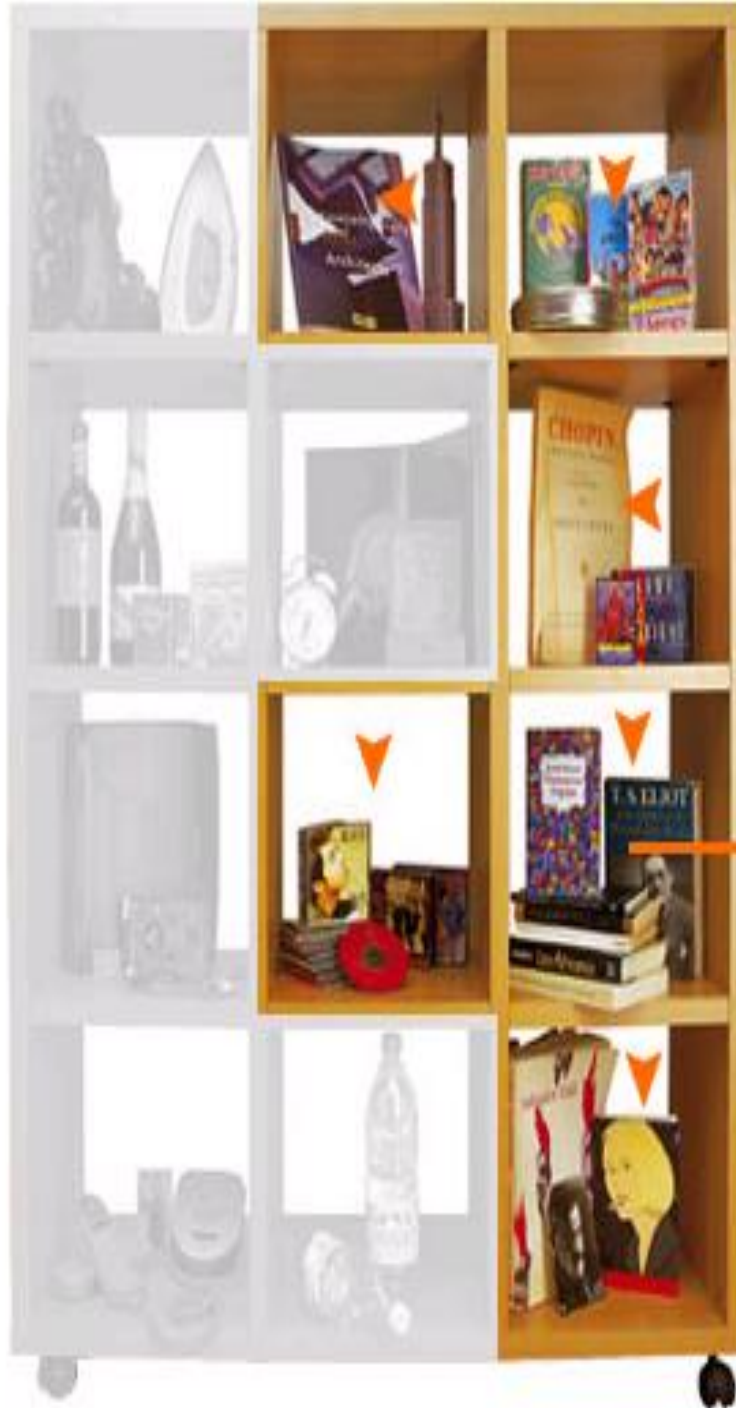
Trademark

Industrial Design

Geographical Indications

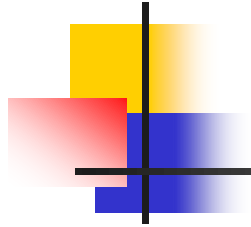
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INDUSTRIAL PROPERTY



The second category of intellectual property is **copyright and related rights**, which includes a broad array of literary and artistic works, ranging from newspaper articles to novels, from drawings to paintings to architectural works, from music to dance, from photographs to films, as well as artistic performances.

