

**CMA CALL FOR INPUTS ON THE RETAINED HORIZONTAL BLOCK
EXEMPTION REGULATIONS AND THE GUIDELINES ON HORIZONTAL CO-
OPERATION AGREEMENTS (THE HORIZONTAL GUIDELINES)**

Apple Inc. Response Concerning Standardization Agreements

11 January 2022

1. INTRODUCTION

- (1) Apple appreciates the opportunity to contribute to the Competition and Market Authority’s call for inputs on the Retained Horizontal Block Exemption Regulations and the Horizontal Guidelines. This position paper¹ focuses only on chapter 7 on standardisation agreements.
- (2) Apple values a balanced standards ecosystem that promotes both innovation and competition. Apple has extensive experience as a standard-essential patent (“SEP”) licensor and licensee, as an innovator, and as an active contributor to standards. Patents are critical to protecting the innovations embodied in Apple’s products and services. To this end, our company follows fair, reasonable, and non-discriminatory (“FRAND”) principles in licensing our own substantial SEP portfolio, and we also have a long history of respecting the intellectual property rights of others and taking voluntary SEP licences on reasonable and fair terms.
- (3) The Horizontal Guidelines’ chapter on standardisation contains important guidance for standards development organizations (“SDOs”) and their intellectual property rights policies. When adopted in 2010, it was the first comprehensive guidance from a competition authority on these issues, and the chapter has since been cited globally by competition authorities and courts dealing with SEP/FRAND disputes.
- (4) Apple participated in the various European Commission consultations on the Horizontal Guidelines, and most recently invited the EC to further refine its guidance on issues that are crucial for promoting innovation, competition, and other related policy goals. This submission includes related suggestions for the CMA’s consideration, taking into account the UK’s unique status as a jurisdiction with legal roots common to both the EU and U.S. legal systems, for a policy central to fostering competition and innovation post-Brexit.
- (5) Apple welcomes the CMA’s continued intellectual leadership in this area. The standardisation process, and in particular the licensing of FRAND-committed SEPs that emerge from this process, is a competition-law issue. While the Guidelines in their current form provide a useful foundation, additional refinement would benefit

¹ In response to question IA1 of the CMA’s call for inputs, Apple, Inc. operates in (c) manufacturing and (j) information and communication. Apple designs, manufactures and markets smartphones, personal computers, tablets, wearables and accessories, and sells a variety of related services. In response to question IA3, Apple is a “large” global company directly employing approximately 154,000 full-time equivalent employees as of September 25, 2021. Apple UK employment is discussed in para. 15, *infra*. For question IA2, please refer especially to Section 4 including paras. 18-20, 22. For question IA4, we understand that companies of all sizes typically make use of the standardization guidelines: please refer especially to paras. 17, 21. The remainder of the paper addresses the questions in HGL7 and HGL8 (and the similar question HGL1(a) to the extent it applies to standardization agreements). For HGL8, please see especially paras. 8-10, 20-25, 31-39, 41-43, 50, 55-58, 64, 69, 72, 81.

consumers and the industry as a whole. The CMA can play a critical role both in (i) promoting competition and preventing abuses *ex-ante* in the standard-setting process and (ii) protecting competition *ex-post* including, when appropriate, investigating and prosecuting companies that fail to respect their commitments to license on FRAND terms.

- (6) In particular, Apple proposes that the CMA adopt its own version of the Guidelines with revisions to provide greater clarity with regard to how SDO IPR policies address seeking injunctions for SEPs; licensing of SEPs on FRAND royalty terms; licensing throughout the value chain; and visibility into SEP ownership during and after standardisation.
- (7) CMA’s adoption of competition law guidance on standardisation is critical to ensure a clear and balanced approach to SEP licensing issues to the benefit of all. Significantly, adopting safe harbours for SDOs that include policies to promote and strengthen standard setting and licensing on FRAND terms will send a strong signal that will further innovation in the UK and beyond.

2. EXECUTIVE SUMMARY

- (8) In developing a standard, competitors collaborate to select technology from among competing alternatives to include in the standard. If that technology is protected by a patent, the inclusion of that technology in a standard confers market power on the patent owners and forecloses other patented and non-patented alternatives. Because an entire industry agrees to use this standardised technology, a potential licensee cannot compete downstream without using the standard, and generally cannot “design around” a truly essential and valid SEP.
- (9) Once a standard is adopted and users make investments tied to the use of the standard, they become “locked in” to the standard because of the substantial switching costs that would be incurred in abandoning initial designs and substituting a different technology—if one could even compete without using the standard.² This “lock-in” effect strongly enhances the leverage SEP owners have to demand excessive rates and terms from potential licensees, especially in certain jurisdictions where there is a high risk of injunctions being granted for use of even a single SEP.³
- (10) SEP holders’ commitments to license SEPs on FRAND terms are therefore critical to foster adoption of standards and to mitigate the abuse of a SEP holder’s dominant position and the impact of such abuse on the market. Rigorous enforcement of those commitments is an essential counterweight to the elimination of competition inherent in competitors agreeing on a single technological solution—a solution from which each of those collaborating stands to gain.⁴ In exchange for acquiring market power, a SEP holder making such a commitment agrees to license for monetary compensation and

² See U.S. Federal Trade Commission, “The Evolving IP Marketplace: Aligning Patent Notice and Remedies with Competition” at 22 (2011), <https://www.ftc.gov/sites/default/files/documents/reports/evolving-ip-marketplace-aligning-patent-notice-and-remedies-competition-report-federal-trade/110307patentreport.pdf>.

³ See A. Douglas Melamed & Carl Shapiro, “How Antitrust Law Can Make FRAND Commitments More Effective”, 127 YALE L. J. 2110, 2115 (2018).

⁴ See *id.* at 2111.

voluntarily limits its rights to charge whatever the market will bear (monopoly level pricing). Failure to abide by this commitment allows SEP holders to abuse their market power, distorting competition, and harming consumers.

- (11) Standardisation is intended to and should be a collaborative exercise that offers many potential pro-competitive benefits, including promoting innovation, increasing competition, lowering barriers to entry, and decreasing prices. But despite decades of debate, the marketplace continues to suffer from a lack of consistent adherence to voluntarily accepted FRAND licensing principles for SEPs, particularly in cellular standards.
- (12) The key issues addressed by this submission include:
- **SEP hold-up is harmful to innovation and merits competition law considerations in evaluating SEP licensing practices.** SEP hold-up is a significant, empirically documented problem harming innovation. The Horizontal Guidelines correctly recognise the competition law basis for regulating SEP hold-up, and in doing so, are in line with regulators in other countries. The CMA’s Guidelines should expressly recognise a safe harbour for SDO policies stipulating that (1) obtaining or threatening injunctions on FRAND-encumbered SEPs constitutes hold-up except in certain limited circumstances, and (2) hold-up arises from pressure imposed on a licensee to conclude a global SEP portfolio licence at a demanded royalty rate under the threat of otherwise being deemed an “unwilling” licensee.⁵
 - **Patents are territorial by nature and potential licensees should continue to have the right to access national courts to adjudicate SEP disputes.** Apple believes that the Horizontal Guidelines, like any competition law guidance on SEP issues, should continue to recognise that potential SEP licensees that seek to resolve royalty disputes should have access to remedies in the national courts. As paragraph 291 of the Horizontal Guidelines notes, “nothing in these Guidelines prejudices the possibility for parties to resolve their disputes about the level of FRAND royalty rates by having recourse to the competent civil or commercial courts”. Any further Guidelines on SEPs should maintain this view, so that SDOs adopt IPR policies that limit the possibility that a potential licensee can be subject to an injunction for refusing to accept a global portfolio licence.
 - **SEPs must be valued on their own merits.** Existing guidance that the value of a SEP must be evaluated based on the value of the patented technology, rather than the value of the standard or the “lock in” thereto, should be reinforced. SEP owners should obtain compensation based on the value of their SEPs, not the value added by others, or value that is attributable to standardisation itself (i.e., the value of the agreement among competitors to build products one way rather than another). We recommend the CMA strengthen the current discussion in the Horizontal Guidelines

