PATENT HOLD-UP AND «ANTITRUSTIZATION» OF FRAND: A MULTI-SIDED REAPPRAISAL

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OUTLINE AND GOALS OF THE PRESENTATION

I. Patent hold-up

II. The « *Antitrustization* » of FRAND, or FRAND as source of antitrust liability and remedy

III. A reappraisal: FRAND as matching device on multi-sided platforms

I. PATENT HOLD-UP

1. Market developments
2. Academic theory
3. Recognition in the law

1. MARKET DEVELOPMENTS

2001, NTP sues RIM for patent infringement, $612.5 million settlement

2011, Global patent war

APPLE FILING OF DESIGN PATENTS (JANUARY 2007)

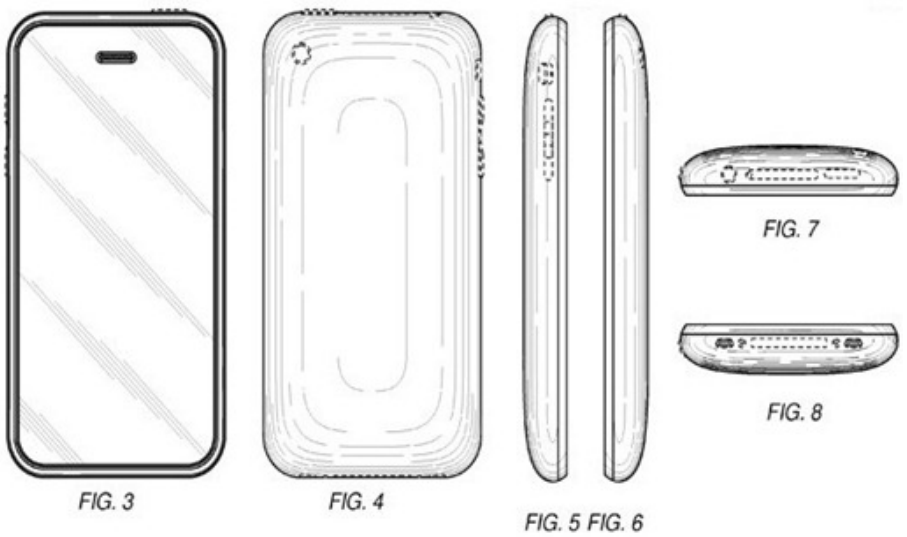


FIG. 3 FIG. 4 FIG. 5 FIG. 6

FIG. 7

FIG. 8

APPLE FILING OF DESIGN PATENTS (JUNE 2007)

Apple files massive GUI design patent
six days before iPhones sold in stores June '07

D604305
$725 M verdict
against Samsung

193 screen shots filed June 23, 2007

APPLE V SAMSUNG LITIGATION (2011)

These pictures, by now familiar to the Court, remain the basic story of our case:

THE GLOBAL PATENT WAR

Patent owners enforce their IPRs and seek injunctions in courts across the world (to obtain removal of infringing products)

Some patents are core to standardized technologies (though not all) => SEPs (ex. IEEE 802.11 Wi-Fi standard)

Some SEPs are encumbered by a FRAND commitment

Some of those players are patent trolls, or non practicing entities (NPE) or patent assertion entities (PAE): NTP, Intellectual Ventures, etc.

2. ACADEMIC DEVELOPMENTS

Papers

Shapiro, "Navigating the Patent Thicket: Cross Licences, Patent Pools and Standard Setting", non formal policy paper of 2001

Shapiro, "Injunctions, Hold-up and Patent Royalties", Formal economics working paper of 2006 later published in *American Law and Economics Review*

Shapiro and Lemley, "Patent holdup and royalty stacking", Interdisciplinary paper of 2007

Idea

Focus on ICT where products integrate multiple patented components

"*injunction threats*" entitle patent holders to "*negotiate royalties far in excess of the patent holder's true economic contribution*"

Severe in the case of "*private standard setting*", because "*it is extremely costly or even impossible as a practical matter to "redesign" a product standard to avoid infringing a patented technology*"

"*Patent surprise*" scenario (implementer ignored there was a patent) as well as "*early renegotiation*" (implementer knew there was a patent)

3. LEGAL RECOGNITION OF PATENT HOLD UP

Horizontal cooperation guidelines, §269: IPR owners can "*behave in anti-competitive ways, for example by 'holding-up' users after the adoption of the standard*"

Reference to §269 of the HCG in footnote 32 of the *Google/Motorola Mobility* Merger Decision of 2012

Reference to "*hold-up*" in two press releases of 2012 in *Samsung* and *Motorola*

Reference to §269 of the HCG in 2014 *Samsung* (§39) and *Motorola* decisions (§§76, 77 and 289)

Cited by AG Wathelet in *Huaweï v ZTE*

Soft law turned to hard law?

