National Judicial Conference for High Court Justices on IPR

Emerging Issues on IP Regime in India and Globally

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National Judicial Academy, Bhopal November 17 to 19, 2017 Emerging Issues and Changing Landscapes

- Legislative and Treaty with special reference to the pharma sector
- Global IP Profiles, Shifting Landscapes and Administrative Challenges
- Innovation Deficit



Legislative and Treaty

National Legislation

- Post 1970, most significant changes made between 1995 and 2005
- Triggered by the 'Triad'
- IP laws amended/new laws adopted in several areas
- Some developments have had widespread implications for stakeholders over a wide spectrum – both internal and external
- Two examples from pharma sector....

Section 3(d) Issue

THE PATENTS ACT, 1970

INVENTIONS NOT PATENTABLE

Section 3

What are not inventions

(d) the **mere discovery** of a *new form* of a known substance which does not result in the enhancement of the known efficacy of that substance or the **mere discovery** of any new property or *new use* for a known substance or of the *mere use* of a known process, machine or apparatus unless such known process results in a new product or employs at least one new reactant

Challenged Unsuccessfully

Novartis case

- Contested by Novartis after the patent application on the beta crystalline form of *imatinib mesylate* (Gleevec) was rejected – decision upheld by IPAB, HC and the SC
- Novartis: "Ruling is a setback for patients that will hinder medical progress for diseases without effective treatment and companies like Novartis would invest less money in research in India as a result of the ruling"
- Special 301 Report of the USTR:
 - The US continues to have concerns that Section 3(d), as interpreted, may have the effect of limiting the patentability of potentially beneficial innovations.

Compulsory Licenses

- In March 2012, a CL was issued to Natco to make and sell an anti-cancer drug Nexavar* patented by Bayer
- First time in the history of the Patents Act (1911)
- International right holders community considered it tantamount to reneging on new obligations for providing pharma product patents
- Patient support groups and public health activists hailed the decision and said it would set a precedent for overcoming drug price barriers.

*used for the treatment of primary kidney and advanced primary liver cancer that cannot be removed by surgery



TRIPS truly a watershed in terms of Treaty obligations determining National law



Origins....

Absence of protection or inadequate protection considered trade distortive practice leading to

the inclusion of IPRs in various international arrangements at the plurilateral and bilateral levels...

TRIPS - 1994

- Comprehensive multilateral agreement setting minimum standards
 - Reduces distortions and impediments to trade
 - Members determine appropriate method of implementing obligations within their own legal system and practice
 - Substantial provisions of the Paris Convention and the Bern Convention to be incorporated
 - National Treatment and Most-Favoured-Nation Treatment
 - Objectives and Principles specified

Obligations on Member States

- Amend provisions of existing laws/adopt laws in new areas to adhere to TRIPS
- Modernize administrative offices, streamline operations and automate procedures
- Strengthen enforcement mechanisms
- Build human resource capacities
- Internalize new international IP framework in other bilateral/plurilateral arrangements



Significant investments in the new system...

but did the new world order actually help developing countries...

perceived imbalance and lack of concern for vulnerable sections lead to debate on revisiting norms and also at times seeking paradigm shifts...

Concerns Expressed in Various Fora

- Doha Ministerial Declaration on TRIPS and Public Health - 2001 (http://docsonline.wto.org/DDFDocuments/t/WT/Min01/DEC2.doc)
- Commission on Intellectual Property Rights (CIPR)-2002 (<u>http://www.iprcommission.org/graphic/documents/final_report.htm</u>)
- UNCTAD XI 2004 (<u>http://www.unctad.org/Templates/meeting.asp?intItemID=1942&lang=1&m=4289&info=doc</u>)
- Second South Summit 2005 (http://www.g77.org/southsummit2/doc/Doha%20Plan%20of%20Action%20(English).pdf)
- Government Accountability Office (GAO) 2007 (http://oversight.house.gov/documents/20071030125409.pdf)
- Organisation for Economic Co-operation and Development (OECD) - 2007 (http://www.oecd.org/dataoecd/2/31/39374789.pdf)
- WIPO Development Agenda 2004 to 2007

(http://www.wipo.int/ip-development/en/agenda/)

WIPO Development Agenda

- IP not end in itself means for promoting public interest, innovation and access to S&T
- Credibility undermined by promoting benefits of protection, without acknowledging public policy concerns
- Integrating development dimension will strengthen credibility and encourage its acceptance as a tool for innovation, creativity and development
- Three-year long debate lead to adoption of 45 recommendations in 2007 the Development Agenda

Adopted Recommendations





Global IP Profiles and Shifting Landscapes

Patent Applications - Global

A1 Trend in patent applications worldwide



Note: WIPO estimates cover 147 patent offices and include direct applications and Patent Cooperation Treaty national phase entry data (where applicable).

Source: WIPO Statistics Database, October 2015.

Trademark Applications - Global

Figure 7. Trademark applications worldwide



Source: Standard figure B1.

Industrial Designs Applications - Global

Figure 14. Industrial design applications worldwide



Source: Standard figure C1.

Recent Shifts

gure 4. Patent applications by region



ource: Standard table A6.



Administrative Challenges

Patents – Applications and Grants

A1 Trend in patent applications worldwide



Note: WIPO estimates cover 147 patent offices and include direct applications and Patent Cooperation Treaty national phase entry data (where applicable)

Source: WIPO Statistics Database, October 2015.

irena in patent grants worldwide



e: WIPO estimates cover 130 patent offices and include patent grants based on direct applications and on Patent Cooperation Treaty national se entry data (where applicable).

rce: WIPO Statistics Database. October 2015.

Backlogs - Implications

- Longer pendency time reduces the value of patents to applicants, and hence R&D motivation
- Non-grantable applications may remain unexamined, and hence gain temporary monopoly power for a longer period
- Backlogs also lead to decline in patent quality as patent offices' resources are stretched
- Uncertainty over the scope of granted patent rights may deter investment and hence slow down, or prevent, valuable innovation



Innovation Deficit

Developing Countries

- One of the measures of a country's innovative ability is the number of patent applications filed by its residents, per million of population
 - In 2012 Global 245; India 8; China 396; S.Korea 2962
- PCT filings:

| Country | 2013 | 2002 |
|---------|--------|------|
| India | 882 | 480 |
| China | 22,942 | 1124 |
| S.Korea | 12,442 | 2552 |

Alternative Paradigm -Open Innovation

- A combination of several factors
 - Intensification of the Knowledge Economy
 - Geographic Shifts
 - Pressure on IP systems
 - Mobility of people, products, capital

Internationalization of S&T

- Catalyzed businesses to be outward looking in order to <u>sustain</u> and <u>further</u> the innovation process
- Encouraged rise to the phenomenon of "Open Innovation" - Henry Chesbrough

Closed innovation



Source: Chesebrough :2003 Pushpendra Rai

Open innovation



Source: Chesebrough :2003 Pushpendra Rai

Some Examples

 AIDS Vaccine Discovery (Bill & Melinda Gates Foundation July 2006)

- 600 investigators in 103 institutions across 16 countries
- collaborators working on various aspects of AIDS vaccine, while remaining mindful of the overall goal
- Open Source Drug Discovery Project (CSIR)
 - launched to "hasten the drug discovery process"
 - contributions from over 7900 participants and 75 institutions communicating from 130 countries
 - all contributions are recognized; patents ensure quality; availability of subsequent innovations in open source; affordability through non-exclusive licenses



Thank you