⁵ Apple recognises that the UK Supreme Court in *Unwired Planet v Huawei*, [2020] UKSC 37, 26 August 2020, held that SEP holders can obtain injunctions on SEPs in certain circumstances. But, as described further below, the *Unwired Planet* decision turned largely on contract rather than competition law through interpretation of the relevant SDO IPR policy. The CMA thus has an important role to play in providing SDOs with guidance on the harms to competition from injunctions and imposing global licensing that will influence SDOs’ decisions on the nature of their contractual IPR policies and, in turn, provide courts with contracts for interpretation that appropriately reflect competition law concerns.

by stating that an SDO IPR policy must require members to value SEPs in accordance with these principles to fall within the scope of the safe harbour. Companies that seek to extract the value of SEPs “to the end user” or base royalty demands on the price or use of a consumer end product are seeking abusively to capture value that is not attributable to their own inventions.

- **Licences should not be refused to certain market participants.** A lynchpin of the Horizontal Guidelines’ protections against SEP abuses is that FRAND licences must be available to “all third parties”. Suggestions to backtrack on policies supporting the fundamental right of third parties to obtain FRAND licences must be rejected. As the current Horizontal Guidelines acknowledge, “standardisation may lead to anti-competitive results by preventing certain companies from obtaining effective access to the results of the standard-setting process” (para. 268). To ensure such access, the Guidelines further state that SDO IPR policies should “require participants wishing to have their IPR included in the standard to provide an irrevocable commitment in writing to offer to license their essential IPR to all third parties” (para. 285). If, on the other hand, FRAND licences were not available to certain licensees, the justification of the exemption under Section 9(1) of the UK Competition Act 1998 for the cooperation among competitors involved in standardisation agreements would be meritless. We suggest that the CMA consider strengthening the Guidelines’ current language by stating that an SDO IPR policy must require licensing to any party that requests a licence in order to fall within the scope of the safe harbour.
- **The importance of recognising transparency interests around standardisation.** Apple supports the ongoing efforts to bring further transparency to SDOs’ declaration processes. To ensure more transparency and spur competition over the available technologies, the Horizontal Guidelines should be extended to cover a requirement for SEP owners to identify specific claims and SEPs applications, both published and unpublished, during the standards development process.

3. APPLE’S ROLE IN SEEKING A BALANCED SEP ECOSYSTEM

- (13) Apple has a long track record as an innovator, consistently investing billions annually in research and development, with over GBP 16 billion invested globally in FY 2021.⁶ Apple’s portfolio includes a significant number of patents declared essential to various industry technical standards, including many thousands of SEPs for 5G. Indeed, Apple is one of the top 10 worldwide cellular SEP owners and is a major SEP licensor, having licensed most of the world’s major cellular infrastructure suppliers and over a billion cellular devices since 2015.
- (14) Apple is also a SEP licensee, and our products support many different standards. Apple pays billions of pounds in royalties annually to license cellular SEPs from third parties, relying on their commitments to license their SEPs on FRAND terms and conditions. As a licensee, Apple is a major target for patent assertions, including from non-practicing entities (“NPEs”) that purchase low-quality subsets of patent portfolios to free them from cross-licence obligations and assert them against manufacturers.

⁶ Apple Annual Report on Form 10-K at 23 (2020), [https://s2.q4cdn.com/470004039/files/doc_financials/2021/q4/_10-K-2021-\(As-Filed\).pdf](https://s2.q4cdn.com/470004039/files/doc_financials/2021/q4/_10-K-2021-(As-Filed).pdf)

- (15) While Apple is a global company, it has made and makes significant investments in the UK economy. Apple has been operating in the UK for many years and has been an engine of growth for the UK economy, supporting almost 300,000 jobs in the UK, including about 6,500 Apple employees, 1,100 jobs through UK-based suppliers, and 291,000 jobs attributable to the App Store ecosystem.⁷
- (16) Apple’s extensive experience in this space, and dual role as both a major SEP owner and licensee, allows us to bring a balanced perspective to this call for inputs. Apple has therefore prepared the present document outlining its comments, and seeks to propose practical, balanced solutions benefiting innovation, industry, and consumers.
- (17) Apple’s views here are informed not only by its own experience, but by those of its suppliers, distributors, and industry contacts. Apple regularly interacts with companies that operate in the UK that are seeing the harmful effects of SEP abuses as SEP licensing moves into new economic sectors. We refer the CMA to the CEN-CENELEC Workshop Agreement *Core Principles and Approaches for Licensing of Standard Essential Patents*.⁸ The views cited therein—including from more than 50 signatories from throughout the economy—are in line with mainstream industry views and concerns over SEP abuses. It is important not to underestimate the economic harms that abusive SEP licensing has already caused, nor the much greater harms that will occur if enforcement or regulatory standards are weakened.

4. THE KEY ROLE OF SEPS FOR NEW MARKET ENTRANTS AND NEW INDUSTRIES

- (18) Standardisation involving patented technologies is common across a broad variety of industries, including the electronics and communications sectors. The adoption of wireless communication standards has expanded into new areas in the last few years with the emergence of the IoT. Sectors that have started using communication standards relatively recently include the automotive industry, health and medical equipment, agriculture and infrastructure, smart energy, smart homes, e-health, manufacturing, and asset tracking. These sectors will likely expand their reliance on SEPs with the advent of new products and services.⁹
- (19) With the proliferation of wireless communications throughout the economy, access to SEPs on predictable, transparent, and reasonable commercial terms is thus critical for UK industry to innovate and commercialise competitive products.
- (20) As the situation currently stands, new market entrants that incorporate wireless or cellular communications standards into their products face great uncertainty relating to the licensing of SEPs. Apple’s experience is a cautionary tale for new entrants. When Apple first launched the iPhone in 2007 and engaged with licensors of cellular SEPs, Apple faced excessive royalty demands, onerous contract terms, and the threat of injunctions barring the sale of a revolutionary new product that redefined smartphones.

⁷ Apple, “Job Creation”, <https://www.apple.com/uk/job-creation/>.

⁸ See CEN-CENELEC CWA 9500, “Core Principles and Approaches for Licensing of Standard Essential Patents”, (2019), <https://2020.standict.eu/sites/default/files/CWA95000.pdf>.

⁹ See, e.g., UK Government, “5G Supply Chain Diversification Strategy” (2020), <https://www.gov.uk/government/publications/5g-supply-chain-diversification-strategy/5g-supply-chain-diversification-strategy>.

The SEP licence agreements Apple signed then, and the royalties Apple paid, were not FRAND. It has taken years of re-negotiation, advocacy, and litigation, as well as significant resources, to begin to remedy this.

