



Rigorous empirical
research on
intellectual property

As Open as Possible, as Closed as Needed: Challenges of the EU Strategy for Data

Host: Dr. Claudia Tapia, Chair Executive Board, 4iP Council

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- **Ginevra Bruzzone**, 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





The Value of Connectivity in the Automotive Sector

Prof. Bowman Heiden
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The Hoover Institution, Stanford University

December

FRAND licensing levels under EU law

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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

Authors
& contributors

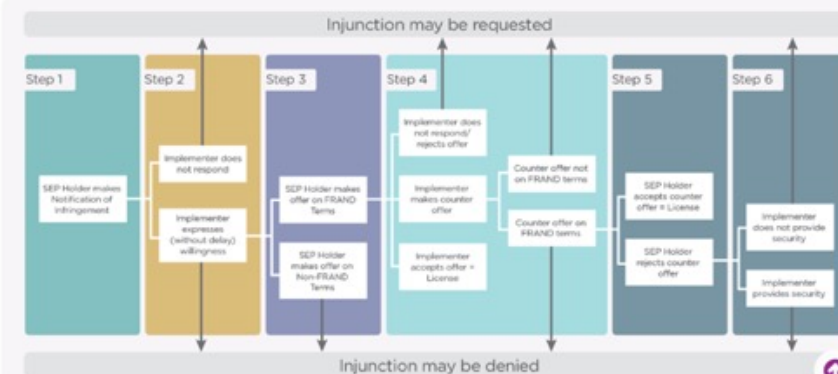
National Courts Guidance

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
Network



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
SME Features
Research

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4 REASONS TO PATENT

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

Explore how patents add value with our [interactive guide](#).

4 REASONS 4 COPYRIGHT

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

Explore the benefits of copyright with our [interactive guide](#).

4 REASONS 4 TRADEMARKS

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

Explore the benefits of trademarks with our [interactive guide](#).

4 REASONS 4 DESIGN RIGHTS

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

Explore the benefits of design rights with our [interactive guide](#).

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 unauthorised making, using or selling of the patented invention</p> <p>See also: Patents</p>	<p>Prevents the work being copied, reproduced 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 10 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>No</p> <p>See also: Copyrights</p>	<p>Yes, filing an application to a design office is required</p> <p>Have an design 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</p>	<p>Yes, filing an application to a trademark office is required</p> <p>Have an trademark 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</p>	<p>No</p> <p>See also: Trade secrets</p>



As Open As Possible, As Closed As Needed: Challenges Of The EU Strategy For Data



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The times, they are a'changing



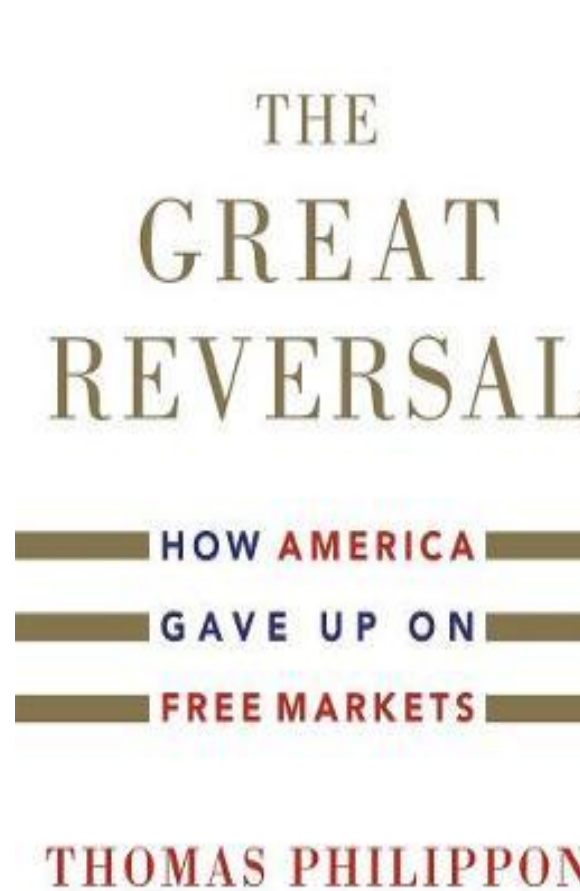
But... challenges of the Digital Transformation



The positive impact of the digital transformation on economy and society strongly depends on appropriate institutional framework and public policies ensuring:

- Connectivity
- Trust in online transactions (protection of personal data, consumer protection, cybersecurity)
- Interoperability of technical solutions
- The ability of SMEs to exploit the potential of the digital ecosystem
- Digital skills and requalification of workforce

Moreover ... Digital Market challenges



The Rise of Market Power and the Macroeconomic Implications*

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KU Leuven and Princeton University
NBER and CEPR

Jan Eeckhout[‡]
UPF-ICREA-GSE and UCL

August 24, 2017

Abstract

We document the evolution of markups based on firm-level data for the US economy since 1950. Initially, markups are stable, even slightly decreasing. In 1980, average markups start to rise from 18% above marginal cost to 67% now. There is no strong pattern across industries, though markups tend to be higher, across all sectors of the economy, in smaller firms and most of the increase is due to an increase within industry. We do see a notable change in the distribution of markups with the increase exclusively due to a sharp increase in high markup firms.

