Patents in an Environment of Global Collaboration

Pryor Garnett
Senior Counsel, Patent Strategy
IBM Corporation
The World is Changing Rapidly

- Globalization, commoditization and innovation acceleration are unstoppable forces
- New challengers: Asia-Pacific, Eastern Europe, Latin America, Brazil, Russia, India, China ("BRIC")
- GDP growth forecast: A-P 4.9%, US 3.6%, EU 1.3%. Services dominate GDP.
- More than a billion Internet users

Innovation is what is going to differentiate businesses and national economies
Collaboration Stimulates Innovation

- IBM shares patents, inventions, processes, and know-how
  - Open Source Communities
  - Open Standards Committees
  - Global Innovation Outlook with Government, University, and Business Leaders
  - Open Patents
  - EcoPatent Commons
The Nature of Innovation Itself is Changing

- It’s occurring **more rapidly**

- It’s more open, **global** and requires wider **collaboration** across **multiple disciplines**, specialties and borders often involving cultural diversity and language.

- Concepts of **intellectual property ownership** are giving way to a more enlightened emphasis on intellectual capital, sharing and collaboration.

- It requires a broader view of the elements a company should look for in...
  - a partner
  - a competitor
  - an intellectual property strategy
IBM Global Technology Outlook

- Identify Emerging Technology Trends Significant to IBM and Competitors
  - Disruptive to Existing Business, Potential New Ones, Game Changers
  - Exponentials - Thresholds
  - How New Technology can Impact Customers (and Our Businesses)
  - Understand Major Customer Challenges by Industry Segment

- Influence Technical Strategy of the Company
  - Make Sure the Company is Focused on Major Opportunities For New Growth

- Source of Education For the CEO & Senior VPs
Global Innovation Outlook

Objectives

- Uncover new insights and opportunities that will shape business and society
- Accelerate the integration of best world thinkers in technology creation and strategic business design
- Demonstrate to key constituencies the competitive advantage created by collaboration among a global ecosystem

GIO 1 Focus Areas

- Healthcare
- Government
- Work/Life

GIO 2 Focus Areas

Future of the Enterprise
Designing the 21st century corporation; managing global talent and skills; the global small business

Transportation
Mega-urban centers and smart traffic management; the connected” vehicle; customs, ports and border control

The Environment
Eco-efficient technologies; economic impact of access to clean water supplies; predictive environmental impact services
IP is Central to Economic Growth & Competition

US investment in intangible assets (>1T/year) equivalent to investment in tangibles

“Intellectual property is the backbone of America's economy”
U.S. Commerce Secretary
Carlos Gutierrez

Japan intends to “bring about a nation founded on intellectual property”
Japanese Prime Minister
Junichiro Koizumi

“The competition of the future world is a competition for Intellectual Property Rights”
Chinese Premier
Wen Jiabao

~80% of the value of modern companies comes from intangible assets

Sources: US Federal Reserve – Nakamura, Ned Davis Research
IP Drives Profitability, Growth, Competitive Advantage

Innovation

Distinction

Intellectual Property

Ownership

Marketshare

Price

Cost

Direct Income

Influence

Sustainable Profitability
More/Stronger Patents = More Innovation?
Top Defendants in US Patent Litigation  
# Suits, 2006-2007

- Microsoft (43)
- Verizon (29)
- Target (28)
- Dell (28)
- Wal-Mart (24)
- HP (24)
- Apple (23)
- Motorola (20)
- Sprint Nextel (20)
- AT&T (19)

Source: Troll Tracker, December, 2007
Plaintiffs in US Patent Litigation
2006-2007 = Non-Practicing Entities

26% of overall infringement suits
- 50% of infringement suits against large companies

3 months in late 2007
- 80% of infringement suits against large technology and financial companies

Source: Troll Tracker, December, 2007
The Impact of Patent System Imbalance

“We estimate that the deadweight loss of a “loose” patent system from lost innovation is approximately $21 billion each year in private costs alone, or nearly $200 per household per year. This sizeable deadweight loss constitutes approximately 7% of annual R&D spending in the United States.”

Sources of Patent System Imbalance

- Inventive step / nonobviousness test
- Patentable subject matter
- Damages proportionality

- These (and others) are determinants of national technology and industrial policy
Goldilocks and the Trilateral Patent Offices

Too loose?

Too tight?

Just right?
Inventive Step / Nonobviousness

- Determines the quality of patents granted
- Affects the number of patents granted and enforced

- Quality too high / number too low → patents are too difficult to obtain
  - This discourages investment in R&D, and reduces invention creation
- Quality too low / number too high → too many patents are enforced / asserted
  - Patent speculators extract unjustified payments from producers
  - This discourages investment in production, and reduces the application of inventions to real problems
Patentable Subject Matter

- Determines the technologies affected by patents
- Affects the number of patents granted and enforced

- Problems with patent office and court assessments of inventive step / nonobviousness of software-related inventions, especially the non-technical ones, are cited to justify abolishing all patents on subject matter relevant to software
- ... or all patents
- ... or all intellectual property
Patent Damages Proportionality

- Affects the number of patents enforced
- Determines the effect of patents on producers
  - Plaintiff #1 – "A reasonable royalty is 5%." 
  - #2 – "ditto"
  - #s 3-10 – "us too"
  - N – "what about me"

\[
\int N \text{ royalty} \cdot \text{revenue} = \pi = 1 
\]

... at least in in the domain of information technology products and services
Thank You