FRAND « *ANTITRUSTIZED* »

II

ISSUE

Antitrust agencies' view of FRAND pledges as anti-hold-up tools by patent owner, HCG §287, *Motorola* §77, *Samsung* §40 => distributional purpose

But issue is that FRAND pledges have no teeth: mere paper-tiger, courtesy obligation;

Let's turn FRAND pledges into antitrust theory of liability and source of antitrust remedy!

(+ Let's encourage (standardize) them, HCG as good practice)

Antitrust empowerment of FRAND

TWO POSSIBLE APPROACHES

FRAND as source of antitrust pricing discipline?

- Verify if licensing terms are un-FRAND, and consider the price level abusive => outcome interpretation of FRAND commitments
- Agencies have repugned to do this
- *Qualcomm* case, 2007

FRAND as source of antitrust conduct obligations?

- Commisison has embraced this interpretation
- FRAND creates « *exceptional circumstances* »
- SEP holder can no longer seek injunction in courts (agst implementer that is not unwilling)
- SEP holder can no longer introduce non-challenge or termination clauses in contract
- SEP holder must take very « *specific steps* »: Samsung « *licensing framework* » and Wathelet's « *Guidelines* »

THE LAW

Commission Decision, *Samsung – Enforcement of UMTS Standard Essential Patents*, 29 May 2014, AT 39939 (Article 9) (Apple complaint)

Commission Decision, *Motorola – Enforcement of GPRS Standard Essential Patents*, 29 May 2014, AT 39985, (Article 7) (Apple complaint)

Preliminary reference before the CJEU, *Huawei v ZTE*, C-170/13, Opinion of AG Wathelet, 20 November 2014

THE LEGAL PROBLEM WITH FRAND « *ANTITRUSTIZATION* »

Antitrust subject to external legal controversies?

No explanation why FRAND creates « *exceptional circumstances* »

Discussion axed on national law concepts

- Contract or quasi-contract?
- Moral promise?
- Estoppel theory or waiver principle?
- « *License of right* », AG Wathelet, §65

Example: the German quagmire

- DE test is whether there's « *willing licensee* »
- FSC, Orange Book Standard; Request under Article 15 of Regulation 1/2003, Judge Andreas Voß request in Motorola v. Apple, November 2013; Preliminary reference before the CJEU, Huawei v ZTE, C-170/13, Dusseldörf Court

Antitrust in state of legal inconsistency?

Antitrust tends to consider that unilateral announcement of pricing intentions not liable to create assurances on which third parties can rely and make design choices (*Woodpulp*, *Bayer*, etc.)

Well settled that for price announcements to trigger antitrust exposure, strategic information must be disclosed: FRAND too abstract in content?

THE ECONOMIC PROBLEM WITH FRAND « *ANTITRUSTIZATION* »

The current antitrust interpretation of FRAND as a source of strict conduct obligations seeks to prevent hold-up, rather than remedying it when it occurs

This theory assumes, conjectures, predicts hold-up as inevitable result of un-FRAND SEPs owner conduct

