Standard Essential Patents : who is really holding up (and when) ?

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Introduction

- Should owners of "standard essential patents" (SEPs) be able to seek injunctions ?

- A central issue in the Commission review of *Google/Motorola.*

- Investigations of MMI and Samsung underway.

- Concern about the use of injunctions to « hold up » prospective licences (extract excessive royalties).

- Wider context of multilateral patent disputes between mobile handset producers.

- Disputes involve SEPs as well as non-SEPs, and design rights.

- Disputes should be seen in the context of competition among platforms (IOS, Windows, Android) in the downstream market.

Outline and overview

- Hold up: there is no alternative to SEPs. The threat of injunctions will enable the patent holder to extract "excessive royalties".
- But SEP owners have committed to FRAND terms.
- Yet, in the absence of injunctions, what would be the incentive of the prospective licensee to take a license? "Reverse hold up".
- The prospect for hold up and reverse hold up depends on FRAND commitments and on Court procedures (which give effect to FRAND terms) in case negotiations breaks down and firms litigate.
- Review of Court procedures in Europe: injunctions are only awarded when the prospective licensee is "unwilling".
- We model these procedures and find that they balance the risk of hold up by the patent holder and reverse hold up by the prospective licensee.
- Not clear that there is a systemic problem.

A brief overview of EU procedures

- SSOs typically require a FRAND commitment.
- Patents are simply declared essential by the owner. Both validity and infringement can be challenged in Court.
- All EU courts give effect to the FRAND commitment. If the prospective licensee has made an offer deemed to be FRAND, no injunction will be granted.
- Damages and injunctions available in all jurisdictions (2004 Directive).
- Damages are compensatory rather than punitive:
  - FRAND rates and legal cost for an infringer,
  - Foregone profit for a potential licensee when an injunction is subsequently lifted (if the patent is found invalid).

Note : evidence on procedures and case law was gathered with P. Camesasca an P. Treacy partly from a survey of counsels across Europe
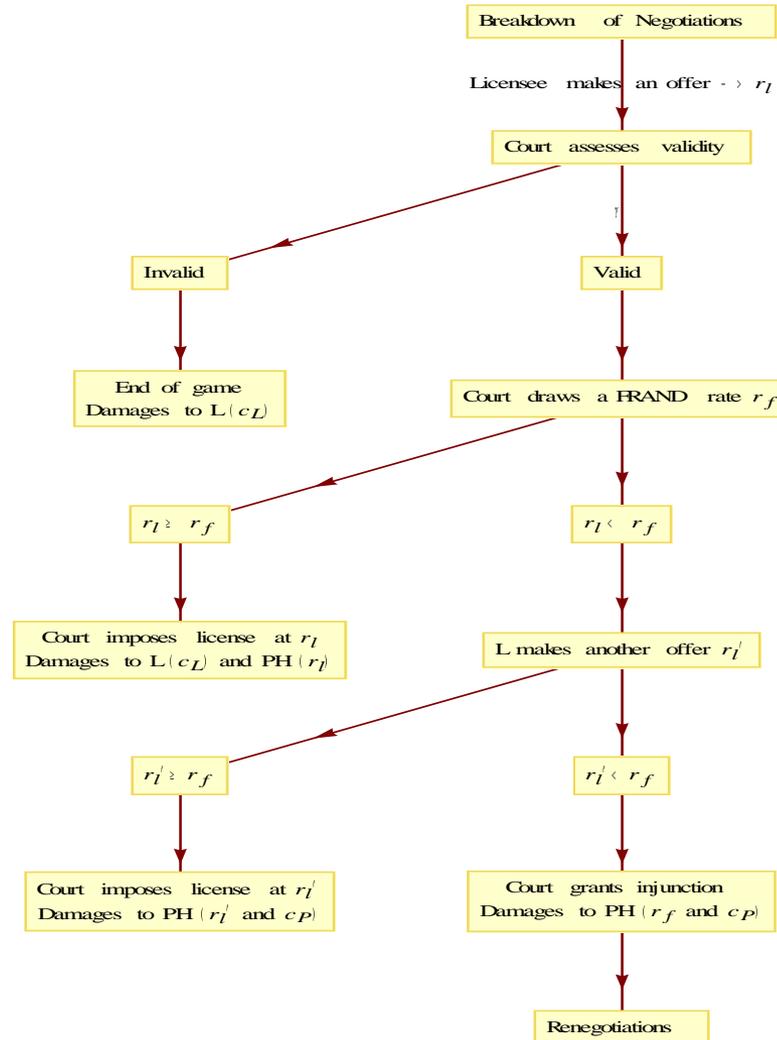
A brief overview of EU procedures (ii)

- Procedures vary among members states (with bifurcation in Germany).

