

CHAPTER 10 DISCLOSURES AND ENFORCEABILITY OF STANDARD-ESSENTIAL PATENTS: AN OVERVIEW

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§10.01 INTRODUCTION

Innovative standards form the backbone of the modern knowledge economy. Standards allow for interoperability between devices produced by disparate manufacturers around the globe, as well as for top-notch performance that enables myriad innovative products and services.¹ It is broadly recognized among policy-makers and regulators that standardization provides for a wide array of benefits for private businesses, consumers, and economies overall.² Those include breakthrough innovations, increased competition, lower prices for consumer goods, improved quality and security, reduction of international trade barriers and supply-chain integration, specialization and productivity gains, higher growth and job creation.³ Moreover, the World Trade Organization (WTO) has also emphasized the importance of

¹https://single-market-economy.ec.europa.eu/single-market/european-standards/standardisation-policy/benefits-standards_en.

²Communication from the Commission, Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements Text with EEA relevance [2011] OJ C11/1, paras 263 *et seq.*; World Trade Organization (WTO), Agreement on Technical Barriers to Trade (1995), Preamble; Office of Public Affairs | Assistant Attorney General Makan Delrahim Delivers Remarks at the Leadership Virtual Series | United States Department of Justice (Sept. 10, 2020), *available at* <https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-remarks-leadership-virtual-series>.

³David Evans, Howard Chang, and Steven Joyce, “What Caused the Smartphone Revolution?” (2019), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3455247 (accessed July 20, 2020); Jorge Padilla, John Davies, and Aleksandra Boutin, “Economic Impact of Technology Standards” (2017), *available at* https://www.compasslexecon.com/wp-content/uploads/2018/04/CL_Economic_Impact_of_Technology_Standards_Report_FINAL.pdf.

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standards for economic development and developing economies.⁴

Standards are collaboratively developed within standards-development organizations (SDOs), *i.e.*, bodies that provide the framework and structure of standards development for their participants, mainly private businesses.⁵ SDOs aim at attracting highly valuable technologies by providing the opportunity for technology contributors, who invested in risky and costly R&D,⁶ to obtain reasonable royalties., This is achieved by contributors making their patents essential for the implementation of standards (standard-essential patents, SEPs) accessible on fair, reasonable and non-discriminatory (FRAND) terms and conditions.⁷ To further protect the availability of standards to industry, SDOs also require, in their Intellectual Property Rights (IPRs) policies, that members properly inform the SDOs of their holding of patents or patent applications potentially essential.⁸ Regarding the mechanism for such a disclosure, SDOs encourage members to identify patents and patent applications that might be essential,⁹ without the

⁴WTO, Second Triennial Review of the Operation and Implementation of the Agreement on Technical Barriers to Trade, WTO Doc. G/TBT/9 (Nov. 13, 2000), Annex 4 (stressing the importance of SDOs factoring in developing countries' interests in standardization processes).

⁵Daniel Spulber, "Innovation Economics: The Interplay Among Technology Standards, Competitive Conduct, and Economic Performance" (2013) 9(4) *J. Comp. L. & Econ.* 777; Timothy Simcoe, "Standard Setting Committees: Consensus Governance for Shared Technology Platforms" (2012) 102 *American Econ. Rev.* 305; Timothy Simcoe, Stuart Graham, and Maryann Feldman, "Competing on Standards? Entrepreneurship, Intellectual Property and the Platform Paradox" (2007) *NBER Working Paper 13632*, 4, available at <http://www.nber.org/papers/w13632> (accessed July 20, 2020); Mark Lemley, "Intellectual Property Rights and Standard-Setting Organizations" (2002) 90 *Calif. L. Rev.* 1889.

⁶Georgios Effraimidis and Kirti Gupta, 5G standards and the stark divide between innovators and implementers, IAM, June 8, 2022, available at <https://www.iam-media.com/article/5g-standards-and-the-stark-divide-between-innovators-and-implementers> and <https://www.4ipcouncil.com/research/5g-standards-and-stark-divide-between-innovators-and-implementers>.

⁷See, for instance, the goals set by the European Telecommunications Standards Institute (ETSI) in its IPR Policy: European Telecommunications Standards Institute (ETSI), ETSI Intellectual Property Rights Policy, Annex 6 ETSI Directives, Article 3.1 (2019), available at <https://www.etsi.org/images/files/IPR/etsi-ipr-policy.pdf> (accessed July 20, 2020): "It is ETSI's objective to create STANDARDS and TECHNICAL SPECIFICATIONS that are based on solutions which best meet the technical objectives of the European telecommunications sector, as defined by the General Assembly. In order to further this objective, the ETSI IPR POLICY seeks to reduce the risk to ETSI, MEMBERS, and others applying ETSI STANDARDS and TECHNICAL SPECIFICATIONS, that investment in the preparation, adoption and application of STANDARDS could be wasted as a result of an ESSENTIAL IPR for a STANDARD or TECHNICAL SPECIFICATION being unavailable. In achieving this objective, the ETSI IPR POLICY seeks a balance between the needs of standardization for public use in the field of telecommunications and the rights of the owners of IPRs." See also, among many contributions, Daniel Spulber, "Innovation Economics: The Interplay Among Technology Standards, Competitive Conduct, and Economic Performance" (2013) (4) *J. Comp. L. & Econ.* 777; Gregory Sidak, "The Meaning of FRAND, Part I: Royalties" (2013) 9(4) *J. Comp. L. & Econ.* 931; Roger Brooks, "SSO Rules, Standardisation, and SEP Licensing: Economic Questions from the Trenches" (2013) 9(4) *J. Comp. L. & Econ.* 859; Richard Epstein, Scott Kieff, and Daniel Spulber, "The FTC, IP, and SSOs: Government Hold-Up Replacing Private Coordination" (2012) 8(1) *J. Comp. L. & Econ.* 1.

⁸Nikolic, Igor, Estimating 5G Patent Leadership: The Importance of Credible Reports (April 15, 2022). the Chinese version of this paper was published in China IP Magazine 2022, Available at SSRN: <https://ssrn.com/abstract=4109222> or <http://dx.doi.org/10.2139/ssrn.4109222> at p.2.

⁹ETSI IPR FAQ question 1, available at <https://www.etsi.org/images/files/IPR/FAQ-IPR-Question1.pdf>; ETSI Guide on IPRs dated 10 June 21 §3.2.1, available at <https://www.etsi.org/images/files/IPR/etsi-guide-on-ipr.pdf>.

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SDOs themselves conducting any essentiality assessment. SDOs then require that members indicate whether they are prepared to grant licenses on FRAND terms under those disclosed patents and patent applications, but only to the extent they are or become and remain essential to the standard (FRAND commitment). FRAND declarations are an indispensable element of any SDO IPRs policy because they protect the availability of the standard on FRAND terms and allow an SDO to circumvent those patents whose owners will not license on FRAND terms. FRAND declarations also incidentally provide information to standard users that implementation of the given standard may entail the licensing of IPRs and, hence, a reasonable royalty compensation.¹⁰ SDOs have so far not adopted a common definition of essentiality. However, essentiality is generally defined in SDO IPRs policies as either “technical essentiality,” that is, the relevant standard *cannot*, as a technical matter, be implemented without infringing the SEP; or “commercial essentiality,” *i.e.*, the SEP in question is not technically essential in a narrow sense, but the commercial benefits of its implementation (*e.g.*, cost savings, performance improvement, security and reliability) are so important that implementers will typically require access to the SEP.¹¹ Moreover, identification of potentially essential patents may involve specific patent rights, or might be broad notifications that the declarer may possess SEPs without identifying particular rights (“general or blanket declarations”).¹²

The issue of disclosures of essential patents and identification of potentially essential patents, although largely a technical issue arcane to most external observers, has arisen prominent over the past decade among policymakers worldwide. Regulators have raised a concern over the failure to properly disclose SEPs and make corresponding FRAND declarations, which might enable SEP-owners to “hold up” the standard and impose onerous licensing terms on users once the standard is implemented. Moreover, alleged deficiencies in disclosures have been raised as a defense in SEP-infringement actions in the EU and the United States. As explained in the following sections, in the United States, defendants have alleged that failure on the part of the SEP owner to disclose—or failure to disclose in a timely manner—its SEP amounts to an antitrust offence (“patent ambush”),¹³ or that it constitutes an “implied

¹⁰*See, e.g.*, “The ETSI IPR Information Statement and Licensing Declaration Form,” *available at* <https://www.etsi.org/images/files/IPR/etsi-ipr-form.doc>.

