

Licensing Standard Essential Patents: FRAND and the Internet of Things

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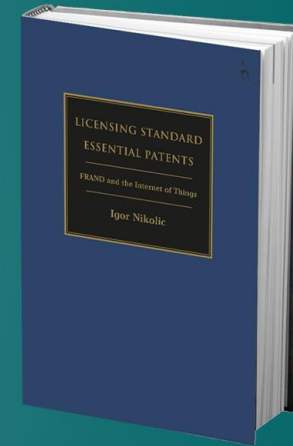




LICENSING STANDARD ESSENTIAL PATENTS

FRAND and the Internet of Things

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Overview



Where are we now?



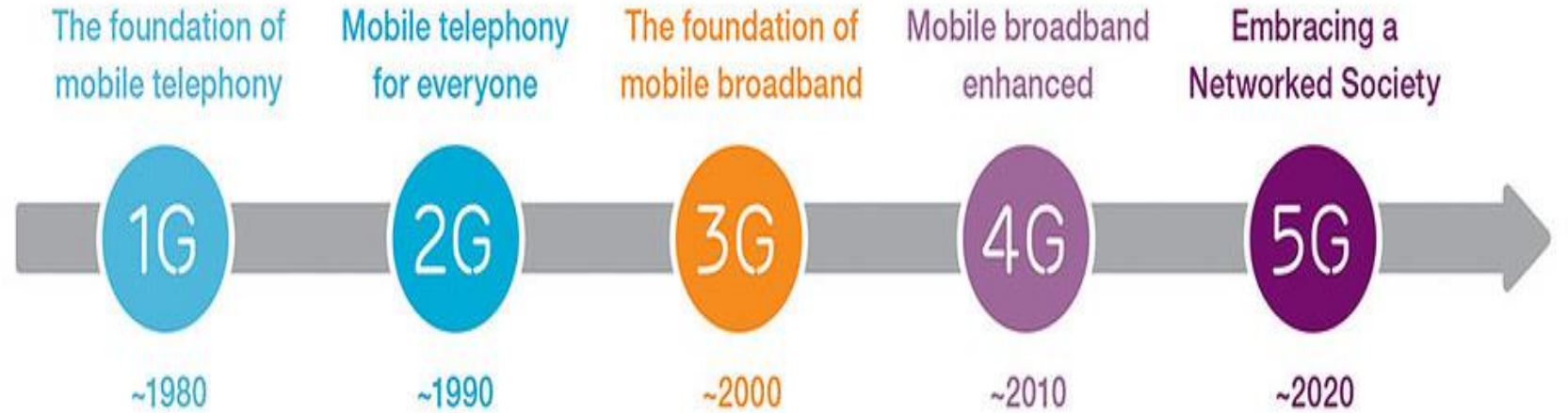
What lessons can be learned from the past?



Where are we heading?

History

Wireless access generations



Holdup and holdout debate

- **Holdup and royalty stacking**

- Lemley and Shapiro 2007, Farrell et al 2007 ... Melamed and Shapiro 2018, Contreras 2019, Shapiro and Lemley 2020

- **Counter arguments**

- Geradin and Rato 2007, Golden 2007, Sidak 2008, Elhauge 2008 ... Sidak 2018, Werden, Froeb 2019, Spulber 2020

- **Holdout**

- Teece 2017, Petit and Heiden 2018, Epstein and Noroozi 2018



What is the evidence?

- **Smartphone industry:**

- Prices falling
- Increased output
- Market entry
- R&D

- Galetovic, Haber, Levine 2015;
Mallinson 2016; Galetovic, Haber
2017; Galetovic, Haber Zaretski 2018

- Market reports



What is the evidence?

- Aggregate royalty rate for 2G, 3G, 4G SEPs:
 - <0.5% of the total mobile economy
 - 3.4% of the average selling price
- Counter argument: **"but for world"**
- Beware of **"Nirvana fallacy"**
- Individual cases – remedies against holdup work well!
- More cases about holdout



Implications

1. Weakening the availability of injunctions

- *Competition advocacy, SCOTUS eBay, IEEE 2015 IP Policy*

2. Royalty rate calculations

- *ex ante incremental value approach, top-down methods*

3. Royalty base

- *SSPPU, component*

4. Licensing in the production chain

- *Everywhere*

5. Interpretation of the ND requirement

- *Same rate to all*

6. Use of competition law

- *Breach of FRAND commitment is anti-competitive*

Court cases

1. Injunctions available

- CJEU *Huawei v ZTE* and national case law

2. Good faith licensing obligation on implementers too

- *Sisvel v Haier* (Germany)

3. Royalty rate & base - comparable licenses

- *Unwired Planet v Huawei* (UK), *HTC v Ericsson* (US)

4. The choice of licensing level on the SEP owner / not anti-competitive

- *FTC v Qualcomm* (US); *Nokia v Daimler* (Germany)

5. ND - similar rates to similarly situated licensees

- *Unwired Planet v Huawei* (UK)

6. Breach of FRAND not automatically anti-competitive

- *Continental v Avanci* (US), *Unwired Planet v Huawei*

What can we learn?

- **FRAND system worked well in telecoms and smartphone industries!**
- **No evidence of market failure**
- **Why it worked?**
 - Combination of private (SDOs, FRAND commitment, patent pools) and public ordering solutions (guidances, court practices)



What can we learn?

- **How to improve on the success of the system without negative effects?**
- **The need to look at specific markets, rather than SEPs in general**



Where are we heading?

- 5G and IoT:
 - More industries using cellular standards
 - Countless licensees
 - Different licensing traditions
 - SMEs and start-ups
- Recipe for market failure?
- Do we have evidence?
- Are there market based solutions?



Reforming the SEP licensing framework

- Commission - increasing transparency and clarifying the meaning of FRAND
 - *What about the costs of licensing?*
 - *Geopolitics?*
 - *Public vs private ordering?*
- The real question: **what is the price of a standard?**

Takeaways for discussion

1. Empirical evidence
2. Public authorities can help gather evidence
3. Different licensing framework for different markets
4. Market based solutions vs public intervention
5. The impact on EU industry and innovation

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