



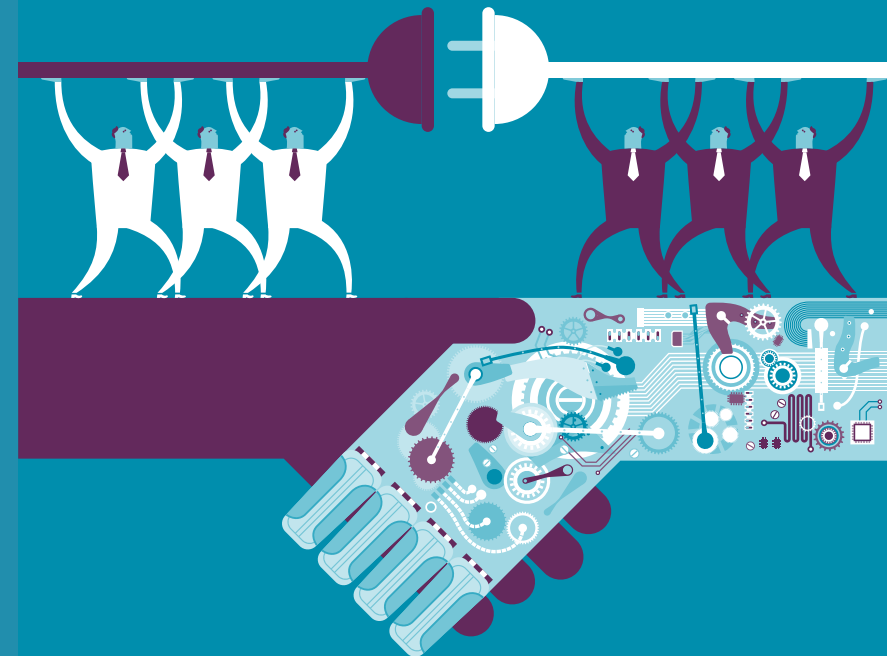
Rigorous empirical
research on
intellectual property

Open Source Software and Standards Development: Competition Law Implications

Host: Axel Ferrazzini, Managing Director, 4iP Council

Presenters:

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The Value of Connectivity in the Automotive Sector

Prof. Bowman Heiden
Center for Intellectual Property (CIP), Chalmers University of Technology
The Hoover Institution, Stanford University

December

FRAND licensing levels under EU law

Dr Jean-Sébastien Borghetti
Professor of Private Law at University Paris II Panthéon-Assas

Dr Igor Nikolic
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Dr Nicolas Petit
Professor of Law at the University of Liege and at the College of Europe

Summary

February 2021



The Value of Standard Essential Patents and the Level of Licensing

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Summary

January 2021

Case Law post CJEU ruling *Huawei v ZTE*

4iP Council Case law home CJEU Huawei v ZTE German court decisions Italian court decisions English court decisions English/Irish court decisions Romanian court decisions French court decisions Dutch court decisions National Courts Guidance

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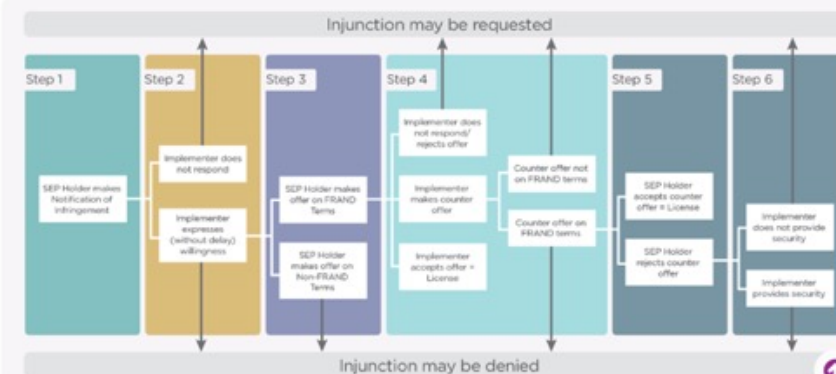
National Courts Guidance

Negotiating Licenses for Essential Patents in Europe


Increased clarity provided on the principles established by the Court of Justice of the European Union in *Huawei v ZTE*.