- (21) Even with our resources and extensive SEP portfolio today, Apple still faces substantial pressure to agree to non-FRAND terms, including under threats of injunctions. Resisting that pressure is likely impossible for an SME with limited resources and expertise. Strong safeguards from competition authorities and governments are needed to protect against abuses of the power that SEP licensors hold as virtually the entire economy moves to incorporate connected devices.
- (22) While the aggressive assertion of SEPs for 3G, 4G, and 5G cellular standards by certain patent holders has attracted most of the attention in the public policy debate, many other successful standards demonstrate that in competitive markets, patent owners are incentivised to contribute their patented technologies to standards without resorting to such disruptive tactics to obtain excessive royalties. Indeed, Bluetooth has become one of the most ubiquitous standards in mobile devices thanks to the Bluetooth Special Interest Group's long-standing policy of requiring its members (almost 30,000 companies, including major players such as Ericsson, Samsung, Apple, Intel, Microsoft, and Toshiba) to grant royalty-free licences to their SEPs.¹⁰
- (23) In balancing claims by a few prominent and vocal SEP holders that they need compensation at disproportionate levels for the patented inventions they contribute to certain standards, it is important to bear these incentives in mind. It is not, and never was, the case that only a few companies are capable of innovating and developing standards, such that excessive incentives are necessary for the standardisation system to thrive. The adoption of a participant's contributions into a technical standard provides a substantial reward of an instant, much broader market of standards adopters than having to compete against others offering different technical solutions. Those potential rewards should not be discounted in favour of focusing only on incentives from obtaining licensing revenue.
- (24) For example, a recent study examined text changes in two SDOs' IPR policies (one a switch to royalty-free licensing at W3C and the other adopting greater clarification of RAND terms at the Institute of Electrical and Electronic Engineers ("IEEE")) and found that these changes did not dampen participation or innovation at those SDOs, even if they would, or would be perceived to, reduce the ability to monetise SEPs.¹¹ Further, it is important to weigh those interests against the interests of both the vast number of companies that develop innovations and products using such standards, and the consumers who purchase these products.
- (25) A policy aiming to shift greater control over licensing policies, and economic rents, to SEP holders would undermine, rather than strengthen, the UK economy. Indeed, the majority of claimed cellular SEPs are held by non-UK players (including notably Huawei, Samsung, LG, Qualcomm and InterDigital). According to a study commissioned by the EC, the largest number of patent families disclosed to the

¹⁰ Bluetooth Special Interest Group, "Patent & Copyright License Agreement", <https://www.bluetooth.com/about-us/governing-documents/>.

¹¹ Timothy Simcoe & Qing Zhang, "Does Patent Monetization Promote SSO Participation?" (2021), <https://ssrn.com/abstract=3973585>.

European Telecommunications Standards Institute (“ETSI”) in the 1990-2019 period were attributed to Chinese firms (27.3%), followed by U.S. firms (21.5%), South Korean firms (19.3%), and followed thereafter by European firms (19.2%).¹²

5. FEEDBACK REGARDING CHAPTER 7 OF THE GUIDELINES

5.1 SEP hold-up is harmful to innovation and merits competition law considerations in evaluating SEP licensing and litigation practices.

The Horizontal Guidelines implicitly recognise the danger of SEP hold-up

- (26) The Horizontal Guidelines correctly highlight competition law’s vital role in the standard-setting process, both prior to the inclusion of patents in a standard as well as after the finalisation of a standard, particularly in the context of SEP/FRAND licensing negotiations.
- (27) Paragraphs 263-269 of the Horizontal Guidelines correctly recognise that standardisation can produce “significant positive economic effects” by “encouraging the development of new and improved products or markets and improved supply conditions”. But those paragraphs also recognise that standardisation creates opportunities for abuse that can limit or control “production, markets, innovation or technical development”. Specifically, companies that abuse standardisation can “acquire control over the use of a standard” and can “hold[-]up users after adoption of the standard”.
- (28) The Horizontal Guidelines explicitly identify two specific types of hold-up: (1) seeking “excessive royalty fees”; and (2) “refusing to license the necessary IPR” (para. 269). Each of those types of hold-up is addressed below in Sections 5.3 and 5.4 respectively. The Horizontal Guidelines correctly recognise FRAND commitments as the key practice designed and relied upon to protect against hold-up. Indeed, FRAND commitments are intended to prevent SEP holders from withholding licences or demanding (and charging) unfair, unreasonable, or discriminatory royalty fees “after the industry has been locked-in to the standard” (para. 287).
- (29) Similarly, the Horizontal Guidelines currently suggest that obtaining or threatening to obtain an injunction can be a form of hold-up: “If a company is either completely prevented from obtaining access to the result of the standard, or is only granted access on prohibitive or discriminatory terms, there is a risk of an anti-competitive effect” (para. 268). The law and economics literature has also long identified the threat of a preliminary injunction as a form of hold-up that enables a SEP owner to exert pressure on companies accused of patent infringement.¹³ Apple invites the CMA to further

¹² Rudi Bekkers, Emilio Raiteri, Arianna Martinelli & Elena Mas Tur, “Landscape Study of Potentially Essential Patents disclosed to ETSI” at 30 (2020), <https://ec.europa.eu/jrc/en/publication/landscape-study-potentially-essential-patents-disclosed-etsi>; see also IPLytics, “Fact finding study on patents declared to the 5G standard” at 12 (2020), https://www.iplytics.com/wp-content/uploads/2020/02/5G-patent-study_TU-Berlin_IPLYtics-2020.pdf.

¹³ Carl Shapiro & Mark A. Lemley, “The Role of Antitrust in Preventing Patent Holdup,” 168 U. PA. L. REV. 2019 (2020); Melamed & Shapiro, *supra* note 2, at 2115; Mark Lemley & Carl Shapiro, “Patent Hold-up and Royalty Stacking”, 85 TEX. L. REV. 1991 (2007), <https://ssrn.com/abstract=923468>.

reinforce this concept and expressly recognise that an injunction or the threat of an injunction is one way in which a SEP licensor can engage in anticompetitive behaviour.

- (30) By making a commitment to license anyone who wishes to use the standard on FRAND terms, a SEP holder accepts that monetary compensation is sufficient, and voluntarily waives the right to exclude (injunctions) in most circumstances. Otherwise, SEP owners obtain strongly enhanced leverage to demand non-FRAND terms from potential licensees based on the market power gained from lock-in rather than the intrinsic value of the SEP itself.¹⁴

Evidence of harm caused by SEP hold-up

- (31) There is extensive evidence that SEP hold-up is a pervasive problem that damages the competitive process and innovation. For example:
- A recent working paper concluded opportunistic conduct among SEP holders was prevalent based on an in-depth analysis of the dockets of U.S. patent cases filed between 2010-2019 to enforce declared SEPs.¹⁵ The paper (“Do Standard-Essential Patent Owners Behave Opportunistically? Evidence from U.S. District Court Dockets”) describes “evidence of opportunistic behavior by the SEP enforcer in approximately 75% of patent-party level SEP assertions”.¹⁶ The most commonly pursued form of opportunistic behaviour before the U.S. courts was an allegation that SEP holders are entitled to injunctions (in 39% of cases brought by NPEs and in 56% of cases brought by practicing entities), followed by exhaustion and over-declaration.¹⁷
 - The EC’s *Motorola* decision describes how Motorola’s injunction against Apple resulted in Apple’s temporary exclusion from online sales of its GPRS-compatible iPhone and iPad products in Germany.¹⁸ The ban continued until Apple accepted a number of disadvantageous licensing terms, including a termination clause that gave Motorola the ability to terminate the licence if Apple challenged the validity of the SEPs at issue.¹⁹ Motorola even conceded that the aim of the termination clause was precisely to discourage Apple from bringing validity actions.²⁰ As such, the EC found that this clause could limit

¹⁴ See Melamed & Shapiro, *supra* note 2, at 2115.

