

### 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)

#### Threshold question for EU Policymakers

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."

(COM/2016/180 final, Brussels 19.4.2016 "Digitising European Industry – Reaping the full benefits of a Digital Single 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)

#### Common framework for FRAND and SEP licensing (2)

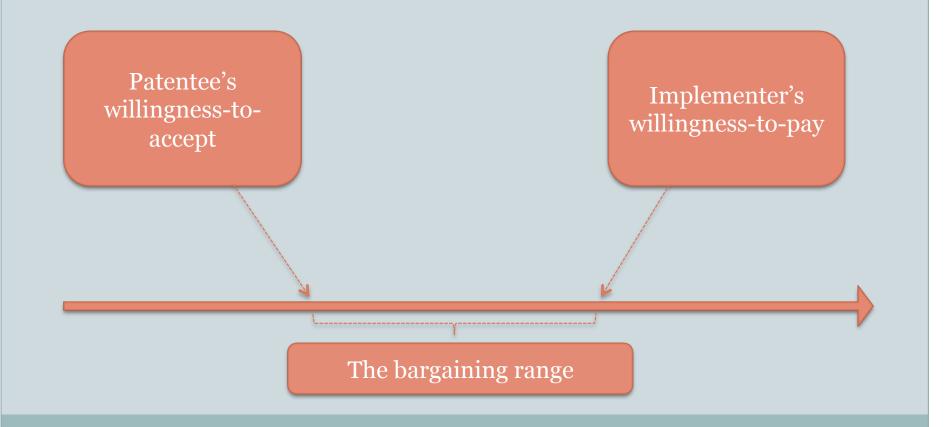
- Emphasis on the bilateral negotiation framework involves compliance with the certain principles of good conduct (in the spirit of *Huawei v ZTE*) that are relevant for the evidentiary process in the litigation context:
  - > diligence, concrete offer/counteroffer
  - timeliness (no delay tactics)
  - > more balanced distribution of the burden of proof
- Specific evidentiary aspects:
  - > role of observable data in the rate calculation
  - proof of essentiality

#### Common framework for FRAND and SEP licensing (3)

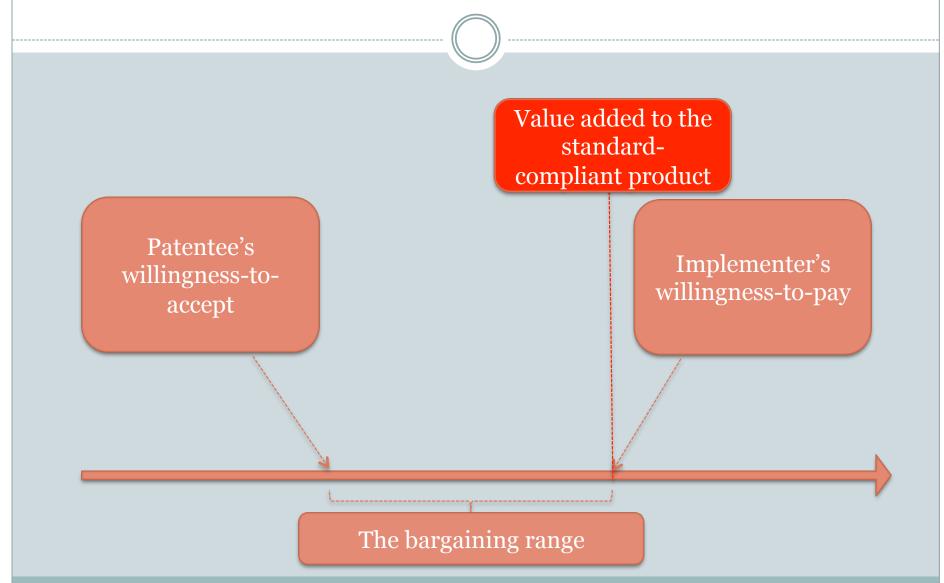
- Recasting the role of injunctions in the common framework:
  - > no automatic grant of injunctions = proceedings become more factspecific
  - > injunction request remains available to SEP holder as a result of failed bilateral negotiations due to non-FRAND compliant conduct of the potential licensee = 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

