**APPLE'S RESPONSE TO THE EUROPEAN COMMISSION'S CONSULTATION ON THE REVISED HORIZONTAL GUIDELINES**

**26 April 2022**

## 1. INTRODUCTION

(1) Apple has actively participated in the European Commission's review of the Guidelines on Horizontal Cooperation Agreements ("Guidelines") and appreciates the opportunity to contribute to the draft of the revised version of the Horizontal Guidelines ("Revised Guidelines") that the European Commission ("EC") published for comments in March 2022. Apple's comments focus on Chapter 7 on standardization agreements.

(2) Apple is a major SEP owner, licensor and licensee, which allows us to bring a balanced perspective to this consultation. Apple is one of the top 10 worldwide cellular SEP owners, and has licensed most of the world's major cellular infrastructure suppliers, and over a billion cellular devices since 2015. Apple is also a SEP licensee. Apple pays billions of Euros annually to license cellular SEPs from third parties, relying on their FRAND commitment. As a licensee, Apple is a major target for patent assertions, including from non-practicing entities who purchase SEPs to assert them against others.

(3) Apple is deeply committed to innovation and standardization. We invested over EUR 20 billion in R&D globally in FY 2021.[1] We also participate in over 700 standard activities, including cellular standards, and our engineers participate in over 100 diverse standard development organizations ("SDOs").

## 2. EXECUTIVE SUMMARY

(4) The Guidelines' chapter on standardization contains critically important guidance for SDOs and their IPR policies. We provide in this submission our main comments and suggested text revisions (marked in blue in the body of this submission) on the Revised Guidelines. We also refer the EC to our previous submissions, in particular those of February 2020, September 2021, and October 2021, which detail the main issues that we considered important to re-affirm, clarify, and potentially expand in the Revised Guidelines.

(5) In this response, we focus on certain key actions that we believe the EC could take to ensure that the Revised Guidelines make a positive impact for European innovation and deployment of next generation standards:

- **Hold-up** (¶470): the Revised Guidelines correctly maintain that standardization can create opportunities for abuse, citing as examples of hold-up practices refusals to license the necessary IPR or extraction of excess rents by way of discriminatory or excessive royalty fees. They also correctly recognize hold-up practices as being anti-competitive, and recognize that seeking injunctions can be a form of abusive conduct. Apple encourages the EC to maintain this language, and to expressly state that obtaining or threatening to obtain an injunction on FRAND-encumbered SEPs constitutes hold-up, except in very limited circumstances. In addition, the Revised Guidelines should also require SDO IPR policies to provide explicit limitations on injunctions to fall within the "safe harbor".

- **Hold-out** (¶470): the Revised Guidelines introduce the concept of hold-out for the first time, incorrectly appearing to equate hold-up, which constitutes a competition concern for

[1] *See* 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.

the reasons explained in the Revised Guidelines, with hold-out, which is a generic patent licensing issue adequately addressed under patent law by monetary damages. The EC should remove the discussion of hold-out, or, if retained, the EC should ensure that its definition is limited so that it cannot be interpreted to include legitimate negotiation behavior.

- **FRAND valuation** (¶¶484, 486):

  - The Revised Guidelines (¶486) correctly maintain that for royalties to be considered FRAND, they should be based on the economic value of the IPR. Apple also welcomes the EC's clarification at paragraph 486 that the market success of the product (understood to mean the end product) should not be considered in determining the economic value of the IPR. However, the meaning of the term "present value added" is unclear and may lead to inaccurate SEP rate determinations. We therefore recommend modifying the text of the Revised Guidelines to explain that the economic value of the IPR must be assessed with regard to a hypothetical *ex ante* negotiation between the essential IPR holder and a prospective licensee that takes place before the standard has been developed and before the industry has become locked-in to the essential IPR and thus vulnerable to hold-up. We also welcome the addition in the Revised Guidelines of a discussion of valuation methods based on *ex ante* comparison of licensing fees to those of the next best available alternative technology, and of so-called "top-down" methods, and suggest ways in which this revised text may be further improved.

  - We also invite the EC to either remove or qualify a newly added last sentence at paragraph 484, which reads: "*FRAND commitments allow IPR holders to monetise their technologies via FRAND royalties and obtain a reasonable return on their investment in R&D which by its nature is risky. This can ensure continued incentives to contribute the best available technology to the standard*". "FRAND" does not mean that every IPR that is essential to a standard will earn an attractive return on invested capital. To the contrary, in an *ex ante* situation many "essential" IPRs have likely low value, or even zero value if there is a competitive alternative available for free. As with any other R&D investment, the amount invested (whether high or low) does not necessarily reflect the value of the SEP.

