

Morgan Lewis

Standards Setting, Patent Pools and Antitrust Laws

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Shanghai, 28 August 2007

Topics for Discussion

- Standards Setting
- Patent Pools
- Antitrust Laws
- Government Review of Patent Pools



Standards Setting

Standards Setting

- Many examples of technology standards
 - Communications - GSM, CDMA, TDCDMA, 3GPP
 - Audio/video - JPEG, TIFF, MPEG
 - Interconnects – USB, PCI Bus
 - Memory
 - Media – CDR/RW
 - Protocols

Standards Setting - Benefits

- Benefits:
 - Helps adoption of new technologies by imposing uniformity in function and implementation
 - Lowers technological entry barriers for a company entering the market since product features are identified in the Standard
 - Compatibility among products of different manufacturers adhering to a Standard helps consumer acceptance of new products

Standards Setting - Concerns

Antitrust concerns and risks

- Raises entry barriers for products that do not conform to the Standard or that are alternatives to the technology found in the Standard
- Creates market power for firms that control relevant technology and have IPR covering the Standard
- May stifle innovation and incentive to improve on the technology provided by the Standard

Standards Setting - General

- Standard Setting Organization (SSO) organized to
 - Maximize openness of technology discussions
 - Provide for consensus in determining the Standards
 - Limit one firm's ability to control a group working on the Standard
- Manipulation of process can lead to antitrust liability
- A participant's withholding of IPR information from an SSO can be sanctioned under antitrust laws and by the Federal Trade Commission (FTC)

Essential Patents Defined

- Essential Patents
 - A patent is Essential if it would be impossible to implement a Standard without making use of the patent.
 - European Telecommunications Standards Institute (ETSI) Definition: “Essential as applied to IPR means it is not possible on technical (but not commercial) grounds, taking into account normal technical practice and the state of the art generally available at the time of standardization, to make, sell, lease, otherwise dispose of, repair, use or operate EQUIPMENT or METHODS which comply with a STANDARD without infringing that IPR.”

Determination of Essentiality

- How is a patent determined to be Essential?
 - Preferred method is to have an independent reviewer consider the Standard and the claims of a patent alleged to cover a part of the Standard
 - CDR/RW - Patent attorney in NYC is retained to make determination
 - Independent? – paid by company with alleged Essential patent
 - Consensus? – evaluation is not public

Determination of Essentiality

- There is not always a review in the process of designating a patent as Essential
 - ETSI permits patent holder to file a mere declaration that a patent is Essential
 - Can be at application stage – but claims can be narrowed during prosecution
 - No review or comment on the declaration

Obligation to License Essential Patents

- In Europe – FRAND
 - Fair, Reasonable And Non-Discriminatory
- In USA – RAND
 - Reasonable And Non-Discriminatory
- Reasonable and Non-Discriminatory are broad principles over which parties can disagree with ultimate determination being made in the courts

What is Reasonable?

- Patent Owner A
 - Large patent portfolio of Essential patents
 - Has licensed the portfolio to other companies in royalty range of 1.2% to 1.4% of NSP
 - Most favored licensee obligations exist
 - Reasonable rate is 1.2%?
- Unlicensed Manufacturer
 - Has Essential Patent Licenses with companies B, C, and D
 - Each company also has a large Essential patent portfolio
 - Rates paid to B, C, and D are 0.5% to 0.8%
 - Reasonable rate is 0.8%?