¹¹*Id.* at 9–10. On technical as opposed to commercial essentiality, *see also In re Innovatio IP Ventures, LLC Patent Litig.*, 956 F. Supp. 2d 925, 938 (N.D. Ill. 2013) (“Instead, a claim is ‘necessary’ when there is ‘no commercially or technically feasible non-infringing alternative’ by which to implement the standard. In other words, to determine if a claim is necessary, one must ask if there were commercially and technically feasible non-infringing alternative ways to implement the standard at the time of the standard’s approval. Even if some prohibitively expensive alternative technically existed when the standard was approved, a claim may still be necessary, because no alternative was ‘commercially’ feasible. Similarly, even if one could hypothesize an alternative way to implement the standard, a claim is still standard-essential if that hypothetical implementation was not technically feasible when the standard was approved.”).

¹²Rudi Bekkers, Christian Catalini, Arianna Martinelli, Cesare Righi, and Timothy Simcoe, “Disclosure Rules and Declared Essential Patents” (2019) *NBER Working Paper 23627*, 5, *available at* <http://www.nber.org/papers/w23627> (accessed July 20, 2020); Justus Baron and Tim Pohlman, “Mapping Standards to Patents Using Declarations of Standard-Essential Patents” (2018) 27 *J. Econ. Manage. Strat.* 504, 508 (“Firms inform SSOs that they own SEPs for a particular standard in a declaration statement. These statements are usually sub-mitted to SSOs in two ways: Either by submitting an online form, or by sending a completed Information Statement, Licensing Declaration Form, or Letter of Assurance”).

¹³It is worth noting that this particular defense has been pushed rather vigorously and most loudly by Apple since, at least, 2011. *See, e.g.*, *Nokia Corp. v. Apple, Inc.*, 1:09-cv—00791-GMS, Document 273-1 pp. 50-1, ¶¶ 53–56 (D. Del. filed Mar. 16, 2011) arguing “Even though Nokia eventual made F/RAND commitments” because it allegedly “concealed IPR purportedly cover[ing] technologies” during the “standard setting process” constitute patent misuse. *See also* *Apple Inc. v. Motorola Mobility, Inc.*, 886 F.

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waiver” precluding the enforcement of the SEP in question.¹⁴ The present article attempts a critical overview of the responses by regulators and courts when confronted with issues around disclosures of essential patents and attempts to put policy and litigation developments into a broader perspective.

§10.02 DISCLOSURES OF ESSENTIAL PATENTS TO SDOS: THE CASE OF ETSI

SDO IPRs policies can vary according to their goals, their membership, and the needs of the industry in which they commercialize their standards. Hence, there is no across-the-board harmonized approach regarding disclosures of potentially essential patents. Nevertheless, some patterns can be identified: (a) some SDOs, such as the European Telecommunications Standards Institute (ETSI), require individual disclosures. Those SDOs allow members to be over-inclusive by identifying individual patents and patent applications that may be *potentially* essential, (b) essentiality is defined as technical essentiality, and (c) there is a temporal requirement for the disclosures.

The IPRs Policy of ETSI offers a good illustration of regulating disclosures of essential patents. ETSI is central to the collaborative standardization ecosystem for several reasons. First, ETSI is an officially recognized European Standardization Organization which under EU Regulation 1025/2012 is responsible for issuing European standards and harmonized standards.¹⁵ Thus, products implementing ETSI standards can obtain a “certificate of conformity” with the so-called essential requirements (the “CE” mark on many consumer products) and can circulate freely within the EU internal market. Second, ETSI developed some of the most important and commercially successful standards in the domain of information and communications technologies (ICT), such as the 2nd generation GSM wireless standard (2G-GSM). Finally, ETSI is one of the founding and most active members of the 3rd Generation Partnership Project (3GPP), a joint venture of seven SDOs developing the ubiquitous 3G, 4G, and currently 5G standards.¹⁶ ETSI is moreover in charge of 3GPP secretariat.¹⁷ Because these wireless telecommunications standards are the most patent-intensive in the ICT sector, and licensing declarations for 3GPP standards are generally submitted to ETSI, the ETSI IPR policy is, in fact, the governing framework for disclosures of potentially essential patents and licensing declarations worldwide.¹⁸

As a preliminary remark, the ETSI IPRs policy is to be understood and interpreted within the overall aims of the IPRs policy, which is, according to Article 3, to create standards and technical specifications incorporating the best solutions available to meet a particular technical need.¹⁹ Hence, the aim of the ETSI IPRs policy is not to create royalty-free standards, nor to incorporate the least costly, from an IP licensing

Supp. 2d 1061, 1086–88 (W.D. Wisc. 2012) and *Conversant Wireless Licensing S.A.R.L. v. Apple, Inc.*, 2019 WL 4038419 (N.D. Cal. May 10, 2019) at 1367-68 requiring the SEP owner to disclose before the standard is adopted.

¹⁴ “[a] member of an open standard setting organization may...have impliedly waived its right to assert infringement claims against standard-compliant products.” *Hynix Semiconductor Inc. v. Rambus Inc.*, 645 F.3d 1336, 1347–48 (Fed. Cir. 2011) (*quoting* *Qualcomm Inc. v. Broadcom Corp.*, 548 F.3d 1004, 1019 (Fed. Cir. 2008)); *see also* *Core Wireless Licensing S.A.R.L. v. Apple Inc.*, 899 F.3d 1356, 1365 (Fed. Cir. 2018). *See also* *Conversant Wireless Licensing S.A.R.L. v. Apple, Inc.*, 2019 WL 4038419 (N.D. Cal. May 10, 2019).

¹⁵ Regulation (EU) No. 1025/2012 of the European Parliament and of the Council of October 25, 2012 on European standardization [2012] OJ L 316.

¹⁶ For the standards development process at 3GPP, *see* Justus Baron and Kirti Gupta, “Unpacking 3GPP Standards” (2018) 27 *J. Econ. Manage. Strat.* 433.

¹⁷ <https://www.etsi.org/committee/3gpp>.

¹⁸ *Id.* at 452; Baron and Pohlman (n. 16) 509.

¹⁹ ETSI IPR Policy (n. 5) Article 3.

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perspective, technical solutions. In fact, ETSI members are actively discouraged to take licensing considerations into account during standard development work, or even discuss those issues in ETSI technical group meetings, as is made clear in the ETSI IPRs Guide.²⁰ Moreover, the disclosure obligation under Article 4 in the ETSI IPRs policy is to be viewed in close connection with the obligation on the part of SEP owners to submit an IPR licensing declaration under Article 6bis and the corresponding Appendix.

In ETSI IPRs policy, essentiality is defined, under Article 15.6, as follows: “ESSENTIAL as applied to IPR means that it is not possible on technical (but not commercial) grounds...to make, sell, lease, otherwise dispose of, repair, use or operate EQUIPMENT or METHODS which comply with a STANDARD without infringing that IPR.” Although technical essentiality is preferred by most SDOs in their own definitions, ETSI goes beyond that, in explicitly excluding commercial considerations to be factored in determinations of essentiality. Moreover, one further consequence of ETSI's essentiality definition is that unlike patents, patent applications cannot be “Essential IPRs,” because as a general rule, patent applications cannot be “infringed.” This has significance when considering ETSI's disclosure obligation on its members, as discussed further below.

