National Judicial Conference for High Court Justices on IPR

IPR - Genesis, Benefits, Importance

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National Judicial Academy, Bhopal
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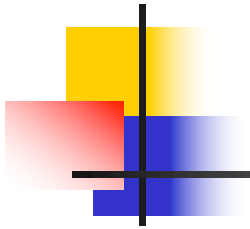


The Genesis

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

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

1474: Venice drafted first codified ordinance on Patents – 20 year monopoly to inventors

1559: Queen Elizabeth I established tradition of conferring patents on inventors for their creations. 30 years-50 patents soap, leather, salt, glass, knives, sailcloth, sulphur, starch, iron and paper.

1594: Galileo received a patent for a mechanism for irrigation

UK Patent office: The first Ordinance on Patents was adopted in England in 1623, which set the term at 14 years.
United States : First patents legislation in 1790.
The first recorded patent (July 13, 1836) was granted to inventor John Ruggles for traction wheel.
Japan: First in Asia – Patent Monopoly Ordinance 1885

International Protection

1883: Paris Convention for the Protection of Industrial Property Rights

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

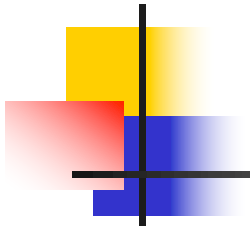
20th century: Several treaties were adopted in different areas of intellectual property rights - substantive law, facilitation of the process and classification systems

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

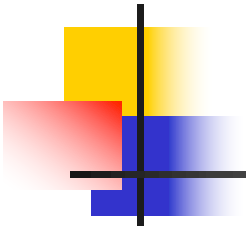
- First Act relating to patent rights passed in 1856 - granted exclusive privileges to inventors of a new manufacture - term 14 years
- Amended by the Act of 1859 and later by the Acts of 1872, 1883 and 1888
- **Indian Patents and Designs Act, 1911** replaced all the previous acts - established a patent 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

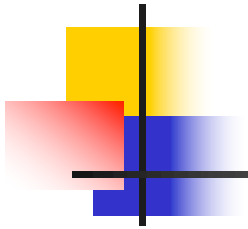
- Non-rivalrousness:
  - simultaneous use by multiple entities
  - no bottlenecks or capacity constraints
- Non-excludability :
  - use without authorization cannot be prevented
- For **static** efficiency: optimal to permit free society-wide use as marginal cost low
- For **dynamic** efficiency: need to prevent above, as incentives required to invest in creations, where social value exceeds development costs



- 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

Diffusion Process and IPRs

- IPRs assist innovators/creators during this process
- Buyer Diffusion:
  - Trademarks and Designs boost marketing efforts
  - Patents signal technological superiority
- Seller Diffusion:
  - Limited/delayed by keeping process/technology secret
  - Patents/copyright create entry barriers
- With globalization, concern transcends national frontiers

