# **Standards & Patents**

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# **Standardisation & interoperability**

Standardisation is a consensual, ex-ante means of achieving interoperability

# **Types of standard:**

- Formal
  - official standardisation body
- Ad-hoc
  - Unofficial or "informal" industry grouping
  - Is participation open to all?
  - Does everyone have access to the standardised technology?
  - i.e. is it an "open standard"?
- De-facto (proprietary)
  - Solution of one (or few) proprietors becomes dominant
  - Should different policy considerations apply?



# **Patents Promote Standardisation**

- Patents encourage investment in innovation (R&D)
  - True also in standardisation

- Filing a patent application allows technology developers to disclose/share their ideas openly and early
  - No patents -> secrecy
- Enables technical specifications to be promulgated
  - For benefit of the industry
  - Which may (probably will) include patented technology



# **Tension between Patents & Standards**

- Patents create a "monopoly"
  - May entitle owner to exclude others

- Patent owner may have market power
  - merely because his patent is in the standard
  - Others have to use patented technology to be compliant with the standard, i.e. for interoperability
    - This is what is meant by a so-called "essential patent"



# Patents & Standards. Policy Challenge:

To strike the right balance between:

- the rights of the patent owner to enjoy the full benefits of the patent
  - But not reap additional value merely because the technology is adopted as mandatory
- the rights of third parties to make and sell interoperating products
- the public interest not to lock users into specific technology platforms
  - Or force consumers to pay too much for their products because of high cumulative royalties

recognizing that in daily life society benefits from standards



# **Current Policy Approach:**

#### Tends to favour:

- permissive patent law regime with "external" checks & balances
  - i.e. outside patent law regime (competition law, health & safety laws)

## **AND**

- self-regulation within standard development organisation (SDOs)
  - With dispute resolution, e.g. amount of reasonable royalties, through bi-lateral negotiation, or failing that, through national courts



# **Checks and Balances - Analysis:**

- "External" legislative checks & balances
  - i.e. outside patent law regime
  - Notably competition law
- Possible "Internal" legislative approaches
  - Within patent law for discussion
  - Not legislator's favoured approach
- Self –regulation (SDO's own IPR rules)
  - Policy makers' preferred policy approach
    - Must be consistent with competition law



# 1. "External" legislative Checks & balances

- Dominant market actors in particular are subject to competition law
  - Refusal of a *dominant* supplier to license for interoperability may be anti-competitive
- No presumption that patent ownership confers market power
  - US Supreme Court in *Illinois Tool Works, Inc. v. Independent Ink, Inc.,* (Mar. 1, 2006)
- But standards-related, i.e. "essential patents" arguably do confer market power automatically
  - Not possible to avoid patent with any standard-compliant product
  - Also, not possible to sell products if not standard-complaint
- Existing "external" checks and balances are limited
  - Are they sufficient?
- Do not address unwilling or unreasonable licensors or Licensees?
  - Who is not dominant



# 2. Possible "internal" legislative solutions??

## (i.e. in addition to existing remedies) For discussion

- Limited infringement exception for interoperability purposes
  - Removes reward for innovators
    - could chill standardisation (innovators discouraged form making technical contributions to SDOs)
- Compulsory License on (F)RAND terms
  - Allows compensation to patent owner
  - catches all patent owners, even non-members
- Strong/essential patent owner "Misuse" Doctrine in patent law:
  - Patent becomes unenforceable under certain specific circumstances
  - Does not require dominant supplier Depends behaviour of patent owner & public interest
  - Causal link between behaviour of patent owner & impact on market
    - E.g. Refusal to license, or on unreasonable or disproportionate terms
    - · Consider total cost of all necessary patent licences
      - · With regard to typical cost profile of relevant business
- Note: any solution must be TRIPS compliant (esp. Art. 30)
  - i.e. must not: (1) unreasonably conflict with normal exploitation of the patent, nor (2) unreasonably prejudice legitimate rights of patent owner, and take account of legitimate third party interests.



# Precedents for "internal" measures for interoperability in other areas of IP law

#### Copyright unenforceable for spare parts for repair

• British Leyland v Armstrong, 1988, House of Lords, UK (car exhaust pipes)

#### Must-fit exceptions in design law

UK and EU registered and unregistered design statutes

#### **Exception for spare parts for repair**

Draft EU directive amending the EU designs directive 98/71/EC

#### Copyright: Reverse engineering exception for interoperability purposes

US DMCA 1998 and EUCD 1991

# Patents: wide range of proposals tabled in proposed computer-implemented nventions (CII) directive, including compulsory licences and limited exceptions

• the whole directive was rejected by the EP in July 2005

#### French copyright law proposed amendment implementing 2001 EUCD

 Technical protection measures (DRMs etc) cannot block interoperability. De-compilation permitted for interoperability purposes.



