

Benefits of Standards

- Standards are widely acknowledged as vital. They enable interoperability among many products, particularly in the high-technology sector.
- Firms in the information technology and telecom industries frequently face the problem that sometimes hundreds of thousands of inventions need to work together in a single device or network.
- They solve this "interoperability" problem through voluntary consensus-based standard setting organizations (SSOs).

Benefits of Standards

- SSOs create technical standards to ensure that multiple components work together in predictable ways.
- This creates value for consumers by increasing competition, innovation, product quality, and choice.
- Standards lower costs by increasing manufacturing volume.
- Standards increase competition by eliminating switching costs for consumers who want to switch between products manufactured by different companies.
- Standards can increase innovation, efficiency, and consumer choice; foster public health and safety; and serve as building blocks for international trade.

Standards Development

- Standard setting in U.S. is sector-based and market led; private sector involvement is crucial.
- The process by which industry standards are set varies.
- Businesses can work through SSOs to develop standards that all firms (including non-SSO members) can use to manufacture interoperable products.
- Alternatively, "de facto" standards may be set through competition in the marketplace.
 - A business tries to have its technology become the standard technology for the industry.
 - A consortium of companies jointly agree to promote their technology to become an industry standard.
- De facto standardized technology may compete with SSO-standardized technology.

Procompetitive Benefits of Collaborative Standard Setting

- Typically, procompetitive benefits of standard setting outweigh potential anticompetitive effects.
- Procompetitive benefits of standard setting include:
 - interoperability of compatible products;
 - prevention of coordination failures in markets with network effects;
 - enhanced product quality;
 - speeding up new product introduction;
 - development of best processes; and
 - information sharing.

Anticompetitive Concerns Arising From Standard Setting

Although standards are generally beneficial, manipulation of the standard setting process can lead to anticompetitive results:

- anticompetitive collusion among SSO members (e.g., downstream price fixing);
- anticompetitive manipulation of SSO to obtain monopoly power; and
- exercise of monopoly power after manipulation of SSO processes.



Anticompetitive Collusion/Exclusion

Allied Tube (U.S. Supreme Court 1988)

- Involved an SSO conspiracy to exclude a rival technology.
- The Supreme Court affirmed a jury verdict finding that Allied Tube and others had "subverted" the standard-setting process and thereby illegally restrained trade in violation of Section 1 of the Sherman Act.
- The Supreme Court stressed that SSOs cannot validate anticompetitive activities of its members simply by adopting rules that fail to provide safeguards sufficient to prevent the standard-setting process from being biased by members with economic interests in restraining competition.

Patent Hold-up

- Before a standard is set, multiple technologies may compete for inclusion in the standard.
- Once the standard is set, industry begins to make investments tied to the standard.
 - At that time, it may not be feasible to deviate from the standard unless industry participants agree to do so in compatible ways.
- Consequently, after the standard is set, the chosen technology may lack substitutes precisely because it was included in the standard.
- As a result, a SEP owner may have the power to obtain higher royalties, or other more favorable terms, because the standard-setting process eliminated competitive alternatives. This is a form of patent hold-up.

Patent Hold-up

- Hold-up and the threat of patent hold-up can deter innovation by increasing market uncertainty.
- It may also discourage the adoption of standards, leading firms to rely less on the standard-setting process and depriving consumers of the substantial procompetitive benefits of standard setting.
- Hold-up can harm consumers when excess costs are passed on to them.



Mitigating Patent Hold-up

- SSOs can mitigate patent hold-up in two ways:
- First, SSOs can require disclosure of IP rights that may be infringed by a standard in development.
 - This addresses "patent ambush," or the situation when a patent holder does not disclose that technology under consideration is patented, so that it can allege infringement after the standard is set, when implementers must use the patented technology to practice the standard.

Mitigating Patent Hold-up

- Second, SSOs may require their members to commit to license SEPs on "reasonable and non-discriminatory" (RAND) terms.
 - This addresses the potential to seek more favorable licensing terms based only on inclusion of the IP in the standard.
- A RAND commitment may make it easier to adopt a standard.
- The potential for hold-up remains if the RAND commitment is later disregarded because the royalty rate often is negotiated after the standard is adopted.
- For example, an implementer may be found to have breached its RAND commitment by seeking to enjoin implementers from making standards-compliant products, when the implementers are willing to negotiate a RAND rate.

Remedies for Patent Hold-Up

U.S. law provides several ways to address patent hold-up in the standard-setting context:

- Breach of contract
- Fraud
- Patent defenses
 - equitable estoppel/implied waiver
- Antitrust

Antitrust Approach to Patent Hold-Up

- Facts of hold-up cases vary, and the specific facts of each case are important to analysis.
- U.S. antitrust law looks for conduct that harms competition.
- U.S. law does not impose specific disclosure rules.
 - SSOs may choose disclosure rules that best meet the needs of their members.