We then evaluate the macroeconomic implications of an increase in average market power, which can account for a number of secular trends in the last 3 decades: 1. decrease in labor share; 2. decrease in capital share; 3. decrease in low skill wages; 4. decrease in labor force participation; 5. decrease in labor flows; 6. decrease in migration rates; 7. slowdown in aggregate output.

Keywords: *Markups; Market Power; Secular Trends; Labor Market.*

JEL: E2, D2, D4, J3, K2, L1

~~Don't
Be
Evil~~

**The
Case
Against
Big
Tech**

RANA FOROOHAR

EU strategy for the Digital Transformation



- **European Digital Agenda (2010)**

- **Digital Single Market Strategy (2015)**

=> GDPR; e-privacy; unfair commercial practices in B2C relations; competition rules; protection of databases and trade secrets

=> Free flow of data Regulation (2018/1807): removal of unjustified restrictions by Member States on cross-border flow of data and codes of conduct for data portability

=> Open Data Directive (2019/1024): replaces the 2003 Directive on Public Sector Information (PSI)

The strategy of von der Leyen Commission



- A Europe fit for the digital age is one of the pillars of the EU strategy for sustainable growth
- Shaping Europe's Digital Future (2020) + 2021 Digital Compass
- Vision: a European society powered by digital solutions strongly rooted in our common values; European technological sovereignty, starting from integrity of data infrastructure and networks; broad availability of non personal data
- 3 objectives: technology that works for people; fair and competitive economy; an open, democratic and sustainable society

Initiatives, with focus on data ecosystems, digital platforms / gatekeepers

- Strategy for data (Feb 2020), contemplating initiatives on common European dataspaces
- Implementation of Open Data Directive: list of of High value datasets
- Proposal for a EU Data Governance Act (Nov 2020)
- Regulatory initiatives on platforms (Digital Markets Act - DMA, Digital Services Act -DSA, Dec 2020)
- Proposal of Regulation on use of AI (April 2021)
- (forthcoming) Proposal for Data Act (B2B and B2G data sharing)

Big data in the EU?



- Ongoing technological developments, such as IoT, increase the production of data exponentially and may allow the EU to recover positions. But multiple European challenges:
 - Fragmentation of the Internal Market, e.g. government access to private sector data and access to public sector data
 - Need for data available for re-use (AI)
 - Imbalances in market power and in bargaining power
 - Need for enhanced control on own personal data by data subjects and on non personal data by entities which contributed to their creation/collection
 - Interoperability issues
 - Cloud services and data location
 - Cyber security
 - Lack of skills

Access and re-use of data: need for a vision



Digital markets are dynamic and strongly based on innovation. Any strategy for the Digital Transformation should be based on a vision of how markets work and consider the impact of initiatives and regulatory measures on incentives and innovation:

- Not just access, but also data generation and use
- Avoid free-riding, hence need for a legal framework on access
- Take into account the heterogeneity of data, the confidentiality of information, and the co-generation of data (IoT)
- Balancing both interests and fundamental European values involved

Access and re-use of public sector data



Open Data Directive: which data held by the public sector are available for re-use, in which ways and under which economic conditions

- Limitations: when third parties hold IPR, carve out for sensitive data and avoid distortion of competition
- If needed, public sector bodies can recover their costs
- Academic research data: FAIR principles (findable, accessible, interoperable, re-usable), but IPRs and commercial interests can be taken into account, de facto an opt-out possibility
- Obligations apply also to public undertakings providing services of general economic interest non directly exposed to competition, but only for those data for which the entity has decided to permit re-use

High value data sets



- One of the main novelties of the Open Data Directive
- Re-use associated with important benefits for society, the environment and the economy
- Public sector bodies and public undertakings shall make such data available free of charge, disseminated in machine-readable format by means of API throughout the EU and provide them as a bulk download where relevant
- Thematic areas include geospatial, earth observation and environment, meteorological, statistics, companies and company ownership; mobility
- List under construction, but consider impact on undertakings (cost-benefit analysis: need for specific investments, impact on competition etc.)

Private undertakings data: B2B



- Antitrust: if dominant position, refusal to supply essential data may, under certain conditions, be an abuse of dominance
- Some sectoral provisions require undertakings to grant access to specific information: repair and maintenance of motor vehicles (Reg. 715/2007); safety of roads and ITS (Reg. 2017/1926); data on customers of payment services (PSD2)

General principles (EC Guidelines 2018): freedom of contract; in case of co-production (data generated as a sub-product of the use of a good (e.g. sensor in agriculture) or a service), acknowledgement of the shared value creation => forthcoming Data Act

Key principles on supply of private sector data to public sector bodies under preferential conditions for re-use:

- Requests by public bodies should not go beyond what is necessary and proportionate for pursuing objectives of public interest; purpose and duration of the use of data clearly limited; transparency on B2G collaboration
- Legitimate interests of the companies are respected; they remain able to monetize the insights derived from the data with respect to other parties
- Undertakings offer reasonable and proportionate support to help assess the quality of data (but should not be required to improve the quality of data in question)