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The Genesis



Down the ages

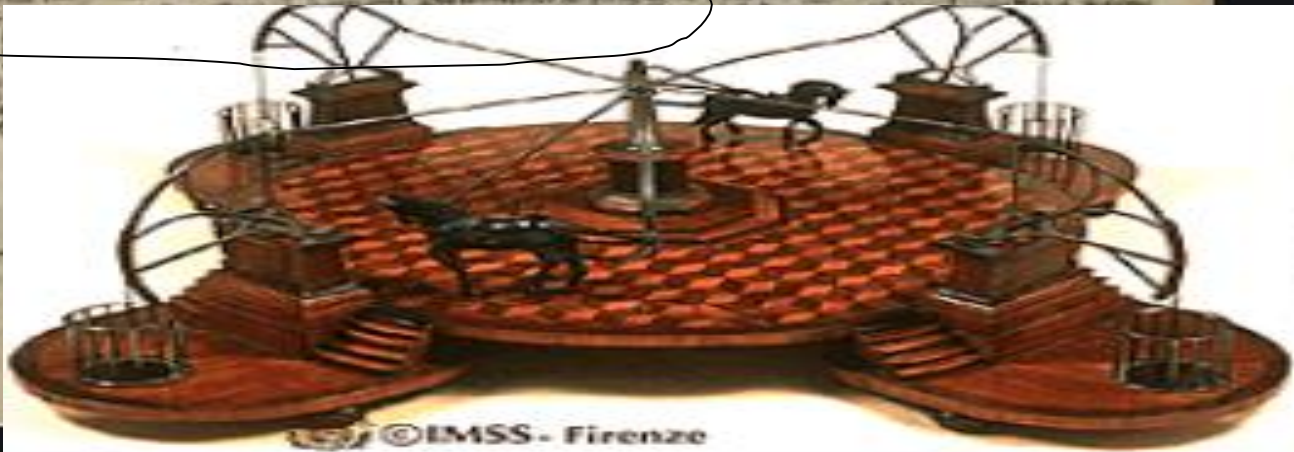
- For several centuries world has acknowledged need to protect knowledge
- Initially creativity, talent and inventiveness rewarded by the state; sustained by grants from the Crown or State
- Subsequently, with increasing commercialization and stratification of professions, creator left to invent and nurture his creation
- Recompense available through the market, only if the product considered of worth and that too later
- National protection.... Origins...

1324 AD: King Edward II of England granted letters of protection to German miners to get them to England

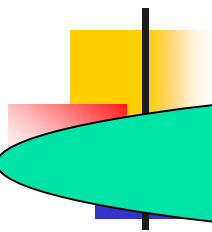
1449: John of Utynam awarded 20-year monopoly for a glass-making process previously unknown in England (supplied glass for the windows of Eton College Chapel). In return was required to teach process to native Englishmen

HISTORY OF PATENTS

Handwritten text from a historical document, likely a patent or legal record, written in a cursive script.



International Protection



1883: Paris Convention for the Protection of Industrial Property Rights

1886: Berne Convention for the Protection of Literary and Artistic Works

20th century: Several treaties were adopted in different areas of intellectual property rights - substantive law, facilitation of the process and classification systems

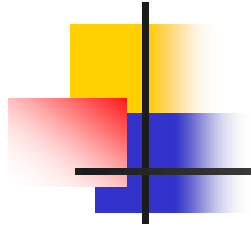
1994: Agreement on the Trade Related Aspects of Intellectual Property Rights (TRIPS) – first multilateral agreement establishing *binding minimum standards*

Since then: Several Plurilateral and Bilateral agreements concluded, and under negotiation, to institute TRIPS plus standards



