Morgan Lewis

IP ISSUES WITH EMERGING AUTOMOTIVE AND MOBILITY TECHNOLOGIES

PART OF THE 2019 TECHNOLOGY MAY-RATHON AND THE 2019 AUTOMOTIVE HOUR SERIES

May 29, 2019

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Morgan Lewis Automotive Hour Webinar Series

Series of automotive industry focused webinars led by members of the Morgan Lewis global automotive team. The 10-part 2019 program is designed to provide a comprehensive overview on a variety of topics related to clients in the automotive industry. Upcoming sessions:

JUNE 12 | Distribution of Vehicles in the United States and the Impact of State Law

SEPTEMBER 18 | Venture Investing in the Automotive and Mobility Space

OCTOBER 16 | Workforce Change in the Auto Industry: Takeaways From Three Case Studies

NOVEMBER 13 | Joint Ventures and Alliance Issues in the Automotive Space

DECEMBER 11 | Privacy Considerations and the Use of Collected Data

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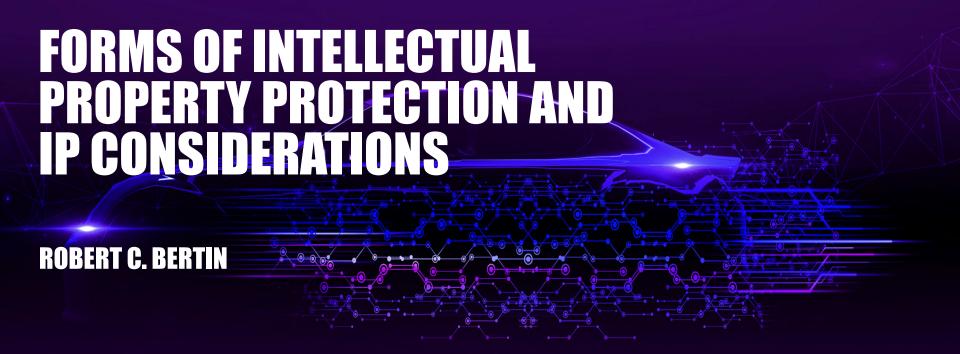
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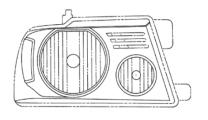


Patents

- US Patents provide a right to exclude others from making, using, selling, offering for sale, or importing protected inventions
- Utility Patents 20 years from filing
 - Utility cover new articles of manufacture, machine, chemical composition or process
 - Examples: Lidar for autonomous vehicles, infotainment systems, battery technology
 - David Hall, inventor of 3D Lidar, recent inventor of the year. He has over 30 patents and his company Velodyne Lidar Inc. supplies many manufacturers with Lidar sensors
 - US Patent No. 7.969,558 upheld at the US Patent Trial and Appeal Board on May 23, 2019
- Design Patents 15 years from filing
 - Cover ornamental designs on articles
 - Designs on shape of cars and car parts, user interfaces such as infotainment displays
 - Recent litigation surrounding the use design patents to cover the shape of car parts
 - Automotive Body Parts Association ("ABPA") v. Ford Global Technologies, LLC, Case No. 2:15-cv-10137 (E.D. Mich. Feb. 20, 2018)

Patents

 Autobody Parts Association brought a declaratory judgment action against Ford on behalf of its members. Ford brought infringement suits on F-150 auto body parts against members of the ABPA:





- ABPA argued that there is no design patent protection for functional shapes and that autobody parts are always functional.
- The Court disagreed, finding the look of a vehicle matters, and protection with design patents is appropriate.