Normative assumption devoid of support

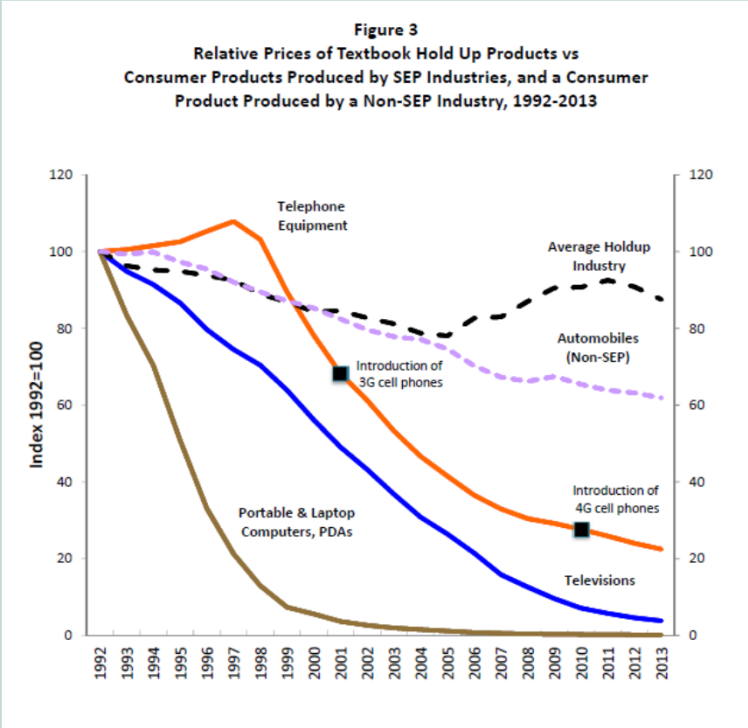
Weak theoretical evidence: extrapolation of Shapiro papers

- No antitrust remedy => stay injunctions until redesign has taken place;
- Heavy focus on non-integrated innovators (trolls)

Weak empirical evidence:

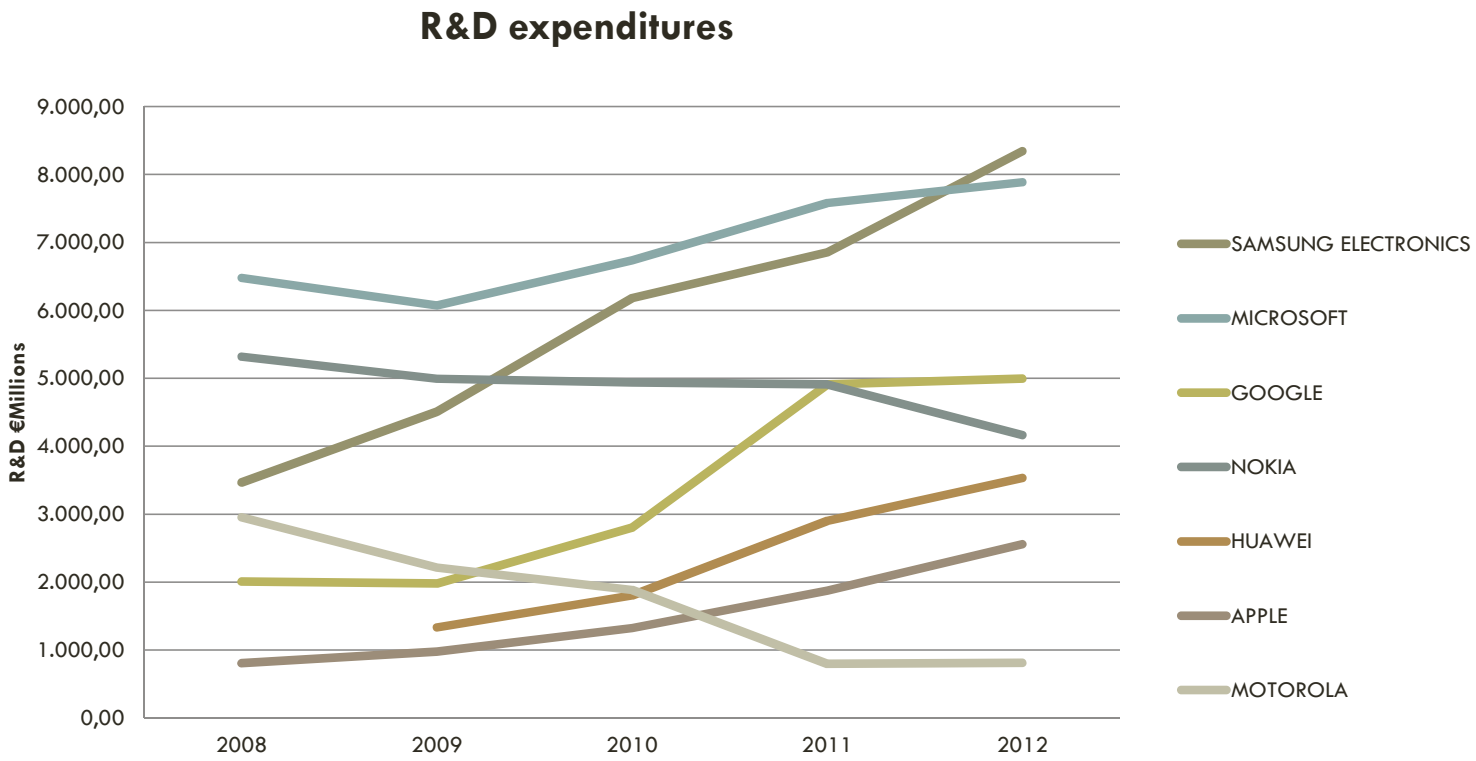
- Joshua Wright, "Evidence-Based Antitrust Enforcement in the Technology Sector", enforcement should be "disciplined by empiricism"
- ICT sector, public enemy N°1 for both abolitionists – innovation is said to be hampered by patents – and reformists – view that weak patents and thickets plague the sector