India

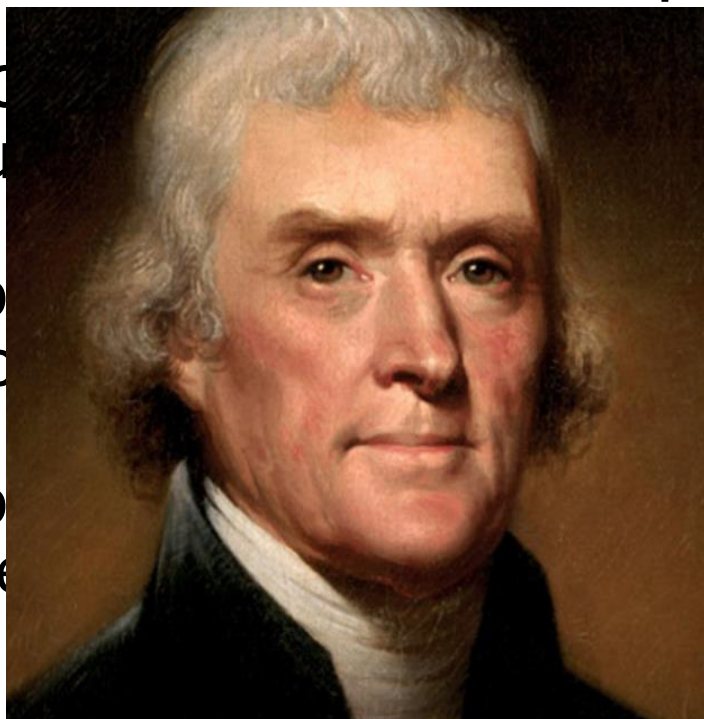
- First Act relating to patent rights passed in 1856 - granted exclusive privileges to inventors of a new manufacture - term 14 years
- Amended by the Act of 1859 and later by the Acts of 1872, 1883 and 1888
- **Indian Patents and Designs Act, 1911** replaced all the previous acts - established a patent system and administrative framework for the first time
- After Independence, the **Patents Act, 1970**
- 1999 onwards several acts to conform to **TRIPS**



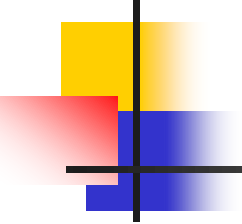
Why Protect?

