

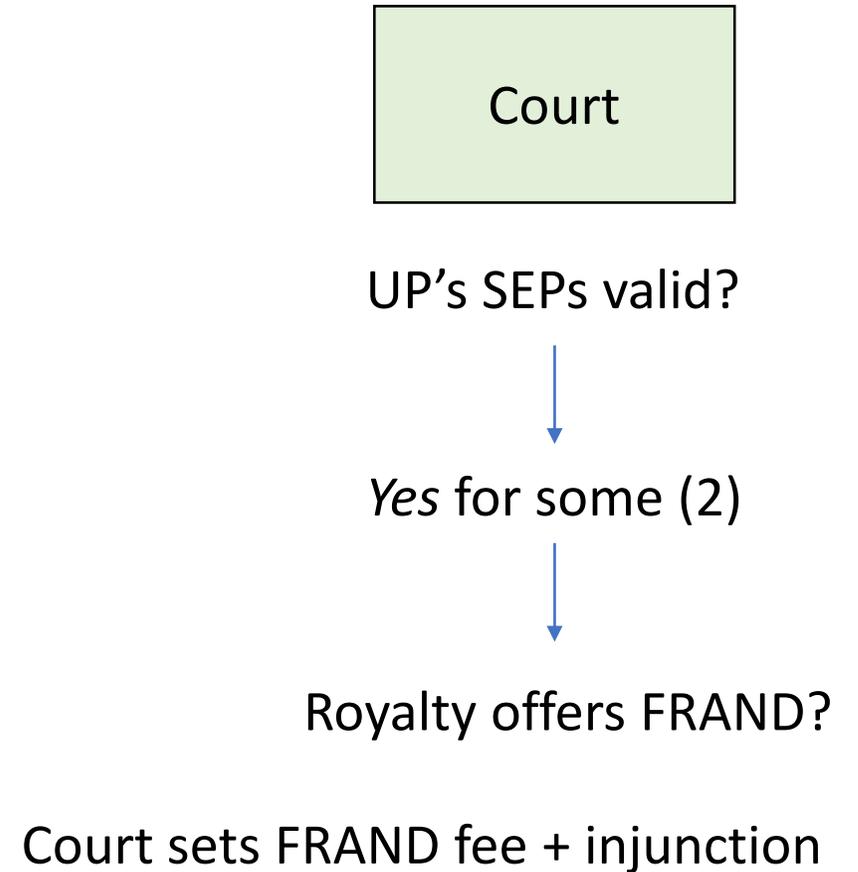
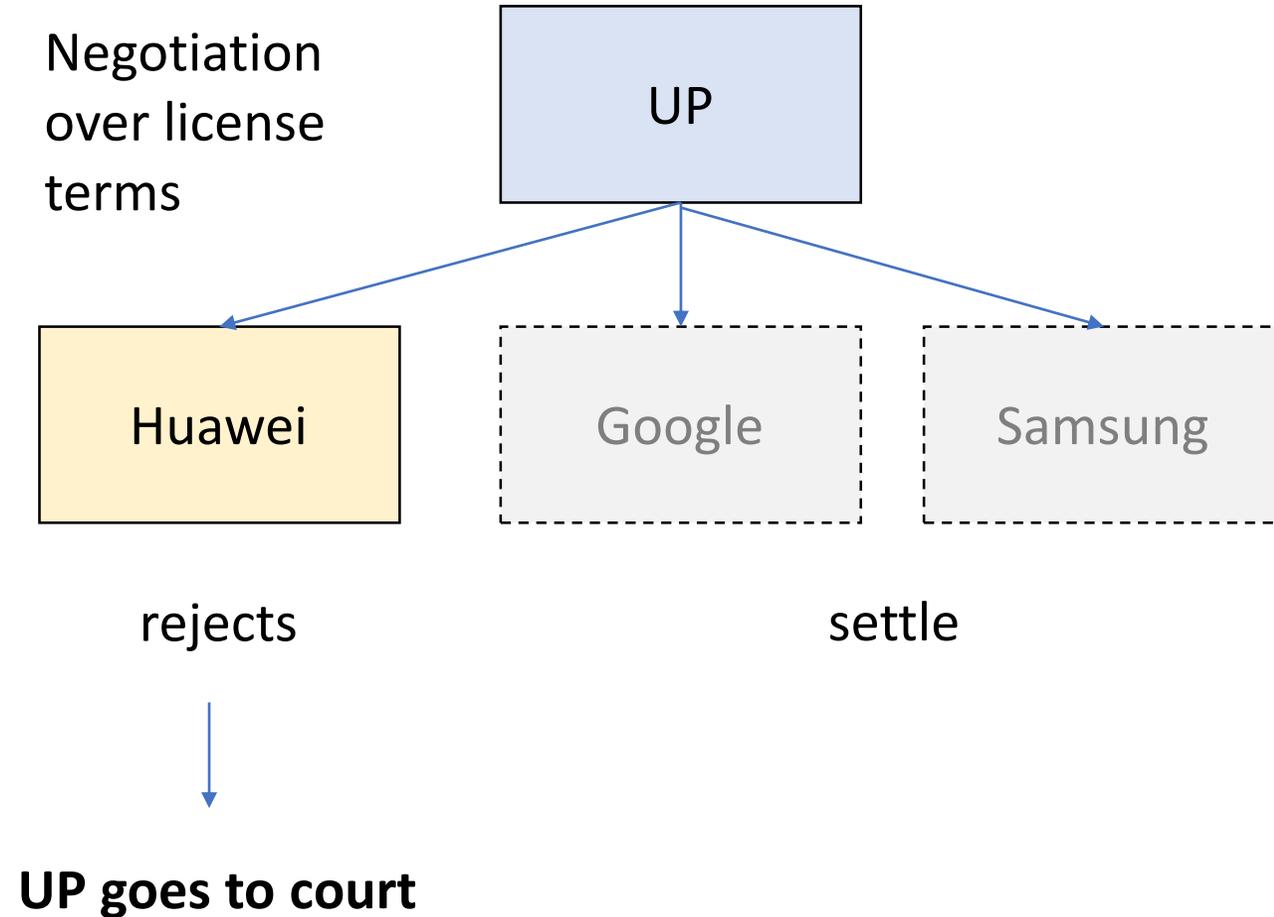
Unwired Planet v. Huawei (2017)