Trademarks and Trade Dress

- A **trademark** is a <u>word</u>, <u>phrase</u>, <u>design</u>, <u>sound</u>, <u>color</u>, <u>shape</u>, <u>scent</u>, etc., or <u>combination</u> (not all countries recognize all these forms), which is used in trade with goods to <u>indicate the source</u> of the goods and to distinguish them from the goods of others.
 - In 1985 there were about 75,000 names trademarked in the automotive space.
 - Today there are 800,000.
 - Can be difficult to find a name and localize it in markets around the world.
- A **trade dress** is similar to a trademark except that it protects a product's physical appearance, including its size, shape, color, design, and texture
 - Trade dress applies to the shape and appearance of vehicles.
 - Land Rover has sought trade dress protection for the Land Rover Defender.
 - Billionaire Ineos founder Jim Ratcliff is building a "Defender" inspired vehicle

Trade Secrets and UTSA

- Uniform Trade Secrets Act (UTSA) Adopted in every state except NY
- Under UTSA, "Trade secret" means information, including a formula, pattern, compilation, program device, method, technique, or process, that:
 - derives independent economic value, actual or potential, from not being generally know to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and
 - is the subject of efforts that are reasonable under the circumstances to maintain its secrecy
- Trade secrets can potentially be used to protect confidential business plans, technologies, software source code, schematics, etc.
- Mobility of employees can create trade secret issues when an employee goes from one automotive company to another
 - Zenimax v. Facebook (\$600 million verdict)
 - Waymo v. Uber
 - Tesla v. Zoox

Trade Secrets and UTSA

- Waymo v. Uber (N.D. California, Judge Alsup)
- Allegations that Uber, the worldwide ride sharing company, conspired with Anthony Levandowski to steal trade secrets from Waymo (Lidar, software)
- Levandowski worked on Google's autonomous car team until January 2016 at which point he left to start his own company, Otto, acquired by Uber in late July 2016.
- During the four days of trial, Waymo presented evidence that Levandowski downloaded 14,000 files of Google data just before he left the company.
- Google was seeking \$2.7 but settled during trial for about \$234 million in a stock transaction (0.34% of Uber).

Trade Secrets and UTSA

- *Tesla v. Zoox* (N.D. California, Judge Alsup)
 - Four former Tesla employees are alleged to have left Tesla to join Zoox, with trade secret information on software and operating procedures for inventory control and distribution
 - One employee is alleged to have emailed documents to his personal email account before leaving Telsa with the statement "you sly dog you" and another emailed himself Tesla documents with the subject line "good stuff"
 - Another of the employee is alleged to have emailed a document with portions copied from Tesla and bearing a Zoox logo to a former Telsa employee's email address
- The counts include trade secret misappropriation against Zoox and the employees and breach of contract against the employees
- Filed March 20, 2019, US District Court for the Northern District of CA

Copyrights

- "Copyright protection subsists, in accordance with this title, in <u>original</u> works of authorship <u>fixed</u> in any <u>tangible medium</u> of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device."
- Copyrights do NOT cover useful works
- "Bundle" of Exclusive Rights of Copyright Owner
 - Reproduction (Copies)
 - Create Derivative Works
 - Distribution
 - Publicly Display or Performance
- Inexpensive and easy to obtain
- Copyrights cover software, pictorial and sculptural works.
- Digital Millenium Copyright Act Protects automotive software and circumvention of protections.
- Computer Fraud and Abuse act also protects automotive software from hacking
- Right to repair is a countervailing trend in conflict to some extent with DMCA

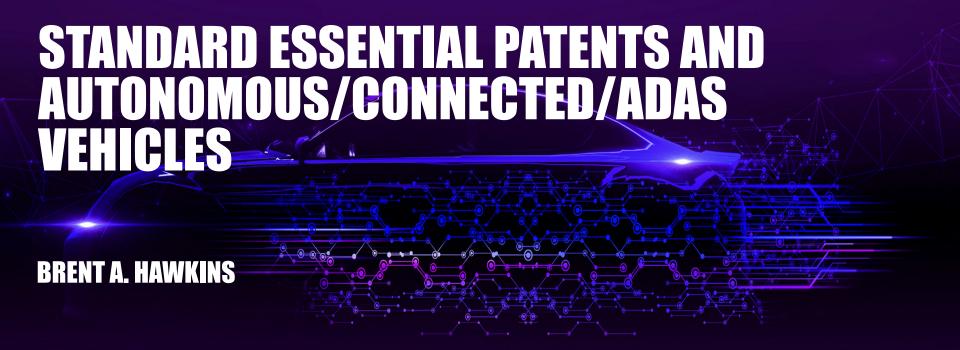


- Most major automotive players have planted research capabilities in Silicon Valley to take advantage of local, high tech talent
- More trade secret litigation as employees change companies
 - Waymo v. Uber
 - Tesla v. Zoox
- More patent litigation as additional electric and autonomous vehicles come onto the market

