

Patents and royalties: stifling or promoting innovation in ICT?

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Participants:

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Benno Buehler, Economist, Chief Economist Team, European Commission DG COMP
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Esa Kaunistola, Director, EMEA IP, Standards & Interoperability and Trade Policy, Microsoft
Jorge Padilla, Senior Managing Director and Head of Compass Lexecon Europe
Rebekka Porath, CE Technology Policy Manager, Intel

Chair: **Reinhilde Veugelers**, Senior Fellow, Bruegel

Notes:

Royalty stacking is a particularly important issue for the ICT sector, where it is often necessary to combine various complementary technologies in one end product. How big is the royalty stacking issue? What is the impact on the short and long term? What type of intervention should there be?

Jorge Padilla shares his recent work on the issue and starts by indicating that he would like to call it a royalty stacking puzzle, rather than a problem. Some claim royalty stacking is a theoretical possibility without empirical support. There is a lack of (clear-cut) evidence in support of royalty stacking.

In his paper it follows that royalty stacking is more likely to be a problem when patent holdings are less skewed and when downstream competition is strong. An implication for competition policy is that welfare-increasing consolidation of large patent holders may not always occur, while welfare-decreasing consolidation of small patent holders will always take place. The lack of clear-cut evidence in support of royalty stacking may be due to the fact that the hypothesis is based on a theory which relies on assumptions with little link to reality. Under the theory developed in this paper:

- Patent pools need not be welfare increasing
- Patent consolidation may prove anticompetitive
- Patent divestitures need not be anticompetitive

Paul Belleflamme stresses the desirability of a “cartel” in the form of a patent pool in complementary products. The can internalise the externalities which two firms impose on each other. This benefits both consumers and producers. The problem is, however, that just like in the case of cartels, these pools may have a hard time to form. Stability is an issue because pool members have an incentive to leave the pool and free-ride on the others forming the pool. Paul highlights the richness of the theory, which takes into account heterogeneity between patents and how patent pools can be a good thing so long as the right patent holders have the incentive to be in the pool.

Benno Buehler starts by noting that it is not entirely clear whether royalty stacking is just narrowly the Cournot effect problem, or if it can be used as an expression for excessively high aggregate royalties. This latter could have many reasons, of which the Cournot effect is just one. Recent work by DG Comp includes updating the guidelines that govern patent pools and two recent antitrust cases on standard-essential patents. In these cases DG COMP tried to address

the abusive use of junctions to extract excessive royalties. DG Comp acknowledges the fact that cooperation between firms can be beneficial to both consumers and producers, and in the guidelines tries to provide guidance on when patent pools can be beneficial and treat those leniently. Furthermore, besides the Cournot effect there are other considerations that need to be taken into account and for its work DG Comp also examines recent research in the field. Evidence shows predominantly large patent holders have incentives to engage in pools, which is an encouraging idea.

Paolo Casini explains a recent consultation with firms and citizens which aimed to identify whether there is a royalty-stacking problem, and how it should be dealt with. There is little consensus and polarised views depending across different situations and types of firms. Returning to Padilla's model he points out two issues:

1. What happens if you model different types of firms (also SMEs)? The lack of data is an issue.
2. The variable (X) on the number of patents/quality may be endogenous. There is evidence that patent pools can increase the number of patents and lead to patent races.

From a policy perspective an important goal is to make sure that licensing works properly, is inclusive (also for SMEs), and is not hampered by an excessive amount of patents that de facto create too much information to be dealt with.

Esa Kaunistola gives a more practical point of view on the matter. Microsoft follows the discussion closely (especially on standard-essential patents and FRAND). They are quite happy with how the situation is dealt with, in particular by DG COMP. He indicates concerns about the quality of patents, compliance with FRAND, and risks of litigation for smaller companies.

Rebekka Porath shares her views on the evidence base for royalty stacking. She questions the argument that royalty stacking is a theoretical problem which does not occur in practice. Court cases have brought to light demands from individual SEP holders that would lead to a royalty stack in excess of the total value of the product. She shares some industry examples that indicate this issue, but due to the lack of publicly available (unconfidential) data these studies are to some extent indicativeness.

Furthermore, she raises the issue that disproportionately high rewards for some patents do not mean that the royalties have to be excessive. Other SEP holders might be undercompensated. The holders of all patents necessary for a standard should be taken into consideration upfront.

Jorge Padilla ends with a practical note. It is mainly the licensees, not the researchers, who are in possession of the data. The Commission could do a Sector Inquiry to obtain this information and find out what the aggregate royalty stack is.

Event notes by Nuria Boot, Research Assistant