The Court of Justice of the European Union clarified, in *Huawei v ZTE* (Case No. C-170/13), European law relating to the availability of injunctive relief for infringements of FRAND-based standard essential patents. In doing so, the Court provided a legal framework focused on the good faith

Huawei v ZTE process



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About
The Issue
Research
Publications
Webinars
Case Law Search
News
Features
4SMEs
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Rigorous empirical research on intellectual property

Types of IP
Benefits of IP
IP for Business Growth
4 Reasons to Patent
4 Reasons 4 Copyright
4 Reasons 4 Trademarks
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4 REASONS TO PATENT

- 1 - MARKET ACCESS
- 2 - NEGOTIATING
- 3 - FUNDING
- 4 - STRATEGIC VALUE

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4 REASONS 4 COPYRIGHT

- 1 - COMPETITIVE EDGE
- 2 - REPUTATION
- 3 - COLLABORATION
- 4 - FUNDING

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4 REASONS 4 TRADEMARKS

- 1 - DIFFERENTIATION
- 2 - PROTECTION
- 3 - REPUTATION
- 4 - REVENUE

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4 REASONS 4 DESIGN RIGHTS

- 1 - EXCLUSIVITY
- 2 - COMMERCIALISATION
- 3 - REPUTATION
- 4 - VALUE

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Which types of intellectual property do you need?

Filter table columns

	PATENTS	COPYRIGHTS	DESIGN	TRADEMARKS	TRADE SECRETS
What do they protect?	<p>Any invention, process and technical way of doing something or solving a technical problem</p> <p>See also: Patents</p>	<p>A work or original intellectual creation</p> <p>See also: Copyrights</p>	<p>A new and original design</p> <p>See also: Design</p>	<p>Any sign that identifies goods or services</p> <p>See also: Trademarks</p>	<p>Any type of useful information for business that is secret and not confidential</p> <p>See also: Trade secrets</p>
Examples of what is protected	<p>Inventive products and processes in all areas of business</p> <p>For examples of successful inventions see Patents</p>	<p>Audio-visual works, software, graphics, architecture, databases, software, designs, literature, novels, poems, plays, music and video, graphic works</p> <p>See also: Copyrights</p>	<p>Product and packaging designs</p> <p>See also: Design</p>	<p>Product and service marks, logos, slogans, trade names, etc.</p> <p>See also: Trademarks</p>	<p>Any type of useful information for business that is secret and not confidential</p> <p>See also: Trade secrets</p>
How are my rights protected?	<p>Prevents unauthorized making, using or selling of the patented invention</p> <p>See also: Patents</p>	<p>Prevents the work being copied, distributed or made available online</p> <p>See also: Copyrights</p>	<p>Protects the integrity and attribution of the work</p> <p>See also: Design</p>	<p>Related rights: Public performance and display of the work</p> <p>See also: Trademarks</p>	<p>Any type of useful information for business that is secret and not confidential</p> <p>See also: Trade secrets</p>
How long is my innovation protected?	<p>Up to 20 years</p> <p>See also: Patents</p>	<p>Lifetime of the author plus 70 years after death (depending on the country)</p> <p>See also: Copyrights</p>	<p>Up to 15 years</p> <p>See also: Design</p>	<p>Indefinite</p> <p>See also: Trademarks</p>	<p>Indefinite</p> <p>See also: Trade secrets</p>
Do I have to register it?	<p>Yes, filing an application to a patent office is required</p> <p>Have an patent applications on: UK, EU, USA, Japan, China, India, South Korea, Australia, Canada, Brazil, Mexico, Argentina, Colombia, Peru, Chile, Venezuela, Cuba, Honduras, Nicaragua, Costa Rica, Panama, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Guatemala, El Salvador</p> <p>See also: Patents</p>	<p>No</p> <p>See also: Copyrights</p>	<p>No</p> <p>See also: Design</p>	<p>No</p> <p>See also: Trademarks</p>	<p>No</p> <p>See also: Trade secrets</p>



Open Source Software and Standards Development: Competition Law Implications



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Overview

- Technical standards developed by standards development organizations (“SDOs”) increasingly involve software-based solutions that implicate open source software (“OSS”).
- Traditional SDO standards activities and open source projects are not mutually exclusive, and both can drive innovation and competitiveness.
- European Commission’s (EC) Communication on Standard Essential Patents (2017):

“Integration between open source projects and standards development processes is a win-win situation [...] Flexible and effective interactions between standardisation and open source communities will promote and accelerate the uptake of advanced technology developments.”

Overview

- To achieve such integration, consensus-based approaches to standards development, where account is taken of all stakeholder interests, and which abide by principles of openness, balance and due process, should apply when SDOs accommodate open source projects.
- Such procedural safeguards are fundamental to avoid potential anticompetitive effects resulting from imposing IPR policies that favour discrete stakeholder interests.
- EU and US competition law provide the necessary tools to challenge conduct related to standardization and open source licensing that may diminish competition and innovation.