Litigating Essential Patents

- Good jury appeal – If it is Essential then must be an important patent
 - What if merely declared Essential by patent owner?
 - What if evaluator is biased to find patents Essential?
 - Is a manufacturer's admission that a product complies with a Standard proof of infringement of an Essential patent covering the Standard?
- If Essential patent held to be infringed, no right to injunction because of obligation to license
 - Can patent holder seek exclusion order at ITC?
 - Essential patent holder may pursue injunction by including non-essential patent in litigation

Standards Setting Obligation to Identify Relevant IPR

Recommendation 5: Patent Restatements Due by June 5, 1989

All Proposers of any Part of the JPEG algorithm being considered for Standardization, must attempt to identify any Patents which Proposer believes would apply to his/her proposed Part of the JPEG algorithm. (This does not include Patents which, in the Proposer's opinion, are only related, but do not apply, to the Part he/she is proposing). If any such Patents are identified, the Proposer must obtain from the Patent Holder(s) a Statement of whether they will follow the ISO requirements. All of this information must be sent to JPEG Chairman by June 5, 1989.

FTC Standards Setting Cases- Dell

- Dell failed to disclose a relevant patent to Video Electronics Standards Association (VESA) at time of determining the Standard
- FTC claimed Dell representative signed statement providing that proposed VESA standard would not infringe Dell IP
- After VESA Standard was adopted Dell asserted its IP
- 1996 FTC Consent Decree - Dell agreed not to enforce patent rights for 10 years.

FTC Standards Setting Cases - Rambus

- JEDEC adopted SDRAM and DDR SRAM technology standards without knowledge that Rambus was pursuing patents on the technology
- FTC claimed Rambus failed to disclose patents and applications for technology within Standards
- FTC charged Rambus with (1) acquisition of monopoly power, (2) attempted monopolization, and (3) restraint of trade

FTC Standards Setting Cases - Rambus

- Administrative Law Judge (ALJ) finds monopoly power but no liability:
 - Rambus did not violate JEDEC disclosure policy
 - Neither JEDEC nor its members were misled by Rambus
 - No anticompetitive effects
- Appealed to Federal Trade Commission
 - ALJ findings overruled, Rambus illegally monopolized and practiced deception in obtaining patents on technology it proposed to JEDEC
 - FTC severely curtailed right of Rambus to collect royalties



Patent Pools

Patent Pool Defined

- Group of patents licensed from two or more companies agreeing to jointly license patents relating to particular technology
 - Licensing agent may be either a new party responsible for licensing pooled patents or one of the patent holders
- Patent Pool of Essential Patent vs. Rival Patents
 - Pool should include patents on complementary technology
 - Pool should not include patents on competitive technologies

History of Patent Pools

- Sewing Machine Combination
 - Walter Hunt built America's first sewing machine in 1834, but declined to patent fearing it would cause unemployment
 - Elias Howe received sewing patent in 1846, and sued others for using his invention
 - Isaac Singer patents improvement to designs by others
 - Through the 1850s, a substantial number of patents were issued relating to sewing machines
 - Companies started to sue each other over sewing machine patents
 - In 1856, the Sewing Machine Combination was formed from four companies: Signer, Howe, Wheeler and Wilson, and Grover and Baker
 - Combination lasted until 1877, when the last of the patents in pool expired

History of Patent Pools

- Motion Picture Patents Company (MPPC)
 - Early days of motion picture technology were chaotic with patent wars and litigation
 - In 1908, the Edison Film Manufacturing company, the Biograph company, and other members agreed to pool their patents together
 - MPPC obtained a monopoly on the industry, and sought license fees from producers, distributors, and exhibitors
 - Antitrust charges from independent film companies ultimately dissolved the MPPC

Patent Pools Overcome Problems

- Blocking Patents - multiple patents that are indispensable to make a product
- Stacking Licenses – multiple licenses required because several companies own patents essential to the product

Patent Pool - Benefits

- One stop source of license for patents owned by different entities
- Reduces likelihood of litigation since key patents are bundled in same license
- Distribution of risk and rewards for patent owners
- Encourages others to use and improve the technology



- “By balancing patent users’ interest in reasonable access with patent owners’ interest in reasonable return, MPEG LA creates the opportunity for adoption of new technologies and fuels innovation. Today MPEG LA clears patent thickets in licensing programs consisting of essential patents in 57 countries (<http://www.mpegla.com>).”