Distinctive Economic Characteristics of Intellectual Property

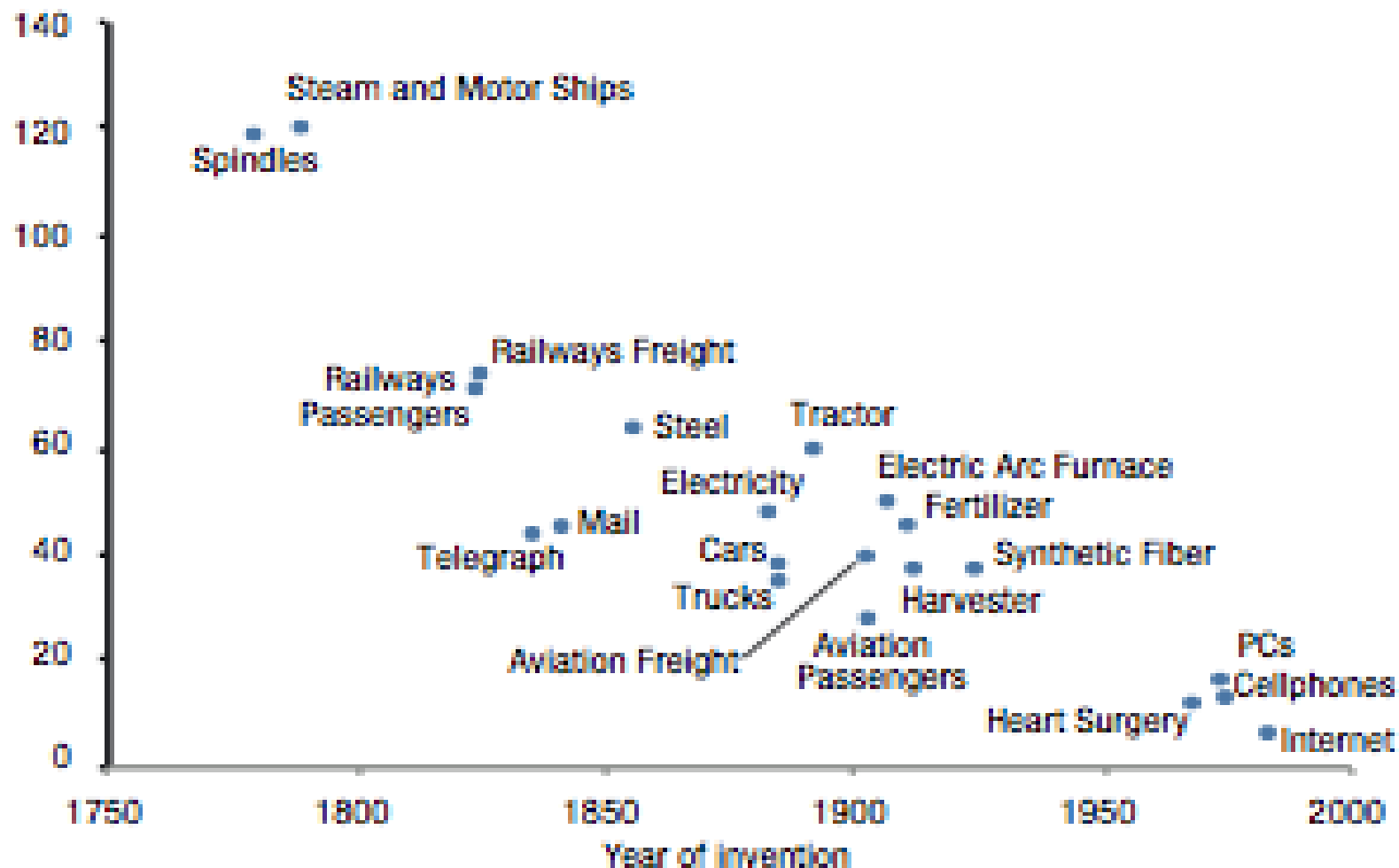
- Non-rivalrousness:
 - simultaneous use by multiple entities
 - no bottlenecks or capacity constraints



