

# ***Impact of Changing Patent Laws in Developing countries on Innovations, Business and Economy...A case Study of India***

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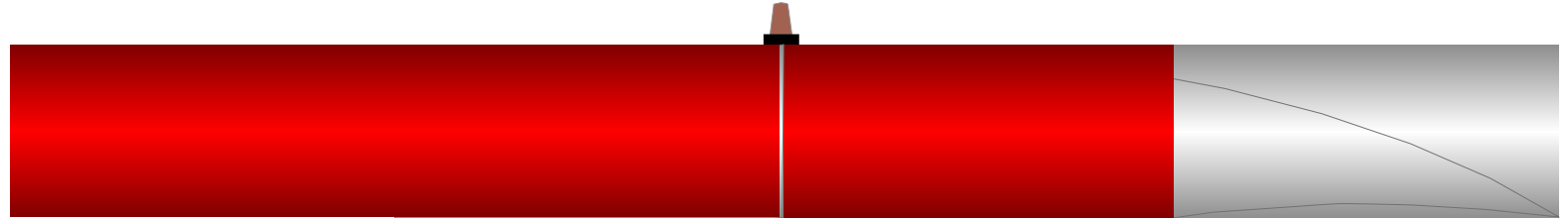
# Developing country Concerns on IPR

- Will a strong IPR regime facilitate national development or inhibit inclusive growth?
- Will a strong IPR Regime facilitate innovation processes in the country or will it restrict innovation?
- Will a strong IPR regime make the country over dependent on “transnational companies” or will it facilitate growth of indigenous industries including become instrumental in enhancing participative international trade?
- Will the country be able to protect and effectively exploit its traditional knowledge
- What will be the impact on public health and environment?

# ***India ....launching into the future***

- **One sixth of the world population**
- **“youngest nation in the world” with more than 50% of its population being less than 25 years of age and more than 65% hovers below the age of 35**
- **One of the largest secular democracy**
- **One of the most successful “well-spring” of trained human resource**
- **Mature infrastructure of Science and Technology**
- **Consistent economic growth now ready to meaningfully partner technology transfer and process of globalisation**

# India Pre 1991



**A Protected Economy**

**Servicing Local Markets**

**Limited access to global markets**

**Process of infrastructure and human resource build-up**

**Slow industrial growth**

**Restrictive IPR Laws to promote adaptive innovations**

**to stimulate**

**domestic inventive activities**

**technology development through spill over to indigenous industries and institution**

# India Post 1991

**Opening up Economy**

**Enhanced Access to global markets**

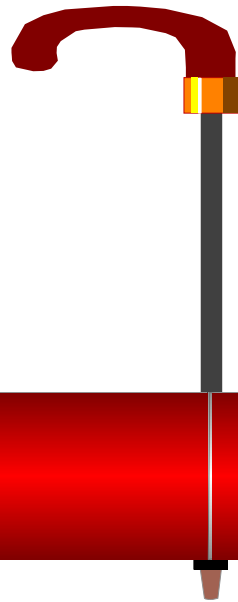
**Speedy FDIs in diverse sectors**

**Sector Specific industrial growth**

**IPR Laws harmonised to comply with TRIPS**

**Competitive market led R&D**

**Monetizing of innovations and IPR**



# Some Economic Indicators during the last 5 years

- GDP between 7 to 9% in the last 5 years
- Foreign Exchange Reserves from \$200Bn to ~\$300Bn
- Inflation between 6 to 14%

# Development of the Patent Law In India

**Phase I.....in British India....**

Act VI of 1856; Act XV in 1859

Patterns and Designs Protection Act 1872

Protection of Inventions Act 1883

Inventions and Designs Act 1888

Indian Patents and Designs Act 1911

**Products and processes were patentable without any  
Limitations on technologies  
Including drugs, pharmaceuticals, chemical entities, etc.**

# Development of the Patent Law in India

**Phase II.....in Independent India...pre TRIPS**

Indian Patents Act 1970(39 of 1970)

