Discussion Agenda

• How is China promoting patents and competition regulation as key elements of innovation policy?

• What are the implications of China’s recent patent and competition regulation activities for cross border transactions?
The Chinese Economy: Rapid Transition

• Massive growth over past 20 years

• Largest growth in manufacturing for export, and increasingly for domestic consumption

• More companies poised to move into advanced technology markets — places where most growth and global competition lie

• These markets, therefore, are the focal points for innovation, patent and competition policy
The U.S. Marketplace

• The U.S. is well-known for entrepreneurship and innovation in technology
  o "Big ideas are born and grow here first"
• The U.S. is a big marketplace for high end technology products and services
• Expanding Chinese firms don't always face a warm welcome
  o Huawei - 3Com & 3Leaf acquisitions blocked
  o ZTE and Huawei prevented from supplying Sprint 4G network
  o But, compare Alibaba (Auctiva, Vendio) and Lenovo (IBM, Motorola Mobility) deals
The U.S. Patent System

• Patents enshrined in the U.S. Constitution
  o Article 1, Section 8(8) - "To promote the progress of science and useful arts ..."

• U.S. Patent system currently known for:
  o NPEs
  o software patent proliferation
  o secondary marketplace innovation
  o big damages
  o high stakes operating company disputes
  o ITC: a new gatekeeper at customs
The Chinese Marketplace

• Rapidly expanding economy across all sectors
  o Market reforms combined with technology investment and entrepreneurship stoking big opportunity boom

• China is a growing marketplace for high end technology products and services with huge upside potential

• Expanding foreign firms don't always face a warm welcome ...
The Chinese Patent System

- The Chinese Government has been pushing to strengthen its patent system, home grown innovation and the competitiveness of Chinese companies.

- Stated goals of the National Patent Development Strategy (2011-2020) are “encouraging innovation and promoting economic development” in the unique context of a “socialist market economy”.

- Chinese Patent system currently known for:
  - growth and proliferation across all technologies
  - high number of litigations
  - low damages (but upward trend)
  - uncertainty over quality and consequences...
Invention patent applications skyrocket

A7 Trend in patent applications for the top five offices

Note: The top five offices were selected based on their 2013 totals.

Source: WIPO statistics database, October 2014.
A looming utility model problem?

A42 Utility model applications for the top 20 offices, 2013

<table>
<thead>
<tr>
<th>Office</th>
<th>Resident</th>
<th>Non-resident</th>
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<tbody>
<tr>
<td>China</td>
<td>892,362</td>
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</table>

Growth rate (%): 2012-13

Source: WIPO statistics database, October 2014.
Litigations are rising annually

Number of patent lawsuits filed in China (in first-instance courts); in thousands

Source: China’s State Intellectual Property Office
Key questions as we move forward

• How will patent proliferation in China be used in industrial and trade policy over time?

• Will a growing secondary market for Chinese patents primarily benefit local companies, foreign companies or large NPEs?

• Will the Chinese Government tamp down on Troll activity? Or itself foster secondary market activity?
China Competition Policy

Anti-monopoly Law (AML) went into effect only on August 1, 2008 – concerned with:

(i) anti-competitive agreements between undertakings, (ii) abuse of a dominant position, and (iii) mergers that may have the effect of eliminating or restricting competition

- **National Development and Reform Commission (NDRC)**
  - Enforces the price related rules of the AML (including anti-competitive agreements and abuse of dominance)

- **State Administration for Industry and Commerce (SAIC)**
  - Enforces the non-price related rules of the AML and rules against the abuse of administrative powers to restrict competition

- **Ministry of Commerce (MOFCOM)**
  - Enforces the merger control regime
Chinese Leading Global Producers

Source: China statistics yearbook, China economy statistics yearbook, World economy statistics yearbook, Press search, BCG database
The China Automobile Industry

“After three years of seizing market share from Chinese companies, foreign auto makers are starting to take it from each other” – WSJ Dec 10, 2013
GM Loses China Car Crown, But That’s Not The Big Story

• “The big story is that, after all these years of technology transfer, foreign companies dominate the Chinese market and domestic competitors continue to lose market share.”