- Patent Filings on Electification of Vehicles are way up
- First patent pools are starting to appear in the automotive space
 - Avanci, LLC offering first patent pool on connected cars.
 - BMW, and recently Audi, Porsche reportedly licensees
 - Pools offer aggregated sets of patents for a single price
 - Generally must be tied to a standard to pass antitrust scrutiny
- Wireless players are seeking to sell patent licenses to automotive players
 - Nokia v. Daimler patent licensing dispute at European Commission
 - Raises SEP issues

- Licensing of technology from software vendors to established players
 - Microsoft, Google
 - Infotainment systems and connected cars
- License On Transfer for Patents
 - Google led program
 - Ford, GM, Honda members
 - Seeks limit disruptive aspects of patents when transferred from one company to another

- Use of Trade Dress / Trademark to protect shapes of vehicles that are too old to protect with patents
 - Land Rover Discovery Case
- Use of Design Patents to protect newer shapes and car parts



The Anatomy of Autonomous and Connected Vehicles

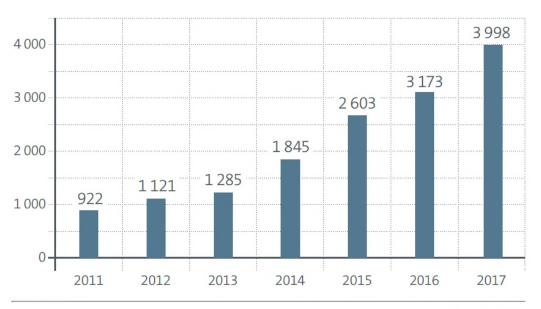


- Central Computer
- V2V/V2X Communication
- Infotainment
- Global Positioning System (GPS)
- Cameras (Video)
- Light Detection and Ranging (LIDAR)
- Sensors (Hardware/Software)
- Ultrasonic Sensors
- Aftermarket Repair
- Battery Storage

 $Source: \ https://cbi-blog.s3.amazonaws.com/blog/wp-content/uploads/2016/05/1-unbundling-car.png$

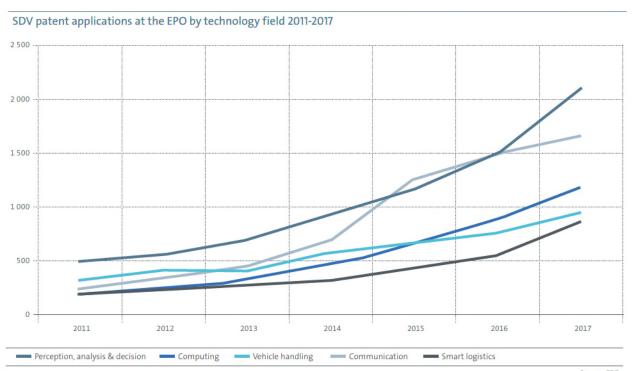
Autonomous and Connected Vehicle Patent Applications