The disclosure obligation is laid down in Article 4.1 ETSI IPR policy which reads:

Subject to Clause 4.2 below, each MEMBER shall use its reasonable endeavours, in particular during the development of a STANDARD or TECHNICAL SPECIFICATION where it participates, to inform ETSI of *ESSENTIAL IPRs in a timely fashion*. In particular, a MEMBER submitting a technical proposal for a STANDARD or TECHNICAL SPECIFICATION shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's IPR which *might be ESSENTIAL* if that proposal is adopted. (Emphasis added)

Moreover, the ETSI IPR policy makes clear that members are not obliged to conduct IPRs searches (Article 4.2). Thus, the disclosure obligation under the ETSI IPRs policy entails that the subject of a disclosure to ETSI is “ESSENTIAL IPRs” and “IPR which might be ESSENTIAL if [a] proposal is adopted.” In both instances, the reference is to patents, not patent applications, since patent applications are not “ESSENTIAL IPRs” (*i.e.*, infringeable) and cannot “be ESSENTIAL” (*i.e.*, infringeable). Still, members are expected to inform ETSI of essential IPRs “in a timely fashion,” particularly during standards development.

Depending on the meaning of “timely,” this *could* require the disclosure of an essential patent, even before its grant. However, the meaning and scope of what is “timely” would be governed by the laws of contractual interpretation designated in Section 12 of the ETSI IPR Policy (*i.e.*, those of France). Under French rules of contractual interpretation, in the absence of clear and unambiguous contractual terms, the term at issue is to be interpreted according to the common intention of the parties. If that cannot be discerned, the term would be interpreted in the sense which a reasonable person placed in the same situation would give it. With regard to unclear or ambiguous terms in the ETSI IPR Policy, the common

²⁰European Telecommunications Standards Institute (ETSI), ETSI Guide on Intellectual Property Rights, ETSI Directives (2013) 68, *available at* <https://www.etsi.org/images/files/IPR/etsi-guide-on-ipr.pdf> (accessed July 20, 2020) (“Specific licensing terms and negotiations are commercial issues between the companies and shall not be addressed within ETSI. Technical Bodies are not the appropriate place to discuss IPR Issues. Technical Bodies do not have the competence to deal with commercial issues. Members attending ETSI Technical Bodies are often technical experts who do not have legal or business responsibilities with regard to licensing issues. Discussion on licensing issues among competitors in a standards making process can significantly complicate, delay or derail this process”).

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intent of the parties, and the reasonableness of an interpretation, could be discerned from the policy objectives of the Policy as well as industry practice.

In this regard, the overarching purpose of the ETSI IPR Policy is to assure users that essential patents will be accessible on FRAND terms.²¹ Historically, industry has overwhelmingly provided—at over a 90% rate, and ETSI has accepted, disclosures months or years after the development of a standard, as long as a FRAND commitment is forthcoming.²² If no such FRAND commitment will be forthcoming, however, it would seem reasonable in light of ETSI's Policy objectives to expect a member to notify ETSI of such a negative declaration while ETSI and its members still have an opportunity to circumvent the IPR, regardless whether the IPR is still a patent application at the time.

With regard to the mechanism for disclosing “ESSENTIAL IPRs,” ETSI allows members to be over-inclusive. In accordance with Article 6bis and the corresponding IPR Licensing Declaration forms at the Appendix, ETSI allows its members to identify, according to their “present belief,” IPRs that “may be or may become ESSENTIAL.” In this manner, ETSI allows members to identify relevant and *potentially* essential patents and patent applications, without requiring an identification of what patents actually are essential. Members are then required to indicate whether they are prepared to grant licenses on FRAND terms under those disclosed patents and patent applications, but only “[t]o the extent that the IPR(s) disclosed in the attached IPR Information Statement Annex are or become and remain ESSENTIAL.” By design, IPR Licensing Declaration forms therefore allow for over-inclusiveness beyond what is actually essential.

Thus, identifications of potentially essential IPRs to ETSI are not meant to include only actually essential IPRs, nor to be used as input to academic and policy research, or to inform licensing negotiations between private parties.²³ This is a caveat worth keeping in mind in the context of debates on issues of transparency in disclosures of potentially essential IPRs.

§10.03 DISCLOSURES AND ENFORCEABILITY OF SEPS

Beyond the SDO IPRs policies themselves, disclosures of potential SEPs in the SDO context are also influenced by legal developments, and in particular by antitrust enforcement by competition authorities, as well as by the outcomes of patent infringement litigation worldwide. In this respect, a number of

²¹Juan Martinez, “FRAND as Access to All versus License to All” (2019) 14(8) *J. Intellect. Prop. Law Pract.* 633, 642–51, <https://doi.org/10.1093/jiplp/jpz075>; Borghetti, Jean-Sébastien and Nikolic, Igor and Petit, Nicolas, FRAND Licensing Levels under EU Law (Feb. 5, 2020). *European Competition Journal* (2021), available at SSRN: <https://ssrn.com/abstract=3532469> or <http://dx.doi.org/10.2139/ssrn.3532469>.

²²Using the date when work a version of a standard is complete and is ready for commercial development, *i.e.*, the so-called “Freeze Date” and comparing it to the declaration date by various members of ETSI, the overwhelming majority of declarations to 4G were past the Freeze Date (“FD”). Release 8 has 93% post FD disclosures; Release 9 had 98% post FD; Release 10 had 99% post FD; Release 11 had 96% post FD; Release 12 had 91% post FD; Release 13 had 96% post FD; and Release 14 had 89% post FD. For 5G, declarations were filed a little more quickly, but still a plurality of declarations were post-FD, thus for Release 15 NSA 91% were post FD; Release 15 SA 73% were post FD; Release 15 42% were post FD and Release 16 40% were post FD. *See* Gustav Brismark, On the Timing of ETSI Disclosures (Dec. 17, 2021) at Table 1, p. 7, available at SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3988411.

²³To be sure, SDO SEP databases are an invaluable source of information for researchers. *See*, for instance, Baron and Pohlman (n. 16) 506 and literature cited therein.

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developments are worth taking a closer look at. First, the antitrust actions in the early 2000s in both the United States and the EU against Rambus for allegedly failing to timely disclose its SEPs to the relevant SDO, on the basis of the theory of “patent ambush,”²⁴ which had a different outcome of antitrust enforcement in the United States than in the EU. It should be noted, however, that in Europe acquiring market power through anticompetitive means is not an offense under EU law.²⁵ As a result, the European Commission focused not on whether Rambus illegally acquired market power through late disclosure of its SEPs but rather that it subsequently claimed unreasonable royalties for its SEPs.²⁶

Second, the “implied waiver” decision by the U.S. Court of Appeals for the Federal Circuit in its 2018 *Core Wireless* ruling. The Federal Circuit decision, based on a very limited record in the lower court, recognized an implied waiver over enforcing SEPs in certain circumstances of delayed disclosure. Unfortunately, only the defendant's expert had testified in the lower court on the meaning of the ETSI IPR Policy (and only briefly), providing the Federal Circuit with a limited perspective on an issue with serious implications for industry as a whole. The decision has been criticized for not aligning closely with the ETSI IPR Policy's explicit language, its policy objectives, or industry practice, including the defendant's own disclosure practices.²⁷

Third, is the rejection of the non-enforceability claim by the court of appeal of The Hague in the Netherlands,²⁸ and similar ruling in the High Court of England and Wales,²⁹ which blocked the way to a similarly strict treatment of disclosures in connection with the enforceability of SEPs. The overall effect of the first two developments is that the surrounding framework regarding disclosures creates strong incentives for technology contributors to disclose as broadly and as soon as possible to avoid the perils of either antitrust liability or implied waiver in the United States.³⁰

²⁴See Anne Layne-Farrar, “Assessing IPR Disclosure Within Standard Setting: An ICT Case Study” (2011) 3, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1912198 (accessed July 20, 2020) (“The economic theory underlying the concern over a failure to timely disclose IPR is one of exploitation. If licensors, especially those that are upstream specialists (like Rambus), are seen as withholding relevant patent disclosures while standard discussions are underway within an SSO, disclosing their patents only after the standard had been defined and member firms may be ‘locked into’ the chosen technology, then those licensors can charge ‘excessive’ licensing fees”).

²⁵See Damien Geradin, “Ten Years of DG Competition Effort to Provide Guidance on the Application of Competition Rules to the Licensing of Standard-Essential Patents: Where Do We Stand?” (Jan. 21, 2013) 7, available at SSRN: <https://ssrn.com/abstract=2204359> or <http://dx.doi.org/10.2139/ssrn.2204359>.

