Licensing Terms for Standard Essential Patents
A Comprehensive Analysis of Cases

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Some study data

Geography of FRAND (Landmark cases published up to September 2016)

- Europe: 23 cases (20 court cases + 3 antitrust cases)
- United States: 16 cases (14 court cases + 2 antitrust cases)
- Asia: 8 cases (5 court cases + 3 antitrust cases)

Parties to proceedings

- Patent holders: Motorola, Ericsson, Realtek, Qualcomm, Nokia, InterDigital, R&D (CSIRO, Cornell University, Acacia/St Lawrence), Apple (Apple v Motorola), Huawei (Huawei v ZTE), Samsung (Samsung v Apple)
- Implementers: Microsoft, Apple, Cisco, D-Link, LSI, TCT Mobile, HTC, LG, ZTE, Huawei, Samsung, Nokia (IPCom v Nokia)
- New entrants/third parties: NPE (Innovatio IP Ventures, IPCom, Core Wireless, Vringo), privateers (Unwired Planet), distribution channels (Deutsche Telekom, Vodafone), patent pool (Sisvel, One Blue)

Technology scope

- Wireless/cellular technology: IEEE 802.11, 2G (GSM), 3G and 4G (LTE)
- Other: video compression (AVC H.264), audio and video streaming, DRAMs, Blu-Ray
Methodology and Objectives

TOWARDS A COMMON FRAMEWORK FOR FRAND

Identify the overarching principles

Positive analysis based on case law; enumerate the principles that the courts endorse as guideposts for their FRAND analysis

Interpretation

Identify conflicts or ambiguities in the list of guiding principles, point out open questions of interpretation

Consistency

Apply economic analysis; show that there is an interpretation under which the fundamental principles of FRAND are consistent and can be unified

Implementation

Informative value of available data-sets
Main Outcomes of the Case Law Analysis

- FRAND is a dynamic concept that accommodates various economic and legal interpretations
- Emphasis on incentive compatibility and fair balance of interests
- Evaluation of conduct (Europe) v. emphasis on royalty rates (US)
- Converging practice on injunctions
- Judicial analysis of FRAND is built on the core principles of the ex-ante negotiation and the incremental value of the patent
- FRAND calculation is an approximation and subject to various methodologies that use two sources of observable data: comparable licenses and market data (royalty base)
Need for clarity in the FRAND context

- Discrepancy of incentives
- Ambiguity of holdup and lack of empirical evidence
- Idiosyncrasies of FRAND disputes
- Ex ante benchmarks v ex post considerations
- Evidentiary challenges and data constraints
- A new SEP landscape requires a new course of action: emerging SEP markets, ownership concentration v. ownership fragmentation, portfolio licensing and rapid advances and scalability of new technologies (5G, Cloud Computing, IoT, Data technology and Cybersecurity)
From a EU policy perspective, “this strategic focus [to standardization] is supported by a robust delivery mechanism, building on regular monitoring by the Commission, a sustained political dialogue of the Commission with all stakeholders, reinforced cooperation with standardisation organisations, and strengthened international engagement. In addition, ICT standardisation needs to rely on a **balanced** intellectual property rights policy for access to standard essential patents (SEPs), based on FRAND licensing terms [...] ensuring a **fair return** on investment to incentivise global R&D and innovation, and for a **sustainable** standardisation process, whilst ensuring **wide availability** of technologies in an open and competitive market.”


**In view of these objectives, how do we establish and implement a common, coherent framework for FRAND?**
Huawei v ZTE and the bilateral negotiation framework

CJEU promotes diligent bilateral negotiation as the means of reaching a FRAND agreement!

- Parties need to take specific steps before injunctions can be enforced:
  - Alert the implementer of alleged infringement
  - Specific written FRAND offer
  - Response to FRAND offer without undue delays / prompt written counteroffer
  - Security

- Parties may request third-party determination of FRAND royalty when negotiations fail

- CJEU strikes a balance between the parties interests (IPR and right to injunctions v. freedom to conduct business and undistorted competition)
Common framework for FRAND and SEP licensing (1)

- FRAND is a commitment to a specific conduct during bilateral negotiations that amounts to “fair”, “reasonable” and “non-discriminatory” terms.