**Made Products related to drugs, pharmaceuticals,  
chemical entities non-patentable ;**

**Only process to make them were patentable .**

**Introduced limitations on technology areas that could  
be patented**

# Development of the Patent Law in India

## Phase III.....post TRIPS

Three amendments to the 1970 Patent Act  
Indian Patents (Amendment) Act 2005 currently in  
force

*Patents now reintroduced for products of chemical reactions, substances that are foods, drugs, pharmaceuticals, agricultural products such as pesticides, fertilisers, etc. Processes continue to remain a subject matter of patents as in the Patents Act 1970*

# India's IPR related Laws .... Post TRIPS

- **Indian Patents (Amendment) Act 2005**
- **The Trademarks Act 1999**
- **Copyright Act 1957 with Copyright rules 1958 followed by International Copyright Order 1999.**
- **Designs Registration Act 2000**
- **Geographical Indications Act 1999**
- **Protection of Layouts for Integrated Circuits Act 2000**
- **The Protection of Plant Varieties and Farmers Rights Act 2001**
- **Bio-diversity Act 2002**

# Major Steps taken in the Patent, Trademark, Designs Office in India

- 4 Offices modernized
- e filing of patents and trademarks
- Journal of Patents on website
- Database of granted patents and published patent applications on website
- Electronic monitoring of status of the patent applications and trademark applications
- Patent / Trademark Agents Examination made more rigorous.

# Key Areas addressed in the amended Patent law

- Inventive step has been defined,
- Elaborates on exclusions to patentability
  - Very tight benchmarks to be satisfied by new chemical entities to be patentable.
  - a mathematical or business method or a computer program *per se or algorithm not patentable*;
  - Inventions which are Traditional Knowledge or an aggregation or duplication of known properties of traditionally known component or components are not patentable.
- Mandatory disclosure of source and geographical origin of “biological materials” in patent specifications