  - The Revised Guidelines (¶500, footnote 297) also include multiple references to the possibility of having *ex-ante* disclosure of maximum accumulated royalty rates. We understand that the EC is referring to unilateral disclosures by individual licensors, and that it is not contemplating joint disclosures. However, new footnote 297 to paragraph 500 could more easily be misinterpreted to refer to joint disclosures and we suggest to delete it, as joint action by an SDO to set a maximum accumulated royalty rate could lead to collusive greater-than-FRAND pricing in a royalty-bearing context.

- **License to all** (¶482): we applaud the EC's decision to maintain the requirement at paragraph 482 that "*IPR policy would need to 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 on* [FRAND terms]". We also appreciate the EC's reinforcement of this principle by citing in new footnote 278 the ECJ's *Huawei v ZTE* judgment and the EC's decision in *Motorola* that the FRAND commitment creates legitimate expectations for third parties that a license on FRAND terms will be granted.

- **Transparency** (¶483): we also welcome the proposed changes to increase transparency around IPR disclosure in the Revised Guidelines, and invite the EC to expand this notion so that specific disclosure also applies explicitly to unpublished IPR applications. Doing so would ensure further transparency and spur competition between technologies.

(6) Finally, we also include additional suggestions in the "**other issues**" section below.

## 3. HOLD-UP

(7) The Revised Guidelines (¶470) correctly identify hold-up as a form of anticompetitive behavior by SEP owners. The Revised Guidelines correctly identify examples of hold-up practices, and thus anticompetitive behavior by SEP owners, including refusing to license the necessary IPR or extracting excess rents through discriminatory or excessive royalties.

(8) Apple invites the EC also to expressly include the inappropriate use of an injunction by SEP owners that have committed to license their SEPs under FRAND terms as an example of hold-up. Apple has explained in detail in its previous submissions to the EC the negative effects that seeking or threatening to seek a SEP injunction has on potential licensees (*see* Apple's Position Paper on Standardization submitted to the EC on 5 October 2021). Indeed, seeking or threatening to seek SEP injunctions can result in the exclusion of the potential licensee from the relevant market, damaging competition and innovation, which the EC itself recognized in its *Motorola* decision.

(9) Unfortunately, seeking injunctions is also very common opportunistic conduct by SEP licensors. A recent working paper concluded that opportunistic conduct among SEP holders was present in approximately 75% of SEP assertions, based on an in-depth analysis of the dockets of U.S. patent cases filed between 2010-2019 to enforce declared SEPs, and that the most commonly pursued form of opportunistic behavior was an allegation that SEP holders are entitled to injunctions.[2]

(10) The Revised Guidelines already recognize elsewhere that seeking an injunction (or threatening to seek one) can be a form of abusive conduct by citing *Huawei v ZTE* in new footnote 282 and noting there that "*an action for infringement may constitute an abuse of a dominant position within the meaning of Article 102 if it is brought against a willing licensee without complying with the procedural steps set out by the Court in its Judgment*". The EC should state more clearly that this conduct is hold-up, at paragraph 470 as follows (proposed edits marked in blue):

"*When the standard constitutes a barrier to entry, the undertaking could thereby control the product or service market to which the standard relates. This in turn could allow undertakings to behave in anti-competitive ways, for example by refusing to license the necessary IPR, by extracting excess rents by way of discriminatory or excessive royalty fees thereby preventing effective access to the standard ~~("hold-up")~~, or by inappropriately seeking or threatening to seek injunctive relief ("hold-up")*".

(11) Further, as Apple has explained in its previous submissions, injunctions for FRAND-committed SEPs should be available only in rare circumstances. As the EC has recognized at footnote 282, the ECJ noted the anticompetitive effects from the use of SEP injunctions *in Huawei v ZTE*, and it defined strict requirements before a SEP holder could seek an injunction. However, some courts have misinterpreted the *Huawei v ZTE* framework, by distorting the concept of "willing licensee" to allow injunctions at an alarming rate. In particular, some recent German and Dutch courts judge the behavior of the potential licensee at any time before and during the negotiations, and without first determining that the SEP holder discharged its obligation to make a FRAND offer. The concept of "willing licensee" has thus lost its original meaning. As a

[2] *See* 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 (at 26 and 41).

consequence, injunctions have been allowed in circumstances that constituted hold-up by SEP owners. Our suggested addition to the text of paragraph 470 of the Revised Guidelines would help address abusive conduct by SEP holders and serve as guidance to courts when assessing requests to issue an injunction (*see* paragraph (10) of this document).

(12) We continue to stress that the EC should require that in order to benefit from the "safe harbor" under the Revised Guidelines, SDOs must include in their IPR policies express guidance that members may not seek injunctions barring exceptional circumstances. More explicit IPR policies would reduce uncertainty, assist in building common understanding across industry, and thus encourage the private resolution of licensing disputes.