# Self-regulation - current state:

Standards bodies (SDOs) aim to minimise IPR risks in standards

#### **SDO** members commit:

- to disclose essential patents early
- make licences available on (F)RAND or RF terms subject to reciprocity
  - i.e. voluntary declaration = "Voluntary compulsory license"
  - Ensures access to patented standards
- With dispute resolution, e.g. amount of reasonable royalties, through bi-lateral negotiation, or failing that, through national courts



# **Patents & Standards:**

# **The Track Record**

- Standardisation has been remarkably successful in telecoms
  - GSM example
  - IPR rules have broadly worked well
- Will same approach work for future generations of telecoms?
- And software interoperability?



# Is Self-regulation in SDOs fit for purpose?

#### Some potential pitfalls?

- Disclosure of essential patents based on "self-certification"
- No or late disclosure => patent ambush (anti-competitive)
- Over-disclosure
  - distorts market perception of true ownership and license dues
- Members can choose not to make a FRAND declaration.
- Does not bind non-members (who can still block the standard)

Unwilling or unreasonable licensors have potential to hinder or block standards by claiming unreasonable or disproportionate royalties

Or by attempting to avoid their FRAND commitments



# Self-regulation: Recent Developments in ETSI

#### Initiative to review ETSI IPR regime started Jan 2006

- Major interest from all stakeholders: c.100+ participants at monthly meetings
- Being watched by SDOs & authorities worldwide
- Report to ETSI General Assembly this month (November)

#### ETSI IPR Policy is not fundamentally broken

- Model for many SDO patent policies worldwide
- but complexity of current environment gives cause for some concerns

#### Proliferation of "essential" patents AND patent owners

- Licensing environment has become considerably complex for all players
- A barrier for new entrants?

#### Call for less unpredictability and more transparency of IPR costs

- Especially from mobile operator community
  - •Supported by small & medium size enterprises (SMEs) and new entrants



# **Key issues under review in ETSI**

- FRAND (especially "reasonable")
  - Not broken, but may need clarification because of abuse by some (a minority of )IPR owners
  - Most play reasonable
- Cumulative royalties
  - More patents, more patent owners, more complex licensing regime
- Royalty Stacking
  - Multi-function, multi-technology products
  - Exacerbates cumulative royalty issue
- Transparency of Essential Patents
  - System premised on a self-certification process
  - No essentiality check
  - Who really owns what?
- Transparency of License Terms
  - · Less predictability in business planning
  - How to make early major investment decision with no idea of patent costs?
- External patent owners (third parties who are non-members of ETSI):
  - Not bound by FRAND rules (non-members of ETSI)
  - Those who are not manufacturers have licensing advantage
  - Patent Trolls patent owners who own/acquire patents on to exploit them
- > risk of excessive/extortionate royalties



# Suggestions considered in ETSI

#### 1. Ex-ante

- Ex-ante disclosure of license terms (voluntary)
  - Advocates believe it would promote competition on technology and price
- Competition authorities in US and EU have indicated that ex-ante is not necessarily anti-competitive
  - Most recently DoJ in VITA Business Review Letter (30 October 2006)
    - For mandatory ex-ante proposal
- But would it work for broad-scope standards?
  - i.e. with many technology components
  - Risks slowing down standardisation with complex commercial/legal discussions?
  - Note: No impact on what others may charge



# Suggestions considered in ETSI

# 2. Minimum Change Optimum Impact (MCOI) Proposal

Proposed jointly by Ericsson, Motorola, and Nokia

**Key Principles:** 

Clarification of FRAND by including twin principles of

- AGGREGATED REASONABLE TERMS (ART)
  - Cumulative royalties are commercially viable (i.e. whole royalty pie is "reasonable")
  - This is not a fixed "cap"
- PROPORTIONALITY
  - Individual entitlement to royalties benchmarked against all other patent owners' entitlements (so all slices of royalty pie fit)
- Clarify NOT re-define FRAND

Note: Discussions on FRAND/MCOI in ETSI put "on hold" for longer term consideration while external cases pending:

• Courts and/or competition authorities may give more guidance in due course



# Patents & Standards. Conclusions:

#### **Current policy approach:**

For ensuring access to interoperability (standards-related) patents on commercially viable terms:

- Checks and balances tend to be "external" to patent law
- "External" legislative/regulatory measures are limited
  - Mainly competition law
  - Are they adequate?
- Are "internal" legislative measures needed, i.e. in patent law?
  - E.g. a strong/essential patent owner "Misuse" doctrine
- Is self-regulation within SDOs adequate?
  - To prevent hold-up and patent ambush
  - To ensure access to essential patents on reasonable terms
    - So cumulative royalties are commercially viable



# Thank you for listening

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