• “Beijing has forced foreign car companies to transfer technology precisely to give domestic brands an edge. SAIC Motor Corp, still known by former name Shanghai Automotive, has joint ventures with both GM and VM and is beginning to compete with them.”

• “SAIC Motor’s Roewe, for instance, is taking on GM’s Buick, made by a GM-SAIC joint venture, and VW’s Audi, the luxury leader in China”

• Forbes – Dec 29, 2013
JVs with local companies: the price of market admission

NDRC investigations have caused Audi AG, BMW and Mercedes-Benz AG to announce cuts to spare-parts prices. The Chinese government insists that it "does not specifically target foreign multinational enterprises," as a China Daily article put it, but going after excessive profits in the luxury car business hurts foreign firms -- which seem all too willing to reduce their healthy margins to maintain access to the Chinese market. – Bloomberg View, Aug 15, 2014
MOFCOM – Taking the Global Spotlight

• Western Digital/Hitachi HDD Merger (2012)
  • As with U.S. and European Competition authorities, MOFCOM required WD to spin out 3.5” HDD business as condition of merger
  • Additionally imposed “operations independence”, “brand maintenance” and “information firewalls” between WD and acquired Sub

• Google/Motorola Mobility Merger (2012)
  • As with U.S. and European Competition authorities, MOFCOM required GOOG to license Moto patents on FRAND terms
  • Additionally required GOOG to offer Android for free for at least 5 years post-merger

• Microsoft/Nokia Mobile Merger (2014)
  • Prohibitions on seeking injunctions on SEPs anywhere globally against phones made in China
  • Must provide non-exclusive licenses to non-SEPs (relating primarily to Android) and can’t raise price terms to “pre-concentration” levels
NDRC – a pivotal role in market reforms

- National Development and Reform Commission (NDRC)

- “In the transition from the planned economy to a socialist market economy, our commission persists in deepening reform, subscribing to new ideas, transforming functions and giving full play to the fundamental role of the market in allocating resources.”

- “Meanwhile we have been making unremitting efforts to strengthen and improve macroeconomic management and forcefully promoting the sustained, rapid and sound development of the national economy”

NDRC – The Supreme Patent Regulator?

• InterDigital Corp. (Dec. 2013)
  • One of the biggest NPE licensing entities in the mobile technology space globally
  • Has been seeking to enforce importation bans against Huawei and ZTE in US (but no actions being pursued in China)
  • After CEO summoned to appear in China and attempted to delegate to lower executives, NRDC is purported to have threatened any IDC executives appearing in China with criminal arrest!
  • Eventually agreed to not to “overcharge” for licenses

• Qualcomm (Jan. 2014)
  • World’s biggest cellphone chip maker, earned nearly half of global sales in China ($12.3B) during its FY ended Sept 2013
  • Fined $975M in 2015, close to maximum.
SAIC – Setting the Rules of Engagement

• New Patent Rules (Apr. 2015)
  • “Provisions on the Prohibition of the Abuse of Intellectual Property Rights to Eliminate or Restrain Competition”
  • In development since 2009

• Limits on horizontal and vertical agreements
  • Horizontal – no more than 20% of market or at least 4 substitute technologies in same market available at reasonable cost
  • Vertical – no more than 30% of market or at least 2 substitute technologies in upstream or downstream markets available at reasonable cost

• “Essential Facilities” concept appears to require compulsory licensing of not only SEPs, but non-SEPs as well

• Standard Setting Organizations and Patent Pool conduct
Conclusions

• Patent proliferation in itself will not promote innovation and there are danger signs that it may promote negative behaviors and impede innovation in China.

• A patent system properly balanced with competition laws and market-driven economic development policies will best promote and protect innovation.

• Hypothetically at least, as China’s advanced technology firms gain more traction in domestic and global marketplaces, competition and patent enforcement may shift increasingly from the State to private actors.