Standards and OSS pursue innovation



- Both standards and open source development can support innovation and growth.
- Standards have long been recognised as a driving force for innovation:
 - EC's Standardisation Policy (2016): *"Standards support market-based competition and help ensure the interoperability of complementary products and services. They reduce costs, improve safety, and enhance competition."*
 - U.S. Dep't of Justice & Fed. Trade Comm'n (2007): *"Industry standards are widely acknowledged to be one of the engines driving modern economy. Standards can make products less costly for firms to produce and more valuable to consumers. They can increase innovation, efficiency, and consumer choice; foster public health and safety; and serve as a 'fundamental building block for international trade.'"*
- To achieve the goal of attracting the best available technology, IPR policies of the most successful SDOs afford innovators who contribute their technologies the opportunity to realize sufficient returns on their R&D investments, and balance these incentives with the equally important goal of affording standards implementers access to standardized technologies (SEPs).

Standards and OSS pursue innovation



- EC's Communication on Standard Essential Patents (2017):
"In the context of current advances in technology, open source software (OSS) implementation is, in addition to standards, also driving innovation, and is becoming increasingly widespread, including in the area of ICT standards."
- However, open source licensing pursues, at least in part, different objectives.
- JRC Report 'The Relationship between Open Source Software and Standards Setting' (2019):
"IPR regimes serve partially different purposes in SDOs compared to OSS communities. OSS licenses mirror and follow collaboration models and represent how participants envision the jointly created products to be used, resulting in the strong copyleft, weak- copyleft and permissive OSS licenses."

Integration of Standards and OSS

- “Open source” has been used and understood in different ways, and encompasses a variety of licenses ranging from weak copyleft to permissive licenses.
- Open Source Initiative (OSI) purports to define the term “open source”.
- In the context of standards, the OSI advocates that a standard is not “open” if conforming implementations in open source software are prohibited; if any essential patents are licensed other than royalty-free for unrestricted use or subject to non-assertion promises when practiced in open source implementations of the standard; or if any license agreement or other form of paperwork to deploy conforming implementations of a standard is required:

“[FRAND terms that require] an implementor [sic] to have a relationship with the patent holder before use of the standard [i.e., enter a license] – are toxic to open source communities.”

Integration of Standards and OSS

- The foregoing notwithstanding, integrating open source projects and standards development processes is still envisioned as a “win-win” situation.
 - EC’s Communication on Standard Essential Patents (2017): *“the alignment of open source and standardization can speed-up the standards development process and the take-up of ICT standards, and [...] standards can provide for interoperability of open source software implementations.”*
 - Kappos (2017): open source and FRAND licensing are compatible, and reliance on permissive open source licenses may permit reconciliation between OSS and SDO FRAND-based IPR policies.
 - Vivant (2018): open source and FRAND licensing are complementary if development and implementation of a standard are autonomous, with FRAND licensing applying to the former and OSS principles to the latter.

Integration of Standards and OSS

- The European Telecommunications Standards Institute (ETSI) has stated its support for a complementary integration of standards and open source solutions:
“Open Source software and standards [are] not competitive but complementary. Open Source can bring innovation, fast development and the involvement of a committed global community and many companies have found a solid business case to develop and use Open Source software. On the other hand, [...] standards bring long-term stability, wide consensus and a cohesive view of large and complex systems, together with ensuring interoperability, confidence in products, and services, and offering economies of scale.”
- ETSI is exploring approaches for putting its views on open source software into practice (e.g. Open Source MANO and TDL Open Source Project) while remaining business model neutral.

A Consensus-based Approach

- A consensus-based approach to standards development, where account is taken of all stakeholder interests, is fundamental to avoiding potential anticompetitive effects that otherwise could arise if a particular treatment of IPR were imposed.
- American National Standards Institute (ANSI)(2002):
“[restrictive IPR policies could] stifle competition and the standardization of technological advances. Different approaches by different groups with different participants and different objectives provide the necessary flexibility to maximize the overall results for the U.S. community as a whole.”
- U.S. DOJ (2018):
“As long as an SSO’s IP policies are the product of a consensus or a clear majority that includes both standard-essential patent holders and implementers, the Department of Justice should have no reason for concern. On the other hand, if an SSO’s policy making decisions appear to be dominated by implementers, and the resulting policies or standards appear to be heavily skewed toward implementers and away from innovators, that’s already two strikes.”

A Consensus-based Approach

- The EC has likewise stressed the need for an approach balancing the interests of the stakeholders.
- EC's ICT Standardisation Priorities (2016):

“ICT standardization requires a balanced IPR policy, based on FRAND licensing terms [...]. A balanced policy should take into account a variety of needs: fair return on investment to incentivize R&D and innovation, a sustainable standardisation process, wide availability of technologies in an open and competitive market, and the difficulty for SMEs to participate. Against this background, a fast, predictable, efficient and globally acceptable licensing approach, which ensures a fair return on investment for standard essential patent (SEP) holders and fair access to SEPs for all players – and especially SMEs – of the value chain would be beneficial.”
- Even within a system that allows for “free” licensing, the European Commission recognized the need to ensure innovators a fair return on investments, as it did in its Communication on the Internet of Things (2016).
- EC's Communication on Standard Essential Patents (2017):

“[T]here is an urgent need to set out key principles that foster a balanced, smooth and predictable framework for SEPs. These key principles reflect two main objectives: incentivising the development and inclusion of top technologies in standards, by preserving fair and adequate return for these contributions, and ensuring smooth and wide dissemination of standardised technologies based on fair access conditions.”