Galetovic, Haber & Levine, May 2014



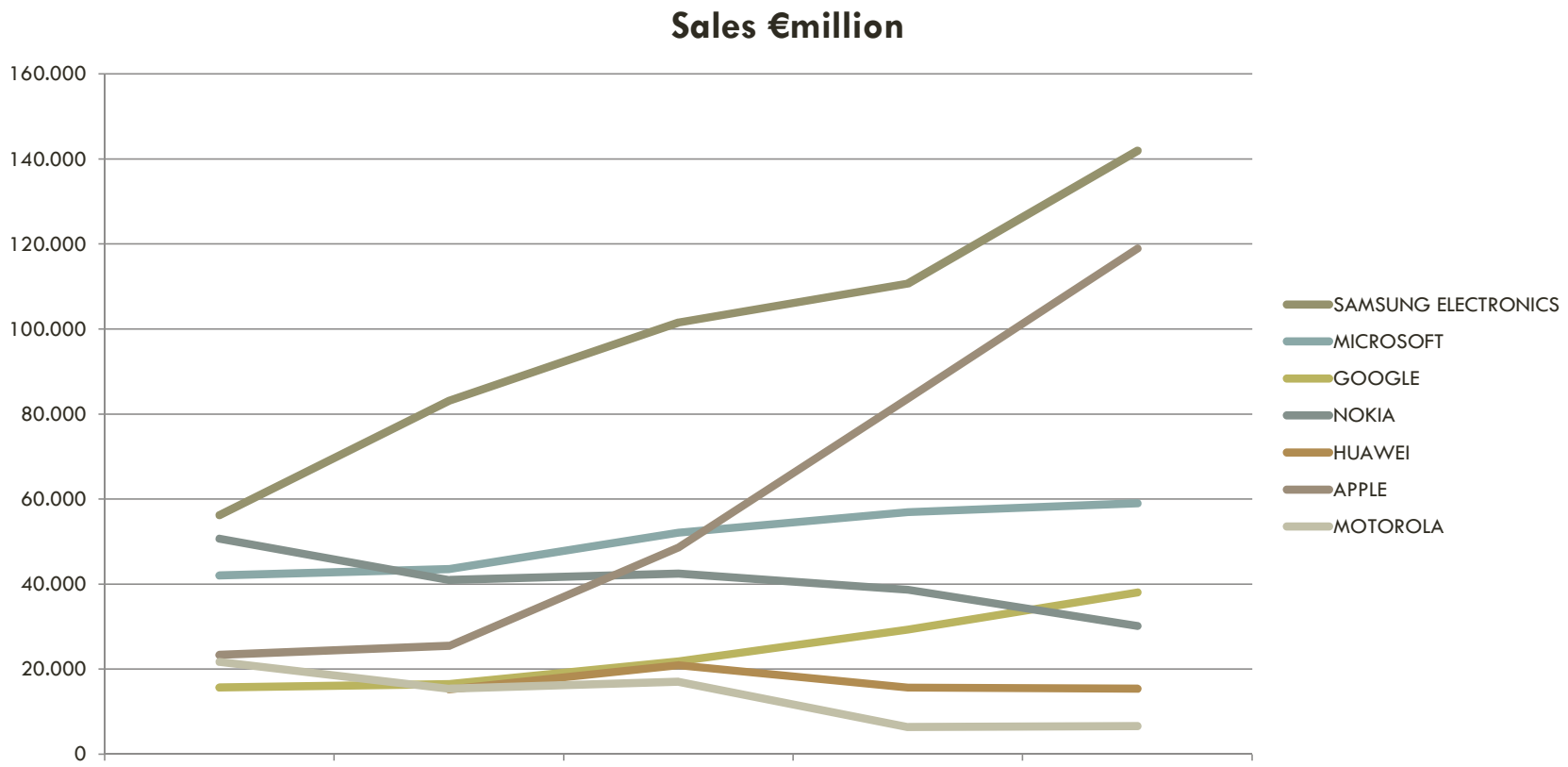
PRICES

In industries allegedly subject to hold up



EUROPEAN COMMISSION'S JOINT RESEARCH CENTRE (JRC) - (IPTS)

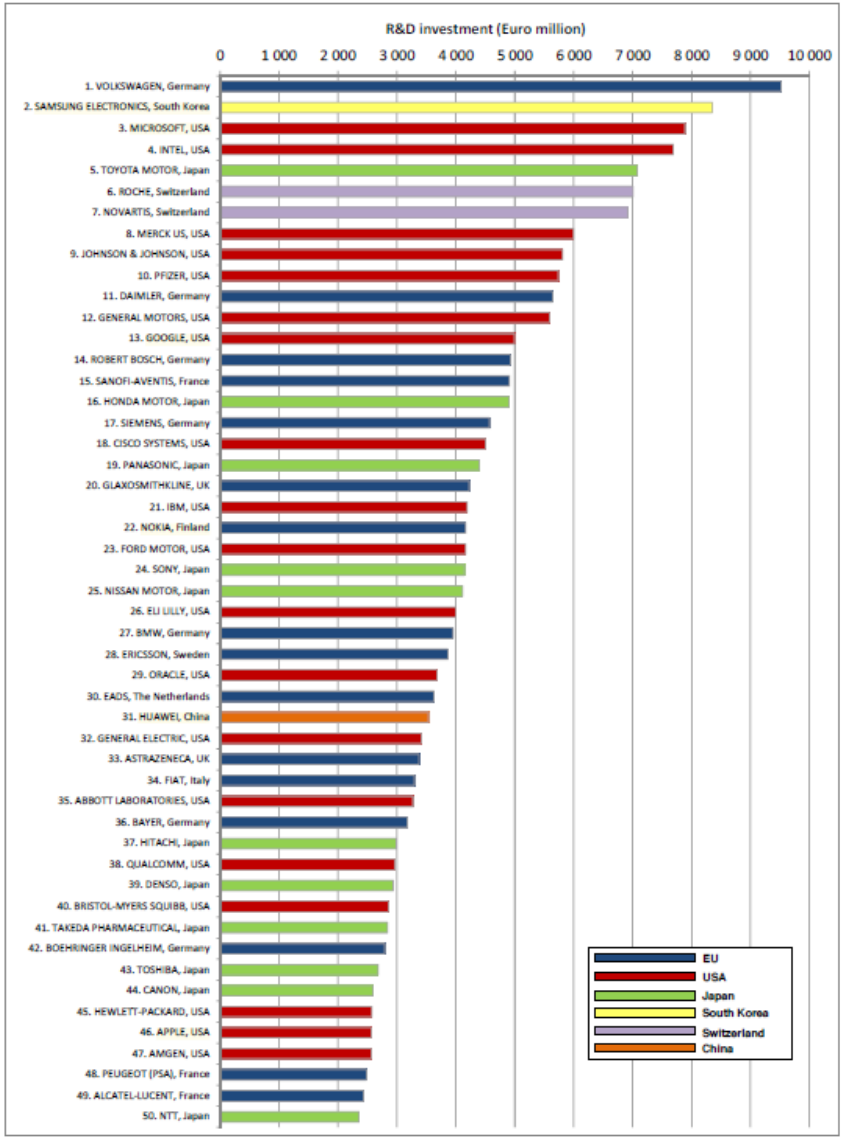
Data retrieved from EU Industrial R&D Investment SCOREBOARDS 2009-2013



EUROPEAN COMMISSION'S JOINT RESEARCH CENTRE (JRC) - (IPTS)

Data retrieved from EU Industrial R&D Investment SCOREBOARDS 2009-2013

Figure 2.1. The world's top 50 companies by their total R&D investment (€m) in the 2013 Scoreboard.



