Intellectual property rights in standard setting from a competition law perspective

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This article gives an overview of the competition rules that apply to intellectual property rights (IPR) policies in standard setting. It focuses in particular on the recent discussions on ex ante disclosure and licensing policies developed by standard setting organisations.

These instances shed some light on the principles standard setting organisations should abide by under EU competition rules when developing IPR-policies. This paper is not intended to provide a full and detailed analysis of the application of Article 81 to standard setting agreements. Instead, we will focus on specific issues that may arise when technologies protected by intellectual property rights are incorporated in a standard. These issues can be divided into ex ante concerns, i.e. arising prior to the adoption of a standard, and ex post — concerns arising once the standard is set.

General competition issues in standard setting

In general, it is not and should not be an antitrust agency's role to interfere in the nature of the standard setting process. In hi-tech markets especially, standards, if properly developed, play a positive role in promoting the efficient promulgation of new technologies in a manner that is most beneficial to the consumer and the economy in general. When the choice of one technology over others is made in a transparent and fair way, any potential restrictions of competition are generally outweighed by the countervailing economic benefits.

Standards can be set in formal government standard setting bodies (2), through formalised industry collaboration in the framework of standard setting organizations or by ad hoc agreements among undertakings. Standards may also arise spontaneously outside any collaborative process as a result of technologies' high penetration of a given market.

Industry standards have a positive effect insofar as they drive economic interpenetration in the common market, encourage the development of new markets and promote efficiency, and consumer choice. Standards provide for improved supply conditions, for lower transaction costs, benefiting economies as a whole. These benefits are achieved as standards aid in ensuring interoperability, maintaining quality, and providing information (3).

Within the European internal market, standards provide additional benefits related specifically to the policy objective of market integration within the EU. Pursuant to the case law of the European Court of Justice following the *Cassis de Dijon* case, certain restrictions to the free movement of goods provided for in Article 28 of the EC Treaty are permissible. Common standards, governmental or private, help eliminate restrictions to trade among Member States.

In spite of their benefits, all standard setting scenarios raise a number of issues under competition rules. Some of the concerns associated with standard setting agreements are dealt with in Section 6 of the Commission Guidelines for horizontal cooperation agreements (4).

Insofar as a standard is set by agreement among competitors on a given market, consumer choice and other competitive restraints are foregone. The collaborative process of standard setting may therefore raise issues of collusion and exclusion if anti-competitive coordination is only disguised as standard setting and is aimed at suppressing competition and/or price fixing. As a result, standardization agreements caught by Article 81(1) will be prohibited if they *"use a standard as a means amongst other parts of a broader restrictive agreement aimed at excluding actual or potential competitors"* (5).

However, standard setting agreements which contain restrictions of competition may be exempted under Article 81(3) if they "(…) *promote*

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(2) In the EU there are standards bodies recognized under Directive 98/34 of June 22, 1998, on technical standards and regulations, OJ L 204, 21.7.1998, p. 37.

(3) Commission Communication on the role of European standardisation in the framework of European policies and legislation COM(2004) 674 final.

(4) Commission Notice Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements (2001/C 3/02).

(5) Ibid, para 165.

economic interpenetration in the common market or encourage the development of new markets and improved supply conditions" (6). The exemption is conditioned inter alia upon a finding that the agreements contain no restrictions of competition that are not indispensable to achieve the reasonable objectives of the standard, such as unnecessary restrictions on innovation (7) and that access to the standard must be made available to new entrants on the market wishing to comply with the standard (8).

Ex-ante IPR disclosure and licensing from a competition perspective

Prior to the adoption of a standard, multiple technologies may compete for incorporation into the standard under consideration. Once a company's essential IPR has been incorporated into the standard, and once the industry has been locked in to the standard, the essential IPR holder might charge an artificially inflated ex post monopoly price which it would not have otherwise been able to charge ex ante due to availability of alternatives at the time the standard was being discussed. It can be difficult in practice for a commitment to licence on fair, reasonable and non-discriminatory terms to constrain the charged price.

The Commission put forward a set of recommendations for standard setting bodies on the ways to deal with intellectual property rights relating to the standards in the 1992 Communication on "Intellectual Property Rights and standardisation" (9). Many standard setting bodies adopted rules aiming to prevent antitrust liability, including rules forbidding discussions about the terms and conditions of licenses to patents essential to a standard. Standard setting bodies have adopted patent policies ranging from a mere ex ante disclosure of IPR that read on the technologies considered for inclusion in the standard in development to requirements to commit to license the IPR on "reasonable and non discriminatory" ("RAND") terms, to rules on disclosure and commitment to specific licensing terms before a given technology can be included in a standard.

The Commission has indicated in its Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements that ex ante licensing can have pro-competitive benefits when subject to appropriate safeguards. The Guidelines (10) provide that *"undertakings setting up a technology pool that is compatible with Article 81, and any industry standard that it may support, are normally free to negotiate and fix royalties for the technology package and each technology's share of the royalties either before or after the standard is set"* (11). The Guidelines then provide that *"it may be more efficient if the royalties are agreed before the standard is chosen […], to avoid that the choice of the standard confers a significant degree of market power on one or more essential technologies. On the other hand, licensees must remain free to determine the price of products produced under the licence"* (12).