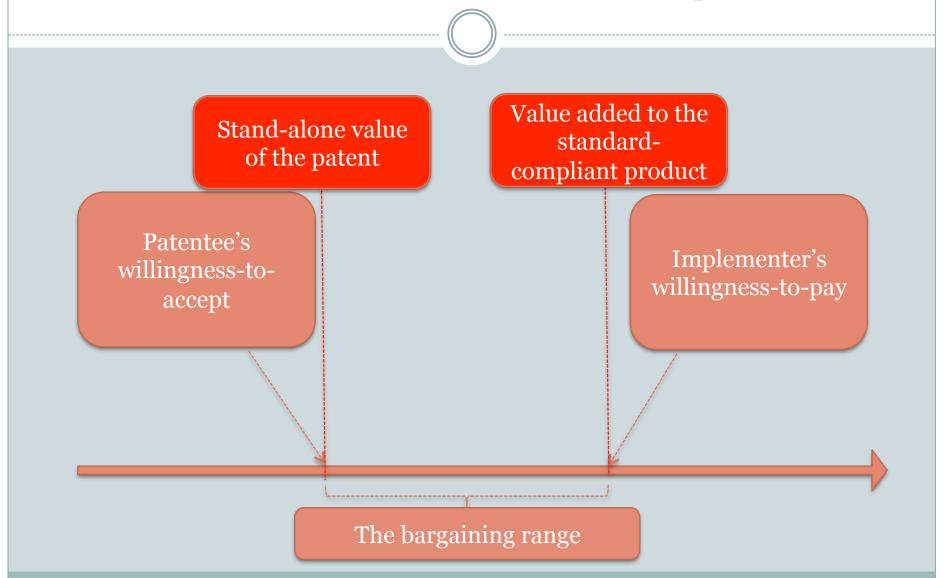
The ex ante negotiation benchmark defines the upper and lower bounds to a reasonable royalty



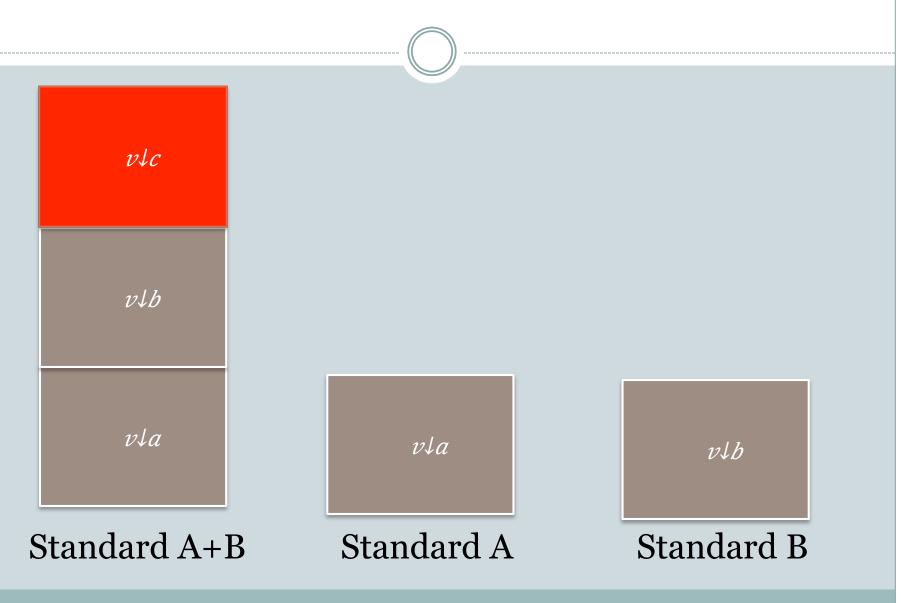
### Core Principles of FRAND: Incremental value