Antitrust implications: the IEEE experience



- Questions have been raised about the process for approving and the substance of the 2015 revision to patent policy of the Institute of Electrical and Electronic Engineers (IEEE).
- U.S. DOJ has commented that the IEEE experience illustrates the potential for “buyer side” collusion.
- Absent open, consensus-based governance, risks exist that a standard or a licensing obligations in connection with SEPs or open source software could result from imposition of certain stakeholder interests at expense of others, and replace effective workings of a competitive marketplace.
- This experience is relevant to SDO considerations of pursuing combined standards and open source solutions, e.g.,
 - Should open source licensing terms be limited to existing defined licenses?
 - Should use of term “open source” be conditioned on use of certain defined licenses?

Antitrust implications: the IEEE experience



- The 2015 IEEE policy made changes to the then IEEE Patent Policy by:
 - limiting the ability of SEP owners to seek injunctions until a final adjudication of FRAND terms;
 - restraining SEP owners' licensing freedom by mandating the royalty base that could be used in a FRAND license; and
 - “suggesting” definitions of a reasonable royalty in connection with SEPs.
- This resulted in a precipitous increase in “negative LOAs,” non-approval of IEEE WiFi standards as American National Standards, and the U.S. DOJ revisiting its 2015 Business Review Letter, which had stated the DOJ’s intention not to challenge the new IEEE Patent Policy.
- In 2020, the U.S. DOJ supplement its 2015 Business Review Letter:

“As experience has shown, a group of implementers working collectively may have both the motive and the means to impose anticompetitive policies or rules that favor their interest to the detriment of others. Any such collusion can also be a serious threat to innovation if the conduct leads to under-investment by patent holders in the standard setting process. Balance is therefore important not only to encourage participation and competition among patent holders in the standard setting process, but also to ensure more significant antitrust concerns do not arise.”

Antitrust implications: EU concerns

- Antitrust concerns arising from a failure to pursue a consensus-based approach also arise under EU law.
- **Article 101 TFEU.**
 - EC's Horizontal Guidelines provides, in respect of standard-setting agreements: *"Any standard-setting agreement which clearly discriminates against any of the participating or potential members could lead to a restriction of competition. For example, if a standard-setting organisation explicitly excludes upstream only companies (that is to say, companies not active on the downstream production market), this could lead to an exclusion of potentially better technologies."*
 - EC's Horizontal Guidelines provides, in respect of buyer purchasing agreements: *"If the parties [to a purchasing agreement] have a significant degree of market power on the purchasing market (buying power) there is a risk that they may force suppliers to reduce the range or quality of products they produce, which may bring about restrictive effects on competition such as quality reductions, lessening of innovation efforts, or ultimately sub-optimal supply."*
- **Article 102 TFEU:** The concern about the exercise of monopsony power is confirmed by cases involving unilateral conduct under Article 102, which prohibits the abuse of a dominant position and which notes that such an abuse *"may, in particular, consist in [...] directly or indirectly imposing unfair purchase [...] prices."* See: Case 298/83 CICCE v Commission, and Case CA98/19/2002 Association of British Travel Agents and British Airways plc.

Conclusion

- Experience shows the competitive benefits of consensus-based approaches in connection with standards development, and the negative potential consequences when the safeguards inherent in a consensus-based approach are avoided. EU and US competition enforcers have recognized both the benefits of following such an approach, and the risks of failing to do so in terms of diminished competition and innovation.
- Consensus-based approaches related to IPR already used by SDOs to develop standards - where account is taken of all stakeholder interests, and which abide by principles of openness, balance and due process - should apply equally when standards development involves open source software solutions.
- As industry explores integration of OSS solutions into standards development, respect should be given to the competition-enhancing protections that proper IPR policies and procedures afford and steps should be taken to ensure successful integration of OSS and standards development.

Thank you

Q & A

Forthcoming webinars

26th April, 4pm CEST	How to protect your business through trademarks and designs Joint webinar with INTA for World IP Day	Kate O'Rourke, Mewburn Ellis LLP Mascha Heidelberg, Müller Schupfner & Partner Sandra Sophia Redeker, SKW Schwarz
18th May, 4pm CEST	As Open As Possible, As Closed As Needed: Challenges Of The EU Strategy For Data	Ginevra Bruzzzone, Senior Fellow, LUISS School of European Political Economy and Deputy Director General Assonime Prof. Koenraad Debackere, Department of Management, Strategy and Innovation & ECOOM Research Center, KU Leuven R&D

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