Patent Pools - Criticism

- Encourages monopoly pricing - inclusion of competitive technologies lessens competition
- Shields invalid patents - less likely to be challenged
- May lead to royalty payments for minor improvement patents that could be designed around after key patents expire



US Antitrust Principles

Antitrust Laws

- Principles of US Antitrust Laws
 - Protects competition, not competitors
 - Monopoly itself is not illegal
 - Monopoly gained through legitimate exercise of IP rights is not illegal
 - Sellers/Licensors may charge whatever the market will bear

Antitrust vs. Patent Law

- 1970s
 - DOJ issued list of nine illegal patent licensing practices (known as the “Nine No-Nos”)
 - (1) tying the purchase of unpatented materials as a condition of the license,
 - (2) requiring the licensee to assign back subsequent patents,
 - (3) restricting the right of the purchaser of the product in the resale of the product,
 - (4) restricting the licensee's ability to deal in products outside the scope of the patent,

Bruce B.
Wilson
Deputy
Assistant
Attorney
General
Before an
Antitrust
Conference on
Nov. 6, 1970

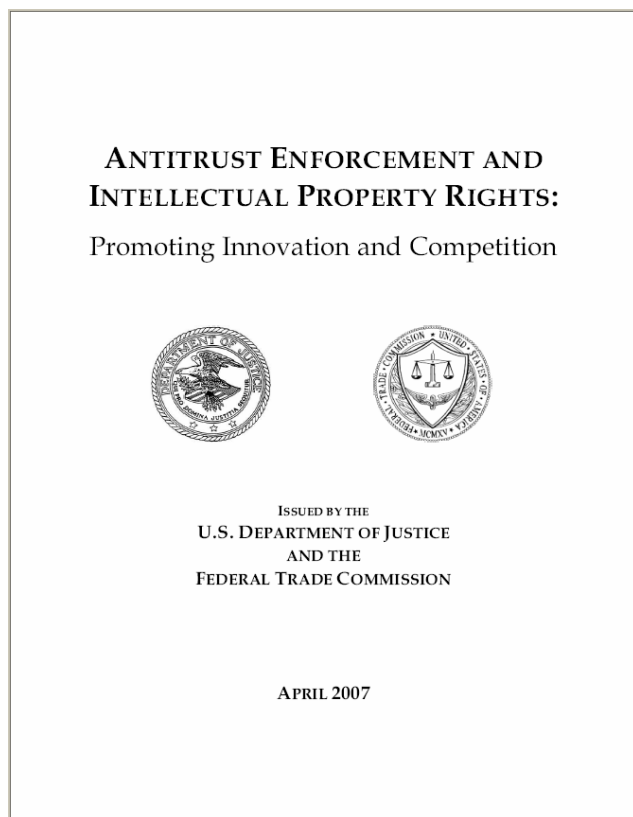
Antitrust vs. Patent Law

- (5) a licensor's agreement not to grant further licenses,
- (6) mandatory package licenses,
- (7) royalty provisions not reasonably related to the licensee's sales,
- (8) restrictions on a licensee's use of a product made by a patented process, and
- (9) minimum resale price provisions for the licensed products.

Antitrust vs. Patent Law

- More recently
 - DOJ and FTC recognize significant benefits to patent pools
 - In April of 1995 DOJ and FTC issue Antitrust Guidelines for the Licensing of Intellectual Property
 - In April of 2007, DOJ and FTC issue Antitrust Enforcement and Intellectual Property Rights: Promoting Innovation and Competition

Antitrust vs. Patent Law



- Chapter 3 cites “Efficiencies” in patent pools
 - “Patent pools also help to **mitigate the ‘hold up’ and ‘hold out’** problems that can sometimes stymie industry efforts to make a product that conforms to an industry standard”
 - “[P]atent pools can reduce transaction costs for licensees in several ways”:
 - “obtaining a pool license may be **less costly than negotiating separate licenses** with each patent owner”,
 - “patent pool members can offer **‘one-stop shopping’**”, and
 - “this simplified approach to licensing can enable more **rapid development and adoption of new technologies**”