²⁶*Id.*

²⁷See, e.g., David L. Cohen, “Apple's CORE Hypocrisy—Setting a World Record in Late Disclosure,” Kidon IP Blog (June 23, 2020), available at <https://kidonip.com/frightful-five/apple-core-hypocrisy-setting-a-world-record-in-late-disclosure/>.

²⁸Koninklijke Philips N.V. v. Asustek Computers Inc., Court of Appeal of The Hague (Gerechtshof Den Haag), Case No. 200.221.250/01 (May 7, 2019).

²⁹Optis Cellular Technology LLC and others v Apple Retail UK Limited and others, High Court of England & Wales, 25 June 2021, London, [2021] EWHC 1739 (Pat), *appeal dismissed* [2022] EWCA Civ 1411 (unanimous decisions of the Court of Appeals upholding the lower court's ruling and dismissing both parties' appeals).

³⁰The *Sisvel v. Haeir*, 24 November 2020, Case-No. KZR 35/17 (Bundesgerichtshof), case in Germany's disposal of the patent ambush, discussed below, also seems to follow the path of the *Philips* and *Optis* cases.

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[A] Antitrust Liability for Failure to Disclose: “Patent Ambush”

The case against Rambus arose from the company's alleged failure to properly notify the other members of JEDEC, an SDO developing, among others, standards for PC memory units, that it held IPRs on JEDEC's memory standard DRAM (dynamic random access memory). In particular, Rambus allegedly modified specific patent applications in such a way as to read on JEDEC's DRAM standard and then failed to disclose these applications.

In the United States, the Federal Trade Commission (FTC) filed an action before an administrative law judge (ALJ) against Rambus alleging a violation on the part of the latter of section 5 FTC Act.³¹ In the view of the FTC, Rambus's conduct aimed at capturing the JEDEC DRAM standard and thus at monopolizing the market for DRAM-compliant memory processors. The ALJ refused to find a §5 FTC Act infringement and the FTC subsequently reopened the case to admit further evidence to the record and ultimately issued an infringement decision under §5 finding that Rambus willfully deceived JEDEC and its members with the view to acquire monopoly power. The Commission further found that, had Rambus disclosed the IPRs in question, JEDEC would have either designed around those IPRs or obtained a FRAND commitment by Rambus.

On appeal, the D.C. Circuit struck down the FTC's decision and held that, even if deceptive, a failure on the part of the IPR owner to disclose its IPRs is not, in itself, anticompetitive.³² The court took issue with both the Commission's theory of harm and its interpretation of the JEDEC IPR policy. To begin with, the court noted that for a monopolist's conduct to be illegal under §5 FTC Act it must have an exclusionary anticompetitive effect, thereby harming the competitive process and consumers.³³ Harm to competitors alone is insufficient for such a finding. In the case at hand, the court observed that even if Rambus's conduct allowed it to avoid offering a FRAND commitment and licensing its SEPs on non-FRAND terms, this, in itself, did not amount to anticompetitive exclusionary conduct.³⁴ On the contrary, high prices tend to attract competitors, not exclude them, a formulation that echoes the famous pronouncement to the same effect by Justice Scalia in the U.S. Supreme Court's *Trinko* ruling.³⁵ Moreover, the court found the Commission's interpretation of JEDEC's IPR policy too expansive. In particular, the court was unconvinced that, under the JEDEC IPR policy, contributors are under a duty to constantly update their declarations of pending patent applications.³⁶

³¹In the United States, monopolization and attempted monopolization claims are prosecutable under, either §2 Sherman Act, or §5 FTC Act which is a broad provision against unfair competitive practices that can be enforced in a stand-alone action or in conjunction with one of the provisions of the Sherman Act. The FTC is the sole enforcer of the FTC Act.

³²Rambus Inc. v. Federal Trade Comm'n, No. 07-1086, 2008 U.S. App. LEXIS 8662 (D.C. Cir. Apr. 22, 2008).

³³*Id.* at *12.

³⁴*Id.* at *15.

³⁵*Id.* at *18 (“had JEDEC limited Rambus to reasonable royalties and required it to provide licenses on a nondiscriminatory basis, we would expect less competition from alternative technologies, not more; high prices and constrained output tend to attract competitors, not to repel them”). *See also* Verizon Commc's, Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. ___ (2003) at 7 (“The mere possession of monopoly power, and the concomitant charging of monopoly prices, is not only not unlawful; it is an important element of the free-market system. The opportunity to charge monopoly prices—at least for a short period—is what attracts ‘business acumen’ in the first place; it induces risk taking that produces innovation and economic growth. To safeguard the incentive to innovate, the possession of monopoly power will not be found unlawful unless it is accompanied by an element of anticompetitive *conduct*”).

³⁶*Rambus* (n. 29) 19–20.

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The outcome of the Rambus case was, however, different, across the other side of the Atlantic. In the EU, the Commission focused on the conduct of Rambus after the alleged patent ambush (*i.e.*, intentionally failing to disclose its patents and patent applications until the standard was adopted). The Commission issued a “commitments decision,” a kind of formal settlement of the Commission's investigation, under Article 9 of EU Regulation 1/2003.³⁷ The Commission, in its Statement of Objections against Rambus, reached the preliminary conclusion that Rambus's charged excess royalty rates (which they allegedly were able to do because of their delayed disclosures of patents reading on the JEDEC DRAM standard), thereby, according to the Commission's preliminary findings, amounting to an exploitative abuse of dominant position and, therefore, an infringement of Article 102 of the Treaty for the Functioning of the EU (TFEU).³⁸ As noted above, under Article 102 it may be illegal for an undertaking in dominant position to impose excessive prices or otherwise oppressive and exploitative terms on its customers (including end consumers). Rambus offered commitments to license its SEPs on specific terms (partly royalty-free, partly FRAND) and those commitments were made binding with the Commission's *Rambus* decision. Because the case ended up in a settlement, while providing an indication that failure on the part of a SEP owner to properly disclose its essential IPR to the relevant standards body might lead to a Commission investigation, the Commission was unable to establish a set of principles on the issues raised.³⁹

Although the case against Rambus resulted in different outcomes in the United States and the EU, the fact remains that a member's intentional failure to disclose SEPs to an SDO in order to avoid a FRAND declaration can imply for the SEP owner antitrust investigation and litigation at the very least, and antitrust liability and sanctions at worst. The potential risk of antitrust liability produces strong incentives for technology contributors to make disclosures of essential IPRs to SDOs, and when in doubt, err on the side of disclosing patents that might later prove to be non-essential.⁴⁰ That said, it cannot be restated enough that RAMBUS' failure to disclose was a result of a *willful intent* to deceive the SDO. Nearly all cases since (including the ones discussed below) concern disclosure that was not timely enough for the court's liking—whether as a result of a slow-moving corporate bureaucracy, contested interpretations of ETSI obligations, or inadvertent oversight by the patent owner, not an intent to deceive.

³⁷*Rambus* (Case COMP/38.636) Commission Decision [2009].

³⁸*Id.* at 28. In EU competition law, the concept of exploitative abuse refers to the imposition by an undertaking in dominant position of prices (and/or other contractual terms) that bear no “reasonable economic relation” to the economic value of the products/services supplied. *See* Case 27/76, *United Brands Company and United Brands Continental BV v. Commission of the European Communities* [1978] ECLI:EU:C:1978:22, paras 150 *et seq.* It has to be noted that, under Article 102 TFEU, the bar set in *United Brands* for the Commission to establish exploitative prices is very high indeed. Hence, exploitative abuse as a basis for Article 102 TFEU enforcement is rarely relied upon by the European Commission. Moreover, review under Article 102 of the pricing of intangible assets (such as patents) is even more challenging than for tangible goods, because for the latter the Commission can, in principle, rely on an analysis of costs of production to establish the no “reasonable economic relation” requirement. In *Rambus*, the Commission never adopted a final infringement decision and, thus, its theory of harm that the royalty rates charged by Rambus were exploitative was never put under the scrutiny of EU courts.

³⁹*See* Damien Geradin, “Ten Years of DG Competition Effort to Provide Guidance on the Application of Competition Rules to the Licensing of Standard-Essential Patents: Where Do We Stand?” (Jan. 21, 2013) 8, *available at* SSRN: <https://ssrn.com/abstract=2204359> or <http://dx.doi.org/10.2139/ssrn.2204359>.

