Legal Pluralism in Patenting
- A more pluralistic regulation of cloud computing patents?

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Background

» Technological Changes

» New Types of Economies and business models: “Service”
  » Cloud Computing/Cloud Service
  » Search
  » Adword used in the search
  » eBooks (availability of contents as a service)
  » Game items (“virtual ownership”)

» New types of claims for protection for the values generated by the new business models

» Extra-territorial reach of businesses

Reaction in IP Law & Theory

» First Regulate/Internalize “values” into IP law/ (Harmonize into international law)
  » Provide IPR protections
  » When, and which IPR
  » How
    : which doctrines of IP law need adjustment (i.e. subject matter? patentability?)
  » Then justify with theory
    » incentive/utilitarian thesis, or natural rights

» Finally, Recalibrate with more regulation (harmonize)
  » a new limitation and exception? user rights?
  » a new infringement liability
  » A uniform/harmonized cross border litigation
Research question (a claim)
- Vertical Order Pluralism and patents

1. Regulation of conducts (innovation/invented) need to take plurality of alternative ordering into consideration.
   - A more realistic approach (theory) acknowledging multiple layers of ordering
   - Using IP law proper may not always be the suitable

2. Applicable of the thesis of “vertical legal pluralism”: cloud computing inventions
   - Is it possible to regulate cloud computing/service inventions not thru patent law but thru other means of ordering/regulation?

Vertical Order Pluralism
- Cloud computing invention

1. Public Ordering
   - Constitution, TRIPs, National Patent Law (patentability & enforceability)
   - Case laws, Examination Guidelines

2. Private Ordering
   - Programmer Ethics
   - Open initiatives (open source, open data, open standard)
   - Industry strategies (ICT-patent war or defend freedom of action)
   - PATENT CLAIM

3. Facts
   - Cloud computing facts (technical and geographical scope)
   - PATENT CLAIM (description of invention in tech. terms: may be made location specific)

4. Personal & individual skills and preferences
   - Inventor/Patent Lawyer specificity (of claim format)
   - Provider/User preferences of a business model

Cloud computing

Cloud Computing Inventions
- Inventions of means, methods, system, apparatus, devices of, on, using ubiquitous media/communication possibility and infrastructure
  - computer programs (for server)
  - computer, programmable devices (both for users, server, client)
  - internet, telecommunication connection
  - application program (user interface): allowing transfer of data

- In essence, computer program product/methods claims
- Combination invention using “Cloud”
Cloud computing inventions

Several patent applications have already been filed and pending on cloud computing. As the Figure 2 illustrates, an invention can be composed of a device located in a country, utilizing parts of the steps of an invention, enabling another user utilizing device located in another country to practice entirety of steps. As seen in the Figure 2, the claims to this type of invention almost always require a step conducted by a user(s) or their computing devices, located remotely, sometimes even outside the country of grants. While the claim text may not highlight this aspect, in practice, these inventions will almost always use the Internet, and novel and inventive merits of these inventions over other services would clearly be in the combination where the users who need to access the data from a distance – outside the territory of a grant, and not in each individual element.

Trilateral Cases Examples

2. UK: RIM v Motorola (2010)
3. DE: Prepaid Calling Card (2009)*
5. US: MS v AT&T (2007) Supreme Court

(*appealed, **pending en banc hearing)

2. Private ordering thru Patent claim?

- Why grant such patents? Why claim such patents?
- Why divide the conduct of use
- Why divide the steps/technical scope? Is it unavoidable? (benefit of the invention):
  - business model offering computer program as service ("the cloud")
- Patent Claim has a choice over
  - Who (is using the invention): single person perspective of the invention
  - What
    - method/product claim
    - components or steps of an invention
  - But not Where: embodiment issue? difficult to control the location where the invention will take effect ("the cloud service": a business decision)

3. The Cloud?
   Tech.& Business Facts

- Characterized by technical and geographic (?) facts
- Computing as a service/performance concept
- Distribution of elements of computing
- Enabling transfer between locations (moving data from local machine to the cloud)
- Systems composed of readily divisible steps (with pre-and post invention process) scalability and modularity of tasks
- End-User/Multiple actors’ participation in working the invention or in making invention to take effect
- Location and device independence
4. Individual skills & Preference

Why draft such unenforceable patent claims?
- Patent drafter inexperience?
- Inventor preference?
- Nature of invention forces claims drafter
  - Invention lies at the combination of steps
  - Unless the claim is directed to the entire combination, it is likely not to pass the patentability standard

Concluding remark

- "A patent that cannot be enforced on any theory of infringement is not a statutory patent right." (J. Neuman)
- Why grant such patents that cannot be enforced?
- However, before making a big public ordering move (i.e., joint tort liability to cloud invention), or start reading “essence” into the claim elements for partial protection
  - An evidence based assessment is necessary
  - How many of these patents are actually “out” there?
  - Who enforces them (genuine market innovator or a NPE?)
  - Can claim drafting save the enforceability of an patented invention
  - Claim drafting guideline by the PTOs?
- A policy choice: do we need to give special consideration to cloud invention patents in general? Maybe no.