(13) Finally, the new added footnote 268 qualifies the statement at paragraph 470 by saying "*if also accompanied by a FRAND commitment. See paragraphs 482-484*". However, the entire paragraph 470 only applies to FRAND-committed SEPs (*i.e.*, there are no anticompetitive concerns of the type included at paragraph 470 regarding patents that have been appropriately excluded from a standard and are thus not covered by a FRAND commitment). Therefore, this footnote should ideally apply to the entirety of paragraph 470.

## 4. HOLD-OUT

(14) Paragraph 470 introduces the concept of **hold-out** after defining hold-up, as follows "[t]*he reverse situation may also arise if licensing negotiations are drawn out for reasons attributable solely to the user of the standard. This could include for example a refusal to pay a FRAND royalty fee or using dilatory strategies ("hold-out")*."

(15) The Revised Guidelines (¶470) incorrectly equate hold-out with hold-up without distinguishing their relative significance. Hold-up involves holders of SEPs exercising market power acquired when their IP was included in a standard. Hold-up is a competition concern because anticompetitive behavior by SEP owners is enabled by agreements between actual or potential competitors, as explained at paragraph 470. The market power that SEP owners gain by virtue of having their technology included in the standard allows them take advantage of users' standards-specific investments to control the product or service market to which the standard relates by anti-competitively excluding potential licensees or obtaining excessive royalties (or other non-FRAND terms) than would have been possible when competing for inclusion in the standard with alternative technologies.

(16) Hold-out, on the other hand, is not a competition concern.[3] As at least one court has recognized, it is a generic issue applicable to all IPRs, and it has long-standing and well-established legal remedies.[4] Hold-out does not exploit market power obtained through standardization. Thus, it is not a "reverse" situation, as articulated at paragraph 470.

(17) The concern about hold-out is also greatly overstated. First, the chance that a patent holder will not recoup its investment in developing patented technology is a normal aspect of a market economy where investment in innovation – including in the form of patents – is risky because it is rewarded after the fact based on its demonstrated worth. By contrast, standardization actually enhances the prospects that patent holders will benefit from their patents because it

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[3] *See, e.g.,* Colleen V. Chien, "Holding Up and Holding Out", 21 Mich. Telecomm. & Tech. L. Rev. 1, 5 (2014) (describing hold-out as situation in which "[t]*he company ignores you and refuses to engage or license the patent, no matter how strong it is or reasonable your offer*").

[4] *See, e.g.*, *In re Innovatio IP Ventures, LLC Patent Litig*., 2013 WL 5593609, at *11 (N.D. Ill. Oct. 3, 2013) ("*Moreover, the 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.*").

increases the number of potential licensing agreements they can enter and the likely number of licensed devices that will embody the invention. Second, SEP holders may pursue monetary damages if they cannot reach agreement with potential licensees, and obtain the FRAND royalties they voluntarily promised to accept for use of their SEPs. Third, there has been little to no empirical evidence indicating that hold-out is a widespread problem for SEP holders.[5]

(18) Even if the concept of hold-out is not deleted from the Revised Guidelines, the proposed definition of hold-out at paragraph 470 is problematic, as it could be interpreted to include legitimate delays from good faith negotiation activities. Good faith negotiations might well involve evaluation of the SEPs at issue, requests for detailed information about declared SEPs, or litigation to resolve disputes about essentiality, validity, enforceability or infringement of the asserted SEPs,[6] or to dispute non-FRAND offers or other license terms, such as relevancy, scope (*i.e.*, geographical coverage of the patents and licensed products), the monetary compensation demanded for the license, duration, transferability of the license, etc. No issue would arise in these situations, even if the resulting delay were "*attributable solely to the user of the standard*." Negotiation of complex portfolio licenses simply takes time, and there can be no one-size-fits-all timetable for these transactions. Such activities are legitimate efforts by prospective licensees to understand the scope of claimed SEPs and, if needed, to ask a court or arbitrator to determine a FRAND royalty for the asserted SEPs.

(19) The proposed language (¶470) is also not clear as to how one could establish that a licensee has refused to pay a FRAND royalty. This determination could only occur if such a FRAND royalty has been established by an independent court of competent jurisdiction in a final judgment that the patent(s) at issue are infringed and not invalid or otherwise unenforceable, and the licensee has been held to have to pay that royalty. Otherwise any SEP owner would claim that a potential licensee is engaging in hold-out conduct during the course of negotiations, as there are often disputes as to the merits of the SEPs, and whether the SEP owner's offer is indeed FRAND.