SDV patent applications at the EPO 2011-2017

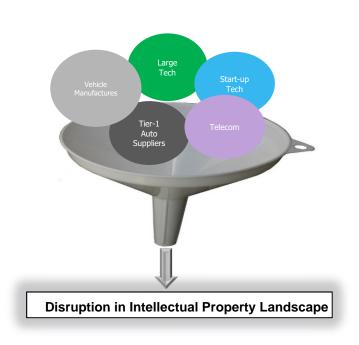


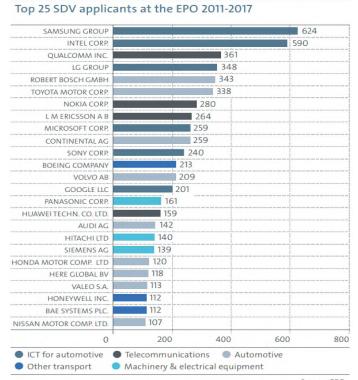
Source: EPO

Autonomous and Connected Vehicle Patent Applications



Intellectual Property Landscape for Autonomous and Connected Vehicles





Source: EPO

Standards: autonomous and connected vehicles



FRAND and the automotive value chain

Fair, Reasonable and Non-Discriminatory

"YOU KEEP USING THAT WORD. I DO NOT THINK IT MEANS WHAT YOU THINK IT MEANS." - Inigo Montoya, "The Princess Bride"

TCL v. Ericsson: Fair and Reasonable

(Case Nos. SACV 14-341; CV 15-2370)

UNITED STATES DISTRICT COURT CENTRAL DISTRICT OF CALIFORNIA

TCL COMMUNICATION TECHNOLOGY HOLDINGS, LTD., et al..

Plaintiffs/Counterclaim-Defendants,

v.

TELEFONAKTIEBOLAGET LM ERICSSON, et al.,

Defendants/Counterclaim-Plaintiffs,

ERICSSON INC., et al., Plaintiffs/Counterclaim-Defendants.

V.

TCL COMMUNICATION TECHNOLOGY HOLDINGS, LTD., et al.,

Defendants/Counterclaim-Plaintiffs.

Amended

Memorandum of Findings of Fact and Conclusions of Law (PUBLIC REDACTED VERSION)

CASE NO: SACV 14-341 JVS(DFMx)

CASE NO: CV 15-2370 JVS(DFMx)



Total Aggregate Royalty

× Ericsson's Proportional Share of the Total Aggregate Royalty
= Ericsson's Royalty Rate

Ericsson's proportional share can be further broken down as:

 $\frac{\textit{Proportional Share}}{\textit{Total Number of SEPs owned by Licensor}}$

Throughout this section, the Court refers to the number of unexpired SEPs owned by Ericsson as the numerator, and the total number of SEPs as the denominator. As explained below, because Ericsson's SEP portfolio is weaker in some countries than others, the Court also had to apply a regional strength ratio. The full top down formula used by the Court can be expressed as:

 $Ericsson's \ Royalty \ Rate = \\ Total \ Aggregate \ Royalty \times \left(\frac{Number \ of \ unexpired \ SEPs \ owned \ by \ Licensor}{Total \ Number \ of \ SEPs \ in \ the \ Standard}\right) \times \underbrace{Regional \ Strength \ Ratio}_{Ratio}$

"Top Down" FRAND Rate Model for SEPs

Licensor	Value Share Rate		
1	A%	a	
2	В%	b	
3	C%	С	
4	D%	d	
5	E%	e	
6	F%	f	
7	G%	g	
Total	100% Maximum Royalty Burde		

TCL v. Ericsson: Non-discrimination Obligation (Case Nos. SACV 14-341; CV 15-2370)

UNITED STATES DISTRICT COURT

TCL COMMUNICATION TECHNOLOGY HOLDINGS, LTD et al...

CENTRAL DIST

v.

TELEFONAKTIEBOLAGET LM ERICSSON, et al.,

Defendants/Counterclaim-Plainti

v.

ERICSSON INC., et al.,

TCL COMMUNICATION TECHNOLOGY HOLDINGS, LTD., et al ..

Defendants/Counterclaim-Plaintiffs.

Amended

Memorandum of Findings of Fact and Conclusions (PUBLIC REDACTED VERSION)

The Court concludes there is no single rate that is necessarily FRAND, and different rates offered to different licensees may well be FRAND given the economics of the specific license. (Id.) Based on the drafting history of ETSI's Plaintiffs/Counterclaim-Defendar IPR Policy, Dr. Huber concluded that "the drafters did not intend 'non-discriminatory' to ensure the exact same treatment or identical license terms for all licensees to the same portfolio of essential patents." (Id. ¶ 44.) Significantly, Dr. Huber was the only legal expert with experience in and an understanding of the ETSI standards process to opine on the meaning of non-Plaintiffs/Counterclaim-Defendants, discrimination, It necessarily follows that TCL cannot claim that anything other than the nominally lowest rate in marketplace is *per se* discriminatory.