# Key Areas addressed in the amended Patent law

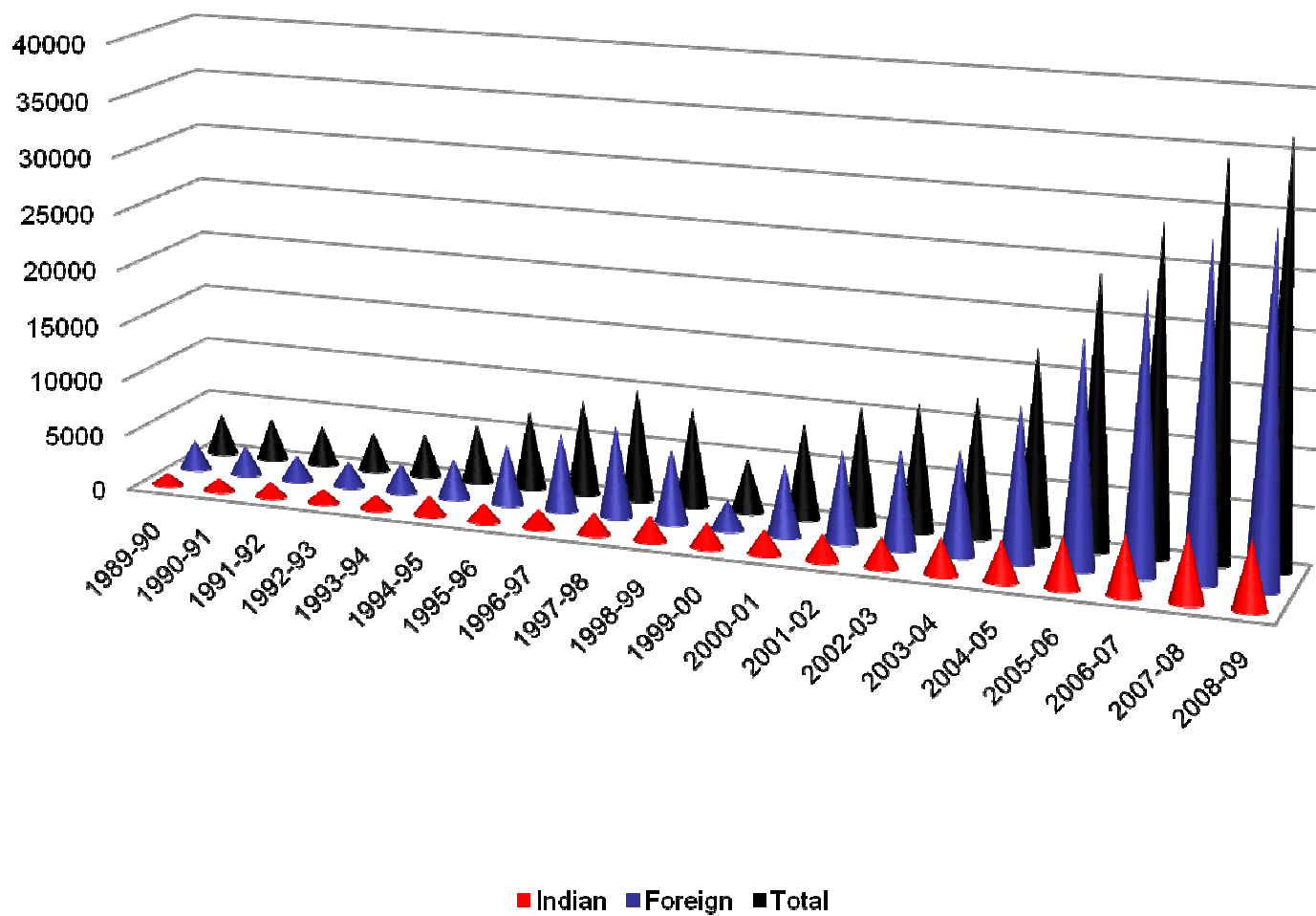
- Enforcement of Patents for applications made before 01-01-2005
- opposition proceedings .....pre-grant and post grant oppositions
- Compulsory. Licenses..special features
- Working of Patents