(20) In light of the above-discussed considerations, we suggest that the additional text on hold-out be deleted, or, at a minimum revised as follows (proposed edits marked in blue):

"*~~The reverse situation~~ A different situation may arise if licensing negotiations are unreasonably drawn out for reasons attributable solely to the user of the standard. This could include for example a refusal to pay a FRAND royalty fee as set forth in a final judgment of patent infringement from a court of competent jurisdiction or using dilatory strategies without other legitimate aim than to unreasonably delay negotiations ("hold-out")*".

## 5. FRAND VALUATION

### 5.1 Valuation methods

(21) We appreciate various revisions in the Revised Guidelines concerning valuation, but consider they could be even further improved.

(22) **Paragraph 486, *ex ante* valuation**: the new text at paragraph 486 importantly clarifies that the economic value of the covered IPR "*should be irrespective of the market success of the products*

[5] *See* Brian J. Helmers & Christian Love, "An Empirical Test of Patent Hold-Out Theory: Evidence from Litigation of Standard Essential Patents 3" (Santa Clara Univ. Legal Studies Research Paper Oct. 26, 2021), https://ssrn.com/abstract=3950060.

[6] As we have discussed in prior submissions, studies have shown that truly essential, infringed, and valid SEPs are only a small fraction of declared SEPs, which makes disputes and even litigation over essentiality quite likely and legitimate.

*which is unrelated to the patented technology*" [emphasis added]. We welcome the EC's clarification that market success which is unrelated to the patented technology should not be included in the economic value of the IPR.

(23) However, the Revised Guidelines' use of the phrase "*the present value added of the covered IPR*" is confusing. Present value analysis is an economic method used to account for the time value of money and thereby to enable accurate comparisons of payments made at different times. For example, present value analysis might be used to discount the value of a future payment so that it could be compared to the value of a payment made today.[7]

(24) We presume that because the Revised Guidelines state that the present value added should be irrespective of the market success of the product, it intends to convey that valuation of the covered IPR should take place *ex ante*, before the standard is set, and that the objective is to determine whether there is an increase in the value that is specifically attributable to the covered IPR in products that use the standard.[8]

(25) To convey that meaning more clearly, we suggest the following edit to the Revised Guidelines (¶486) (proposed changes marked in blue):

"*The economic value of the IPR ~~could~~ should be based on the ~~present~~ ex ante value added of the covered IPR and should be irrespective of the market success of the products which is unrelated to the patented technology*" (footnotes omitted).

(26) It is important that the Revised Guidelines state clearly that the economic value of the IPR should be assessed with regard to a hypothetical *ex ante* negotiation between the essential IPR holder and a prospective licensee that takes place before the standard has been developed and before the industry has become locked-in to the IPR and thus vulnerable to hold-up. First, this interpretation of FRAND is widely endorsed by academics and practitioners.[9] Second, an *ex post* assessment of the economic value of the IPR would not achieve the stated aim of the Revised Guidelines that SEPs should be valued "*irrespective of the market success of the products which is unrelated to the patented technology*." Third, the "*various methods available*

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7 It should also be noted that a problem with present value-added analysis, which is often used in conjunction with economic tools like demand estimation and conjoint analysis, is that these tools can typically only be used to estimate the value of a feature of a product that uses covered IPRs and cannot directly estimate the value of the technology covered by the IPRs. This distinction is important for two reasons. First, the value of the feature typically provides no information about the value of the technology claimed in the IPR because it does not account for potential alternative technologies that could have constrained royalties during an *ex ante* competition to be the technology selected for the standard. Second, the value of features often derives from multiple factors unrelated to covered IPRs, such as brand value and other IPRs, and for this reason the estimated value of the feature must be carefully interpreted to understand how it relates to covered IPRs.

8 It should also be understood *ex ante* that as the standard ages and future versions of the standard are developed, and as patents expire, the value of a SEP can decrease over time.

9 *See*, for example, Stanley M. Besen, "Why Royalties for Standard Essential Patents Should Not Be Set by the Courts", Chicago-Kent Journal of Intellectual Property, Vol. 15, No. 1, 2016, pp. 19–48 at p. 23; Dennis W. Carlton and Allan L. Shampine, "An Economic Interpretation of FRAND," Journal of Competition Law and Economics, Vol. 9, No. 3, 2013, pp. 531–552 at p. 545; Daniel G. Swanson and William J. Baumol, "Reasonable and Nondiscriminatory (RAND) Royalties, Standards Selection, and Control of Market Power," Antitrust Law Journal, Vol. 73, No. 1, 2005, pp. 1–58 at pp. 10–11; U.S. Federal Trade Commission, "The Evolving IP Marketplace: Aligning Patent Notice and Remedies with Competition," March 2011, p. 194, https://www.ftc.gov/sites/default/files/documents/reports/evolving-ipmarketplace-aligning-patent-notice-and-remedies-competition-report-federal-trade/110307patentreport.pdf.