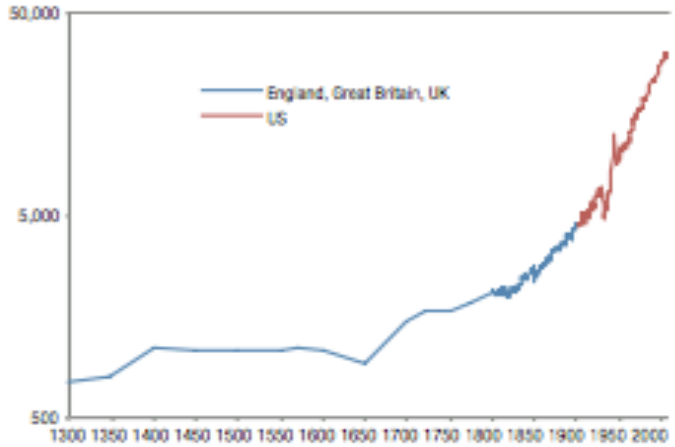


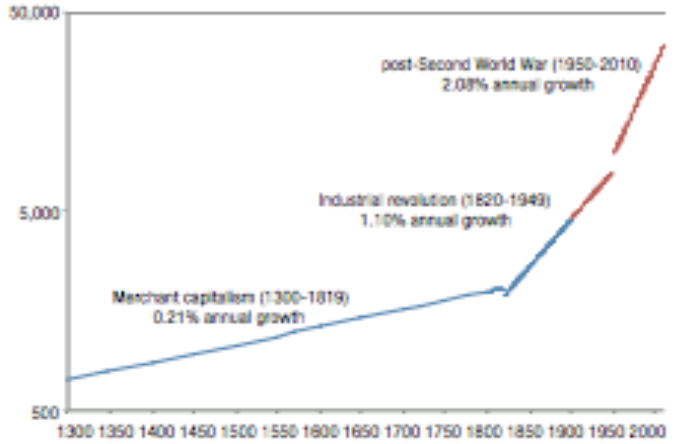
Innovation – Imperative for Growth

Growth Trends*

Figure 1: Growth at the frontier over seven centuries

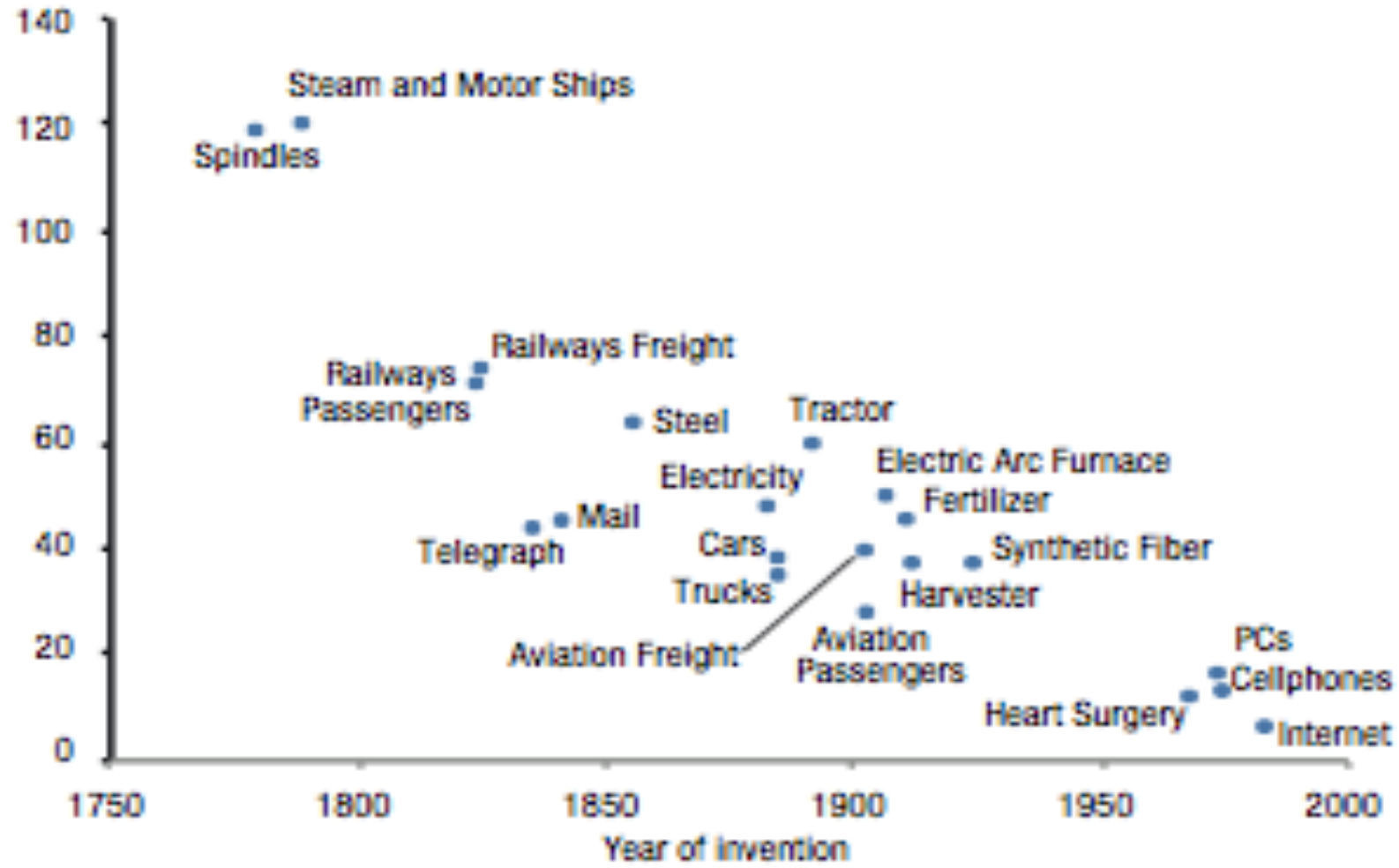
Real GDP per capita, 1300-2000, logarithmic scale