# Provision to implement Para 6 of Doha Declaration

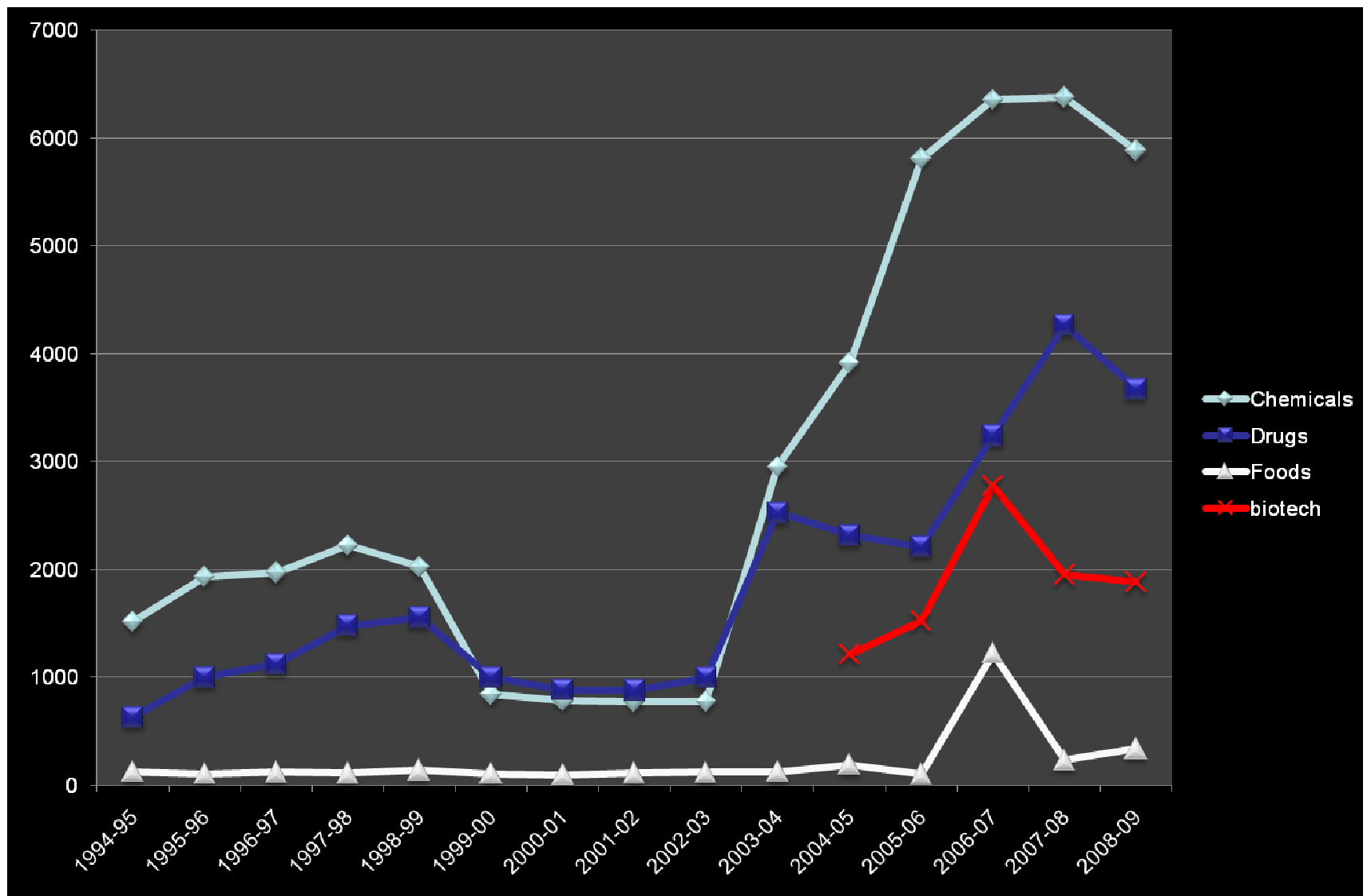
- **Section 92A** : compulsory licence for export of patented pharmaceutical products (provided for in Para 6 of Doha Declaration), to countries that have inadequate production capacities.