¹⁵ Brian J. Love, Yassine Lefouili & Christian Helmers, “Do Standard-Essential Patent Owners Behave Opportunistically? Evidence from U.S. District Court Dockets” (2020), <https://ssrn.com/abstract=3727085>.

¹⁶ *Id.* at 41.

¹⁷ *Id.* at 26.

¹⁸ Case AT.39985—Motorola—Enforcement of GPRS Standard Essential Patents, Comm’n Decision ¶¶ 312-406 (Apr. 29, 2014), <https://tinyurl.com/rz9uewee>.

¹⁹ *Id.* ¶¶ 322-328 (the disadvantageous licensing terms that Apple accepted “as a result of Motorola’s seeking and enforcement of an injunction” comprised of: (1) a termination clause enabling Motorola to terminate the licence if Apple challenged the validity of the SEPs covered by the Settlement Agreement; (2) inclusion of the iPhone 4S in the list of infringing products; and (3) Apple’s acknowledgment of Motorola’s claims for past damages).

²⁰ *Id.* ¶ 340.

Apple’s ability to influence the royalties it would pay, and could also lead to other potential licensees having to pay for invalid patent rights.²¹

- When Microsoft faced the prospect of a German injunction on H.264 SEPs, it undertook the burden of relocating its distribution centre from Germany to the Netherlands as a protective measure at a cost of more than \$11 million.²²
- In the U.S., LSI filed an action seeking a ban for certain Realtek products. LSI subsequently offered to license Realtek the relevant SEPs for a royalty rate which exceeded the selling price of Realtek’s products reading on the relevant standard. The U.S. district court determined that the royalties sought by LSI were around 500 times the appropriate FRAND royalty rate.²³
- Similarly, another U.S. district court found that Innovatio, a NPE, sought royalties from various third parties between 35 and 386 times higher than the adjudicated FRAND royalty rate.²⁴

- (32) Aggressive SEP monetizers seeking excessive royalty fees generally respond to the demonstrated threat of SEP hold-up with two flawed arguments. First, they contend that the evidence shows the absence of hold-up. To support that claim, they often point to studies showing quality-adjusted decreases in the prices of consumer goods over time. But such studies do not show what their proponents claim. That quality-adjusted prices for electronics products have decreased does not prove that there has been no hold-up or that prices would not have decreased much more significantly absent hold-up.²⁵
- (33) Second, aggressive SEP monetizers seek to deflect from the hold-up risk by claiming that licensee hold-out is an equal or bigger risk. But SEP holders are in a fundamentally different position than licensees because they can leverage the market power of the standard to tilt a negotiation to their advantage. A net-payor licensee in a bilateral negotiation with a SEP holder, especially a NPE, cannot call on the same market power to aid it.
- (34) Moreover, much of what is purported to constitute “hold-out” merely amounts to holding SEP licensors to their burden of proving the merits of their SEPs. Having benefited from standardisation by significantly increasing their pool of potential licensees, SEP holders should not be entitled to any shortcuts in proving the patent merits that are not available to other patent holders. Further, there is little empirical support for claims of the dangers of hold-out. A recent study of U.S. litigation concluded that its “results provide little support for the mechanisms proposed by theory

²¹ *Id.* ¶ 336.

²² *See* Microsoft Corp. v. Motorola, Inc., 795 F.3d 1024, 1032-34 (9th Cir. 2015).

²³ *See* Realtek Semiconductor Corp. v. LSI Corp., No. 12-CV-03451, 2014 U.S. Dist. LEXIS 81673, at *23 (N.D. Cal. June 16, 2014).

²⁴ *See* In re Innovatio IP Ventures LLC, No. 11-CV-09308, 2013 U.S. Dist. LEXIS 144061 (N.D. Ill. Sept. 27, 2013).

²⁵ Melamed & Shapiro, *supra* note 2, at 2117-18.

that link SEPs and hold-out, particularly with respect to pre-litigation hold-out, which is the focus of the existing hold-out literature”.²⁶

- (35) In view of the clear risks posed by SEP hold-up, a number of courts and regulators have recognised the incompatibility of injunctions for FRAND-committed patents. For example, in the United States, the Federal Circuit denied Motorola’s request for an injunction against Apple because the FRAND commitment “strongly suggest[s] that money damages are adequate to fully compensate Motorola for any infringement”.²⁷ The Federal Circuit specifically noted how a “patentee subject to FRAND commitments may have difficulty establishing irreparable harm” necessary to justify an injunction.²⁸
- (36) These views have long been expressed by the U.S. Federal Trade Commission, which in 2011 observed that “[h]old-up in the standard setting context can be particularly acute”, as the “lock-in” resulting from standardisation “can make an entire industry susceptible to hold-up”.²⁹ The FTC explained that “[i]n addition to higher prices and other economic harms, hold-up in standards-based industries may discourage standard setting activities and collaboration, which can harm innovation”,³⁰ and concluded that if the SEP owner provided a FRAND commitment, this was “evidence that denial of an injunction in favour of ongoing royalties will not irreparably harm the patentee”.³¹
- (37) Similarly, the Japan IP High Court recognised when Samsung attempted to enjoin Apple on a FRAND-committed SEP that it constituted an abuse of right because of the coercive power provided by the standard: “[I]f the patentee is unconditionally allowed to exercise the right to seek an injunction based on the Patent Right, the standard users may be put into a situation where they are forced to pay a high royalty or to agree to extremely unfavourable license conditions which are not FRAND Terms, or to abandon the business project itself, so as to avoid the damage that may arise from such injunction”.³²
- (38) Likewise, when the EC found that Samsung and Motorola had abused their dominant positions contrary to Article 102 TFEU, it stated: “Seeking injunctions before courts is generally a legitimate remedy for patent holders in case of patent infringements. However, the seeking of an injunction based on SEPs may constitute an abuse of a dominant position if a SEP holder has given a voluntary commitment to license its SEPs on FRAND terms and where the company against which an injunction is sought is willing to enter into a licence agreement on such FRAND terms. Since injunctions generally involve a prohibition of the product infringing the patent being sold, seeking SEP-based injunctions against a willing licensee could risk excluding products from the market. Such a threat can therefore distort licensing negotiations and lead to

²⁶ Christian Helmers & Brian J. Love, “An Empirical Test of Patent Hold-Out Theory: Evidence from Litigation of Standard Essential Patents” at 3 (2021), <https://ssrn.com/abstract=3950060>.

²⁷ See *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1332 (Fed. Cir. 2014).

²⁸ *Id.*

²⁹ U.S. Federal Trade Commission, *supra* note 1, at 28.

³⁰ *Id.*

³¹ *Id.*

³² *Samsung Electronics Co., Ltd. v. Apple Japan Godo Kaisha 17*, IP High Court (Grand Panel), No. 2013 (Ra) 10007 (May 16, 2014), https://www.ip.courts.go.jp/eng/vc-files/eng/file/25_ra_10007zenbun.pdf (English translation).

anticompetitive licensing terms that the licensee of the SEP would not have accepted absent the seeking of the injunction. Such an anticompetitive outcome would be detrimental to innovation and could harm consumers”.³³

- (39) In the UK, the Supreme Court in *Unwired Planet* provided a foothold for SEP owners using the threat of injunctions to force potential licensors into a global licence. However, UK courts have generally focussed on the contractual aspects of the FRAND commitment rather than the competition-law implications of SEPs and FRAND. The Supreme Court’s judgment would potentially allow SEP owners to leverage the power of a single patent, in a single jurisdiction, to force potential licensees to enter into worldwide SEP licences, and shifts the traditional burden of proof that requires the SEP holder to demonstrate infringement in the first place.