⁴⁰Jorge L. Contreras, *Essentiality and Standards-Essential Patents*, in *CAMBRIDGE HANDBOOK OF TECHNICAL STANDARDIZATION LAW: COMPETITION, ANTITRUST, AND PATENTS* (Jorge L. Contreras ed., 2017), pp. 15–16.

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[B] Implied Waiver in the United States

In the United States, a further complication regarding disclosures and the enforceability of SEPs resulted from a Federal Circuit case on “implied waiver.” The implied waiver theory, first pronounced by the Federal Circuit in its rulings in *Qualcomm* and *Hynix*, posits that in cases where the conduct of the SEP owner is patently inconsistent with the exercise by the latter of its IPRs as to induce a reasonable belief that such rights have been relinquished, then the SEP owner implicitly waives the exercise of those rights. According to *Qualcomm*⁴¹ and *Hynix*,⁴² such conduct can be shown where the SEP owner is under a duty to disclose its SEPs to the relevant SDO, and such duty is breached.⁴³

A 2018 ruling regarding implied waiver for failure to disclose SEPs is the Federal Circuit's decision in *Core Wireless*.⁴⁴ The case arose from a peculiar set of facts. The patents in suit were SEPs reading on an optional feature of the ETSI 2G GSM-GPRS standard. These SEPs were originally owned by Nokia, and subsequently transferred to Core Wireless, a non-practicing entity. The specific SEPs were disclosed by Nokia four years after the formal release of the 2G standard.⁴⁵ At trial, the defendant's expert provided brief testimony about the meaning of the ETSI IPR Policy regarding disclosures and concluded that Nokia had breached the Policy because Nokia should have disclosed to ETSI its patent applications before the formal release date of the standard. The plaintiff cross-examined the expert but provided no rebuttal expert testimony on the meaning of the ETSI IPR Policy.

In *Core Wireless*, the Federal Circuit reiterated its findings in *Qualcomm* and *Hynix*, that when an SEP owner is under a duty to disclose its SEPs, yet it fails to do so, the right to enforce the SEPs in question may be implicitly waived.⁴⁶ However, according to the court, the doctrine of implied waiver is to be applied only where the patentee's misconduct resulted in an inequitable benefit, that is, a benefit that would not have accrued “but for” the alleged misconduct (materiality requirement).⁴⁷ An exception to this rule was recognized by the Federal Circuit in *Therasense*⁴⁸—a case of deceptive non-disclosure of information to the patent office—in cases of affirmative egregious misconduct.⁴⁹ Hence, for an SEP to be rendered unenforceable, according to the implied waiver doctrine, one of the following two requirements must be fulfilled: (a) the failure to disclose the SEP resulted in an unfair advantage for the SEP owner that would not have accrued but for the alleged misconduct (materiality requirement), or (b) the failure to disclose reveals bad faith to a degree amounting to egregious misconduct.⁵⁰

On remand, however, the District Court for the Northern District of California seemed to dilute the materiality requirement in *Core Wireless* by pronouncing an SEP unenforceable where non-disclosure can “potentially” result in such unfair advantage.⁵¹ After briefing on appeal, the parties dismissed the case with prejudice offering no explanation.⁵²

⁴¹*Qualcomm Inc. v. Broadcom Corp.*, 548 F.3d 1004, 1020–24 (Fed. Cir. 2008).

⁴²*Hynix Semiconductor Inc. v. Rambus Inc.*, 645 F.3d 1336, 1347–48 (Fed. Cir. 2011).

⁴³*Qualcomm*, 548 F.3d at 1011–12; *Hynix* (n. 39) 1348.

⁴⁴*Core Wireless Licensing S.A.R.L. v. Apple Inc.*, 899 F.3d 1356 (Fed. Cir. 2018).

⁴⁵899 F.3d at 1365.

⁴⁶899 F.3d at 1365.

⁴⁷899 F.3d at 1368.

⁴⁸*Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276, 1292 (Fed. Cir. 2011) (en banc).

⁴⁹*Core Wireless* (n. 41) 1368.

⁵⁰*Id.*

⁵¹See Brief of Telefonaktiebolaget Ericsson et al. in support of Plaintiff-Appellant and Reversal in *Conversant Wireless Licensing S.A.R.L. v. Apple Inc.*, No.15-cv-05008-NC, 2019 WL 4038419, at *7–*8 (N.D. Cal. May 10, 2019).

⁵²Order dismissing the appeal issued October 30, 2020, document 88, Appeal No. 19-2039 (Fed. Cir. 2020).

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The implied waiver doctrine, with its draconian penalty of unenforceability for non-disclosure or untimely disclosure of SEPs, creates strong incentives for SEP holders to avoid under-disclosing. The fact that delayed disclosure can render the patent unenforceable will certainly provide an impetus for SEP holders to disclose early in standards development where the uncertainties regarding essentiality are most acute. Hence, the implied waiver doctrine is a further factor directing SEP owners toward disclosing IPRs well beyond what's actually essential.

What is even more problematic, however, is that this turn of events in the enforceability of SEPs resulted from a misinterpretation of the ETSI IPR Policy. In particular, the Federal Circuit relied on an expert who testified that it was a breach of the ETSI IPR Policy not to disclose a patent application before the formal release date of a standard, even where a subsequent disclosure and FRAND declaration were forthcoming. His opinion was that “ESSENTIAL IPRs” or “IPR which might be ESSENTIAL” could refer to patent applications, not just patents. However, the ETSI IPR Policy is clear that “ESSENTIAL IPRs” are IPRs that must be *infringed* and that “IPR which might be ESSENTIAL” refers to IPR that might be *infringed*. As a general rule, while patents can be infringed, patent applications cannot. And while the obligation to disclose essential patents in a “timely” manner may introduce a question about whether their earlier patent applications ought to be disclosed in certain circumstances, such a question ought to be answered according to French rules of contract interpretation, taking into account the policy objectives of the ETSI IPR Policy and industry practice. Indeed, it is notable that *amici* in the *Core Wireless* case referred to how the vast majority of disclosures to ETSI, including the defendant's own, would be in breach of the ETSI IPR Policy under the Federal Circuit's ruling. It seems highly unlikely that the ETSI community as a whole would be in breach of the ETSI IPR Policy, or that their almost uniform disclosure practices would “imply” a collective waiver of their IPR rights.

It is very doubtful that had Core Wireless provided expert rebuttal testimony the Federal Circuit would have reached its conclusion regarding members' obligations under the ETSI IPR Policy. The Federal Circuit relied heavily on this lack of evidence, and it may be that future litigants who provide expert evidence on the meaning of the ETSI IPR Policy, and its interpretation under French law, can correct this aspect of the *Core Wireless* case.

Or perhaps not. In a recent International Trade Commission final, initial determination,⁵³ ALJ Shaw found the patents to be unenforceable because the patent owner (Philips) “did not declare these three asserted patent to ETSI as ‘essential’ to the standard for over six years” despite the inventors being involved in the working groups that developed the standard on which the asserted patents read (at 276). Given that multiple other bases ALJ Shaw for no violation, the Commission in its final decision “took” no position on implied waver,⁵⁴ and as a result it is highly unlikely that question of enforceability will be heard on appeal.

There was yet another case which did make it to appeal, but the appeal did not address the disclosure question. In that case—related to the Optis case in the UK discussed below—the court found that the defendant, Apple, failed to show that the asserted patents were unenforceable due to untimely disclosure to ETSI.⁵⁵ CL14 p21. Interestingly, the court in interpreting *Core Wireless*, focused on the fact that any duty the patentee had to disclose to the SDO must be proven by clear and convincing evidence. While Apple focused on the fact that failure of the original patent owners to disclose the patents by the relevant

⁵³*In re Certain UMTS and LTE Cellular Communication Modules and Products Containing the Same*, Inv. No 337-TA-1240 (ITC Apr. 1, 2022).

⁵⁴*In re Certain UMTS and LTE Cellular Communication Modules and Products Containing the Same*, Inv. No 337-TA-1240 (ITC July 6, 2022).

⁵⁵*Optis Wireless Tech, LLC, et al. v. Apple Inc.*, No. 2:19-cv-066-JRG, Docket # 542 (EDTX Feb. 29, 2021) at CL 14 p. 21.