Government Review of Patent Pools

28 August 2007

Morgan Lewis

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Government Review of Pools

DOJ believes that patent pools complying with guidelines are pro-competitive

- 1) Integrate complementary technologies
- 2) Reduce licensing costs
- 3) Clear blocking patents
- 4) Avoid costly infringement litigation, and
- 5) Promote adoption of technology

Government Review of Pools

- Anticompetitive aspects of patent pools
 - 1) unlicensed manufacturers cannot effectively compete in the relevant market for a product incorporating the Essential technologies,
 - 2) pool participants collectively possess market power in the relevant market, and
 - 3) limitations on who may join a pool may not be reasonably related to the efficient development and exploitation of the pooled technologies

Government Review of Pools

- DOJ issues Review Letters providing non-binding comments and enforcement intention on potential patent pools.
- Typical comments in Review letters:
 - 1) Patents in pool must be valid and not expired
 - 2) Pool should not encompass competitive technologies

Government Review of Pools

- Further DOJ comments in Review Letters on patent pools
 - 3) an independent expert should be used to determine whether a patent is essential to complement technologies in the pool
 - 4) the pool agreement must not disadvantage competitors in downstream product market, and
 - 5) the pool participants must not collude on prices outside the scope of the pool, e.g., on downstream products

Government Review of Pools

- Specific areas of concern expressed in April 2007 DOJ and FTC “Promoting Innovation and Competition”
 - 1) Including substitute technology within a Patent Pool
 - 2) Exclusive and Nonexclusive Licensing
 - 3) Grantback scope beyond scope of original license
 - 4) Sharing of confidential market and production information
 - 5) Amount of royalty charged for the pool’s patents
 - 6) Requests for the Partial-Pool Licenses

Government Review of Pools

- Distilled to generally two questions
 - 1) Is the proposed licensing program likely to integrate complementary patent rights?
 - 2) if so, will the resulting competitive benefits outweigh the competitive harm posed by other aspects of the program?

MPEG-2 Consortium Review

- MPEG: Initially 9 patent holders; 27 Essential patents
- Only patents “essential” to implementing the MPEG-2 standard
- Independent expert reviews patents for inclusion or retention in the pool portfolio
- Same terms offered to any party requesting a license
- Any person may submit a patent for consideration as Essential
- Patents may be licensed independently from pool members



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June 26, 1997

VIA FAX

Gerrard R. Beeney, Esq.
Sullivan & Cromwell
125 Broad Street
New York, NY 10004-2498

Dear Mr. Beeney:

This is in response to your request on behalf of the Trustees of Columbia University, Fujitsu Limited, General Instrument Corp., Lucent Technologies Inc., Matsushita Electric Industrial Co., Ltd., Mitsubishi Electric Corp., Philips Electronics N.V., Scientific-Atlanta, Inc., and Sony Corp. (collectively the "Licensors"), Cable Television Laboratories, Inc. ("CableLabs"), MPEG LA, L.L.C. ("MPEG LA"), and their affiliates for the issuance of a business review letter pursuant to the Department of Justice's Business Review Procedure, 28 C.F.R. § 50.6. You have requested a statement of the Department of Justice's antitrust enforcement intentions with respect to a proposed arrangement pursuant to which MPEG LA will offer a package license under the Licensors' patents that are essential to compliance with the MPEG-2 compression technology standard, and distribute royalty income among the Licensors.