The role of competition law and SDOs in preventing hold-up

- (40) Against this backdrop, there is a clear role for the CMA to play in providing much-needed guidance in the UK about the harm to competition from seeking SEP injunctions. SDOs can utilise that guidance to develop IPR policies that confirm that there are only specific, limited situations in which SEP holders may be able to obtain injunctions and thereby promote competition and innovation.
- (41) The experience of the IEEE updating the text of its IPR policy to clarify that injunctions are only available in rare circumstances provides a strong example of the role the CMA can play. In 2015, the IEEE revised the text of its policy in response to calls from antitrust regulators for SDOs to provide greater clarity in their IPR policies as well as its own experiences in the shortcomings of its existing policy.³⁴ Among other clarifications, the IEEE provided that a SEP holder “shall neither seek nor seek to enforce a Prohibitive Order [i.e., an injunction] . . . in a jurisdiction unless the implementer fails to participate in, or to comply with the outcome of, an adjudication”.³⁵
- (42) The success of the changes to the IEEE’s IPR policy have been notable. Indeed, in the five years since its adoption, the empirical record demonstrates that the 2015 Patent Policy has facilitated unprecedented growth and success for IEEE and its standards. For example, after two years of declining technical contributions to IEEE standards in 2013 and 2014, total contributions rebounded after the policy update was enacted in 2015 and IEEE had a record number in 2017.³⁶

³³ European Commission, “Antitrust: Commission accepts legally binding commitments by Samsung Electronics on standard essential patent injunctions” (April 29, 2014), https://ec.europa.eu/commission/presscorner/detail/en/IP_14_490.

³⁴ Letter from Michael A. Lindsay to Hon. William J. Baer, Assistant Att’y Gen., U.S. Dept. of Justice at 10-13 (Sept. 30, 2014), <https://www.justice.gov/sites/default/files/atr/legacy/2015/02/17/311483.pdf>.

³⁵ IEEE SA Standards Board Bylaws § 6.2, <https://standards.ieee.org/about/policies/bylaws/sect6-7.html>.

³⁶ See, e.g., Letter to IEEE General Counsel Sophia A. Muirhead (Feb. 9, 2021), <https://actonline.org/wp-content/uploads/Multistakeholder-Ltr-to-IEEE-SA-9-Feb-2021-1.pdf>; ACT | The App Association, “IEEE Must Keep its 2015 Patent Policy Updates” (May 4, 2021), <https://actonline.org/2021/05/04/ieee-must-keep-its-2015-patent-policy-updates/>; Michael Carrier & Brian Scarpelli, “How Standard-Setting Orgs Can Curb Patent Litigation,” Law360 (June 15, 2021), <https://www.law360.com/articles/1392222/how-standard-setting-orgs-can-curb-patent-litigation>; see also IPlytics, “IEEE’s Empirical Record of Success and Innovation Following Patent Policy Updates” at 1-2 (2018), https://www.iplytics.com/wp-content/uploads/2018/04/IPlytics_Report-on-IEEE-

- (43) Following the reform, IEEE’s IPR policy is responsible for a mere **2% of all SEP litigation worldwide**. By way of comparison, more than **75% of all SEP litigation** was related to 2G, 3G, 4G, and 5G standards (under the ETSI/3GPP policies).³⁷
- (44) In light of the above, further IPR text clarifications by other SDOs following the IEEE model would greatly facilitate the adoption and implementation of FRAND commitments, which would result in substantially less litigation and uncertainty for manufacturers.

Injunction recommendations

- (45) In view of the above, Apple invites the CMA to amend the Horizontal Guidelines to clarify that in order to benefit from the “safe harbour” under the Guidelines, SDOs are required to explicitly include in their IPR policies that injunctions are inappropriate except in certain limited circumstances. Specifically, a SEP holder shall not be able to seek an injunction unless a SEP licensee (i) fails to comply with a final judgment from a court of competent jurisdiction, (ii) is bankrupt, or (iii) is beyond the jurisdiction of a court.

5.2 Patents are territorial by nature and potential licensees should continue to have the right to access national courts to adjudicate SEP disputes.

- (46) Apple considers that the Horizontal Guidelines, like any guidance on SEP issues, should continue to recognise that potential SEP licensees seeking to resolve royalty disputes should have access to remedies in the national courts.³⁸ As paragraph 291 of the Horizontal Guidelines notes, “nothing in these Guidelines prejudices the possibility for parties to resolve their disputes about the level of FRAND royalty rates by having recourse to the competent civil or commercial courts”. The Guidelines should further clarify that potential SEP licensees that assert their right to judicial recourse, which requires SEP owners to meet their burdens of proof in their respective jurisdictions, do not thereby become “unwilling” or “unreasonable”, or subject to injunctions for exercising such rights.
- (47) The ability of SEP licensees to access national courts to test the merits of SEP holders’ claims is important because, according to studies, between 70-90% of the alleged SEPs tested in court are found to be either non-essential, invalid or not infringed.³⁹ With

[activities_2018.pdf](#); IPlytics, “Empirical Analysis of Technical Contributions to IEEE 802 Standards” at 1-3 (2019), https://www.iplytics.com/wp-content/uploads/2019/01/IEEE-contribution-anaylsis_IPlytics-2019.pdf.

³⁷ IPlytics, “Webinar Slides on SEP Litigation Trends and Licensing Realities” at 7 (March 9, 2021), <https://www.iplytics.com/de/webinar/sep-litigation-trends-licensing-realities-webinar-video-recording-slides/>.

³⁸ *See In re Innovatio IP Ventures LLC*, 2013 U.S. Dist. LEXIS 144061, at *71-*72 (“[T]he court is not persuaded that reverse hold-up is a significant concern in general, as it is not unique to standard-essential patents. Attempts to enforce any patent involve the risk that the alleged infringer will choose to contest some issue in court, forcing a patent holder to engage in expensive litigation. The question of whether a license offer complies with the RAND obligation merely gives the parties one more potential issue to contest. When the parties disagree over a RAND rate, they may litigate the question, just as they may litigate any issue related to liability for infringement.”).

³⁹ David Goodman & Robert Myers, “3G Cellular Standards and Patents,” IEEE WirelessCom at 5 (June 13, 2005); RPX Corporation, “Standard Essential Patents: How Do They Fare?” at 9 (2014), <https://www.rpxcorp.com/wp-content/uploads/2014/01/Standard-Essential-Patents-How-Do-They->

respect to SEPs owned by NPEs, courts concluded that such SEP holders were successful in establishing essentiality, validity, and/or infringement for only about 6% of alleged SEPs.⁴⁰

- (48) Patents are territorial in nature. Patent laws and remedies differ from one jurisdiction to the next. To the extent that SEP owners seek an injunction in one jurisdiction as leverage to force a licensee into a global portfolio licence, hold-up is magnified from a national to a global scale.⁴¹ From Apple’s perspective, there is a pressing need to explicitly recognise such practice as a form of a hold-up. Indeed, if a licence to a SEP is conditioned upon agreeing to licensing the rest of the SEP holder’s portfolio on a global basis, the licensee may act against its own self-interest and pay for technology rights it does not need or would otherwise challenge. For example, a SEP holder’s cellular portfolio may include SEPs that are not applicable to components in end products, but are instead directed to network infrastructure components—information that a SEP holder may not make available to potential licensees.
- (49) Any CMA Guidelines on SEPs should therefore recognise that potential SEP licensees who seek to resolve royalty disputes should continue to have access to national courts, so that a potential licensee cannot be subject to an injunction for refusing to accept a global portfolio licence.