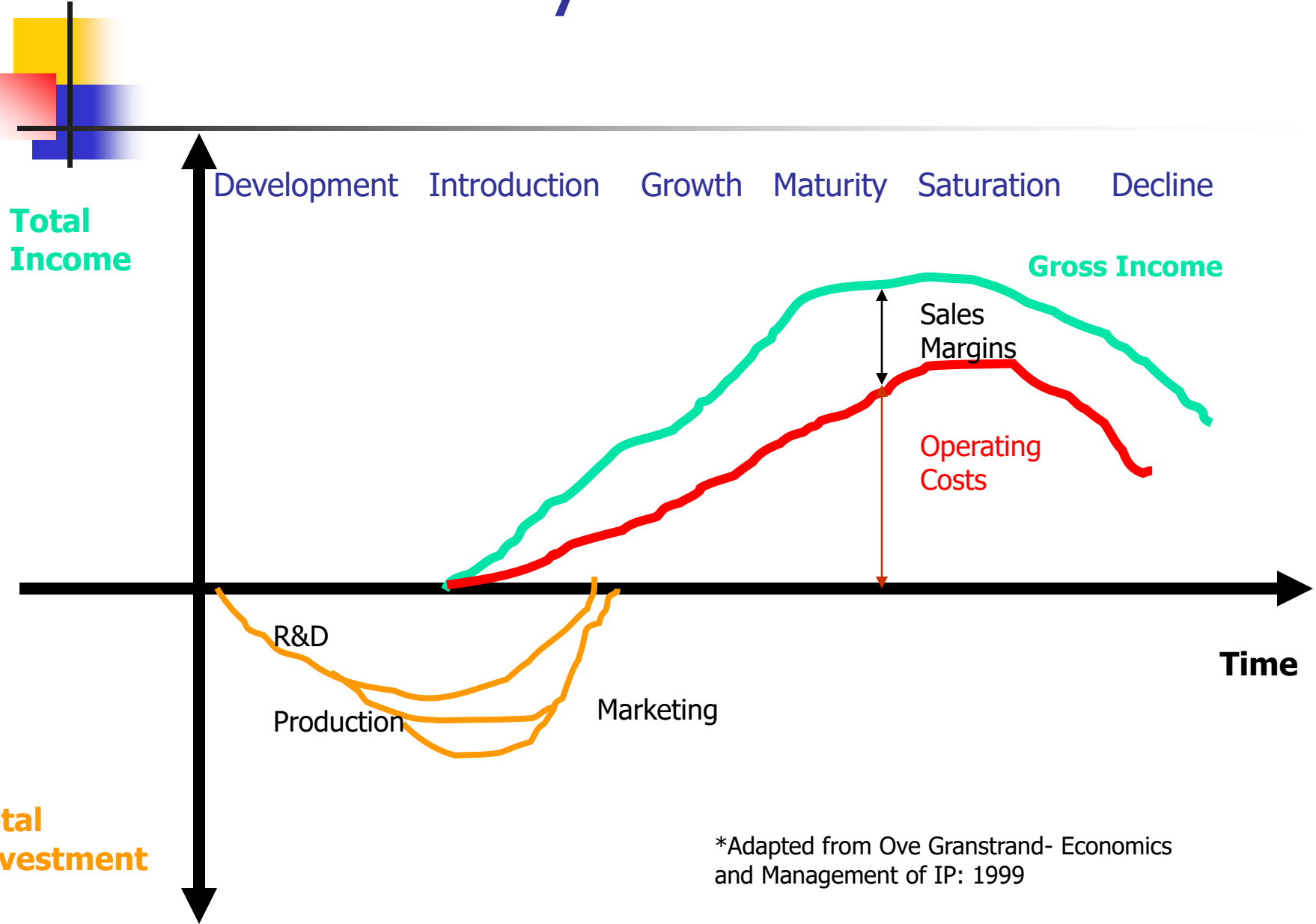
"He who receives an idea from me, receives instruction himself without lessening mine; as *he who lights his taper* at mine, receives *light* without darkening me.

- 
-
- Therefore, societies faced with fundamental trade-off between two market distortions
 - Excessively **weak IPRs**, satisfy the static goal but inadequate incentives to create, leading to slower growth, limited culture, lower product quality
 - Excessively **strong IPRs**, consistent with dynamic goal but generate insufficient access, inadequate dissemination
 - Balance is imperative – diffusion process