Standard setting bodies' policies

The issue of ex ante schemes has come into the limelight after developments in a number of standard setting bodies. The European Telecommunications Standardisation Institute (ETSI) adopted a new IPR guide in 2006 which says that *"Without prejudice to ETSI IPR Policy and other sections of this Guide, voluntary, unilateral, public, ex ante disclosures of licensing terms by licensors of Essential IPRs are not prohibited under ETSI Directives. Licensing terms from such disclosures may, in some circumstances, improve transparency for individual Members in considering technologies for inclusion in standards and technical specifications"* (13).

Suggestions have also been made to adopt a scheme of an ex ante fixed royalty cap. In these proposals the total royalty that can be charged for all patents essential to a standard is capped in advance at an overall percentage of the licensee's product revenues. A holder of an essential patent would receive a proportion of the royalty cap in relation to the overall number of his essential patents incorporated in the standard.

This royalty cap approach carries certain risks. The royalty cap in combination with the proportionality rule appears to preclude any price competition, since the price of each essential patent is fixed in advance as a function of the set royalty cap and the number of essential patents included in the standard.

(6) Ibid. para 169.
(7) Ibid, para 173.
(8) Ibid, para 169.
(9) Commission Communication on IPRs and Standardization, COM 92/445, October 22, 1992.
(10) Commission Notice 2004/C 101/02 (OJ C 101, 27.4.004 , p. 2).
(11) Ibid., para 225.
(12) Idem.
(13) ETSI Guide on IPRs, Version endorsed by General Assembly #48 on 22 November 2006, page 15.

VITA, a US standard setting body accredited by the American National Standards Institute, adopted new rules of disclosure of relevant patents and pending patent applications as a precondition to participating in the standard setting activity (14). The policy contains provisions including:

- licensing commitments including maximum royalty rates and most restrictive non-royalty terms that the member company will request when licensing these patents;
- in case where a maximum royalty is specified but other licensing terms are not, members must accept specific limits on grant backs, reciprocal licenses, non-asserts, covenants not to sue or defense of suspension provisions;
- failure to disclose a known essential patent or failure to declare most restrictive licensing terms on a prompt basis leads to a royalty free license of the essential claims of the undisclosed patent;
- finally members agree to binding arbitration by a panel to be drawn from the VITA Board of Directors to resolve any disputes over applications of the patent policy.

The VITA patent policy clearly prohibits negotiations and discussions of specific licensing terms among working group members or with third parties (15). Actual licensing terms still have to be negotiated subject to limitations imposed by the patent holder's declaration of the most restrictive terms. Any use of the declaration process to fix downstream prices of standardised products, or efforts of patent holders to rig their declarations of licensing terms would be illegal.

The American Institute of Electrical and Electronics Engineers Standards Association adopted a policy that included similar elements in early 2007. A notable difference is that it does not require patent holders to publicly commit to their most restrictive licensing terms during the standard setting process. However, as patent holders will compete to offer the most attractive combination of technology and licensing terms they will most likely make such commitments leading (16).

Conclusion

Given the increase in patenting and the number of standards which incorporate protected technologies it has become increasingly clear that standard setting 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 ex ante. This creates an incentive for the patent holder to attempt to extract the ex post rather than the ex ante value of his technology. Specific rules therefore apply to IPR within the context of standardisation organisations from a competition perspective.

There is an important pro-competitive rationale behind requiring disclosure of patents and patent applications in the framework of standard setting before a standard is set. Ex ante disclosure can allow for competition to take place on the basis of both technological merits and price before the standard is agreed. The requirement to declare the most restrictive licensing terms will enable competition among alternative technologies, including those freely available in the public domain, based on licensing terms and technical merit. As a result, companies will likely be encouraged to compete by proposing terms increasing the chances of their proprietary technology to be selected and the adopted standard will be the result of a more informed choice.

Adopting an IPR policy within standards bodies whereby price and other licensing terms are disclosed ex ante can therefore yield pro-competitive benefits, provided that such IPR policies include appropriate safeguards to prevent collective price fixing which would be illegal. When developing IPR policies standard setting organizations should therefore address the question to what extent, if any, ex ante term disclosure is required.

The role of the competition authorities in these 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.

(14) The policy was adopted on January 17, 2007. The US Department of Justice Antitrust Division issued a «Business Review Letter» providing guidance to VITA on October 30, 2006. see http://www.usdoj.gov/atr/public/busreview/219380.htm.

(15) http://www.vita.com/disclosure/VITA%20Patent%20Policy%20section%2010%20draft.pdf.

(16) See IEEE-SA Standards Board Bylaws Section 6 http://standards.ieee.org/guides/bylaws/sect6-7.html#6.