- Up to the early 19th century, growth averaged around 0.2 percent per year
- Industrial revolution led to a sharp increase in the annual rate of growth to 1.1 percent
- Post-Second World War era, growth accelerated to 2.1 percent per year-doubling of income every 34 years
- Spectacular performance since 1950 as compared to centuries of growth
- Mixed outside frontier economies and barring some in East Asia, rest not caught up
- Inequality has widened since 19th century

*World Intellectual Property Report 2015

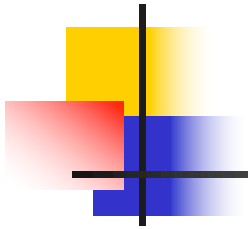

Adoption lag since first invention, in years
140
120
100
80
60
40
20
0
1750
1800
1850
1900
1950
2000
Year of invention
Steam and Motor Ships
Spindles
Railways Freight
Railways Passengers
Steel
Tractor
Electricity
Electric Arc Furnace
Fertilizer
Mail
Telegraph
Cars
Synthetic Fiber
Trucks
Harvester
Aviation Freight
Aviation Passengers
PCs
Cellphones
Heart Surgery
Internet

Faster…. but uneven diffusion

- Innovation is critical for long-run growth but imperfect technology diffusion a cause for diverging levels of economic prosperity
- To productively use imported technologies possess
  - sufficient *absorptive capacity*
  - human capital to apply technology
  - organizational and managerial know-how
  - institutions to mobilize resources for adoption
  - ability to undertake incremental technological and organizational innovation to adapt to local needs

Role of the State

- In order to accelerate eco devt policy makers need to
  - arrest tendency to under invest in R&D
  - create incentives for additional investments
- State intervention imperative for IP protection
- Creates market distortions, but wider good of society
- Provides innovator with potential competitive advantage
- In most cases for a limited period of time, during the early period of the product life-cycle
- However, need to balance static efficiency for a specific innovation and the dynamic efficiency for a stream of inventions



Benefits of IP Protection

Patents and Technological Development

- Facilitate licensing arrangements and investment
- Disseminate initial knowledge as free input ("public good") to produce further knowledge as output ("private good")
- Limit "free riders" not "innovators"
- Speed of essence to avoid 'hard luck' stories

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

Brand Values (US $ million)

	Logo	Name	Brand Value ($m)	Last	SyncForce Customer
1		Apple	184,154	1	
2		Google	141,703	2	
3		Microsoft	79,999	4	
4		Coca-Cola	69,733	3	
5		Amazon	64,796	8	
6		Samsung	56,249	7	
7		Toyota	50,291	5	
8		Facebook	48,188	15	
9		Mercedes-Benz	47,829	9	
10		IBM	46,829	6	

Copyright and Economic Development

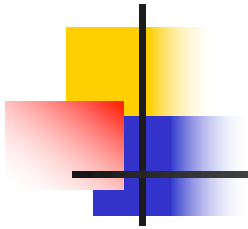
- Protects creativity and ensures adequate recompense for creators and producers
- Balances public with private interest
- Preserves cultural heritage
- Prevents creation from being reproduced elsewhere and competing with original
- Enhances economic growth

Contribution - Main Indicators

- Size of industry as percentage of **GDP**
- **Employment** generation
- Foreign **trade**

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



Thank you