Adoption lag since first invention, in years



Product Life-Cycle*

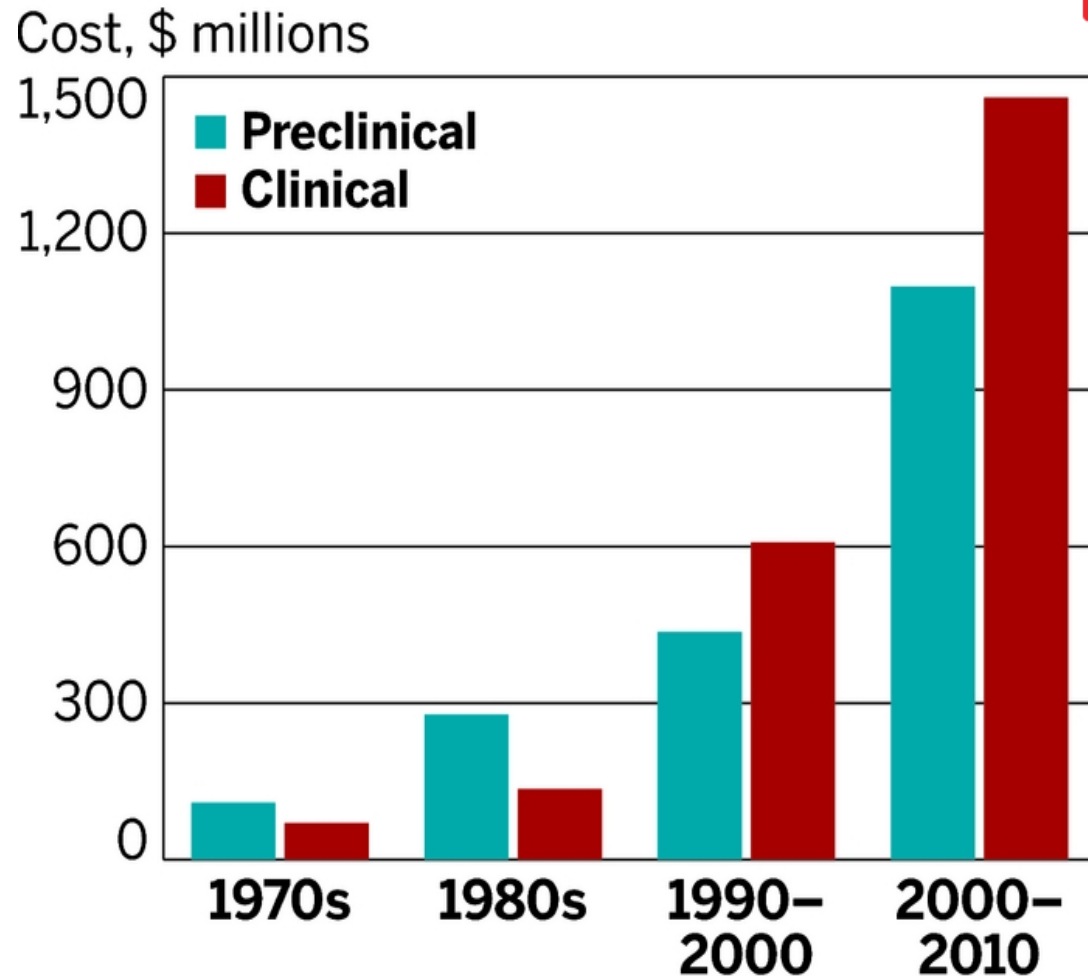


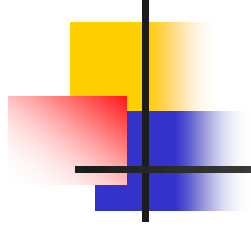
*Adapted from Ove Granstrand- Economics and Management of IP: 1999

Estimated Costs on Developing a Drug:

Tufts Center for the Study of Drug Development

- The R&D costs of 106 randomly selected new drugs - survey of 10 firms
- Data to estimate average pre-tax cost of new drug
- Based on average **out-of-pocket cost of \$1.4 billion** and an estimate of **\$1.2 billion in returns** investors forego during the period drug candidate develops
- \$312 million on post-approval development - studies to test new indications, formulations, and dosage strengths





Benefits and Importance

Patents and Technological Development



Trade Marks and Economic Value



- Increase sales volumes and price
- Stabilize demand through consumer relationships
- Earn royalties through licensing and franchising
- Transfer brand equity to new product categories
- Attempt to move customers from
 - brand awareness, via brand recognition, to
 - brand preference and finally to
 - brand insistence
- *Interbrand* – Valuation of Brands

Brand Values (US \$ million)

VALUABLE INDIAN BRANDS

Brand value of top five brands in India





Copyright and Economic Development

- Protects creativity and ensures adequate recompense for creators and producers
- Balances public with private interest
- Preserves cultural heritage
- Prevents creation from being reproduced elsewhere and competing with original
- Enhances economic growth

CR Industries – Contributing to Development

III. THE COPYRIGHT INDUSTRIES

In nine of our fourteen prior economic reports, we divided the copyright industries into four groups: core, partial, distribution, and copyright related; these are the sectors we developed and defined in our first report issued in 1990. Beginning with the 2004 report, we still used four categories, but in order to conform to the international standard, we relied upon the four copyright categories defined by WIPO: core, partial, non-dedicated support, and interdependent.