I. The Proposed Arrangement

A. The MPEG-2 Standard

The MPEG-2 standard has been approved as an international standard by the Motion Picture Experts Group of the International Organization for Standards (ISO) and the International Electrotechnical Commission (IEC) and by the International Telecommunication Union Telecommunication Standardization Sector

MPEG-2 Review Letter - June 26 1997

- Business review letter pursuant to the Department of Justice's Business Review Procedure, 28 C.F.R. § 50.6
- "...enforcement intentions with respect to..."
- "...package license under the Licensor's patents that are essential to compliance with the MPEG-2 compression technology standard..."

3C DVD Consortium Review

- 3 Company Agreement
 - Philips, Sony, and Pioneer
 - Philips is the licensing agent
- Only patents essential to implementing DVD standard
- Company designates evaluator to review for essentiality
- No obligation to put essential patent into the pool
- Royalty on negotiated basis
- Grantback provision limited to licensee's Essential patents



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December 16, 1998

VIA FAX

Garrard R. Beeney, Esq.
Sullivan & Cromwell
125 Broad Street
New York, New York 10004-2498

Dear Mr. Beeney:

This letter is in response to your request on behalf of Koninklijke Philips Electronics, N.V. ("Philips"), Sony Corporation of Japan ("Sony") and Pioneer Electronic Corporation of Japan ("Pioneer") for the issuance of a business review letter pursuant to the Department of Justice's Business Review Procedure, 28 C.F.R. § 50.6. You have requested a statement of the Department of Justice's antitrust enforcement intentions with respect to a proposed arrangement pursuant to which Philips will assemble and offer a package license under the patents of Philips, Sony and Pioneer (collectively, the "Licensors") that are "essential," as defined below, to manufacturing Digital Versatile Discs (DVDs) and players in compliance with the DVD-ROM and DVD-Video formats, and will distribute royalty income among the Licensors.

I. The DVD-ROM and DVD-Video Formats

The Standard Specifications for the DVD-ROM and DVD-Video formats describe the physical and technical parameters for DVDs for read-only-memory and video applications, respectively, and "rules, conditions and mechanisms" for player units for the two formats.¹ In

¹DVD Specifications for Read-Only Disc (the "Standard Specifications"), Part 3: Video Specifications, Version 1.1 (December 1997), § 3.3.1. You have attached the Standard Specifications as Exhibit A to your letter. DVD-Video, which is described in Part 3 of the

3C DVD Review Letter - December 16, 1998

- Business review letter pursuant to the Department of Justice's Business Review Procedure, 28 C.F.R. § 50.6
- "...enforcement intentions with respect to..."
- "...package license under the patents of Philips, Sony and Pioneer (collectively, the 'Licensors') that are 'essential'..."

6C DVD Consortium Review

- 6 Company Agreement
 - Hitachi, Matsushita, Mitsubishi, Time Warner, Toshiba, and Victor Company
 - Toshiba is the licensing agent
- Only patents essential to implementing DVD standard
- Every four years a review of patents by patent expert to confirm essentiality
- Royalties on per-patent basis, with some adjustment for age of patent
- Grantback provision limited to licensee's Essential patents



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June 10, 1999

VIA FAX

Carey R. Ramos, Esq.
Paul, Weiss, Rifkind, Wharton & Garrison
1285 Avenue of the Americas
New York, New York 10019-6064

Dear Mr. Ramos:

This letter is in response to your request on behalf of Hitachi, Ltd., Matsushita Electric Industrial Co., Ltd., Mitsubishi Electric Corporation, Time Warner Inc., Toshiba Corporation, and Victor Company of Japan, Ltd. (collectively, the "Licensors"), for the issuance of a business review letter pursuant to the Department of Justice's Business Review Procedure, 28 C.F.R. § 50.6. You have requested a statement of the Department of Justice's antitrust enforcement intentions with respect to a proposed arrangement pursuant to which Toshiba will assemble and offer a package license under the Licensors' patents that are "essential," as defined below, to manufacturing products in compliance with the DVD-ROM and DVD-Video formats and will distribute royalty income to the other Licensors.