5.3 SEPs must be valued on their own merits

- (50) The Horizontal Guidelines already explicitly identify seeking “excessive royalty fees” as a specific type of hold-up by SEP owners (para. 269). Excessive pricing is harmful in that it disincentivises widespread adoption of standards, results in consumers paying more for products that implement standards, and distorts the competitive structure of the market. The Guidelines also address appropriate valuation criteria: “In case of a dispute, the assessment of whether fees charged for access to IPR in the standard-setting context are unfair or unreasonable should be based on whether the fees bear a reasonable relationship to the economic value of the IPR” (para. 289). This critical text follows established precedent, and should be maintained.
- (51) The importance of basing FRAND royalties on the value of the IPR also was highlighted by the EC in its SEP Communication, which explains that “[I]icensing terms have to bear a clear relationship to the economic value of the patented technology.

[Fare.pdf](#); Jay Jurata & David Smith, “Turning the Page: The Next Chapter of Disputes Involving Standard-Essential Patents,” *CPI Antitrust Chronicle* at 5 (Oct. 2013), <http://s3.amazonaws.com/cdn.orrick.com/files/CPI.October2013JurataSmith.pdf>; Matthew Rose, Jay Jurata & Emily Luken, “The UK High Court of Justice issues an injunction prohibiting an undertaking from selling wireless telecommunications products in Britain due to its failure to enter into a worldwide patent licence (Unwired Planet / Huawei),” *e-Competitions National Competition Laws Bulletin* at 6 (Aug. 2017), <http://s3.amazonaws.com/cdn.orrick.com/files/eCompetitions-August-2017.pdf>.

⁴⁰ Mark Lemley & Timothy Simcoe, “How Essential Are Standard-Essential Patents?” 104 *CORNELL L. REV.* 607, 625 (2019).

⁴¹ See U.S. Federal Trade Commissioner Rebecca Kelly Slaughter, “SEPs, Antitrust, and the FTC” (Oct. 29, 2021), https://www.ftc.gov/system/files/documents/public_statements/1598103/commissioner_slaughter_ansi_102921_final_to_pdf.pdf (“The threat of exclusion against a willing licensee casts a shadow over licensing negotiations and can allow an SEP holder to leverage that threat into royalties that are not in fact FRAND. These issues are even more important now that many of these disputes are resolved on a global scale, sometimes through the use of injunctions in a single jurisdiction.”).

That value primarily needs to focus on the technology itself and in principle should not include any element resulting from the decision to include the technology in the standard”.⁴²

- (52) This approach is consistent with that taken by the courts, both in Europe and elsewhere. In *Microsoft*, the EU’s General Court found that a dominant technology licensor was entitled to recover only the “intrinsic value” of the technology, as distinct from its “strategic value”.⁴³ In the context of SEPs, the consequence of this ruling is that the valuation must reflect the innovative character of the patented invention itself, as distinct, in particular, from any value obtained from its inclusion in the standard (*e.g.*, the mere ability to interoperate with other products implementing the standard).
- (53) Apple considers that to comply with competition rules, SDO IPR policies must require FRAND licensing based only on the value of the patented invention, and not the added value of standardisation or the end product, in order to fall within the scope of the safe harbour. For example, the clarifications to the IEEE IPR policy described above also include that when determining a reasonable rate, the factors to consider should include, among others, “[t]he value that the functionality of the claimed invention or inventive feature within the Essential Patent Claim contributes to the value of the relevant functionality of the smallest saleable Compliant Implementation that practices the Essential Patent Claim”.⁴⁴
- (54) Apple submits that valuation at the smallest component where all or substantially all the inventive aspects of the SEP are practiced offers the most fair, reasonable, and representative value base for this purpose.⁴⁵ It would be unfair if, for example, the common base related to the end product, or even some arbitrary percentage of the end product, as this would inappropriately reward licensors for features or technologies they have not developed, and would vary based on other factors, such as quality and brand. It also makes most economic sense and follows the objective of the patent laws to reward the invention claimed in the patent.
- (55) Apple urges the CMA further to recognise the harmful effect on innovation and competition of SDO arrangements that facilitate excessive pricing by patentees. For example, immediate effects of excessive pricing include decreased quality, limited output, and reduced R&D expenditure.
- (56) The CMA should also endorse an approach providing consistency and predictability in the IPR valuation methodology, and that reflects the “intrinsic value” of the licensed technology. Over-compensation of licensors (or under-enforcement against SEP

⁴² European Commission, “Communication of the Commission: Setting out the EU approach to Standard Essential Patents”, COM (2017) 712 final (2017).

⁴³ Case T-167/08, *Microsoft Corp. v. European Commission*, EU:T:2012:323, ¶ 138: “[T]he distinction between the strategic value and the intrinsic value of the technologies covered by the contested decision is a basic premiss of the assessment of the reasonableness of any remuneration charged by Microsoft for allowing access to, and use of, the interoperability information”; *see also id.* ¶¶ 142, 143.

⁴⁴ IEEE SA Standards Board Bylaws § 6.2, <https://standards.ieee.org/about/policies/bylaws/sect6-7.html>.

⁴⁵ *See, e.g.*, Japan Patent Office, “Guide to Licensing Negotiations Involving Standard Essential Patents” at 34, 36-38 (2018), https://www.jpo.go.jp/e/support/general/sep_portal/document/index/guide-seps-en.pdf (addressing need “to identify the calculation base according to where the contribution of the essential part of the SEP lies.”).

licensing abuses), however, risks freezing-out new product manufacturers, markets, and product categories—hampering broad adoption of the standard.

- (57) In its FRAND licensing—of both its own SEPs and those of others—Apple applies a two-step FRAND framework that is intended to ensure that royalties are fair, reasonable, and non-discriminatory across licensors. First, a “royalty reference point” is calculated by multiplying (a) the licensors’ pro rata ownership of relevant SEPs by (b) a portion of the smallest saleable unit where all or substantially all of the inventive aspects of the patented standard technology are practiced (in the case of cellular standards this is the baseband chip). Second, the royalty reference point is adjusted—up and down through negotiation with the patentee—to accommodate other comparative factors, including the patent’s merits, licensor’s contributions to the standard, litigation history, comparable licences, exhaustion, *etc.*
- (58) Using a common royalty base provides consistency and ensures that the royalty calculation is non-discriminatory for all SEP holders and downstream innovators. Similarly, a SEP licensor’s pro rata share of declared SEPs is an objective reference point in a FRAND negotiation. An objective reasonable royalty rate protects against SEP licensors being unjustly enriched through excessive royalties (royalty stacking) to the detriment of both SEP licensees and other SEP licensors and contributors, as well as consumers.⁴⁶
- (59) The concept of the intrinsic value of the technology can also be used to further explain why, as indicated at paragraph 289 of the Guidelines, cost-based methods are not well adapted to this context. It is not merely, as currently indicated in the Guidelines, because of the difficulty of assessing attributable costs. Rather, the intrinsic value of a declared essential patented technology that may emerge from research and development efforts is not increased merely by having spent more on that R&D.
- (60) At paragraph 289 of the Horizontal Guidelines, the EC also refers to the possibility of comparing proposed FRAND royalty rates with licensing fees charged before the industry became locked into a standard. Although the EC notes that this assumes the comparison can be made in a consistent and reliable manner, the Guidelines do not provide adequate caution about the use of supposedly comparable licences. Even when comparable licence methodologies are used, the SEP owner still must provide evidence in a patent case that separates royalties attributable to the patented feature from any unpatented features.⁴⁷ Similar considerations apply to the suggestions in paragraph 290 of the Horizontal Guidelines that FRAND values may be obtained by comparisons to licensors’ *ex-ante* declarations of licensing terms, or the rates charged for IPR in “comparable” standards.
- (61) Competition guidelines accordingly should emphasise that, while comparisons with other licences entered into by the SEP licensor may in principle be capable of demonstrating the existence of excessive pricing,⁴⁸ it should not be assumed that

⁴⁶ Lemley & Shapiro, *supra* note 12.