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Unwired Planet v. Huawei



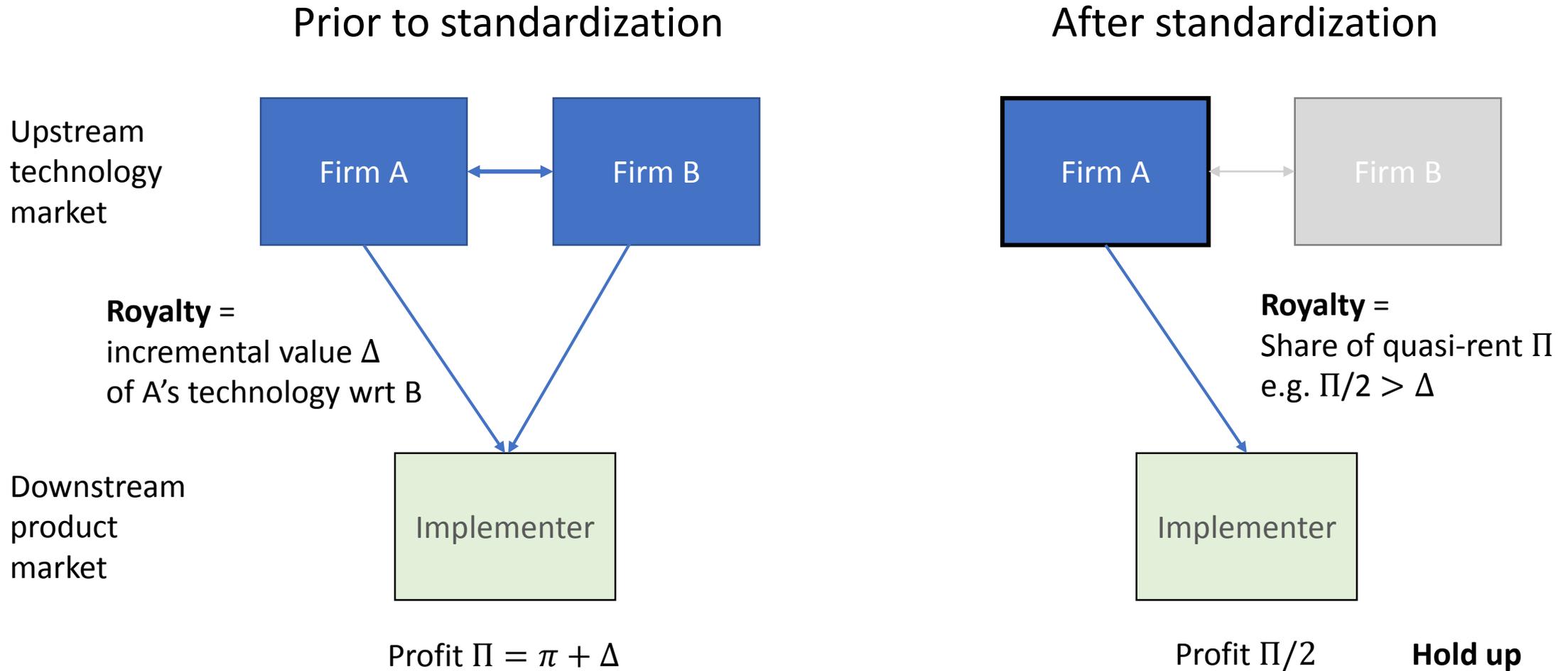
The case

- Dispute over licensing terms between a SEP holder (Unwired Planet) and an implementer (Huawei)...
- ... with contractual commitments (FRAND) made ex ante
- ... in the shadow of litigation (which actually occurs):
 - Assessment of validity of SEPs (infringement)
 - Assessment of FRAND nature of license offers from SEP holder and implementer
 - Possibility of injunction
- **Question:** impact of FRAND assessment by Court on (prior) negotiations between SEP holders and implementers?