- Emphasis on the bilateral negotiation framework involves compliance with certain general norms:
  - “willingness” to license and receive a license on FRAND terms
  - “good faith”, also in conjunction with established commercial practices
  - “fair balance of interests” (maintain incentives for SEP holders and implementers)
Emphasis on the bilateral negotiation framework involves compliance with the certain principles of good conduct (in the spirit of *Huawei v ZTE*) that are relevant for the evidentiary process in the litigation context:

- diligence, concrete offer/counteroffer
- timeliness (no delay tactics)
- more balanced distribution of the burden of proof

Specific evidentiary aspects:

- role of observable data in the rate calculation
- proof of essentiality
Recasting the role of injunctions in the common framework:

- no automatic grant of injunctions = proceedings become more fact-specific
- injunction request remains available to SEP holder as a result of failed bilateral negotiations due to non-FRAND compliant conduct of the potential licensee = bilateral negotiation still takes place “in the shadow” of injunctions but the use of injunctive relief is tied to the “unwillingness” for the licensee as a means to ensure compliance with FRAND
- Enhanced role of courts regarding the assessment of facts and the FRAND-compliance of the offer in a transparent manner
Core Principles of FRAND: Hypothetical ex ante negotiation

The ex ante negotiation benchmark defines the upper and lower bounds to a reasonable royalty

Patentee’s willingness-to-accept

Implementer’s willingness-to-pay

The bargaining range
Core Principles of FRAND: Incremental value

- Patentee’s willingness-to-accept
- Implementer’s willingness-to-pay
- The bargaining range
- Value added to the standard-compliant product
Core Principles of FRAND:
Intrinsic (stand-alone) value of the patent

Stand-alone value of the patent

Patentee’s willingness-to-accept

Value added to the standard-compliant product

Implementer’s willingness-to-pay

The bargaining range
Intrinsic values: lower bound (1)

Standard A+B

Standard A

Standard B
Intrinsic values: lower bound (2)

Standard A+B

Standard A

Standard B

R&D cost

\( v \downarrow a \)

\( v \downarrow b \)

\( v \downarrow c \)
Incremental values: upper bound (1)

Standard A+B

Component A

Component B
Incremental values: upper bound (2)

Standard A+B  Component A  Component B

\[ v \downarrow a \]
\[ v \downarrow b \]
\[ v \downarrow c \]
FRAND range

Stand-alone value of the patent

Value added to the standard-compliant product

Patentee’s willingness-to-accept

Implementer’s willingness-to-pay

The bargaining range
Empirical information for implementing the FRAND framework: Comparable licenses

- Patentee’s willingness-to-accept
- Implementer’s willingness-to-pay
- FRAND range
- The bargaining range

Draws from the bargaining range
Comparable licenses and the circularity problem

Negotiated licensing rates

Court-determined FRAND rates
Empirical information for implementing the FRAND framework: Product prices

- Patentee’s willingness-to-accept
- Implementer’s willingness-to-pay
- Value added to the standard-compliant product

FRAND range

The bargaining range
Royalty base: component v. end product

• The price of the end product, minus the price of hypothetical alternative and cost of component, is a good royalty base (where the royalty rate decreases with the intensity of competition)

• The price of the component is a good royalty base if competition in the component industry is weak, and production costs for end product and components are negligible

• **Intuition**: If component makers have market power, component makers and end product makers share the surplus created by inclusion of the patented feature in the end product
Core elements of FRAND:
- Ex ante negotiation
- Incremental and intrinsic (stand-alone) value
- Incentive compatibility

What can Europe do in the context of FRAND?
- Incentive-based policies that reflect the diversity and evolving dynamics of SEP markets
- Infuse more clarity and flexibility in the notion of FRAND by highlighting the bilateral negotiation as the principal forum of determining FRAND
- Emphasis on the FRAND range instead of rates
- Complementing FRAND with other instruments – role of SDOs and patent pools
- Governance in the 5G markets
- Advocacy at global level
THANK YOU FOR YOUR ATTENTION!

QUESTIONS?