*for the assessment*" of the economic value of the IPR listed in the Revised Guidelines at paragraph 487 (*e.g.*, expert assessment, comparative licenses, "top down" approaches) theoretically could be applied to both *ex ante* and *ex post* assessments. Thus, clearly indicating in the Revised Guidelines that a correct analysis requires an *ex ante* assessment could prevent misguided and inflated valuations of essential IPRs.

(27) **Paragraphs 486-487, *ex ante* valuation methods**: paragraphs 486-487 list methods by which *ex ante* valuation may be accomplished. Revised paragraph 486 clarifies that the licensing fees that were charged for the SEPs in question in a competitive environment before the industry had developed the standard may be compared with "*the value/royalty of the next best available alternative (ex-ante)*". We welcome the addition of the text on the "next best available alternative", which is a well-established economic concept that has been applied frequently in court cases and other settings to determine FRAND rates.

(28) The revised language could be improved, however, in several ways. First, the language suggesting that *ex ante* licensing fees can be compared to *ex post* licensing fees should be improved to clarify the reason for the comparison. That reason is to determine whether royalties demanded *ex post* are aligned with those that would have resulted from an *ex ante* negotiation. Second, the revised language (¶486) still appears to refer only to actual "*licensing fees charged by the undertaking in question*". In practice, a common method of *ex ante* valuation involves comparing licensing fees that hypothetically would have been charged *ex ante* with value of the next best available technology *ex ante*. Finally, the last two lines of paragraph 486 could be added into the beginning of existing paragraph 487. This revision would make clear that this is one of the methods to assess FRAND royalties on an *ex ante* basis.

(29) We accordingly suggest the following edit to the Revised Guidelines (¶486) (proposed changes marked in blue):

"*For example, i~~I~~t may be possible to compare the licensing fees that were charged or would have been charged by the undertaking in question for the relevant patents in a competitive environment before the industry has developed the standard (ex ante) with the value/royalty of the next best available alternative (ex-ante); or with the value/royalty charged after the industry has been locked in (ex post) to determine whether the ex post royalty demanded aligns with the royalty that would have been charged ex ante. This assumes that the comparison can be made in a consistent and reliable manner*".

(30) **Paragraph 487, "top down" valuation method**: we appreciate the reference to the method of "*determining, first, an appropriate overall value for all relevant IPR and, second, the portion attributable to a particular IPR holder*." As Apple has stated on its website, a SEP licensor's *pro rata* share of declared SEPs is an objective reference point in a FRAND negotiation, and 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.[10] Particularly when applied to a common royalty base for SEPs that is no more than the smallest salable unit where all or substantially all of the inventive aspects of the SEP are practiced (and is appropriately further apportioned),[11]

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10 *See* Apple's Statement on FRAND Licensing of SEPs, https://www.apple.com/legal/intellectual-property/frand/.

11 This royalty base should be further apportioned to isolate the SEP value, separate and apart from prior art, non-patented features, other patented technologies, standardization itself, and contributions and

this method is important to prevent SEP licensors from discriminating between licensees, charging different royalties for the same SEPs, and to capturing value attributable to licensee innovations.

(31) Finally, SDOs should be required to include in their IPR policies the guidance on valuation outlined above to benefit from the "safe harbor" under the Revised Guidelines.

## 5.2 Investment risks

(32) We are also concerned with the newly added sentences at the end of paragraph 484 that read: "*FRAND commitments allow IPR holders to monetise their technologies via FRAND royalties and obtain a reasonable return on their investment in R&D which by its nature is risky. This can ensure continued incentives to contribute the best available technology to the standard*".

(33) It is appropriate and important for the Revised Guidelines to recognize that investment in R&D, inside or outside the context of standard development, is inherently risky. But risky investments also mean that a return is not guaranteed. Indeed, risky investments often fail to earn an attractive return on capital. Some technologies that are essential to standards might be highly valuable, while others might have little incremental value and are simply chosen as one of many ways in which to solve a technical issue. In some instances, the value of the invention could also be zero if there is a competitive alternative available for free.