Discussion

- FRAND and hold up
- Injunctions and hold out
- SEP portfolios and SEP trading

The hold up problem



Specific investments by implementers

- Exacerbating factor: **specific investments** made by implementers
 - If implementer invests to develop its product, lower profit incentives with hold-up (appropriation effect)
 - For example, if profits Π (without hold up) and $\Pi/2$ (with hold up) are *per customer profits* \rightarrow reduced incentives to expand the market with hold up
- Risk of hold up can undermine the incentives of implementers to adopt the standard and to make specific investments in standard-compliant products

FRAND as a remedy

- FRAND commitments made by SEP holders (ex-ante)
 - Fair, reasonable, and non-discriminatory licensing terms
- Interpretation of legal literature of 'reasonable' royalties
 - FRAND royalty = (ex ante) incremental value that the technology brings to the licensee compared to alternatives = Δ in previous model
- Alternatives to FRAND
 - Ex ante competition between rival technologies during the standardization process (Swanson & Baumol, 2004)
 - Options-to-license contracts (Ganglmair et al., 2013), negotiated before specific investments are made by implementers
 - Mandatory price caps on royalties set ex ante (Lerner & Tirole, 2015)

FRAND not a perfect remedy

- A lot of litigation between SEP holders and implementers
 - On-going disputes over smartphone patents (e.g., 50+ lawsuits btw Apple and Samsung)
 - **This case:** UP v. Huawei
- Why?
 - Ambiguity on what 'reasonable' means in FRAND?
 - Probabilistic patents → challenge in court weak patents? [UP v. H: 2 SEPs invalidated](#)
 - Reverse hold-up problem

The reverse hold-up problem (hold-out)

- With FRAND, worst outcome for an infringer: pay the FRAND rate
 - Some implementers may then avoid paying the license fee
 - Royalty losses for SEP holders, and reduced incentives to invest in development of standards
- True even if no uncertainty on what ‘reasonable’ means
 - As long as uncertainty on what the Court will decide

The reverse hold-up problem (hold-out)

- Building on Choi (2016), assume that the Court determines a FRAND rate \tilde{r} , with some potential error, but in expectation $E[\tilde{r}] = \Delta = \text{ex-ante benchmark rate}$
- If the SEP holder made an offer $r_o > \tilde{r}$ (non-FRAND), the Court imposes \tilde{r}
- If the SEP holder made an offer $r_o \leq \tilde{r}$ (FRAND), the Court imposes r_o
- The expected royalty for the implementer when going to court is then lower than Δ : incentive to “hold out” and go to Court
- If the SEP holder offers FRAND terms, the implementer goes to Court
→ the SEP holder has to set a royalty fee below FRAND

Injunctions

- With an injunction, an infringing implementer is ordered by the Court to cease selling its infringing products
- Can mitigate hold-out, but at the cost of exacerbating hold-up
- Choi (2016):
 - The Court determines the FRAND rate \tilde{r} , with $E[\tilde{r}] = \Delta$
 - SEP holder offers $r_o > \tilde{r}$ (non-FRAND) \rightarrow the Court imposes \tilde{r}
 - SEP holder offers $r_o \leq \tilde{r}$ (FRAND), the Court allows an injunction, whereby the SEP holder can extract the hold-up fee $\Pi/2$
- The equilibrium royalty is then larger than Δ (there is hold up)

More precise assessment of FRAND

- If the Court can invest to improve the precision of its FRAND assessment, lower extent of hold out or hold up
- At the extreme, if perfect assessment, no hold out, no hold up
- Unwired Planet v. Huawei: clarification by Court of the methodology to be used to compute the FRAND rate
 - Should reduce the uncertainty of the Court's FRAND rate

SEP portfolios and SEP trading

- SEPs in the case: worldwide patent portfolio that UP has acquired from Ericsson
 - 2,185 patents
 - Revenue-sharing between UP and Ericsson + royalty floor provisions
- Motivation?
 - For Ericsson: attenuate FRAND potential repercussions on business relationships from aggressive enforcement?
 - For UP: build a larger portfolio to claim larger royalties (Bourreau, Ménière, Pohlmann 2015 WP)?

Thank you!