# FRAND Commitment - The case against improper antitrust intervention

Oxford – 9 March 2009 Prof. Damien Geradin



#### Introduction

- Standard setting is of crucial importance for the economy
- FRAND regime has operated efficiently for a long-time without raising significant issues
- In the EU, standard setting has received attention over the last few years due to European Commission investigation of complaints against Rambus and Qualcomm
- No clear guidance from the Commission yet

HOWREY

### Standardization and the FRAND regime

- Under traditional SSO procedures IPRs owners:
  - Disclose the patents they consider essential for a standard
  - Typically provide an assurance or commitment that, if their patents are included in a standard, they will license their IPRs on fair, reasonable and non-discriminatory (FRAND) terms, with or without monetary compensation
  - This is not a small commitment as IPRs grant the right to exclude, i.e. not to provide a license at all
- Licensing terms are typically negotiated on a bilateral basis outside the SSOs frequently before the standard is set

-		

#### The FRAND regime works

- FRAND regime allowed successful development of innovative technologies (e.g., mobile telephony, Internet, WIFI, DSL, etc.) and has fostered competition
- Abuses of the FRAND regime are rare. While this regime has been in place for very many years, there is little case law
- But one can perceive tensions in the system in great part due to the presence of different business models

HOWREY

### Different business models as a source of tension

- Firms with different business models have different incentives when it comes to IP licensing:
  - Pure innovators (upstream only) Royalties represent the life blood of these companies
  - Vertically-integrated firms (upstream and downstream) -Essentially interested in cross-licensing. Low royalties or even a zero royalty may be acceptable.
  - Pure manufacturers (downstream only) They want to pay less royalties because this would reduce their costs
  - Buyers of equipment Also tend to believe that lower royalties would benefit them by reducing price of equipment.
- Market actors try to steer the system in the direction that suit them best (Geradin, 2005). Consumer welfare considerations are secondary.

HOWREY

### Main criticisms of the FRAND regime

- Patent hold-up: It is argued that once a standard has been adopted, essential patent holders will seek to exploit the additional market power allegedly conferred by standardization to charge "excessive" royalties in breach of their FRAND commitment.
- Royalty stacking: It is argued that when the standard involves multiple essential patents, cumulative royalty rates paid by implementers may be too high.

#### Patent hold-up

- Theory works only:
  - If there were ex ante alternatives. But what is an alternative?
  - If the holders of essential patent are unconstrained ex post. But is this necessarily the case?
- Moreover:
  - What is an "excessive" (or un-FRAND) royalty? (Geradin & Rato, 2006)
  - On what basis should a reasonable royalty be calculated?

HOWREY

### **Royalty stacking**

- When there are numerous essential patent holders, royalties will stack on top of each other and may reach very high levels (up to 25% or more?)
- However:
  - Is there any empirical evidence that this is the case? (Geradin, Layne-Farrar & Padilla, 2007)
  - Doesn't this ignore cross-licensing? Most licensors don't pay royalties to each other or only small amounts (Geradin, 2008). And even if some licensees end up paying 25% royalties because they have no patent portfolio allowing them to cross-license is it necessarily a bad thing?

HOWREY

#### **Rambus**

- Facts:
  - Complaints submitted to European Commission in December 2002
  - Statements of objections addressed to Rambus in August 2007, hearing held in December 2007
- Difficult case for European Commission as monopolization is not an offence under EC law
- European Commission may claim that Rambus' royalties are excessive because dominant position acquired by means of deception, but this is a difficult road

	•	٠
1	١	2

#### Qualcomm (1)

- Facts:
  - Complaints submitted to the European Commission in October 2005 by Nokia, Ericsson, Texas Instruments, Broadcom, NEC and Panasonic.
  - Acknowledged goal was to "bring Qualcomm to the negotiating table". Commercial dispute over licensing terms of Qualcomm.
  - Commission opens formal investigation in October 2007
- Allegation of exploitative abuses. But what are exploitative rates?

HOWREY

#### Qualcomm (2)

- No deceptive conduct allegations concern licensing terms contained in agreements negotiated at arm's-length in some cases before standard was set
- No evidence of consumer harm. Not clear the savings realized trough lower royalties would be passed on to end consumers (compare Qualcomm's 5% standard rate with very large margin of some handset makers and service providers)
- Settlement with Nokia (July 2008). Thus, commercial dispute was settled like a commercial dispute.

HOWREY

## Ex post antitrust intervention is unhelpful (1)

- Article 82(a) allows the Commission to intervene to put an end to exploitative abuses.
- In the context of standard-setting, exploitation would be present when holder of essential patents abuse from the extra market power it would have gained from standardization.
- This means that in the absence of ex ante alternatives, there
  can be no abuse as it cannot be argued that standard-setting
  conferred additional market power to the IPR holder. The
  technology had no competition before or after standardization.
  - This raises the complex question of whether there were ex ante alternatives, a question that will be asked sometimes ten years after the fact.
  - Not clear what should be considered as an "alternative" (perfect substitute?) and whether competition authorities are well placed to assess whether technology B was an alternative to technology A that was selected as part of the standard.

### Ex post antitrust intervention is unhelpful (2)

- But even assuming that there was an alternative technology B was an alternative to technology A, how do you then determine what a fair and reasonable royalty is?
- In United Brands, the ECJ adopted a two-step approach for determining whether a price is excessive. Specifically, one would have to:
  - (i)"[Examine w]hether the difference between the costs actually incurred and the price actually charged is excessive"; and
  - (ii) "[]If the answer to this question is in the affirmative, [determine] whether a price has been imposed which is either unfair in itself or when compared to competing products."