I. The DVD-ROM and DVD-Video Formats

The Standard Specifications for the DVD-ROM and DVD-Video formats describe the physical and technical parameters for DVDs for read-only-memory and video applications, respectively, and "rules, conditions and mechanisms" for player units for the two formats.¹ In

¹DVD Specifications for Read-Only Disc (the "Standard Specifications"), Part 3: Video Specifications, Version 1.1 (December 1997), § 3.3.1. DVD-Video, which is described in Part 3

6C DVD Review Letter - June 10, 1999

- Business review letter pursuant to the Department of Justice's Business Review Procedure, 28 C.F.R. § 50.6
- "...enforcement intentions with respect to..."
- "package license under the Licensors' patents that are 'essential', as defined below, to manufacturing products in compliance with the DVD-ROM and DVD-Video formats..."

3G Wireless Consortium Review

- Five separate patent platforms, with separate control over royalty rates
- Common evaluation service provider (ESP) operates process for retaining experts and evaluating patents for essentiality
- Platform Company can opt out of ESP after one year, but must adopt comparable process to ensure independence of evaluations
- Only essential patents integrated
- Approved by DOJ and EC Nov. 2002
- Approved by JFTC Dec. 2000

3G Wireless Review Letter - November 12, 2002



DEPARTMENT OF JUSTICE
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November 12, 2002

Ky P. Ewing, Esq.
Vinson & Elkins L.L.P.
1455 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-1008

Dear Mr. Ewing:

This letter responds to your request on behalf of the 3G Patent Platform Partnership ("Partnership") for the issuance of a business review letter pursuant to the Department of Justice's Business Review Procedure, 28 C.F.R. § 50.6. You have requested a statement of the Department's antitrust enforcement intentions with respect to a proposed evaluation and licensing regime, called the 3G Patent Platform for Third Generation Mobile Communication Systems (the "Platform").¹ On May 28, 2002, in response to competitive concerns about the Platform structure originally proposed, your firm submitted revised documents on behalf of the Partnership substantially modifying the original Platform proposal.² The analysis and

¹ Letter from Ky P. Ewing, Jr. to Joel I. Klein, December 14, 1999 ("December 14 Letter").

² Letter from Ky P. Ewing to Carl Willner, May 28, 2002 ("May 28 Letter"), with attached "3G Patent Platform for Third Generation Mobile Communication Systems Definition, Function, Structure, Operation, Governance," Version 7.2 (May 28, 2002) ("Platform Specification") and Annexes, and draft "Memorandum and Articles of Association" for PlatformCo (April 22, 2002) and ManCo (May 20, 2002). PlatformCo is the generic name for several entities that would be established with licensing-related responsibilities for essential patents concerning specific 3G technologies, while ManCo is an entity that would be established to oversee certain defined common functions related to 3G patents such as evaluation of essentiality. According to Annex G to the Platform Specification, the current members of the partnership are nineteen companies headquartered in Europe and Asia, including Alcatel, Bosch, Cegetel, the Electronics and Telecommunications Research Institute (of Korea) (ETRI), France Telecom, Fujitsu, KPN, Korea Telecom, LG Telecom, Matsushita Electric Industrial Co., Ltd., Mitsubishi Electronic Corp., NEC, NTT DoCoMo, Samsung Electronics, Siemens, SK Telecom, Sonera, Sony Corp., and Telecom Italia Mobile. The current members include wireless system operators and telecommunications equipment manufacturers. Although several North American firms claim to hold essential 3G patents, no North American

- Business review letter pursuant to the Department of Justice's Business Review Procedure, 28 C.F.R. § 50.6
- "...enforcement intentions with respect to..."
- "licensing regime, called the 3G Patent Platform for Third Generation Mobile Communication Systems (the 'Platform')."

Conclusions

- Technology Standards will become more common to facilitate global products
- Regulatory scrutiny of new patent pools will become more intense
- Many more companies, including Chinese companies, will actively participate in Standard Setting Organizations

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