> Ericsson's use of floors in its rates is itself discriminatory. In the absence of a credible showing that Ericsson's SEPs add a measurable incremental value, there is no basis for essentially discriminating on the basis of the average selling price where a floor would result in a higher effective rate for lower priced phones. Here, the Court has rejected Kennedy's ex Standard analysis. There is no predicate in this record for floors.

TCL v. Ericsson: Spectrum of Amicus Briefs

Criteria	IP damages experts	Interdigital	Nokia	Panasonic	Uber
Top down FRAND approach		Should only be used when royalty stacking or hold up evidence exists	Use only as check, not primary methodology	Can be useful when paired with another check such as licenses	All applicable SEPs must be considered for FRAND rate
Comparable licenses; non-discrimination	Per unit floors and caps are less likely to discriminate than percentage royalty or per unit royalty	Should be preferred approach; royalty floors are not "per se" discriminatory	Use as primary methodology	Use as a check; exact congruence not required	Different pricing for different device makers is discriminatory
Maximum aggregate royalty rate		There is no industry consensus on such caps; should not be binding on all patent owners	Public predictions are not binding	Must not become cost prohibitive	Extracting value from a downstream channel is discriminatory
Patent owner proportional share	Per unit floors can be apportioned to SEP value	Treating each patent as having equal value is plainly unreliable	Too inclusive on total SEPs; too exclusive on Ericsson SEPs	Findings on total SEPs and individual shares not binding on others; rigorous analysis required	Apportionment requires assessing contribution of SEPs to the industry standard
Regional strength ratio		Public predictions should have been scaled upward to arrive U.S. rate	Wrong to assume U.S. portfolio is stronger		

Unwired Planet v. Huawei (UK): Court of Appeal Decision (Oct. 23, 2018)



Neutral Citation Number: [2018] EWCA Civ 2344

Case No: A3/2017/1784

IN THE COURT OF APPEAL (CIVIL DIVISION)
ON APPEAL FROM CHANCERY DIVISION, PATENTS COURT
Mr Justice Birss
120171 EWHC 711 (Pat)

Royal Courts of Justice Strand, London, WC2A 2LL

Date: 23/10/2018

Before:

LORD KITCHIN LORD JUSTICE FLOYD

LADY JUSTICE ASPLIN

Between:

(1)UNWIRED PLANET INTERNATIONAL LIMITED (2) UNWIRED PLANET LLC

Claimant/ Tenth Party/ Respondents

- and -(1) HUAWEI TECHNOLOGIES CO. LIMITED (2) HUAWEI TECHNOLOGIES (UK) CO LIMITED

Appellants

Andrew Lykiardopoulos QC and James Segan (instructed by Powell Gilbert) for the Appellants

Adrian Speck QC, Sarah Ford QC, Isabel Jamal and Thomas Jones (instructed by EIP and Osborne Clarke LLP) for the Respondents

Hearing dates: 17th May- 23rd May 2018

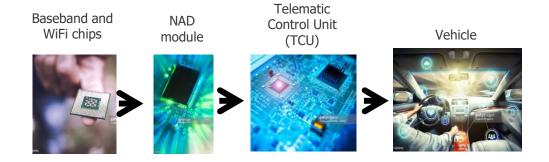
Approved Judgment

- Confirmed Judge Birss' setting of FRAND rates
- There is not only "one true FRAND" set of rates; a range of FRAND rates may be possible
- FRAND rates may be set on a global basis
- Differential rates are not per se discriminatory; "most favoured licensee" provision not required
- Huawei v. ZTE (CJEU) requires "notice" by patent owner before seeking injunction, and sufficiency of notice depends on the circumstances

FRAND Rates: Some Global Convergence and Divergence

- Some use of top-down approach, at least where royalty stacking concerns exist
 - *Unwired Planet:* top-down as check on comparable licenses
 - TCL: top-down as primary; comparable licenses as check
- A range of FRAND rates is possible (no single FRAND rate)
- Non-discrimination?
 - Unwired Planet: no breach if one licensee receives a lower rate than a benchmark rate offered to all potential licensees
 - TCL: anything other than nominally lowest rate is not per se discriminatory?
- Injunction
 - Unwired Planet: open path to injunction if sufficient prior "notice" provided
 - TCL: "injunction" imposing license agreement and royalties?