(34) Because FRAND valuation reflects the *ex ante* competitive value of the invention, it is accordingly appropriate that a return on investment in essential IPRs is not guaranteed. New footnote 286 seems to already recognize as much, since it states that cost-based methods for valuation (*e.g.*, methods that compensate SEP owners for the costs of their investments) may distort the incentives to innovate, and are in essence not the best suited for FRAND valuations. Accordingly, to avoid confusion and unintentional consequences of the proposed addition,[12] Apple urges the EC to consider the following amendments to paragraph 484 (proposed edits marked in blue):

"*FRAND commitments allow IPR holders to monetise their technologies via FRAND royalties and obtain a ~~reasonable~~ return on their investment in R&D, which by its nature is risky, that is aligned with their contribution to the economic value of their patented invention. This can ensure continued incentives to contribute the best available technology to the standard*".

## 5.3 *Ex ante* disclosure of maximum accumulated royalties

(35) Paragraph 500 of the Revised Guidelines adds several references to *ex ante* disclosures of "*maximum accumulated royalty rate*[s] *by all IPR holders*" that merit clarification.

(36) Paragraph 500 states that the *ex ante* disclosure of "*most restrictive licensing terms, for standard essential patents by individual IPR holders or of a maximum accumulated*[297] *royalty rate by all IPR holders will not, in principle, restrict competition within the meaning of Article 101(1)".* The same paragraph further provides that *"should a standard development organisation's IPR policy choose to provide for IPR holders to individually disclose prior to the adoption of the standard their most restrictive licensing terms, including the maximum royalty rates or maximum accumulated royalty rate to be charged*", there should normally not

innovations of others (*i.e.*, materials, manufacturing, marketing, etc.). *See* Apple's Statement on FRAND Licensing of SEPs, https://www.apple.com/legal/intellectual-property/frand/.

12 We are also concerned that that this addition to paragraph 484 could be interpreted to suggest, presumably unintentionally on the EC's part, for FRAND rates to reflect more than the intrinsic value of the patented technology.

be a restriction of competition. As paragraph 500 further explains, *"[s]uch ex ante unilateral disclosures of most restrictive licensing terms or maximum accumulated royalty rate would be one way to enable the parties involved in the development of a standard to take an informed decision based on the disadvantages and advantages of different alternative technologies*" [emphasis added].

(37) We believe that these statements in the body of paragraph 500 make it clear that this paragraph is focused solely upon unilateral disclosures by individual licensors of maximum accumulated royalty rates, and that it is not contemplating joint disclosures by the members of an SDO of maximum accumulated royalty rates. The EC should also clarify that a similar limitation applies to paragraph 487, which states that it may be possible to refer to disclosures of licensing terms, by explicitly stating that it is referring to unilateral disclosures:

"*including the individual or aggregate royalties for relevant IPR, in the context of a specific standard development process*" in the context of a FRAND evaluation. We propose the following edit (proposed changes marked in blue): "*In an appropriate case, it may also be possible to refer to unilateral ex ante disclosures of licensing terms, including the individual or aggregate royalties for relevant IPR, in the context of a specific standard development process*" [emphasis added].

(38) Moreover, we suggest deleting new footnote 297 to paragraph 500 because it could be misinterpreted to refer to joint disclosures: "*In order to increase the transparency of the potential costs for implementing a standard, standard development organisations could take an active role in disclosing total maximum stack of royalty for the standard. Similar to the concept of a patent pool, IPR holders can share the total royalty stack*" [emphasis added].

(39) Joint action by the members of an SDO to set a maximum accumulated royalty rate could lead to collusive greater-than-FRAND pricing in a royalty-bearing context. Furthermore, the potential comparison in new footnote 297 of joint action by an SDO to activities by a patent pool is inapt for several reasons, including that SEP pools set royalty rates after the standard is developed and thus after the *ex ante* technology competition to be included in the standard has ended. In contrast, an SDO setting a maximum accumulated royalty would involve joint action by the owners of competing technologies.[13]

## 6. LICENSE TO ALL

(40) We welcome the EC's decision to maintain at paragraph 482 the requirement that licenses should be available to any interested third party.

(41) We also welcome the EC's reinforcement of this principle by citing the ECJ's *Huawei v ZTE* judgment (¶53) and the EC's decision in *Motorola* (¶417) for the principle that the FRAND commitment creates legitimate expectations for third parties that a license on FRAND terms will in fact be granted (new footnote 278). Indeed, SEP status is granted in return for a promise to license such SEP on FRAND terms to any party that wishes to take a license to use the standard under such terms. The SEP owner benefits from having its IPR contributed to the standard due to the resulting lock-in effect, but in return it agrees to certain constraints on how it will exercise such IPR (*see Huawei v ZTE,* at ¶51: "*the patent at issue obtained SEP status*

[13] After the standard has been developed, the essential IPRs included in the standard are complements, not substitutes. In addition, patent pools typically take steps to satisfy competition safeguards, including protecting sensitive business information by putting in place the necessary safeguards, excluding substitutes, and ensuring that there are opportunities to license outside the pool.