Source: The 2013 EU Industrial R&D Investment Scoreboard. European Commission, JRC/DG RTD.

Number of ICT firms in top 40 (and rank)

1. Samsung (2)
2. Microsoft (3)
3. Intel (4)
4. Google
5. Cisco
6. IBM
7. Nokia
8. Sony
9. Ericsson
10. Oracle
11. Huawei
12. Qualcomm

FRAND COMMITMENTS: A MULTI-SIDED REAPPRAISAL

III

INTUITION

Distributional purpose of FRAND (avert hold up by patent owner) is misguided

FRAND is primarily a matching (or courting) device on a multi-sided platform

Classic cross-platform positive externality, cuts both ways

- Developers positively impacted by presence of implementers on the other side: technology dissemination
- Implementers positively impacted by presence of developers on the other side: faster conception, increased technology selection, avoid inadvertent infringement

SSOs face the well-known challenge « *to bring all sides on board* »

- Bring as many implementer, to convince developpers to join
- Bring as many developpers, to convince implementers to join

FRAND AS A MATCHING MECHANISM

SSOs have no obvious instruments of cost allocation or cost subsidization to bring technology developers and implementers on board

A priori, far from the canonical multi-sided platform where some users (advertisers) are charged and others are not (eyeballs)

But platforms may also interfere on transaction prices between users to promote participation to the platform (Rochet and Tirole, "*Defining Two-Sided Markets*", 2004)

In particular, transaction between buyer and user must not involve a "*price determined through … monopoly price-setting*"

And this matters on both sides: A SSO must obtain "*enough commitments from these owners (reasonable royalties, exact implementation of the technology, treatment of future innovation, etc.) in order to convince various potential users (e.g., consumer electronics and software companies) to invest in the technology, while also making it attractive for each and every intellectual property owner to get on board*" (Rochet and Tirole, "*Defining Two-Sided Markets*", 2004)

Major implications for antitrust policy

SUPERIORITY

Avoidance of lengthy legal controversies that originate in national law

Places the debate on antitrust territory: monopoly power

FRAND HAS TWO SIDES

FRAND seeks to rein in monopoly price setting on technology developper side *but also* on the implementer side

FRAND thus also embodies concern for monopsony power, or group-monopsony power

Antitrustization of FRAND is appropriate *but* focus of antitrust agencies should not only be on developper (selling) side

SSOs and antitrust agencies to be cautious in relation to licensing initiatives driven by implementers => IEEE, DoJ Business Review Letter, 2015?

REFINE UNDERSTANDING OF « MONOPOLY PRICE-SETTING » IN SSOS

Is detention of SEP source of monopoly power?

Standardization in ICT features hybrid participants, where technology developers are at same time implementers who buy technology

Innovation in ICT is combinational, so pure technology developers need cross licensing from each other if they want to keep developing technology

Standardization in ICT is ephemeral, with rapid pace of technological innovation => 2G, 3G, 4G (>< barcode)

- Repeated game with punishment mechanisms
- Market dominance but no permanence (*Motorola* decision, GPRS and EDGE not substitutes!)

Pricing component products with neighbouring monopoly manufacturers => mutual Cournot moderation

WELFARE ASSESSMENT SHOULD FOCUS ON PARTICIPATION OF SSO MEMBERSHIP

Multi-sided market theory predicts that price structure has effect on SSO participation

Hold-up or hold-out hypothesis should be validated or contradicted through that metric

More empirical research is needed

Change in SSO participation following change in SSO licensing policy?

- VITA 2007, IEEE 2015, etc.
- RF to FRAND?
- ISO v other standards

Increase in standards wars in ICT?

CONCLUSION

Need to change approach of FRAND: not distributional but output-centered

FRAND is pricing structure that seeks to « *get all sides on board* »

Admission that risks can arise (and scrutiny) on buyer side