The automotive value chain



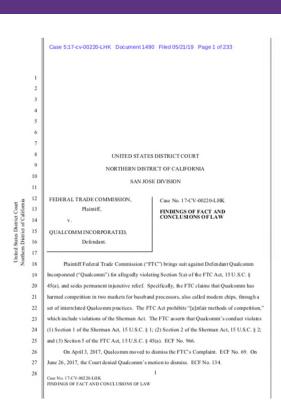
FRAND and the automotive value chain

GENERAL PREMISE: Owners of SEPs must generally agree to give a commitment to license these patents to on FRAND terms as a condition for inclusion of their technology into the standard.

COMPETING VIEWS

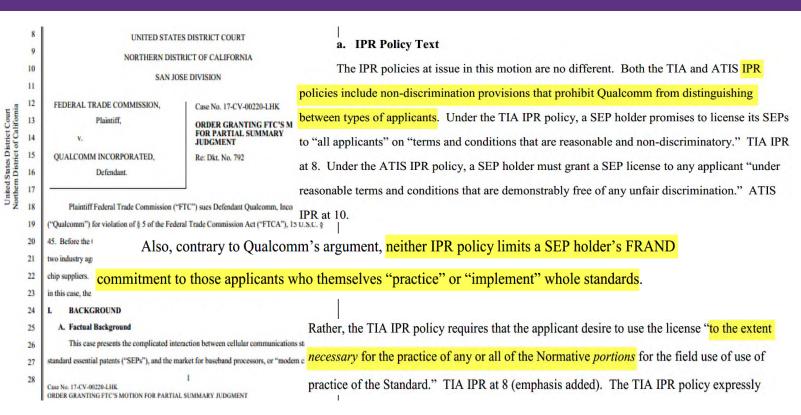
- SEP owners should be free to choose at which level of the supply chain they grant licenses (e.g., finished product makers or manufacturers of components)
- SEP owners should be able to offer used based licenses and charge different rates depending on the end use made of the SEP (even if technology covered by the SEP is the same)
- SEP owners are obligated to licenses to any willing licensee regardless of the level of the supply chain in which the potential licensee is situated
- The technology covered by the SEP fulfils exactly the same role in any standard-compliant product regardless of its end-use because the function of the technology covered by the SEP is defined by the standard

FTC v. QUALCOMM, Inc., Case No. 17-cv-220 (N.D Cal.)



- Court held that "Qualcomm's [licensing] practices violate Sections 1 and 2 of the Sherman Act."
- Court entered an injunction, ordering Qualcomm to:
 - refrain from conditioning the supply of modem chips on a patent license status, and to negotiate or renegotiate license terms with customers in good faith;
 - 2. make exhaustive SEP licenses available modem-chip suppliers on FRAND terms;
 - refrain from entering express or de facto exclusive dealing agreements for the supply of modem chips;
 - 4. refrain from interfering with the ability of any customer to communicate with a government agency; and
 - 5. submit to compliance and monitoring procedures for 7 years.