# Impact of New Patent Act on the Patenting landscape in India

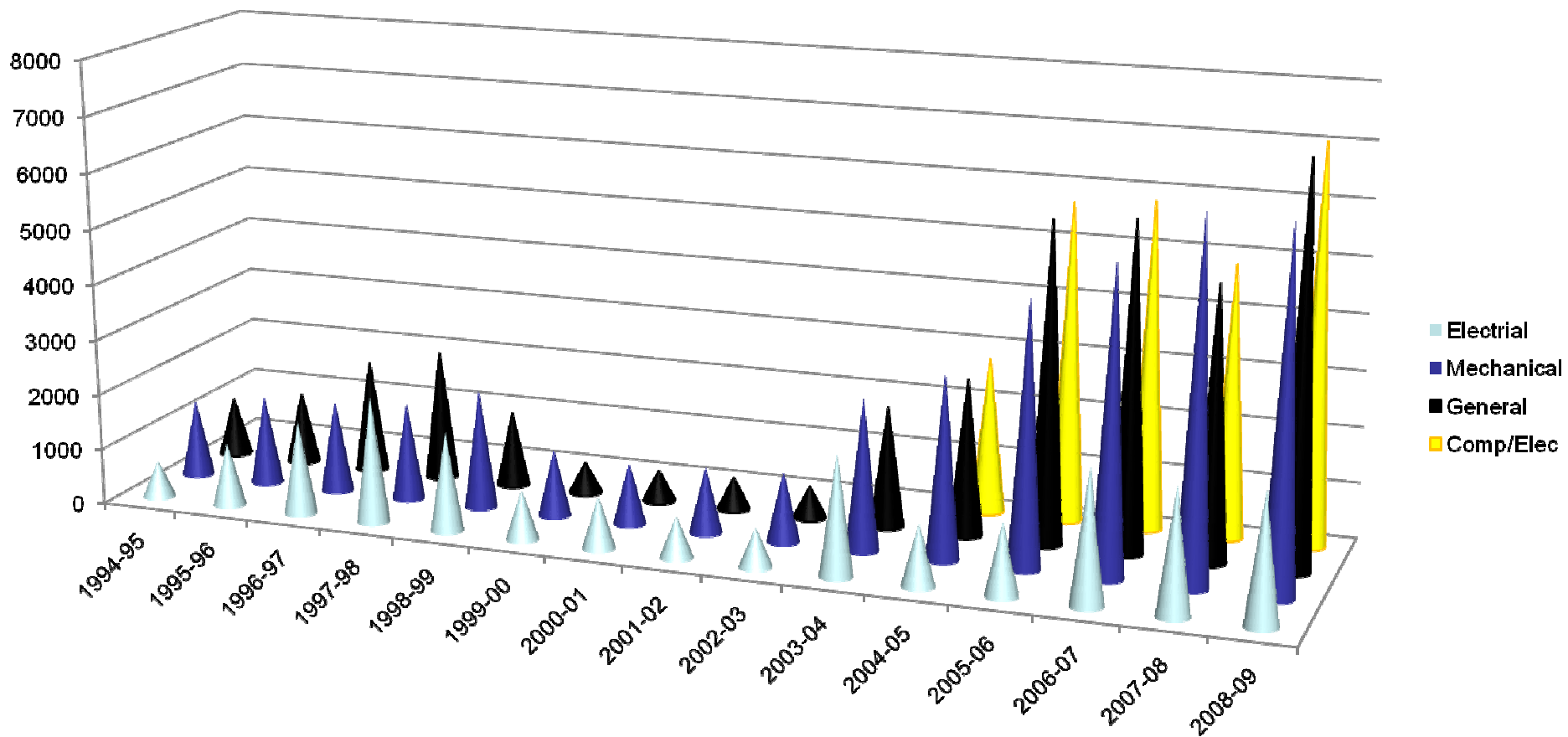
## Patent filing in India 1989-2009



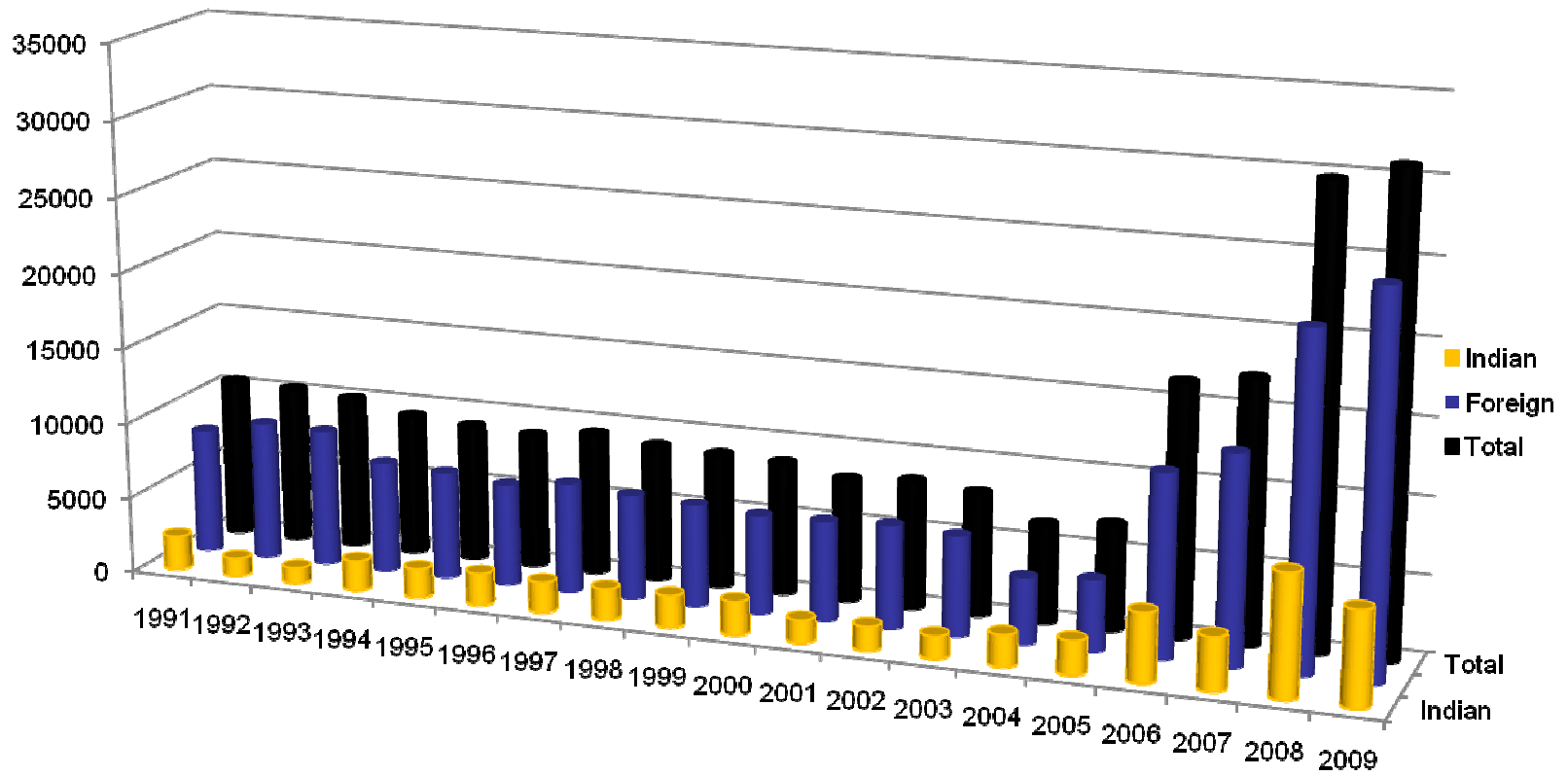
## Patent filings in Chemicals, Drugs, Foods , Biotech



## Patent filings in Electrical, Mechanical, Computers/Electronics, General



# Patents in Force



# Results ..possible learning for other developing countries

- Realization : need enhanced innovations in Indian Industries, SMEs and transnational companies
- Awareness: of stakeholders resulting in enhanced participation in the IPR processes through
  - filings, grant, oppositions, invalidation proceedings, court proceedings, enforcements, etc.
- human resources management; enforcement agencies and judiciary

# Results ..possible learning for other developing countries

- Enabling ecosystem for enforcement of IPR..police, customs, etc.
- Involvement of Indian Judiciary
- National Policies including incentivizing processes to facilitate innovations
- Systems to integrate traditional systems of innovations into the modern S&T system
- Training and Development of Human Resources for IPR

# Results ..possible learning for other developing countries

- TKDL: Traditional Knowledge Digital Library
- Impacting Policies in International Bodies such as WIPO , etc.

# Foreign Investments in R&D

- Contracting Research to Indian R&D Institutions
- Buying out and/or licensing of Indian Technologies
- Sponsored collaborations with Indian Institutions
- *Over 200 R&D Centres by MNCs in operation with global centres of excellence*

# Striking New IPR Based Roots feeding into the National Economy

*.....Contract Manufacturing*

*..... ..JVs in the making*

*.....CROs and Tech Parks*

*..... ..Public Private Partnerships*

*.....Consortia Mode of R&D including  
commercialisation*