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Freeze Dates of the various ETSI standards,⁵⁶ the court noted that disclosure prior to the freeze date is far from the norm: indeed, well over 95% of all declarations to ETSI were made after the freeze dates.⁵⁷ Given that “ETSI is aware of this practice of disclosure and there is no evidence it has taken any action to encourage or enforce earlier disclosure” the court found no breach of a duty to disclose essential IPR to ETSI.⁵⁸ Additionally, given the “very high bar”, the court found that there was no egregious conducts justifying unenforceability of the patents in suit.⁵⁹

[C] The *Philips v. Asus* Case in the Netherlands

In the EU, although SEPs have been intensely litigated over the past decade, the issue of disclosures of essential patents has come up only in rare occasions. For the most part, national courts in the EU deal with SEP-infringement cases within the framework elaborated by the Court of Justice of the EU (CJEU) in its seminal 2015 *Huawei v. ZTE* ruling.⁶⁰ According to the ruling a claim for injunctive relief for an SEP does not, in principle, infringe Article 102 TFEU provided that the SEP owner (a) properly notifies the standard user of its infringement of SEPs, and (b) following the expressed willingness of the alleged infringer to conclude a FRAND agreement, the SEP owner makes a licensing offer on FRAND terms and conditions.⁶¹ Moreover, a willing licensee is expected to (a) indicate, without delay, its willingness to agree to a license on FRAND terms, (b) in case of disagreement over the SEP-owner's initial offer, submitted a counteroffer on FRAND terms, and (c) provide a bank guarantee or deposit on appropriate amount should the counteroffer be rejected by the SEP owner, and (d) to render an account of the acts of use.⁶²

That said, disclosures of essential patents were extensively discussed by the Court of Appeal of The Hague in the Netherlands in its *Philips v. Asus* judgment whereby the court rejected the notion that failure to (timely) disclose SEPs, where a FRAND commitment is ultimately provided, can give rise to an antitrust defense under Article 102 TFEU or, in the alternative, to a bar to SEP enforceability.⁶³ To begin with, the court emphasized that the purpose of the ETSI IPRs policy is not to allow ETSI members to develop, to the extent possible, royalty-free standards—or at the very least, standards that entail minimal licensing costs. Rather, under Article 3 ETSI IPR policy the aim of standardization at ETSI is to incorporate the best available technical solutions to ETSI standards.⁶⁴ Hence, the court rebuffed the argument of the defendant that improper disclosure of SEPs to ETSI deprived its members of the opportunity to include patent-free technologies into the particular standard—in this case, the 3G-UMTS and 4G-LTE standards. According to the court, there is convincing evidence that ETSI and 3GPP working group members do not, in principle, deal with patent and licensing issues in their meetings and discussions.⁶⁵ Hence, disclosures play little, if any, part in actual standards development at ETSI and

⁵⁶*Id.* at pp. 23–24

⁵⁷*Id.* at pp. 24–25. Indeed, Apple is one of the worst violators of its own proposed disclosure rules, see David L Cohen, “Apple's CORE Hypocrisy—Setting a World Record in Late Disclosure,” Kidon IP Blog (June 23, 2020), available at <https://www.kidonip.com/resources/blog/apples-core-hypocrisy-setting-a-world-record-in-late-disclosure/>.

⁵⁸*Optis Wireless*, No. 2:19-cv-066-JRG, Docket # 542, at 25.

⁵⁹*Id.*

⁶⁰C-170/13, *Huawei Technologies Co. Ltd. v. ZTE Corp.* [2015].

⁶¹Case C-170/13, *Huawei Technologies Co. Ltd. v. ZTE Corp.*, [2015] ECLI:EU:C:2015:477.

⁶²*Id.* at ¶67.

⁶³*Koninklijke Philips N.V. v. Asustek Computers Inc.*, Court of Appeal of The Hague (*Gerechtshof Den Haag*) Case No. 200.221.250/01 (May 7, 2019) ECLI:NL:GHDHA:2019:1065.

⁶⁴*Id.* at paras 4.155 *et seq.*

⁶⁵*Id.* at para 4.156.

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3GPP.⁶⁶

Moreover, the court stressed that the main purpose of the disclosure provision in ETSI IPRs policy (Article 4.1) is to trigger the discloser's licensing obligations, and in particular its obligation to submit a FRAND declaration.⁶⁷ The court further found that the main impetus for disclosures of specific IPRs (beyond a general blanket declaration of ownership of SEPs) is for ETSI to identify cases whereby particular SEPs will not be made available for licensing, or not available for licensing on FRAND terms, in which case ETSI technical committees would have to design around the unavailable SEPs.⁶⁸ Conclusively, the court held that the argument that “but for” the untimely affirmative FRAND declaration on the part of the plaintiff ETSI would have chosen a different technology instead was unsubstantiated in fact and unconvincing, given ETSI's stated purpose of developing standards based on the best available technologies.⁶⁹

Evidently, the Court of Appeal of The Hague reached a conclusion contrary to the one reached by the U.S. Federal Circuit in *Core Wireless*. It can be argued that *Philips v. Asus* is better grounded on standardization realities within ETSI and 3GPP and takes a more careful look at the ETSI IPRs policy and its underlying goals. In particular, *Philips v. Asus* stresses that, even if essentiality disclosures are untimely, there is no harm to standard users, provided, of course, that the SEP owner has submitted and fulfilled a commitment to be prepared to grant licenses on FRAND terms and conditions. The Federal Circuit still has an opportunity to course-correct on this point in the latest appeal in the *Core Wireless* saga, should it conclude that there is insufficient evidence that (a) the failure to disclose the SEP resulted in an unfair advantage for the SEP owner that would not have accrued but for the alleged misconduct, or (b) the failure to disclose reveals bad faith to a degree amounting to egregious misconduct.

[D] The *Optis v. Apple* Case in England

The same set of issues arose in 2021 as part of a series of trials between PantOptis's subsidiaries (Optis Cellular Technology LLC, Optis Wireless Technology, and Unwired Planet International Limited) and Apple and its UK subsidiaries.⁷⁰ The trial court's decision concerned the validity and infringement of EP (UK) 2 229 744, previously owned by Ericsson and also previously held valid, infringed, and essential in 2015.⁷¹ Here Apple conceded infringement and essentiality but argued the patent was invalid over two pieces of prior art not considered previously and raised a defense of proprietary estoppel.⁷²

Apple's estoppel argument was that Ericsson had declared its patent as potentially essential late by not

⁶⁶*Id.*

⁶⁷*Id.* at para 4.157. In this regard, see also the similar findings by the U.K. Supreme Court in its recent seminal ruling in *Unwired Planet v. Huawei* (n. 63) para 7 (“The purpose of the ETSI IPR Policy is, first, to reduce the risk that technology used in a standard is not available to implementers through a patent owner's assertion of its exclusive proprietary interest in the SEPs. It achieves this by requiring the SEP owner to give the undertaking to license the technology on FRAND terms. Secondly, its purpose is to enable SEP owners to be fairly rewarded for the use of their SEPs in the implementation of the standards. Achieving a fair balance between the interests of implementers and owners of SEPs is a central aim of the ETSI contractual arrangements”).

⁶⁸*Philips v. Asus* (n. 27) para 4.159.

⁶⁹*Id.* at para 4.160.

⁷⁰*Optis Cellular Technology LLC and others v Apple Retail UK Limited and others*, High Court of England & Wales, 25 June 2021, London, [2021] EWHC 1739 (Pat) *appeal dismissed* [2022] EWCA Civ 1411 (unanimous decisions of the Court of Appeals upholding the lower court's ruling and dismissing both parties' appeals).

⁷¹*Unwired Planet v. Huawei*, [2015] EWHC 3366 (Pat), *upheld on appeal* [2017] EWCA Civ 226.

⁷²[2021] EWHC 1739 (Pat) at ¶3.

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having declared it before the relevant technical groups agreed the content of the relevant standards. Apple claimed that the alleged failure was a breach of clause 4.1 of the ETSI IPR policy. Because of this “late” declaration, Apple contended that the relevant technical groups within ETSI relied on Ericsson's supposed assurance of having no patents that read on the relevant standard and thus suffered a detriment by not incorporating an alternative, unpatented technical solution in the standard. Consequently, Apple argued that Optis was not entitled to enforce the patent against Apple or, alternatively, would not be able to obtain an injunction based on it.

