Patent ambush in standard-setting: the Commission accepts commitments from Rambus to lower memory chip royalty rates

Ruben Schellingerhout and Piero Cavicchi

Forthcoming in Competition Policy Newsletter 2010-1

1. Introduction

Standardisation involves competitors sitting around a table agreeing technical developments for their industry. Normally, antitrust rules do not allow competitors to jointly decide on market conditions. However, the European Commission recognises the general benefits that standardisation brings, and so standard-setting is acceptable under antitrust rules, provided this takes place under strict conditions of openness and transparency. This is essential in order to avoid standards being abused by commercial interests. The Commission had concerns that this may have happened in the Rambus patent ambush case.

On 9 December 2009, the Commission adopted a decision that rendered legally binding commitments offered by Rambus Inc which, in particular, put a cap on its royalty rates for certain patents for “Dynamic Random Access Memory” chips (DRAMs). The Commission initially had concerns that Rambus may have infringed EU rules on the abuse of a dominant market position (Article 102 of the Treaty on the Functioning of the European Union – TFEU) by claiming abusive royalties for the use of these patents. DRAMs are used to temporarily store data, for example in PCs.

The US-based standards organisation, JEDEC, developed an industry-wide standard for DRAMs. JEDEC-compliant DRAMs account for around 95% of the market and are used in virtually all PCs. In 2008, worldwide DRAM sales exceeded US$ 34 billion (more than €23 billion).

On 30 July 2007, the Commission sent Rambus a Statement of Objections, setting out its preliminary view that Rambus may have infringed the then Article 82 of the EC Treaty (now Article 102 TFEU) by abusing a dominant position in the market for DRAMs. In particular, the Commission was concerned that Rambus had engaged in a so-called "patent ambush", intentionally concealing that it had patents and patent applications which were relevant to technology eventually included in the JEDEC standard, and subsequently claiming royalties for those patents.

To address the Commission's concerns, Rambus undertook to put a worldwide cap on its royalty rates for products compliant with the JEDEC standards for five years. As part of the overall package, Rambus agreed to charge zero royalties for the SDR and DDR chip standards that were adopted when Rambus had been a JEDEC member, in combination with a maximum royalty rate of 1.5% for the later generations of JEDEC DRAM standards (DDR2 and DDR3), which is

---

1 The content of this article does not necessarily reflect the official position of the European Commission. Responsibility for the information and views expressed lies entirely with the authors.

2 A non-confidential version of the Decision and the commitments is available on the Commission's website at: http://ec.europa.eu/competition/antitrust/cases/.

3 With effect from 1 December 2009, Articles 81 and 82 of the EC Treaty have become Articles 101 and 102, respectively, of the TFEU; the two sets of provisions are in substance identical.
subsequent JEDEC standards and not only to the SDR and DDR DRAM standards that were adopted during the time in which Rambus was a member of JEDEC.

In the Statement of Objections, the Commission therefore provisionally considered that Rambus was abusing its dominant position on the market for DRAM microchip technology by claiming unreasonable royalties for the use of its patents against JEDEC-compliant DRAM manufacturers at a level which, absent its conduct, it would not have been able to charge.

3. The Commitments

To address the Commission's concerns, Rambus offered a bundled set of Commitments which extend worldwide. First and foremost, as part of the overall package, Rambus agreed not to charge any royalties for DRAM chips based on the SDR and DDR DRAMs standards which were adopted when Rambus was a member of JEDEC.\(^\text{14}\) Secondly, Rambus committed to a maximum royalty rate of 1.5% for the subsequent DRAM chips standards, i.e. below the 3.5% it had previously been charging for DDR in its existing contracts.

The package of Commitments offered by Rambus covered not only chips, but also memory controllers that are not standardised by JEDEC, but which need to interface with DRAM chips and therefore need to comply with the JEDEC DRAM standards. For Memory Controllers, Rambus offered a maximum royalty rate of 1.5% for SDR Memory Controllers until April 2010, then dropping to 1.0%, and a rate of 2.65% for DDR, DDR2, DDR3, GDDR3 and GDDR4 Memory Controllers until April 2010, then dropping to 2.0%.

The Commission took the view that the whole package of the Commitments was sufficient to address the concerns identified by the Commission in its Statement of Objections. As the competition concerns arose from the fact that Rambus may have been claiming abusive royalties for the use of its patents at a level which it would not have been able to charge absent its conduct, the Commission considers that the whole package of the Commitments is proportionate, as it addresses the royalty rates for the JEDEC standards.

The Commitments guarantee that industry will not have to pay more than the capped rates. This predictability and certainty has a clear value for business. Potential new entrants will also have a clear perspective of future royalty costs, facilitating a decision to enter the market. The Commitments will be binding worldwide on Rambus for a total period of five years. On 19 January 2010, Samsung Electronics and Rambus announced the conclusion of a licence agreement covering all Samsung semiconductor products in line with the conditions of the Commitments.\(^\text{15}\)

---

\(^\text{14}\) As outlined above, the Commission provisionally considered that during this time Rambus may have engaged in intentional, deceptive conduct in the context of the standard-setting process by not disclosing the existence of the patents and patent applications which it later claimed were relevant to the adopted standards.

4. Conclusion

Given the increase in patenting and the number of standards which incorporate protected technologies, it has become increasingly clear that standard-setting which does not take place under strict conditions of openness and transparency may lead to serious distortions of competition on a given market. In fact, a patent essential to the implementation of a standard may have a much higher value once the standard has been adopted than it has ex ante. This can therefore create an incentive for the patent holder to attempt to extract the ex post rather than the ex ante value of his technology. There is therefore an important pro-competitive rationale behind requiring disclosure of patents and patent applications in the framework of standard-setting before a standard is adopted.

An effective standard-setting process should take place in a non-discriminatory, open and transparent way so as to ensure competition on the merits and to allow consumers to benefit from technical development and innovation. Abusive practices in standard-setting can harm innovation and lead to higher prices for companies and consumers. For its part, the Commission will vigorously enforce the competition rules in this area, for the benefit of technical progress and European consumers.

Standards bodies have a responsibility to design clear rules that ensure the standard-setting process takes place in a non-discriminatory, open and transparent way and hence reduce the risk of competition problems, such as patent ambushes. The role of the competition authorities in this context is not to impose a specific IPR policy on standards bodies, but to indicate which elements may or may not be problematic. It is then up to industry itself to choose which scheme best suits its needs within these parameters.

The Commission is currently revising the antitrust guidelines for horizontal agreements and intends to improve the existing chapter on standardisation to provide more guidance on standard-setting. The draft will be ready for public consultation in early 2010. Lessons learned from recent experiences such as the Rambus case will be reflected in this document.