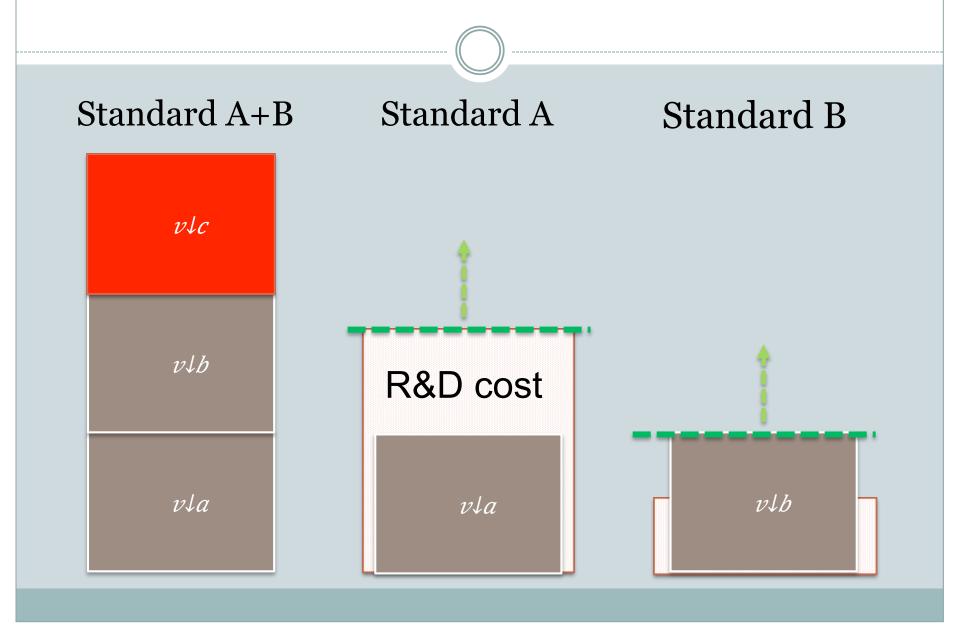
## Core Principles of FRAND: Intrinsic (stand-alone) value of the patent



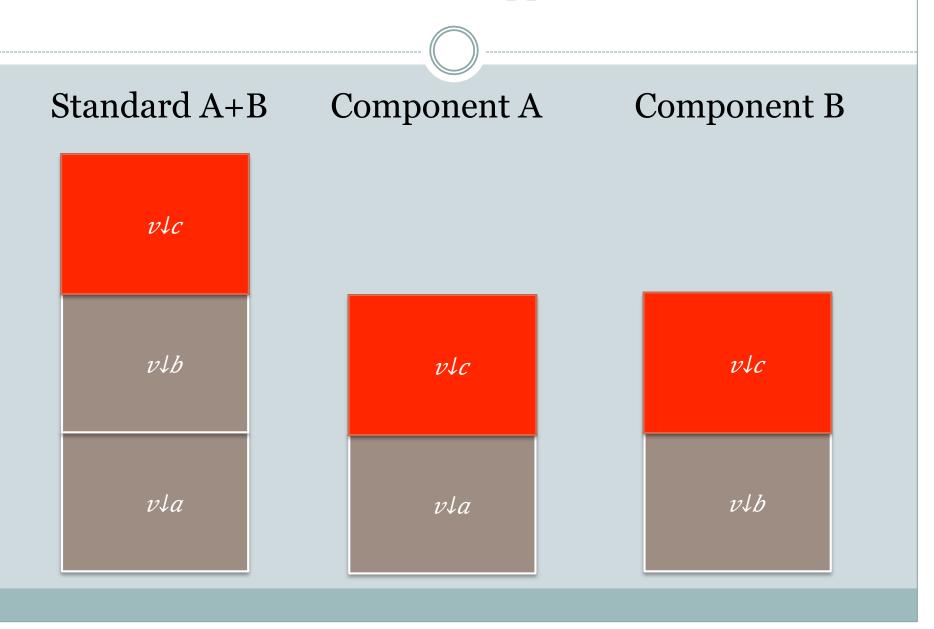
## Intrinsic values: lower bound (1)