HOWREY

### Ex post antitrust intervention is unhelpful (3)

- Because United Brands test seems hard to implement in practice, some have proposed reliance on benchmarks.
- It has, for instance, been argued that the proper benchmark for determining whether a rate is excessive should be
  - (i) the rate that the licensor applied for licensing the same set of essential patents ex ante
  - (ii) if the licensor in question did not license these patents ex ante the rate that would have prevailed from ex ante competition between its technology and alternative technological solutions.

**HOWREY** 

### First alternative – Abuse if ex post rate > ex ante

- If ex ante/ex post analysis shows that ex post licenses clearly provide for more onerous licensing terms than ex ante ones, the essential patent holder engaged in exploitative behavior.
- Comparing ex post licensing terms with ex ante ones is difficult undertaking as technology licenses are complex contracts comprising various forms of consideration (cross-licenses, etc.).
  - Serious mistake would be to compare an ex post agreement with, e.g., a royalty rate of 4% with an ex ante agreement with a lower royalty rate of 2%, while ignoring that the lower 2% royalty rate of the ex ante license was justified by the presence of other forms of valuable consideration (such as a cross-license to a significant IP portfolio) which cannot be found in the ex post license providing for 4% royalty rate.
- True ex ante / ex post comparison must take into account all elements of consideration exchanged between licensor and licensee. Complex econometric analyses will thus be needed to control for the differences in licensing terms.

•	

### Second alternative – Abuse if rate > to rate emerging from ex ante competition

- Swanson and Baumol auction model:
  - Assume two competing technologies A and B with different cost implications for downstream firms. Best IP option is A as it results in downstream production costs of 5 per unit of output. Use of B results in downstream production costs of 6. If A and B compete to be selected by offering per unit license fees, A will offer a fee of 1 per unit of output and be chosen.
  - That is because under Bertrand competition, A and B will compete each other down to marginal costs (which in the case of IP is equal to zero), and A will only be able to charge a licensee fee equal to the incremental value of its technology as compared to the competing alternative (B).
- While this model offers a superficially simple and attractive way to determine what a reasonable royalty should be, its relevance is limited by the fact that the simplifying assumptions on which it is based will hardly ever be present in practice (Geradin, Layne-Farrar & Padilla, 2008).

HOWREY

### Are ex ante mechanisms the way to go? (1)

Philip Lowe (January 2008):

"Ex post control of pricing is not always easy. It is therefore sensible for a competition authority to look at ways that markets can be made to operate better, avoiding the need for ex post control.

So are ex ante mechanisms possible?

Imagine the following scenario. At the point at which a standard is under discussion, there are four viable, roughly comparable alternative technologies each competing to be selected as the essential technology for the standard. If the selection is made on the basis of both the price and quality of the relevant technologies, then the price is competed down to the market level ex ante."

HOWREY

### Are ex ante mechanisms the way to go? (2)

- As noted above, ex ante auctions as suggested by Swanson & Baumol are unlikely to work in practice, but other ex ante approaches may be adopted:
  - Bilateral ex ante negotiations before the standardization is adopted.
    - Before voting for a given technology in SSO, an implementer can ask anticipated royalties to essential patent holders. It may refuse to vote for the technology in question if royalty is unreasonable. If technology is likely to be adopted, if may protect itself by negotiating license terms ex ante.
  - Public disclosure of maximum royalty rate that will be charged ex post

#### **Conclusions**

- Recent disputes over FRAND are commercial disputes between large corporations, which should be settled as commercial disputes.
- Ex post antitrust intervention years after standardization took place raises complex difficulties linked to determination of what a fair and reasonable royalty is.
- Ex ante mechanisms represent the best chance to avoid ex post disputes.
- Ex ante discussions of royalty rates is already possible today and frequently takes place.

HOWREY

#### **Bibliography**

- Geradin, Standardization and Technological Innovation: Some Reflections on Ex-ante Licensing, FRAND, and the Proper Means to Reward Innovators, World Competition (2006)
- Geradin & Layne-Farrar, The Logic and Limits of Ex Ante Competition in a Standard-Setting Environment, Competition Policy International (2007)
- Statidard-Setting Environment, Competition Prolicy International (2007)
  Geradin & Rato, Can Standard-Setting Lead to Exploitative Abuse? A Dissonant
  View on Patent Hold-Up, Royalty Stacking and the Meaning of FRAND,
  European Competition Journal (2007)
  Geradin, Layne-Farrar & Padilla, The Ex Ante Auction Model for the Control of
  Market Power in Standard Setting Organizations, Boston University Journal of
  Science & Technology Law (2008)
- Geradin, Layne-Farrar & Padilla, The Complements Problem within Standard Setting: Assessing the Evidence on Royalty Stacking, European Competition Journal (2008)
- Geradin (2008), What's Wrong with Royalties in High Technology Industries? http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1104315
- Geradin, Pricing abuses by essential patent holders in a standard-setting context: A view from Europe, forthcoming Antitrust Law Journal (2009)

HOWREY

#### **Contacts**

Prof. Damien Geradin Howrey LLP 9-31, Avenue des Nerviens 1040 Brussels - Belgium Tel: + 32 2 741 10 11

Email: geradind@howrey.com

٠		