The **core** industries include those industries whose primary purpose is to create, produce, distribute or exhibit copyright materials. These industries include books, newspapers and periodicals, motion pictures, recorded music, radio and television broadcasting, and software in all formats, including video games.

Partial copyright industries include industries in which only some aspect or portion of the products they create qualify for copyright protection. These industries range from fabric to jewelry to furniture to toys and games.

Non-dedicated support industries include those that distribute both copyright and non-copyright protected materials to businesses and consumers. Examples here include transportation services, telecommunications and wholesale and retail trade. As in past studies, only a portion of the total value added by these industries is considered to be part of the copyright industries.

Interdependent industries include those that produce, manufacture, and sell equipment whose function is primarily to facilitate the creation, production, or use of works of copyrighted matter. These industries include manufacturers, wholesalers and retailers of CD players, TV sets, VCRs, personal computers and usage dependent products including blank recording material and certain categories of paper.

We refer to the four groups together – core, partial, non-dedicated support, and interdependent – as the **"total"** copyright industries.

**COPYRIGHT INDUSTRIES IN THE US ECONOMY
(VALUE ADDED IN BILLIONS OF DOLLARS) 2013**



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Done



Contribution of Copyright Industry (%)

	Gross Domestic Product	Employment
USA	12.00	8.41
Canada	5.38	6.90
Singapore	5.70	5.80
Latvia	4.00	4.50

200 Years of Innovation and Growth

\$2,000
GDP
per person
(in 1990 US\$)

Mankind's pursuit of innovative solutions has powered human progress and transformed our world. Two centuries of breakthrough innovations have seen a 15-fold growth in per capita incomes in frontier economies. WIPO's **2015 World Intellectual Property Report** looks at six transformative technologies, and explores the role of intellectual property in innovation.

1836 Steam Locomotive

1st numbered US patent on the locomotive steam-engine

1837 Electric Telegraph

Cooke and Wheatstone patent the Five needle telegraph

1858

1st transatlantic telegraph message

1856 Plastics

1st man-made plastic invented, patented and trademarked as Parkesine

1856 Industrial Steelmaking

Bessemer patents an improvement of the manufacture of iron and steel

1866 Scientific Plant Breeding

Mendel's scientific publication on plant hybridization

1905

First successful high-yielding wheat hybrid

1879 Automobiles

Benz patents Vehicle with gas engine

1908

Ford mass-produces the Ford T

1906 Airplanes

Santos-Dumont flies his 14-bis
Wright brothers patent the Flying machine

1876 Telephone

Bell patents Improvement in telegraphy

1879 Electric Lamp

Edison patents the Electric lamp

1897 Radio

Marconi patents Transmitting electrical signals

1911 Nuclear Energy

Marie Curie wins her 2nd Nobel Prize

1954

Nuclear plant APS-1 generates electricity for commercial use

1929 Pharmaceuticals

Fleming discovers Penicillin

1947

Mass production of Penicillin

1950 Semiconductors

Bell Labs' Semiconductor patent

1977

1st Commodore PET sold

1954 Robotics

1st industrial robot

1996

Deep Blue beats chess master Kasparov

1969 Internet

ARPANET network deployed

1991

WWW is created at CERN

1981 Nanotechnology

Scanning probe microscopy developed

2005

Bicycle with nanotubes frame in the Tour de France

1925 Television

Jenkins patents "Transmitting pictures by wireless"

1952 Supply Chain Innovation

Barcode patented

1953 Just-in-time Manufacturing

Toyota implements Kanban for lean production

1957 Sustainable Energy

Solar cells are patented

1973 Mobile Phone

1st mobile telephone call

1992

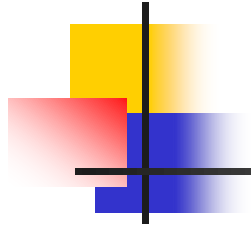
1st SMS sent

1987 3D Printing

Industrial 3D printers commercial

2009

Low-cost 3D printers commercial



Thank you