- But a common substantive approach : courts only grant injuctions when the prospective licensee is unwilling…

  - courts in the UK and Netherlands may be more willing to define a rate that would be adequate to avoid injunctions,

  - courts in Italy and France will consider the behavior of prospective licensee,

  - orange book procedure in Germany: a set of conditions sufficient to avoid an injunction.

- Unlike what happens with non-SEPs, injunctions are rarely granted (in 2010-2012, only 3 instances relevant to the mobile market in Germany) and none has been enforced.

A model of contingent injunctions

- Courts determine what is not FRAND and their ruling is probabilistic.

- For any given offer, there is some probability that it will be considered adequate.

- Consider a framework in which in the course of negotiation, the prospective licensee makes a final offer:

  - If rejected, the court procedure is initiated. The Court first rules on validity.

  - If invalid, the patent holder pays the legal cost.

  - If valid, the Court evaluates the offer of the prospective licensee.

  - If it is below, the licensee makes a second offer.

Continued

- If it is above the Court benchmark, the rate is implemented (and the patent holder pays the cost).
- If the second offer is above the benchmark rate, the Court imposes that rate and the licensee pays the litigation cost.
- If the second offer is still below the benchmark rate, the Court grants an injunction.
- The patent holder and prospective licensee negotiate (under the threat of exclusion for the prospective licensee).
- The procedure puts the licensee in a favourable position: he can optimise his offer, trade off the risk of being considered unwilling with the royalty that would be enforced by the Court (going backward and forward).

Breakdown of Negotiations

Licensee makes an offer $\cdots$ r_l

Court assesses validity

Invalid

Valid

End of game
Damages to L (c_L)

Court draws a FRAND rate r_f

$r_l \geq r_f$

$r_l < r_f$

Court imposes license at r_l
Damages to L (c_L) and PH (r_l)

L makes another offer $r_l^{'}$

$r_l^{'} \geq r_f$

$r_l^{'} < r_f$

Court imposes license at $r_l^{'}$
Damages to PH $(r_l^{'}$ and $c_P)$

Court grants injunction
Damages to PH $(r_f$ and $c_P)$

Renegotiations

Equilibrium royalties

- Derive the optimal final offer of the licensee under the condition that it would be rejected r(rej).

- Derive the optimal final offer of the licensee under the condition that it would be accepted r(acc).

- If r(rej) < r(acc), we show that the licensee sometimes prefers to litigate.

- If r(rej) > r(acc), the unconstrained reject offer would be accepted. We show that the best constrained offer is then r(acc)

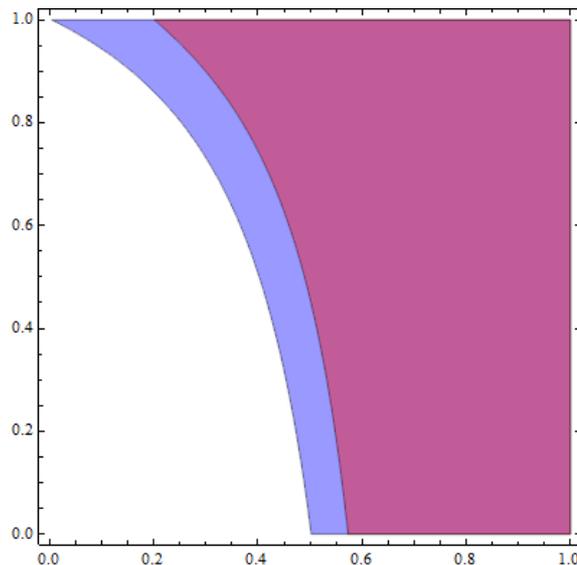- In this parameter range, the licensee prefers to offer r(acc).

The reject offer

- The optimal reject offer is independent of the strenght of the patent : indeed, when the patent is invalid, the licensee gets his legal cost back (independently of his offer). He derives his optimal offer as if the patent was valid.

- When the litigation cost increases, the licensee will want to increase the odds of being considered FRAND (and accordingly increase his offer)

- As the time in court increases, the prospect of an injunction becomes more remote. The licensee is willing to pay less to avoid it and its offer decreases.