Dell (FTC 1993)

- SSO asked members to certify whether they had any IP relating to proposed standard.
- Dell certified it had no applicable IP.
- SSO adopted standard relying in part on certifications, and standard became widely adopted in market ("lock in"), creating market power.
- Dell later demanded royalties against companies using standard.
- Dell agreed in settlement with FTC not to enforce its patent against companies using standard.

Rambus (U.S. Court of Appeals 2008)

- SSO had IP disclosure policies that created expectations members would disclose patent information.
- Rambus did not disclose relevant patents and applications while participating in SSO.
- After the standard was finalized and adopted in the market, Rambus sought royalties from manufacturers.
- The FTC found unlawful monopolization and Rambus appealed to federal appeals court, which overturned the FTC's decision:
 - The FTC failed to prove SSO would have adopted a different technology if Rambus had disclosed patent information (Rambus did not obtain a monopoly because of misleading conduct).
 - The court also questioned whether disclosure policy was clear enough to determine Rambus had violated disclosure obligations (conduct was not misleading).

Motorola Mobility/Google (FTC 2013)

- The FTC alleged that Google reneged on its FRAND commitments by seeking or threatening to seek injunctions against companies who were "willing licensees."
- The FTC's final order prohibited Google from seeking injunctive relief unless it takes a series of steps including:
 - (1) providing a potential licensee with a written offer containing all of the material license terms necessary to license its SEPs; and
 - (2) providing the potential licensee with an offer of binding arbitration to determine the terms of a license.

Motorola Mobility/Google (cont.)

- The FTC's order also provided potential licensees with a voluntary negotiation framework that they could opt into to negotiate license terms.
- The order identified circumstances when Google would be allowed to seek injunctive relief, such as when the potential licensee:
 - is not subject to jurisdiction in the United States, or
 - refuses to agree to terms set by a court or in binding arbitration (i.e., the licensee is an "unwilling licensee").

The Availability of Injunctive Relief

- In *Apple v. Motorola*, the U.S. Court of Appeals for the Federal Circuit held that the issue of whether to grant injunctive relief on a FRAND-encumbered SEP is governed by the U.S. Supreme Court's 2006 decision in *eBay v. MercExchange*.
- Under *eBay*, a patent holder must satisfy four factors in order to obtain an injunction:
 - "(1) that it has suffered an irreparable injury;
 - (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury;
 - (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and
 - (4) that the public interest would not be disserved by [an] injunction."

The Availability of Injunctive Relief (cont.)

The court in Apple v. Motorola further stated that:

- FRAND licensing commitments "strongly suggest" that money damages are adequate to fully compensate the SEP holder for any infringement.
- "A patentee subject to FRAND commitments may have difficulty establishing irreparable harm"; however, the court declined to adopt a per se rule that injunctions are unavailable for SEPs.
- "[A]n injunction may be justified where an infringer unilaterally refuses a FRAND royalty or unreasonably delays negotiations to the same effect."

Lastly, the court acknowledged the public's interest "in encouraging participation in standard-setting organizations but also in ensuring that SEPs are not overvalued."

Conclusion

- Standard setting is generally efficiency enhancing and beneficial to consumers.
- Problems may arise when anticompetitive behavior connected to an SSO allows for anticompetitive collusion, excludes competing technologies or products, or allows a firm to achieve monopoly power through lock-in of users of a standard after it is adopted.
- Anticompetitive behavior is rare and public officials should not routinely second guess SSO decisions or SSOrelated business activities.

Resources

- FTC Decision and Order in *Dell*, http://www.ftc.gov/system/files/documents/cases/960617delldo.pdf.
- Rambus Inc. v. FTC, 522 F.3d 456 (D.C. Cir. 2008).
- FTC Decision and Order in *Motorola Mobility/Google*, http://www.ftc.gov/sites/default/files/documents/cases/2013/07/130724google motorolado.pdf.
- Chairwoman Edith Ramirez, "Standard-Essential Patents and Licensing: An Antitrust Enforcement Perspective," 8th Annual Global Antitrust Enforcement Symposium, Georgetown University Law Center (Sept. 10, 2014), http://www.ftc.gov/system/files/documents/public_statements/582451/140915 georgetownlaw.pdf.
- Koren W. Wong-Ervin, "Standard-Essential Patents: The International Landscape," PUBLIC DOMAIN (Spring 2014), http://www.ftc.gov/system/files/attachments/key-speeches-presentations/standard-essential_patents_the_intl_landscape.pdf.