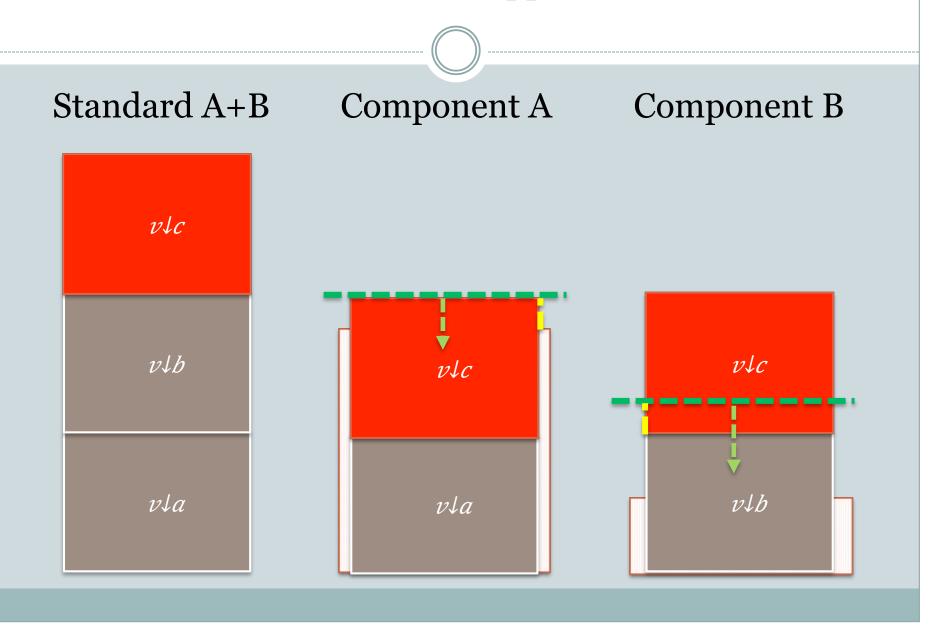
## Intrinsic values: lower bound (2)



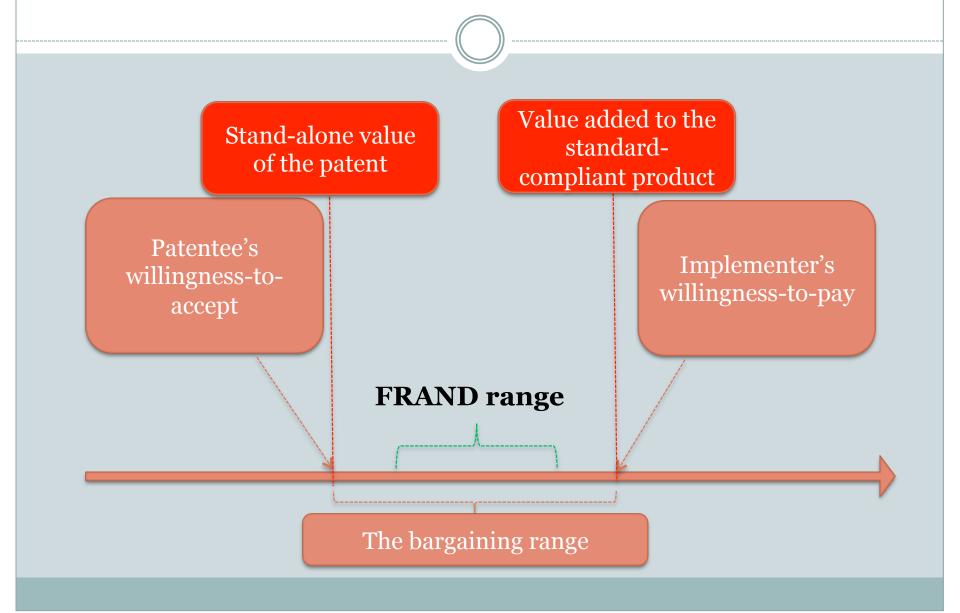
## Incremental values: upper bound (1)



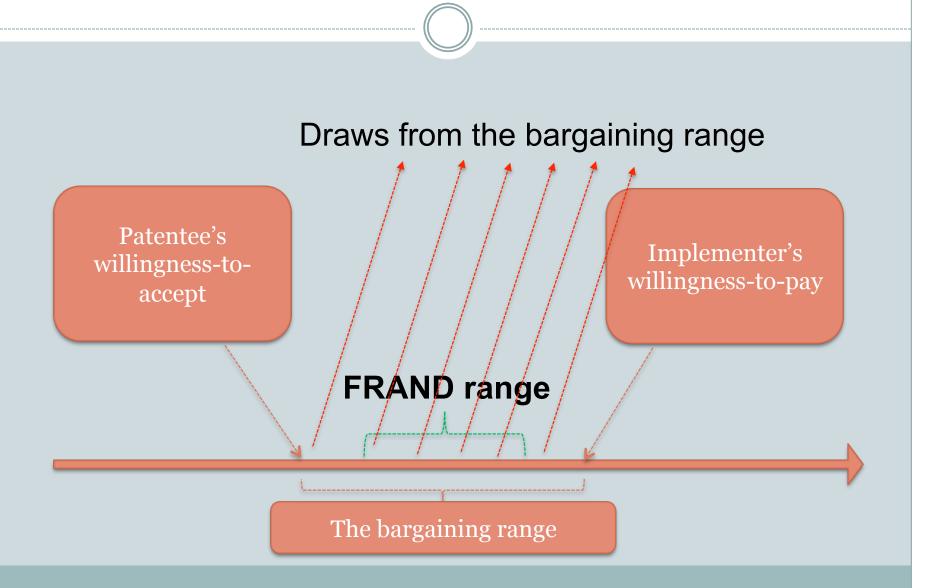
## Incremental values: upper bound (2)