*only in return for the proprietor's irrevocable undertaking, given to the standardisation body in question, that it is prepared to grant licences on FRAND terms*").

(42) Having a balanced SEP framework is key to supporting innovation and consumer choice within the single market. Refusals to license SEPs subject to the FRAND commitment harm European suppliers, who are not able to obtain SEP licenses, and risk forcing them out of the market. Only a direct license allows all third parties to have the necessary freedom-to-operate. However, these benefits can only be achieved if FRAND licenses are available to any market participant, as generally was the case until approximately 2008 when a few SEP holders began to change their prior practices.[14] Paragraph 482 as currently written in the Revised Guidelines should be maintained in the final version of the Revised Guidelines. It provides the necessary clarity that FRAND licensing should be available to all third parties and appropriately relies on EC's precedent to support this position.

## 7. TRANSPARENCY

(43) Apple welcomes the proposed changes on IPR disclosure in the Revised Guidelines (¶483), but we invite the EC to expand this notion so that specific disclosure also explicitly applies to unpublished IPR applications.

(44) In particular, paragraph 483 correctly identifies the harms that can arise from patent ambush, *i.e.*, intentionally failing to disclose SEPs during the standards setting process (footnote 269, citing the EC's *Rambus* decision). And it also correctly requires that IPR disclosure "*should include at least the patent number or patent application number*". But it then qualifies this statement by saying that if "*this information is not yet publicly available, then it is also sufficient if the participant* [does not identify] *specific IPR claims or applications for IPR (so called blanket disclosures)*", making clear that "[e]*xcept for this case blanket disclosure would be less likely to enable the industry to make an informed choice of technology and to ensure effective access to the standard*".

(45) We welcome these changes, as they are broadly in line with the position that a mere declaration by a participant that it is likely to have IPR claims without identifying specific IPR claims or applications is in many cases insufficient. However, specific disclosure of unpublished IPR should be required (*i.e.,* by referencing the specific portion of the standard or contribution to which the disclosure allegedly relates). Doing so would foster a sustainable and more predictable standardization environment.

(46) For the same reason, as previously explained, footnote 267 of the Revised Guidelines (¶469) states that IPR in particular refers to patent(s) "*excluding non-published patent applications*". We believe that the Guidelines should expressly define IPR as including patent applications, both published and unpublished. The exclusion of unpublished patent applications from the requirement to declare essential IPR would undermine transparency during the standard setting process. A contributor's *bona fide* belief that a patent may be essential if the standard is adopted, even if that application is unpublished, should be sufficient to qualify as a disclosable IPR for the purpose of standard setting. There is also no logical reason why the practices of patent authorities as to when they publish applications should affect the obligations of SDO members, if they chose to propose their technology for inclusion in a standard, to disclose all patents and patent applications that might be essential.

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14 This historical change of approach was documented by the court in *FTC v. Qualcomm*. As the Court found (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 licenses to OEM companies. A few other SEP holders thereafter copied this behavior, because they believed it to be more lucrative. See, generally *Federal 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).

(47) We therefore propose the following changes (proposed edits marked in blue):

- Paragraph 483: "*Moreover, 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 is relevant for (i) enabling the industry to make an informed choice of technology to be included in a standard and (ii) assisting in achieving the goal of effective access to the standard. Such a disclosure obligation could be based on reasonable endeavours to identify IPR reading on the potential standard and to update the disclosure as the standard develops. With respect to patents, the IPR disclosure should include at least the patent number or patent application number. If this information is not yet publicly available, disclosure should still reference the specific portion of the standard or contribution to which the IPR relates. ~~then it is also sufficient if the participant declares that it is likely to have IPR claims over a particular technology (without identifying specific IPR claims or applications for IPR (so-called blanket disclosure). Except for this case,~~ Blanket disclosure would be less likely to enable the industry to make an informed choice of technology and to ensure effective access to the standard. Participants should also be encouraged to update their disclosures at the time of adoption of a standard, in particular if there are any changes which may have an impact on the essentiality or validity of their IPRs. Since the risks with regard to effective access are not the same in the case of a standard development organisation with a royalty-free standards policy, IPR disclosure would not be relevant in that context*".

- Footnote 267: "*In the context of this Chapter, IPR in particular refers to patent(s), including both published and unpublished patent applications ~~(excluding non-published patent applications).~~ However, in case any other type of IPR in practice gives the IPR holder control over the use of the standard the same principles should be applied*".

(48) We also agree with the EC's decision to omit any reference to establishing a system of essentiality checks, as we are concerned that unless it is neutrally implemented and well-founded, it could decrease transparency instead of promoting it.