The accept offer

- The accept offer is the lowest that the patent holder would accept (make him indifferent).

- Since the litigation payoff of the patent holder decreases with litigation cost and litigation time, the lowest offer that he would accept also falls.

- Similarly, the litigation payoff of the patent holder increases with the strenght of the patent.

The reject and accept offers

(γ on the horizontal axis and T on the vertical axis)

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- The accept offer is more likely to exceed the reject offer (blue region) when litigation cost increases (left figure). Indeed, the reject offer decreases as C decreases. But the accept offer increases. Hence it is more likely that the accept offer exceed the reject offer

- The reject offer is high when T is small.
- When T is small, the accept offer will also be high (because the threat of injunction is powerful and hence the litigation payoff of the patent holder is high).
- But the former effect dominates. As T falls, the reject offer increases faster. The range of parameters for which the accept offer exceeds the reject offer shrinks.
- The reject offer is independent of γ. The accept offer increases with γ. For low γ it will be below the reject offer but as γ increases it will eventually exceed the reject offer. Hence, as γ increasesit is more likely that the accept offer will exceed the reject offer.
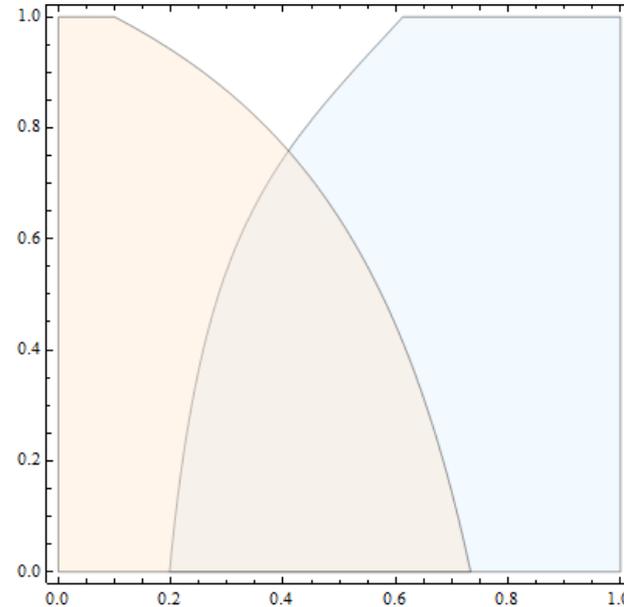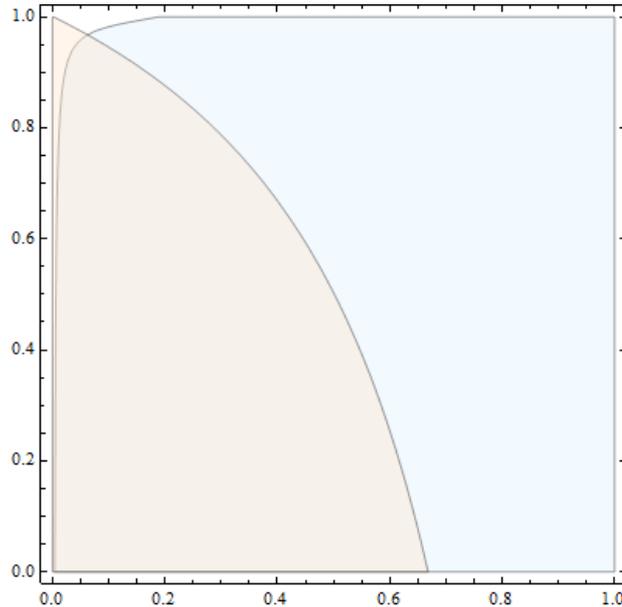
Accomodation vs litigation

- When the reject offer exceeds the acceptance offer, the prospective licensee chooses the acceptance offer.

- Indeed a marginal change from an offer that would be rejected leads to the savings of the litigation cost. As the prospective licensee makes a take it or leave it offer, he extracts these savings.

- When the accept offer exceeds the reject offer, the prospective licensee may prefer to induce litigation (the purple area – when T and γ are high).

Accomodation vs litigation

- The licensee compares the payoff of litigating with a low offer or accomodating with a high offer.

- A low reject offer is attractive when the prospective licensee is not worried about the prospect of being found unwilling (T is high).

- An accomodation offer is unattractive when the patent holder is indifferent between litigation and accepting for a high rate; this arises when γ is high. Indeed, when it is likely that the patent is valid, the patent holder will appropriate much of the gain from a high rate (which would be imposed by the court).