The trial court dismissed Apple's arguments on breach of clause 4.1 and proprietary estoppel more generally. Considering the historical context of the ETSI IPR Policy including the changes to the policy over time, and the behavior of declarants, the judge concluded that clause 4.1 did not require a definitive time limit for declarations of IPR. Moreover, Ericsson's timing was well within the range of what ETSI declarants generally did, and thus objectively reasonable for Ericsson to think that it was complying with the clause.

More generally, the trial court found the fact that an ETSI member has a patent potentially relevant to the standard was not a consideration for those agreeing with the content of the standards. Rather, the goal was to arrive at the best technical solution. Further with respect to the specific standards group at issue, the court found that it was well known that the relevant standards group was “patent-heavy” and that Ericsson was a well-known innovator, patent filer, and participant in the group. Consequently, no member of the relevant working group could reasonably have thought that Ericsson's proposal was patent free and, even if they did, there was no reason Ericsson should have been aware of this perception. Finally, the court contended that the Ericsson proposal was the best technical solution and would have been chosen in any event, so even if the court's conclusions on assurance were wrong, there was no reliance and detriment.⁷³

It thus seems that, similar to *Philips v. Asus* but in contradistinction to *Core Wireless, Optis v. Apple* is better grounded in history and in standardization realities within ETSI and 3GPP. Moreover, in accord with estoppel being an equitable defense, the *Optis* court focuses on whether there was any possible harm to standards users. Importantly the court found: (i) that the relevant patent was not considered by the relevant working group; (ii) Apple did not assert that there existed some non-patented solution that would have been chosen only that there “might” be such a solution; and (iii) that, in fact, no technically equivalent solution existed and thus the patented solution would have been chosen regardless.⁷⁴ Accordingly, the court found no reliance and no detriment.⁷⁵

[E] The *Sisvel v. Haier* Case in Germany

In one of the most consequential essential patent rulings of 2020,⁷⁶ the German Federal Court of Justice in *Sisvel v. Haier*⁷⁷ issued important precedential rulings on essential patents and injunctions in light of the post-*Huawei v. ZTE* landscape. Almost lost in the shuffle was a holding dismissing Haier's patent ambush defense. Germany's highest civil court held that Haier was only entitled to assert such a defense against the original patent owners who were members of the relevant SDO at the time of alleged ambush and not their assignee, Sisvel.⁷⁸ Perhaps sensing the holding's tension with the principle that

⁷³*Id.* at ¶¶535–541.

⁷⁴*Id.* at ¶537

⁷⁵*Id.* at ¶538.

⁷⁶IPWatchdog, What Mattered in 2020? Industry Experts Have Their Say on This Year's Biggest Moments in IP (Dec. 27, 2020), available at <https://ipwatchdog.com/2020/12/27/mattered-2020-industry-experts-say-years-biggest-moments-ip/id=128418/>.

⁷⁷24 November 2020, Case-No. KZR 35/17 (Bundesgerichtshof).

⁷⁸*Id.* at ¶130.

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FRAND obligations run with the patent and are not extinguished through transfer,⁷⁹ the court also found no "patent ambush." Haier failed to present convincing evidence that the standard would have taken on a different form had the original owners presented the relevant patent applications as the standard was being developed.⁸⁰

§10.04 THE EU COMMISSION'S POLICY ON DISCLOSURES OF ESSENTIAL PATENTS

The European Commission has consistently, over the years, taken an active interest in standardization and the proper functioning of SDOs. The reason for this interest is twofold: (a) the importance of standards for any modern and dynamic economy, and (b) the importance of standards for the EU, in particular. As already mentioned above, standards reduce trade barriers between EU Member States and, thus, constitute an important policy lever for the integration of the internal market of the EU.

Specifically, the EU Commission discusses standardization extensively in its Horizontal Guidelines, a non-binding, soft-law document that states the Commission's views and priorities regarding the enforcement of Article 101 TFEU on anticompetitive agreements and concerted practices. In the Horizontal Guidelines, the Commission has provided for a safe harbor from antitrust liability under Article 101 for SDOs that (a) allow for unrestricted membership for all interested parties, (b) have in place transparent procedures for developing standards, (c) develop standards that are not mandatory to comply with, and (d) allow access to essential IPRs on FRAND terms and conditions.⁸¹ SDOs and standardization processes that satisfy these four conditions are, in principle, immune from liability under Article 101 TFEU.

The issue of FRAND declarations relates to factor (d) and in particular to an IPRs policy that ensures effective access to SEPs on FRAND terms. In the Horizontal Guidelines, the Commission expresses the view that, for an IPR policy to safeguard effective access to the standard, it must, *inter alia*, "require good faith disclosure, by participants, of their IPR that might be essential for the implementation of the standard under development."⁸² According to the Commission, such declarations allow SDO participants to make an informed choice on which technologies to include in a given standard.⁸³ SDO contributors could satisfy this goal by "ongoing disclosures as the standard develops and on reasonable endeavours to identify IPR reading on the potential standard."⁸⁴

While in previous years, European case law seemed to provide some sanity with respect to the law of enforceability and disclosure, this sanity now appears under stress. To wit: while the new DG Grow

⁷⁹In the US and EU, antitrust authorities have held that a new SEP owner must continue to abide by a prior SEP owner's F/RAND commitment (*In re Negotiated Data Sols. LLC*, September 23, 2008, FTC Matter 051 0094; *Unwired Planet Int'l Ltd. v. Huawei Techs. Co. Ltd.*, [2017] EWHC (Pat) 711 (upheld on appeal [2018] EWCA (Civ) 2344) (appeal dismissed [2020] UKSC 37); Regional Court LG Düsseldorf 19. January 2016–4b O 120/14; European Commission, Communication from the Commission (2011/C 11/01) para 285). SSOs therefore typically have IPR policies stating that the F/RAND commitment binds all future owners, no matter how far downstream the new owner is from the original SEP owner. *See, e.g.*, ETSI Rules of Procedure, Annex 6; ETSI Intellectual Property Rights Policy, clause 6.1bis (Apr. 18, 2018).

⁸⁰*Sisvel v. Haier* at ¶131.

⁸¹European Commission, *Horizontal Guidelines* (n. 35) para 280.

⁸²*Id.* at paras 284 and 286.

⁸³*Id.* at para 286.

⁸⁴*Id.*

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proposed regulations⁸⁵ have been shelved⁸⁶; the Commissions' critical view of current SDO policies regarding disclosures; and added to the fact that Apple, the largest and wealthiest⁸⁷ SEP implementer by far, has been obsessed with unenforceability from late disclosure since at least 2010⁸⁸ notwithstanding its own hypocrisy,⁸⁹ it is highly likely that the law regarding disclosure requirements will remain in the news for quite some time yet.

§10.05 DISCLOSURES AND ENFORCEABILITY OF SEPS IN PERSPECTIVE

The review of developments in antitrust enforcement, SEP litigation, and public policy on the issue of disclosures to SDOs reveal substantial difficulties in the formulation of effective and realistic policies and solutions. A common thread connecting these developments is that insufficient information on the part of public regulators and courts results in measures and policies being adopted and subsequently backfiring by producing unintended consequences.

The “patent ambush” litigation and enforcement against Rambus in the early 2000s provides a good case in point. Undoubtedly, antitrust authorities in both the EU and the United States were motivated by the laudable aim of deterring what they viewed as an opportunistic non-disclosure of SEPs by a technology contributor. But their enforcement (a) revealed that patent ambush may be a problematic ground for enforcement from an antitrust law perspective. More specifically, the U.S. FTC's action against Rambus was rebuked on appeal by the D.C. Circuit for failing to establish to the requisite standard that insufficient disclosures can have an exclusionary anticompetitive effect.