(49) Finally, we invite the EC to reinstate a sentence at paragraph 470, preceding the notion of hold-up, which was deleted in the Revised Guidelines. The deleted language is still relevant and important, and is also in line with the EC's position on transparency and disclosure more generally (proposed edits marked in blue):

"*Third, standardisation may lead to anti-competitive results by preventing certain undertakings from obtaining effective access to the results of the standard development process (that is to say, the specification and/or the essential IPR for implementing the standard). If an undertaking 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. A system where potentially relevant IPR is disclosed up-front may increase the likelihood of effective access being granted to the standard* [268] *since it allows the participants to identify which technologies are covered by IPR and which are not*. *This enables the participants to both factor in the potential effect on the final price of the result of the standard (for example choosing a technology without IPR is likely to have a positive effect on the final price) and to verify with the IPR holder whether they would be willing to license if their technology is included in the standard*".

## 8. OTHER ISSUES

(50) First, we welcome a number of drafting changes in the Revised Guidelines and support the EC to retain the new text in the final version of the Guidelines. Namely:

- **Paragraph 482**: we agree with moving the sentence that "*FRAND can also cover royalty-free licensing*" to the main body of the text from a footnote.
- **Paragraph 487**: we agree with deleting "portfolio" from the first sentence to support valuation at the individual level of each IPR.
- **Paragraph 488 and new footnote 289**: it is crucial to highlight that any alternative methods of dispute resolution must be agreed to by both parties (*i.e.*, it is a voluntary way to resolve a licensing dispute).

(51) The Revised Guidelines maintain the statement at paragraph 471 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. We also question the reference to the EC's *Motorola* decision added in new footnote 272 to support this statement. It is apparent from the EC's assessment in that case that Motorola was found dominant because it held IPR that was essential to a standard. This analysis is also in line with the EC's practice both in mergers and antitrust to consider each SEP to be its own separate product market (and thus by definition the owner of that SEP has a monopoly over it). We suggest that the EC revisits this issue and deletes paragraph 471 in full.

(52) The Revised Guidelines include new language at paragraph 489 that we invite the EC to reconsider and delete, namely: "[i]*n analysing standardisation agreements, the characteristics of the sector and industry shall be taken into consideration*". Standardization agreements concern technology to be contributed to a standard, and as such, we fail to understand how a sector or industry may be relevant in its assessment (and this also begs the question of which sector/industry). We are also concerned that some SEP owners may read this to validate their claims that they can treat sectors differently to extract higher royalties. Such treatment would go against the EC's stated principles that the value of the IPR should be irrespective of the value of the end-product (and as a consequence, of the relevant industry/sector). We suggest deletion of this new language.

(53) In the last sentence of paragraph 490 of the Revised Guidelines, the EC suggests that if the standard covers only minor aspects of the end product, it is less likely for competition concerns to arise. As explained in previous submissions, this is far from Apple's experience. SEPs covering only minor aspects of end products give rise to very serious challenges for competition. The long-running IPCom litigation is an example. The core patent in that campaign, referred to by IPCom as #100A, covers *at most* a way of prioritizing network traffic

in emergencies, a feature that is rarely if ever used. That has not stopped IPCom from seeking injunctive relief and billions of dollars in royalties. The ability to abuse SEPs to exclude rivals from the 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. The new language added (¶490) to qualify this statement, "*in particular if the standard does not involve any essential IPR*", does not remedy the issue. If anything, it confuses the issue even more as the Guidelines govern essential IPR. We suggest that the EC revisit this issue (proposed edits marked in blue):

"*In the same vein, standards only covering minor aspects or parts of the end- product are less likely to lead to competition concerns than more comprehensive standards ~~in particular~~ if the former standard does not involve any essential IPR*".

(54) We also invite the EC to retain in the final text of the Guidelines the text at paragraph 491, and we welcome the addition that "*competition is likewise likely to be restricted where the result of a standard is only accessible on discriminatory or excessive terms for members or third parties*". We suggest a small change to clarify that the way to provide access to third parties is through FRAND licenses (and not have-made rights as some SEP owners argue) (proposed edits marked in blue):

"*Where the result of a standard (that is to say, the specification of how to comply with the standard and, if relevant, the essential IPR for implementing the standard) is not at all accessible for all members or third parties (that is to say, non- members of the relevant standard development organisation), through the availability of FRAND licenses, this may foreclose or segment markets and is thereby is likely to restrict competition*".

(55) Separately, the Revised Guidelines continue to suggest, at paragraph 512 and footnote 260, 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 EC to clarify that Chapter 7 does not apply to proprietary technologies or formats developed outside the standard development context, and which have not been committed to be licensed under FRAND terms, regardless of whether they achieve widespread adoption in the industry concerned.