FTC v. QUALCOMM, Inc., Case No. 17-cv-220 (N.D. Cal)



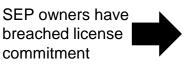
Continental Auto. Syst. v. Avanci, et al., Case No. 19-cv-02520

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Case 5:19-cv-02520 Document 1 Filed 05/10/19 Page 1 of 63
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                     UNITED STATES DISTRICT COURT
                    NORTHERN DISTRICT OF CALIFORNIA
22 CONTINENTAL AUTOMOTIVE
                                       Case No. 19-cv-2520
   SYSTEMS, INC., a Delaware
                                       COMPLAINT FOR BREACH OF
   corporation,
                                       FRAND COMMITMENTS AND
                                       VIOLATIONS OF ANTITRUST
              Plaintiff
                                       AND UNFAIR COMPETITION
                                       (1) Breach of Contract:
    AVANCI LLC, a Delaware
    corporation, AVANCI PLATFORM
                                                             Case No. 19-ev-2520
                                                                 COMPLAINT
```

- Breach of contract
- Promissory estoppel
- Violation of §1 of the Sherman Act
- Violation of §2 of the Sherman Act
 - Unlawful monopolization
 - Conspiracy to monopolize
- Violation of Cal. BPC §17200 (Unfair Competition)

Political Developments in FRAND/SEP Enforcement

• U.S. Department of Justice and Federal Trade Commission have signaled a shift in enforcement paradigm



SSOs are stifling innovation by imposing FRAND requirements on patent holders

Department of Justice: FRAND/SEP Enforcement

- DOJ policy concerns
 - Encourages patent "hold-up"
 - SSOs' ability to force holders of SEPs to grant licenses on FRAND terms disproportionately favors implementers
 - Reduces incentives to innovate
- DOJ's enforcement perspective
 - FRAND is not an antitrust issue
 - SEP-holder has no antitrust duty to deal with implementers despite unilateral commitments to license on FRAND terms
 - Cause of Action for breach of FRAND commitment violates Section 2 of the Sherman Act (i.e., was meant to protect competition, not police prices)
 - Suggests FRAND commitments may give rise to obligations under contract law

Political Developments in FRAND/SEP Enforcement

U.S. Department of Justice

"As I have said before, this joint statement should not be read as a limitation on the careful balance that patent law strikes to optimize the incentive to innovate. There is no special set of rules for exclusion when patents are part of standards. A FRAND commitment does not and should not create a compulsory licensing scheme."

Makan Delrahim, Assistant Attorney General, U.S. Department of Justice Antitrust Div.

U.S. Federal Trade Commission

"The way I look at it is, there has to be an antitrust problem in addition to a problem with the standard-setting context ... Just the fact that there is a breach of a FRAND commitment does not mean in any way that there is an antitrust violation..."

Joseph Simons, Commissioner, U.S. Federal Trade Commission

"We agree with the division leadership that a breach of a FRAND commitment standing alone is not sufficient to support a Sherman Act violation. The same is true even for a fraudulent promise to abide by a FRAND commitment. More is needed."

Joseph Simons, Commissioner, U.S. Federal Trade Commission

Department of Justice: FRAND/SEP Enforcement

- DOJ's proposed "New Madison Approach"
 - 1. Antitrust law should not be used as a tool to police FRAND commitments that patent holders unilaterally make to standard setting organizations.
 - 2. SSOs should not become vehicles for concerted actions by market participants to skew conditions for patented technologies' incorporation into a standard in favor of implementers.
 - 3. SSOs should have a very high burden before they adopt rules that severely restrict the right of patent holders to exclude or amount to a de facto compulsory licensing scheme.
 - 4. A unilateral and unconditional refusal to license a patent should be considered per se legal from the perspective of antitrust law.

Biography



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Rob Bertin has over 20 years of experience litigating patent, trademark, trade secret and copyright cases throughout the United States, counseling clients on intellectual property (IP) and negotiating transactions involving IP. He has represented clients at the center of some of the largest patent portfolio sale and licensing events in the high tech industry, including the Nortel and Kodak transactions. Rob leverages a technical background to represent large and small companies primarily in high technology industries.

Biography



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Brent A. Hawkins centers his practice on intellectual property litigation, counseling, and procurement. Brent's practice encompasses a wide range of technologies. He has served as lead counsel in numerous patent, trademark, trade dress, unfair competition, and copyright matters, representing clients in jurisdictions throughout the United States. Brent also advises clients in connection with licensing negotiations, including with regard to alleged standard-essential patent (SEP) and related fair, reasonable, and non-discriminatory (FRAND) issues.

THANK YOU

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