Similarly, in the United States, the *Core Wireless* case of the Federal Circuit resting on the doctrine of implied waiver arguably has had an impact on declaration patterns by motivating broader and earlier disclosures, both impacting on the accuracy and precision of those disclosures. The most disconcerting aspect of the *Core Wireless* ruling is that it relies on a poor and under-developed factual record not in line with the language of the ETSI IPR Policy, the Policy's objectives or industry practice. The ruling also rests on the incorrect assumption that declarations may have a bearing on decision-making by participants to ETSI technical groups and committees. However, this assumption runs counter to ETSI IPR rules (which call for members to choose based solely on a solution's technical merit), as well as to overwhelming evidence that technical group members ignore, as a general rule, and are positively unwilling to discuss issues around patenting and licensing, with the only exception those (rare) cases whereby a FRAND commitment is not given.

In particular, the court's finding that late disclosures can result in SDO members being misled in their choice of technologies has no basis in actual practice. There is empirical evidence that the prevailing pattern in disclosures to ETSI is for those disclosures to be submitted well past the point the court

⁸⁵*Id.* at 4.

⁸⁶“Mixed Reaction from Market as EU Withdraws SEP Regulation,” *Juve Patent* (Feb. 12, 2025), available at <https://www.juve-patent.com/legal-commentary/eu-commission-withdraws-sep-regulation/>.

⁸⁷Jennifer Korn, Nicole Goodkind, Apple is now worth \$3 trillion, boosted by the Nasdaq's best start in 40 years, CNN Business (Fri June 30, 2023), available at <https://www.cnn.com/2023/06/30/tech/apple-3-trillion-market-valuation/index.html>.

⁸⁸*Nokia Corp. v. Apple Inc.*, No. 1:09-cv-00791-GMS (D. Del.), Doc. 21, filed 2/19/2010, Apple's first amended answer, defenses and counterclaims at ¶¶53–106 (counterclaims). Note as well that Apple as a defendant raised the same arguments in *Core Wireless* in the US and *Optis* in the UK.

⁸⁹David L Cohen, Apple's CORE Hypocrisy—Setting a World Record in Late Disclosure, Kidon IP Blog (June 23, 2020), available at <https://kidonip.com/frightful-five/apple-core-hypocrisy-setting-a-world-record-in-late-disclosure/>.

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identified as “timely” (the adoption of the standard).⁹⁰ Indeed, the defendant's own disclosures were overwhelmingly “untimely” under its proposed interpretation. Despite this practice on the part of ETSI members of submitting disclosures even years after a standard is adopted, ETSI has long developed world-class, cutting-edge standards and some of the most ubiquitous technologies in the telecommunications sector (and beyond).

Accordingly, perceived “late” disclosures have been the norm in ETSI. ETSI developed highly successful standards, due to the fact that those technologies were available on FRAND terms. In particular, the ETSI IPR Policy makes it clear that members are not required to perform IPR searches to satisfy their disclosure obligations.⁹¹ This aspect of the ETSI IPR policy points to the fact that ETSI and its members did not intend to impose a strict requirement on “timely” disclosures, such as the one set by *Core Wireless*. Moreover, prevailing practice points to the fact that disclosure prior to the adoption of a standard is, in fact, neither necessary nor particularly useful for the standard development organization to do its work, provided that technology contributors ultimately commit to be bound by a FRAND commitment.⁹²

SDO members normally do not need such timeliness in a fast-developing market, because their prime concern is to access essential IPRs on FRAND terms, and this goal is served by the FRAND commitment. Should the SDO member fail to disclose on a timely manner and require afterwards a royalty above FRAND it would face charges of exploitative practices (Art 102 TFEU) in the EU, as Rambus case has shown, and no injunction would be granted to that company (following CJEU ruling *Huawei v. ZTE*).⁹³

For SEP users, these disclosures serve the main aim to trigger contributors' declarations regarding FRAND assurances. As long as such assurances are provided, a marginal increase in the timeliness of disclosures will practically offer users little added gain. After all, it is widespread practice in many SDOs

⁹⁰Layne-Farrar (n. 23) 6, 15–16 (“most official IPR disclosures at ETSI are made ex post—often many years after the relevant standard components were published...the overwhelming majority of the complete entries were made after the publication of the technical specification named as relevant by the patent holder”). See also MOTION FOR LEAVE TO FILE BRIEF OF KELCE WILSON AS AMICUS CURIAE IN SUPPORT OF PLAINTIFF—APPELLEE, *Core Wireless Licensing S.A.R.L. v. Apple, Inc.*, No. 17-2102 (Fed. Cir. 2018), doc. 59 page 5 (“for the 3G and 4G standards developed through ETSI, 86% of the disclosures were late and only 14% were timely”); David L Cohen, *Apple's CORE Hypocrisy, Setting a World Record in Late Disclosure*, Kidon IP Blog (June 23, 2020), available at <https://www.kidonip.com/resources/blog/apples-core-hypocrisy-setting-a-world-record-in-late-disclosure/> (noting that Apple filed letters of assurance for standards published more than 7.5 years before, providing table showing the tardiness of Apple's declarations).

⁹¹ETSI, *ETSI IPRs Policy* (n. 7) Article 4.2.

⁹²ETSI, *ETSI IPRs Guide* (n. 20) 59 (“The main problems for ETSI as a standards body which may arise from ‘late disclosures’ include:

- licenses for Patents which have been disclosed late and are not available at all; or
- licenses for Patents which have been disclosed late and which are available, but not on Fair, Reasonable and Non-Discriminatory (FRAND) terms, i.e. the company is unwilling to make a ‘FRAND’ undertaking/licensing declaration”).

⁹³For a summary of the current state of the tumultuous case law and regulatory stance on SEP injunctions in the US, see Biden Administration Provides Guidance on Remedies for FRAND-Assured SEPs Levels the Playing Field against Big Tech and China, Kidon IP Blog (Aug. 16, 2022), available at <https://kidonip.com/standard-essential-patents/new-guidance-on-remedies-for-frand-assured-seps-levels-the-playing-field-against-big-tech-and-china/>. For a review of the history of US policy on SEP injunctions see David L. Cohen, “Response to the US Department of Justice call for Public Comments” (Feb. 4, 2022), available at <https://www.regulations.gov/comment/ATR-2021-0001-0096>.

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(not ETSI) for members not to offer disclosure of specific IPRs at all, offering instead a blanket declaration that they possess potentially essential IPRs.⁹⁴ Blanket or general disclosures in these SDOs point to the fact that the primary concern for users, and for the standardization ecosystem overall, is that of FRAND commitments and SEP accessibility on FRAND terms and conditions.

§10.06 CONCLUSION

Disclosures of potentially standard-essential patents and patent applications have for long been a topic of little interest for third parties to the collaborative standardization process. Yet, developments over the past two decades suggest that regulators and courts have taken a more intense interest in issues around these declarations. Such interest is expressed most prominently in the antitrust enforcement actions of the late 2000s on the basis of the so-called “patent ambush” theory, as well as in the recent ruling delivered by the U.S. Court of Appeals for the Federal Circuit in *Core Wireless* resting on the “implied waiver” doctrine.

However, these policy initiatives and rulings by the Federal Circuit are open to criticism for failing to ground themselves firmly on standardization realities and prevailing practices on the ground. As such, public policy interventions which suffer from deficient information regarding the actual working of collaborative standardization are liable to produce undesirable and unintended consequences. One such consequence is the stripping of most patent holders' IPR rights, with an extremely detrimental cost on innovation. Such cost, moreover, is unlikely to provide actual benefits for users, because there is scant evidence that current disclosure practices and SDO rules hamper standardization and broad standards adoption in any sense.

A further pernicious effect potentially resulting from misguided policy action is the disruption of the equilibrium between technology contributors and users within SDOs. SDO IPRs policies are formulated through rule making processes that are themselves transparent and based on consensus of all interested parties. As such they reflect the balance of interests of individual SDO stakeholders at a particular point and external intervention may destabilize this delicate balance.

In contrast, the *Philips v. Asus* judgment by the Court of Appeal of The Hague and the *Optis v. Apple* judgment by the High Court in England, point to a different and more appropriate route, that of restraint and deference to rules and practices that have survived the test of time. The ruling also shows that decision-makers that pay an adequately close look at SDO rules and prevailing practices can arrive at outcomes that are sensible, fair, and conducive to the efficient functioning of the market for standards.

⁹⁴Bekkers et al. (n. 12) 16–17.