⁴⁷ See, e.g., in the U.S., Petition for a Writ of Certiorari, *Apple Inc. v. VirnetX Inc.* (Dec. 27, 2019) (No. 19-832), https://www.supremecourt.gov/DocketPDF/19/19-832/126835/20191227112807116_191210a%20Petition%20for%20e-filing.pdf.

⁴⁸ See Case 395/87, *Ministère public v Jean-Louis Tournier*, [1989] ECR 2521, ¶ 38; Joined Cases 110/88, 241/88 and 242/88, *Francois Lucazeau v SACEM*, [1989] ECR 2811, ¶ 33.

previous licences in themselves affirmatively demonstrate that a price charged by a dominant SEP licensor is reasonable. Because the definition of dominance under Chapter II of the Competition Act 1998 includes the ability to act independently of customers, the mere fact that other licensees have accepted the same terms may indicate that the dominant essential patent holder is successfully imposing excessive prices. For example, the prior licences could have been negotiated under threat of injunction and reflect a premium to avoid the risk of business disruption rather than just the value of the SEP.

- (62) Paragraph 290 of the Horizontal Guidelines states that one procedure to value SEPs could be to obtain an independent expert assessment of the objective centrality and essentiality to the standard at issue of the relevant IPR portfolio. If such language is retained, it would be helpful for the CMA to further make clear that the conclusions of any such expert would need to be impartial and contain specifics allowing them to be fully analysed by others (*e.g.*, there should be no direct or indirect incentives for the expert to determine that a declared SEP is or is not essential). And any determination should not (1) be binding, (2) result in any legal presumption as to essentiality, (3) shift any of the traditional burdens of proof, or (4) take the place of the patentee proving infringement, whether in licensing negotiations or in court.
- (63) Finally, the Guidelines should state that patent pools, similarly to their members, should comply with the same FRAND principles, as otherwise SEP owners would be able to escape the FRAND commitment by hiding behind such pools.

5.4 Licences should not be refused to certain market participants

- (64) Standardisation has enabled enhancements to quality and consumer choice. However, this can only be achieved if the standards are open for licensing by any market participant, as generally was the case until approximately 2008 when a few SEP holders began to change their prior practices.⁴⁹
- (65) Paragraph 285 of the Guidelines provides that an IPR policy should require participants contributing their IPR to a standard to “provide an irrevocable commitment in writing to offer to license their essential IPR to all third parties on fair, reasonable and non-discriminatory terms” to ensure effective access to the standard. The Guidelines further note that participants should provide such a commitment “prior to the adoption of the standard” and should “ensure that any company to which the IPR owner transfers its IPR (including the right to license that IPR) is bound by that commitment, for example through a contractual clause between buyer and seller”. These requirements are central to the proper functioning of the standards ecosystem, to innovation, and to the development of next generation technologies.
- (66) The CMA should not entertain any suggestions to backtrack on this longstanding principle and requirement for FRAND licensing. Instead, guidance should be issued to explain that an SDO IPR policy must require FRAND licensing to all (without

⁴⁹ This historical change of approach was documented by the court in *FTC v. Qualcomm*. As the Court held (based on both public and non-public internal documents), a major SEP holder regularly licensed its patents to all types of companies prior to 2008, but then changed its practice to limit licences to OEM companies. A few other SEP holders thereafter copied this behaviour, which was held to be a violation of the competition laws, because they believed it to be more lucrative. *See generally Fed. Trade Comm'n v. Qualcomm Inc.*, 411 F. Supp. 3d 658, 669 (N.D. Cal. 2019).

discrimination as to their level in the supply chain) to fall within the scope of the safe harbour.⁵⁰ Because licensing to all is a fundamental counterbalance to the potential anti-competitive effects of an agreement among competitors to choose one set of technical solutions, an SDO that does not include such a requirement in its policy lacks an essential pro-competitive justification.

- (67) The historical record does not support industry-based restrictions as to which industry participants may obtain a FRAND licence.⁵¹ Indeed, the Director - General of ETSI at the time the ETSI IPR Policy was created has written extensively about the requirement that licences be available to any willing licensee.⁵² Even the 3GPP website includes a public notice that its Organizational Partners' IPR Policies all "require IPR holders to make licences available to all third parties, whether or not they are 3GPP Individual Members, under fair, reasonable and non-discriminatory (FRAND) terms".⁵³
- (68) The ECJ's *Huawei v. ZTE* judgment similarly recognised the "legitimate expectations" of third parties to obtain licences, and the EC explained in *Motorola* that "all interested third parties" must be able to obtain a SEP licence.⁵⁴
- (69) In contrast, any effort to eliminate or limit the requirement of licensing to all third parties would starkly conflict with the legal situation in other jurisdictions. This would harm suppliers active in the UK, which would be unable to obtain SEP licences, whereas foreign competitors would be free to obtain licences. Such an approach would entail a very real risk that the UK innovators in the 5G, automotive, and IoT industries, just to name a few, would fall behind the rest of the world.

5.5 The importance of recognising transparency interests around standardisation

- (70) Apple agrees that SDOs should maintain open and transparent specification development processes, as currently set out in at least paragraphs 268, 282, and 284 of the Horizontal Guidelines.

⁵⁰ Daimler and other companies lodged complaints with the EC about, *inter alia*, Nokia's refusal to license at certain levels of the supply chain. See Foo Yun Chee, "Daimler asks EU antitrust regulators to probe Nokia patents", Reuters (March 29, 2019), <https://www.reuters.com/article/us-eu-daimler-nokia-patents/daimler-asks-eu-antitrust-regulators-to-probe-nokia-patents-idUSKCN1RA2KF>; Foss Patents, "Nokia is abusing standard-essential patents, Daimler and medium-sized supplier BURY Technologies allege in EU antitrust complaints" (April 9, 2019), <http://www.fosspatents.com/2019/04/nokia-is-abusing-standard-essential.html>. Daimler has since reached a settlement with Nokia.

⁵¹ See *Fed. Trade Comm'n v. Qualcomm, Inc.*, Findings of Fact and Conclusions of Law, Case No. 5:17-cv-00220 (N.D. Cal. May 21, 2019).

⁵² Karl Heinz Rosenbrock, "Licensing At All Levels Is The Rule Under The ETSI IPR Policy: A Response to Dr. Bertram Huber" (Nov. 3, 2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3064894; Karl Heinz Rosenbrock, "Why the ETSI IPR Policy Requires Licensing to All" (Aug. 2017), https://www.fair-standards.org/wp-content/uploads/2017/08/Why-the-ETSI-IPR-Policy-Requires-Licensing-to-All_Karl-Heinz-Rosenbrock_2017.pdf.

⁵³ 3GPP, "3GPP FAQs: What is the 3GPP policy on licensing?", <https://www.3gpp.org/contact/3gpp-faqs#L5> (emphasis added).

⁵⁴ Case C-170/13 *Huawei Technologies*, EU:C:2015:477, ¶ 53; Case AT.39985—*Motorola*—Enforcement of GPRS Standard Essential Patents, Comm'n Decision ¶ 63 (Apr. 29, 2014) (under the ETSI IPR Policy, "owners of essential patents in a proposed standard are requested to make their SEPs available to all interested third parties on FRAND terms and conditions").