- Litigation happens in equilibrium because the final offer by the prospective licensee carries a commitment (if it is not accepted, it will form the basis for litigation). The prospective licensee can thus not propose a rate that saves the litigation cost. The patent holder would prefer to litigate on the basis of such an offer.
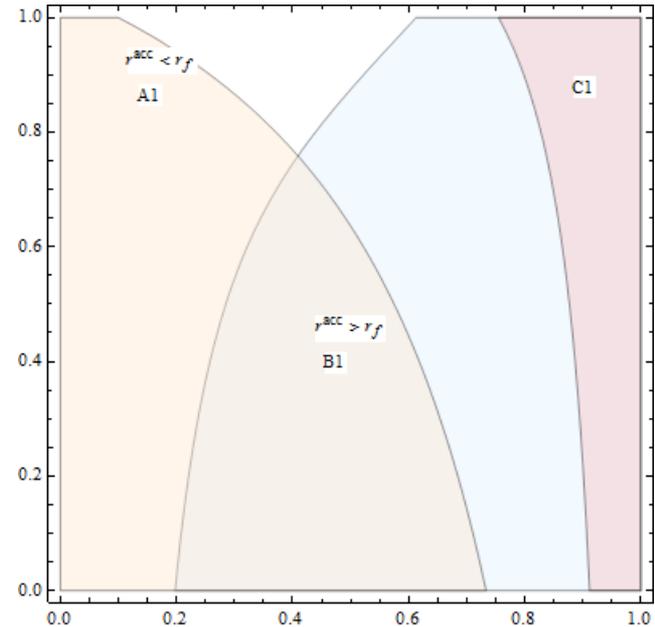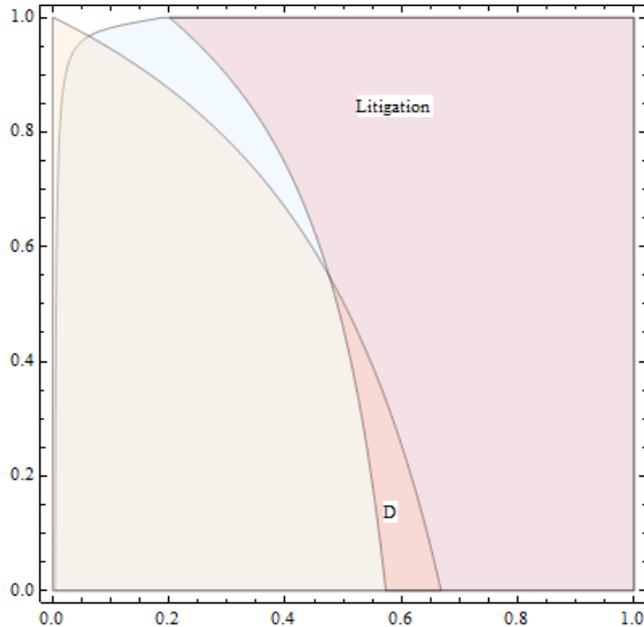
Equilibrium royalties vs Frand

(γ on the horizontal axis and T on the vertical axis)

- The purple area is the parameter range in which the rejection offer is above FRAND
- The blue are is the parameter range in which the acceptance offer is above FRAND

Equilibrium royalties vs FRAND

(γ on the horizontal axis and T on the vertical axis)

- We superimpose the litigation condition. In region C1, there is litigation and the reject offer is below frand.
- In region A1, there is no litigation. But the offer if also below frand.
- The offer is above FRAND in region B1

Equilibrium royalties

- The current procedure thus balances the risk of hold up and reverse hold up.

- The holder of a sufficently weak patent will always end up accepting a rate below FRAND.

- The holder of a sufficiently strong patent will always end up in litigation by refusing a rate below FRAND.

- The prospective licensee has a powerful strategic tool; since his offer is used in order to assess whether an injunction is granted, he can trade off the risk of an injunction with the benefit of a low royalty rate if it is confirmed as FRAND by the Court.

Conclusion

- It is not clear that there is a systemic failure.

- It accords with intuition that the current approach of the courts balance hold up an reverse hold up: injunctions are only granted when reverse hold up is a concern (ie when the licensee is proving to be unwilling).

- There may be scope for improvement in the standard for granting injunctions implemened by the Courts (a more precise definition of the circumstances in which a licensee can be deemed unwilling, further harmonization across countries) possibly through guidelines