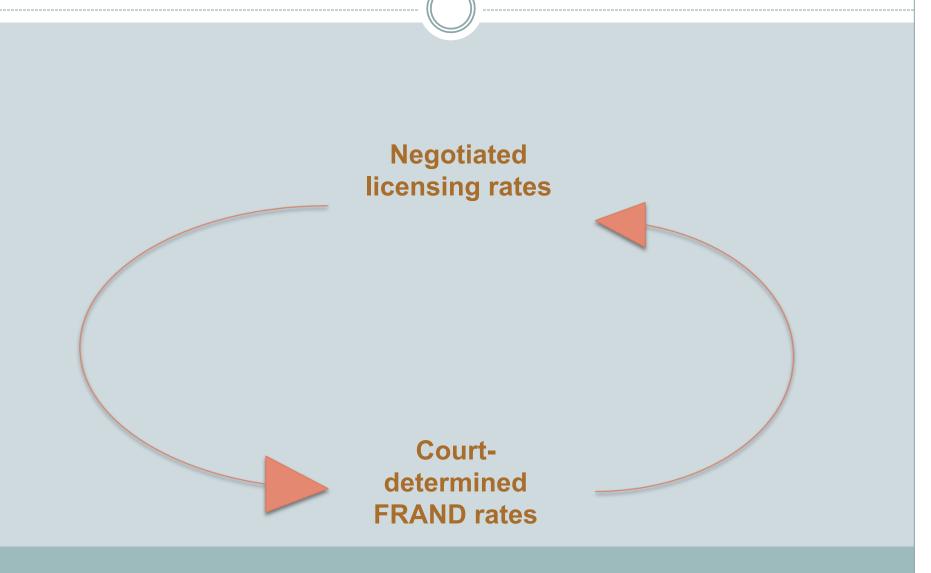
#### FRAND range



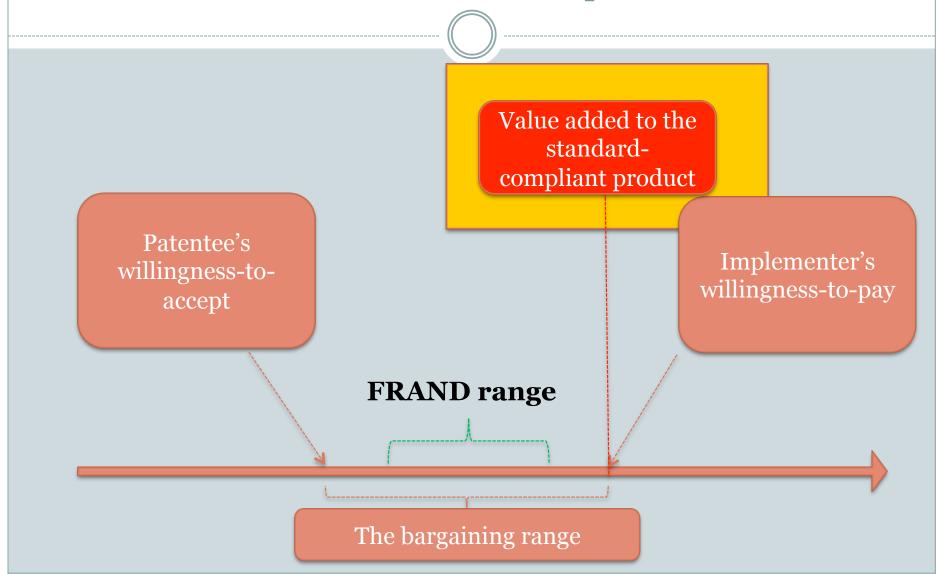
# Empirical information for implementing the FRAND framework: Comparable licenses



## Comparable licenses and the circularity problem



# Empirical information for implementing the FRAND framework: Product prices



### 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
- <u>Intuition</u>: 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

# Summing up ...

- 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