- (71) Transparency is critical to standards development. Disclosing and specifically identifying potential SEPs at an early stage of the SDO development process provides important benefits. As paragraph 286 of the Horizontal Guidelines correctly provides, “the IPR policy would need to require good faith disclosure, by participants, of their IPR that might be essential for the implementation of the standard under development. This would enable the industry to make an informed choice of technology and thereby assist in achieving the goal of effective access to the standard. Such a disclosure obligation could be based on ongoing disclosure as the standard develops and on reasonable endeavours to identify IPR reading on the potential standard”.
- (72) Uncertainty around the identity of who owns which intellectual property rights can prevent SDO participants from choosing between proposed technologies based on their likely costs. It can reduce price competition between technologies and lead to higher royalties than would occur otherwise. For effective competition between technologies for inclusion in the standard, SDO participants should be aware whether particular choices they make may lead to substantial parts of the patented technology in the standard being held by a limited number of patentees, and likewise be aware of the identity of the likely patentees involved. With such transparency, SDO participants can make informed decisions based on which technologies are free of patents or patent applications, the record of individual patentees of charging fair royalties, or avoiding IPRs that may be essential to a standard from being concentrated in a small number of licensors.
- (73) Lack of transparency can also facilitate excessive pricing. Given the benefits of specific disclosures, Apple urged the EC to qualify the guidance contained in paragraphs 286 and 327 that it may be sufficient for a participant to declare that it is likely to have IPR claims over a particular technology without identifying specific IPR claims or applications for IPR. Such general disclosures often will not provide sufficient protection of technology competition during standards development. Instead, the Guidelines should state that, in general, specific disclosure of IPR should be required. Absent this information, technology competition can be reduced, and excessive pricing may be encouraged.
- (74) In the same vein, competition between technologies to be included in the standard should not be reduced simply by reference to the publication practices of patent authorities. Footnote 2 at page 57 of the Horizontal Guidelines (para. 267) states rather abstractly that IPR in particular refers to patent(s) “excluding non-published patent applications”. We believe that the Horizontal Guidelines should expressly define IPR as including patent applications, both published and unpublished. This update would foster a sustainable and more predictable standardisation environment. Disclosures should be specific, such as by referencing the specific portion of the standard or contribution to which the disclosure allegedly relates.
- (75) Finally, while Apple supports efforts to promote transparency through further essentiality checks, we are concerned that unless they are neutrally implemented and well-funded, a system of essentiality checks would not only fail to increase transparency, but also undermine the value of the FRAND commitment.
- (76) In particular, and as noted above, Apple considers that essentiality checks should be (1) non-binding and not result in any legal presumption as to essentiality, so that licensees can challenge them whether in licensing negotiations or in courts; (2) not shift

any of the traditional burdens of proof, including the obligation on the SEP owner to abide by its FRAND commitment; and (3) not take the place of the patentee proving infringement, whether in licensing negotiations or in court.

6. OTHER PROPOSALS

- (77) In addition to the thematic suggestions discussed above, Apple also suggests the following additional changes to the Guidelines.
- (78) When discussing the consistency of intellectual property laws and competition laws, it is important to make a distinction. Paragraph 269 states that IPR promote dynamic competition. As a general proposition concerning the concept of protecting intellectual property, this assertion is entirely valid. However, it would be worth clarifying that while the existence of IPR may promote competition, this is not necessarily true of all practices concerned in the licensing of such IPR. If left unchecked, certain licensing and enforcement practices can be highly damaging to competition, both static and dynamic.
- (79) Similarly, the discussion of the incentives of SDO participants at paragraph 267 could usefully be expanded. For example, it is stated that for up-stream licensors, their “only source of income is licensing revenue and their incentive is to maximise their royalties”. This does not recognise the significant benefit that companies obtain simply from having their patented technologies incorporated into a standard. By doing so, such companies create a market for their patented technologies when otherwise there might be no, or very little, demand and ensure that they have a large number of locked-in licensees.
- (80) By contrast, paragraph 267 of the Guidelines suggests that companies that manufacture products and offer services based on technologies developed by others have as their incentive “to reduce or avoid royalties”. Readers may infer that the EC has in mind downstream innovators who solely implement standards, and yet even those companies with no patents essential to the standard concerned typically develop and use numerous—often much more valuable—technologies in their products. The caricature of a company that depends solely on the technologies of others is far from reality. It also disregards that such companies have a genuine interest in the on-going development of technologies that can improve the standards on which they rely. Downstream innovators can recognise their own interest in ensuring sufficient incentives for standardisation.
- (81) The last sentence of paragraph 293 of the Guidelines suggests that if the standard covers only minor aspects of the end product, it is less likely for competition concerns to arise. This is far from Apple’s experience. Standards covering only minor aspects of end products give rise to very serious challenges for competition. The protracted ICom litigation is an example. The core patent in that campaign, referred to by ICom as #100A, covers *at most* a way of prioritising network traffic in emergencies, a feature that is rarely if ever used. That did not stop ICom from seeking injunctive relief and billions of dollars in royalties.⁵⁵ The ability to use SEPs to exclude rivals from the

⁵⁵ See *ICom GmbH & Co. KG v 1. Apple Inc, 2. Apple Sales International, 3. Apple Germany Retail GmbH*, no. 6 U 33/17 (2 O 53/12), German Appellate Court Karlsruhe. In that case, ICom sought, among other things, compensation for damages initially calculated to amount to roughly 1.028 billion EUR plus interest and injunctive relief.

market or to extract excessive royalties is not in practice dependent on the importance of the feature to which the patent relates for the end product. We suggest that the CMA revisit this issue and delete this language.

- (82) Paragraph 269 states that there is no presumption that holding or exercising IPR essential to a standard equates to the possession or exercise of market power. This statement no longer seems appropriate in light of the reference by Advocate General Wathelet in *Huawei v. ZTE* to a presumption that the holder of a standard essential patent enjoys a dominant position, which is rebuttable with specific, detailed evidence.⁵⁶ Again, we suggest that the CMA revisits this issue and delete this language.
- (83) The Horizontal Guidelines suggest in paragraph 324 and footnote 1 on page 66 that the competitive concerns applicable to standards development by multiple industry participants in a SDO may apply to de facto standards, which it defines as involving a situation where a (legally non-binding) standard is, in practice, used by most of the industry. This might be misinterpreted by some as suggesting that whenever a particular technology or format is taken up by most of an industry, it is subject to the requirements discussed by the EC in Chapter 7 of the Guidelines. It would thus be very helpful for the CMA to clarify that Chapter 7 does not apply to proprietary technologies or formats developed outside the standard setting context, regardless of whether they achieve widespread adoption in the industry concerned.
- (84) Finally, Chapter 7 of the Horizontal Guidelines currently addresses under each heading (main competition concerns, restrictive effects on competition, *etc.*) both issues relating to standard terms and issues relating to standardisation agreements. Apple believes that switching between standard terms and standardisation agreements in the same section of the Guidelines can cause confusion. The nature of these arrangements is sufficiently different that Apple respectfully invites the CMA to consider whether it would be more “user friendly” to devote separate sections to standard terms and standardisation agreements.

7. CONCLUSION

- (85) Apple thanks the CMA for the opportunity to provide our views in this very important field, and we remain available to discuss these issues with the CMA.

⁵⁶ Opinion of Advocate General Wathelet, Case C-170/13, *Huawei v. ZTE*, EU:C:2014:2391, ¶ 58.