

# **The Availability of Injunctions in Standard Essential Patent Licensing**

**by: Benno Buehler, Dominik Fischer, Bernhard Ganglmair**

**Discussant report: Katharine Rockett**

- SEP licensing subject to hold-up:

Many SEP licensing negotiations are ex post: technology has been implemented and once part of standard, little choice → FRAND required

Reverse hold-up also possible: if no mechanism to enforce payment, patent-holder may face innovating without compensation → injunctions

- Comparison of two systems:

*Huawei-ZTE* decision established protocol for bargaining to fair rates requiring offers to be FRAND before injunctive relief available (HZ).

This has been questioned in a series of German decisions allowing injunctions even when patent-holder has not offered a FRAND license (AF).

- Stylised model to investigate the difference in equilibrium royalties, offers, litigation, and injunction rates under increasing court uncertainty and is closely linked to HZ and AF frameworks
  
- Strengths of paper –
  - link to real institutional frameworks (HZ, AF)
  - visualisation of effect of “sliders” of model: court uncertainty and width of FRAND band.

- Important features: timing, institutions, choices available

#### Sliders:

Courts may judge FRAND rate with noise ( $F+\theta_i$ ),  $\theta_i \sim U[-\theta, \theta]$  \*and\*  
Courts view bands of royalties as FRAND  $[F\pm\delta]$ .  $\delta, \theta$  both known (and fixed), but  $\theta_i$  not known when make offers → expectations over continuation payoffs affect offers. No updating.

#### Sticks:

Injunctions are fatal → if an injunction permitted, licensee loses all bargaining power.

Second mover advantage in litigation → if implementer makes a FRAND offer, it prevails regardless of whether SEP holder offer FRAND.

#### Strips out many aspects:

Alternative (ex ante) systems (Ganglmair et al 2012), offer and other decision stages after court “type” known (Langus et al 2013; Ratliff and Rubinfeld, 2013; Choi, 2016), contingent contracts to insure against risk (Spier and Prescott, 2019)

## INTUITION and RESULTS

- If injunctions are easier to come by (AF) equilibrium royalties interact with injunctions to worsen hold-up when Courts are unpredictable.
- Why? Courts' bias in FRAND rate determination is unknown → patent holder “shades up” its offer just in case this makes it past scrutiny.

In HZ, either party can have recourse to a court decision of FRAND rate, and both have “symmetric” threat point so shade their offer symmetrically → “neutral” outcome that splits surplus.

In AF and where injunctions impose a severe penalty so the implementer loses its bargaining power, the patent-holder has little reason to make a FRAND offer → offers rise. The implementer's offer also rises in an effort to avoid the injunction by being non-FRAND “by mistake”.

- Choi (2016) in a model with different timing and injunction rules (non-HZ), court noise increases bid levels although there is no “loosening” of injunction rules.

## INTUITION, CONT

- Further, court noise interacts differently with injunctions, lowering their probability for HZ and raising them for the amended framework.
- Why? For HZ and as noise rises, the patent-holder's offer is less likely to be judged as FRAND, so injunctions fall. For AF, as noise rises the rate of implementer "mistakes" rises.
- Other papers have different control variables and different timing, so cannot address question of increasing uncertainty as clearly.
- Banding: second mover advantage → equilibrium royalty does not rise if noise less than band width under either AF or HZ. Why? Because no uncertainty on FRAND offer range.

## COMMENTS

### 1. Case review – make more compelling

- justify non-proportional offer tolerance, departure from HZ given that appeal available and text refers to HZ framework as context for remarks. Is the model really capturing these protocols fully?
- justify second mover advantage in settlement where no injunction. Is it accurate that both parties have access to such big hammers? The modelling aspect is convenient and helps visualisation, but does it correspond to real settlements?

### 2. More development of theta; timing, options linked to intuition and literature more fully to isolate contribution.

- Contribution of the model is not around the banding but around court noise slider, and tight link to cases and HZ/AF frameworks.
- More detail on the modelling of uncertainty and why this is compelling – quite stark at the moment.

## COMMENTS

3. Broaden literature review especially on effects of uncertainty in courts
  - See Spier and Prescott, Rand, 2019, on jury trials (perhaps more unpredictable than judges/panels?) Looks at insurance mechanisms to offset risk as one more implication of court noise.
  - Given courts' abilities here, why not just impose fair outcome? Convenient modelling again, but model gets a bit stretched here.
  - Emphasise more the importance of the details of the process to the outcome: many papers look at court error and its implications, but assume other fixed and variable factors in their models. Note that your outcome creates larger earnings for patent-holders, so could be a good outcome in some of these models. What is welfare implication?
  
4. Include proofs and ensure intuition complete including initial case payoffs
  - Intuition also needs to be strengthened. You provide very helpful figure 2, but mapping the cases to litigation outcome and payoff calculations in section 3.5 (on which the rest is based) I got different ranges.
  - Is equilibrium in proposition 1 unique? Why not impose fair rate? (bottom of page 9 obscure to me).



## COMMENTS

5. Policy implications need development – why not just say to use HZ? Is training likely to solve anything? How about alternative systems (see Spier and Prescott, eg)?
  
6. Consider a title that brings in court uncertainty, as that is the main player and the main “slider” in the paper. Banding adds a technically different element, but does not drive the main effects. Rather, banding interacts with the second mover advantage to generate similarly low royalties. This suggests developing the second mover advantage more (comment 1).

**THANK YOU!!**