The Data Governance Act



Objective: fostering re-use of data in public and private sector by creating an institutional framework capable of increasing trust in data sharing

- Enhanced framework for re-use of data held by public sector that are subject to rights of others (e.g. personal data, IPRs, commercial confidentiality) and therefore non open pursuant to PSI Directive
- Notification and supervision on non vertically integrated data intermediaries for sharing personal and non personal data
- Fostering data altruism organizations, aimed to make it easier for individuals and organizations to permit the use of their data for the public good

The approach to data in the DMA



The DMA lays down harmonized prohibitions and obligations on large platforms designated as gatekeepers, which include rules on interoperability and access to data

- To enhance control on own data by data subjects and business users (Art. 5.a consent for combination of personal data beyond GDPR; Art. 6.f portability of data; Art. 6.i access by business users to data generated by them)
- To ensure fairness (Art. 6.a do not use non publicly available data generated by business users in competition with them)
- To promote contestability (Art. 6.e interoperability; Art. 6.j access to data of search engines on FRAND terms)

EC Assumptions in Digital Markets Act

- The DMA will cause R&D spending in the information and communication technology sectors of each Member State to double, with related increases in employment;
- Because of the DMA, a significant amount of spending on M&A activity by large technology companies will be replaced by R&D spending on a one-for-one basis;
- These increases in R&D spending generated by the DMA will be as socially beneficial and value augmenting to users as previous forms of R&D spending;
- The DMA's obligations are narrowly targeted such that they will have no negative effect for users with respect to costs, quality, or functionality of core platform services today or in the future;
- Competition “in the market” is more beneficial than competition “for the market” and that regulatory interventions to cause a change in the nature of competition in the digital sector will only involve minimal compliance costs and no harmful side-effects on innovation or competitive incentives;
- The DMA will reduce regulatory fragmentation caused by diverging national approaches to platforms, but in its absence 100% of cross-border trade intermediated by on-line marketplaces would be lost by 2025; and
- All of these benefits can be achieved with only 30-90 Commission employees, and no other enforcement costs at EU institutional level.

Though, the nature of competition, Teece & Kahwaty, 2021



- Static competition

Static economic analysis was perhaps forgivable when assessing competition in mature industrial era industries like the automotive industry and the steel industry where tangible assets were more important than intangibles,¹⁸ intellectual property, and the collection and use of data. In the digital economy, a dynamic economic assessment is necessary.

- Dynamic competition

Dynamic competition is a type of competition centred on innovation. It results in Joseph Schumpeter's "gale of creative destruction", a "process of industrial mutation...that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one." It involves new products and services, new means of delivering services to consumers, new business models to combine assets in different ways, and new production techniques. Such innovation competition can come directly or indirectly from entities active in an industry or in an adjacent one, and it can also come from entirely unexpected entrants, including new businesses.

So what, Europe's Digital Future ...



- Fostering the sharing of data is not an objective in itself, but a tool to support the development of the digital economy
 - => public policy should consider an ex ante perspective, taking into account the incentives of undertakings to collect and process data, and to ensure their quality
 - => need for proper rules on access and re-use of data in the private and public sector (high-value datasets) + proper application of competition rules + proper design of DMA
- Importance of enablers (governance, trust, data spaces)
- Importance of overcoming an approach to data based on silos, but at the same time specific rules, e.g. on sharing of personal data within ecosystems, can remove some rigidities

So what, Europe's Digital Future...



Seize opportunities to become a data driven economy while fostering contestable and fair markets

(Europe needing extra impulses, a.o. principles on modelling and data analytics, automated decision making and profiling, direct marketing and cookies, data repurposing, transfer of data to other organizations and third countries, the right of subjects to transfer data from one controller to another)

So what, the world's Digital Future...



VMware

VMware software powers the world's complex digital infrastructure. The company's cloud, app modernization, networking, security and digital workspace offerings help customers deliver any application on any cloud across any device. The company's culture and values are expressed through the acronym EPIC2: execution, passion, integrity, customers and community. VMware celebrates employees in its annual EPIC2 achievement awards. This honour is given to employees who best exemplify these values through their actions.

Integrity and ethics are embedded in everything they do, from the company culture to its product

development processes. To help operationalize ethics into the organization, VMware's ethics and compliance team is creating an ethical decision-making framework called DECIDE to help employees determine solutions when faced with ethically ambiguous situations. The DECIDE model is a systematic process to evaluate potential solutions through multiple ethical lenses, driving an appreciation of diverse perspectives, and enhancing ethical problem-solving capabilities. As with its AI code of ethics, which was created in a grass-roots manner, VMware prioritizes ethics and its EPIC2 values at every level from its leadership to its 32,000-strong global workforce.

Thank you

Q & A

Forthcoming webinar

8th June, 10am CEST	Joint EUIPO - 4iP webinar: Generate income from your intellectual property	Suzanne Hogan - Customer Department, EUIPO Mark Snelgrove - Partner, Potter Clarkson Claudia Tapia - 4iP Council Mojca Zupan - Founder and CEO, PlanetCare
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