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IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

MICROSOFT CORPORATION,

Plaintiff,

v.

MOTOROLA INC., et al.,

Defendants.

No. C10-1823-JLR

REDACTED

PLAINTIFF MICROSOFT
CORPORATION'S POST-TRIAL
BRIEF

MOTOROLA MOBILITY, LLC., et al.,

Plaintiffs,

v.

MICROSOFT CORPORATION,

Defendant.

MICROSOFT'S POST-TRIAL BRIEF

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1 *Wendler & Ezra, P.C. v. Am. Intern. Group, Inc.*,
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2 **OTHER AUTHORITIES**

3 Farrell et al., “Standard setting, patents, and hold-up,” 74 *Antitrust L.J.* 603 (2007) 10

4 Hovenkamp, “Competition in Information Technologies,” U. of Iowa Legal Studies
5 Research Paper No. 12-32 (Oct. 2012) 10

6 Layne-Farrar, Padilla, and Schmalensee, “Pricing Patents For Licensing in Standard-
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INTRODUCTION

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2 According to Motorola’s expert Richard Schmalensee, in the event of a disagreement
3 about whether particular royalties are RAND royalties, the “Court needs to step in and say
4 what is good faith, what is RAND.” (11/19/12 Tr. 170.) That is now the task before the Court.

5 Microsoft, through its economic and technical experts, has provided a comparables-
6 based methodology for determining RAND royalties, anchored in the economic principles
7 underlying the RAND commitment, which prevents patent owners from abusing the power
8 conveyed by standardization. Microsoft’s proposed valuation methodology using real-world
9 comparables (a common approach in real estate and many other markets) assures that the
10 RAND royalty for Motorola’s patents tracks what the market evidence shows are truly
11 reasonable and non-discriminatory royalties for the use of a few patents from the broad,
12 complex technical standards at issue.

13 Motorola, by contrast, has offered nothing of value to the Court in setting a RAND
14 royalty. It repeatedly promised, but failed to provide, a “modified” *Georgia-Pacific* analysis.
15 Its economist, Schmalensee, largely agreed with Microsoft. Its technical experts failed to
16 establish in any rigorous way that the Motorola patents represent anything more than isolated
17 and dated aspects of the standards, or are better than available alternatives. Motorola’s
18 valuation expert Dansky confirmed the obvious—that the *standards* themselves are often
19 important to Microsoft’s products—but offered no testimony on the importance of Motorola’s
20 *patents* to the standard or to Microsoft. And while Motorola’s license expert Donohoe briefly
21 testified about a few Motorola license agreements, they are demonstrably noncomparable and
22 provide no meaningful guidance. In the end, Motorola provided neither useful real-world
23 evidence nor a coherent methodology for determining a RAND royalty.

ARGUMENT**I. RAND VALUATION MUST REFLECT CORE RAND PRINCIPLES.****A. RAND Principles Include Prevention of Hold-Up and Stacking Problems, and Recognize the Non-Royalty Benefits of Standardization to Patent Owners.**

Standard setting organizations (“SSOs”) develop standards to facilitate interoperability and widespread adoption of particular technologies. Economists recognize that significant efficiencies and other benefits may be achieved merely from the adoption of a uniform standard, regardless of whether the standard reflects any technological advances. (*E.g.*, 11/13/12 Tr. 140 (Murphy).)

A patent may be considered “essential” to a standard if the patent is necessary to implement either a mandatory or optional section of a standard. (11/16/12 Tr. at 17 (Simcoe); 11/19/12 Tr. 71–72 (Williams); Ex. 1568 at MS-MOTO_1823_00004073096 (IEEE-SA Standards Board Bylaws).) Although the trial testimony focused on certain patented aspects of the two standards at issue, this patent-based perspective distorts in important ways the actual standards development process. Most of the technology reflected in popular standards like H.264 and 802.11 is unpatented—built on technologies known to the engineers collaborating to write the standard, or on unpatented contributions from those engineers or from prior technology. (11/14/12 Tr. 114–15 (Orchard); 11/13/12 Tr. 215 (Sullivan); 11/14/12 Tr. 43 (Sullivan); 11/15/12 Tr. 96 (Gibson).) Moreover, most of what is included in the standards does not involve a conscious choice by the collaborating engineers between alternatives or between patented technologies—and the inclusion of a given technology in a standard does not mean that it was superior to alternatives. There is no evidence that these engineers commonly consider specific patents or that they are even conscious of what might be patented when framing the standards. Typically, patents are just not considered. (11/15/12 Tr. 199 (Gibson); 11/15/12 Tr. 43–44 (Sullivan); 11/19/12 Tr. 22 (Luthra).) In the end, however, a successful and widely adopted standard may well implicate thousands of patents worldwide.

1. RAND Valuation Must Address Hold-Up.

1 SSOs and regulators recognize that standard-essential patents (“SEPs”) may be used to
2 block firms from implementing a standard and could impede its adoption. Without meaningful
3 checks, SSO participants could use patents to unfairly exploit the standardization process. For
4 example, they could submit their own patented technology to the SSO for consideration, in the
5 guise of providing broader interoperability. If the suggested technologies are incorporated in
6 the standard, and the standard is broadly adopted, the patent holder’s patents provide it
7 leverage to pounce on implementers, including its competitors. Even in the absence of such
8 intent, every patented technology incorporated into a broadly-adopted standard endows the
9 patent holder with the ability to hold up implementers, independent of any technical or
10 commercial merit in the patent. As one of Motorola’s economic experts in other litigation
11 pointed out, “it only takes one bullet to kill”—and any SEP is a bullet.
12

13 The peer-reviewed literature universally recognizes this danger of hold-up. The
14 solution imposed by virtually all SSOs is to require that SEPs be licensed on RAND terms, and
15 as Schmalensee put it, “the RAND commitment and the whole apparatus exists to deal with
16 hold-up.” (11/19/12 Tr. 142.) This follows from the straightforward economic principle that
17 firms with sunk costs in implementing a technology cannot readily switch to different technical
18 solutions. These switching costs and inefficiencies make implementers vulnerable to patent
19 holders exploiting the power of their SEPs. But the SEP holder that has made a RAND
20 commitment is not entitled to exploit this hold-up leverage. (11/19/12 Tr. 169 (Schmalensee).)
21 Restraining this hold-up power is the first and most important of the core economic principles
22 underlying the RAND commitment.

2. RAND Valuation Must Track Basic Principles of Patent Valuation.

24 A broadly-accepted economic and legal principle is that a patent owner is entitled to the
25 value of the use of its patent, and not to the value of the benefits of others’ SEPs or of the
26

1 standard as a whole. This principle comports with patent valuation in general, and is especially
2 acute in the RAND context. Complex standards arise from the contributions of dozens, if not
3 hundreds, of companies, research institutes, and universities. And with complex
4 interoperability standards, the relative overall contribution of any specific piece of technology
5 tends to be small, reflecting incremental changes. Apportionment is critical in a RAND
6 valuation because no party is entitled to compensation for unpatented aspects of the technology
7 or for improvements provided by other companies, much less for the value of the standard as a
8 whole. The principle of apportionment to limit damages compensation for patent infringement
9 to the patent owner's contribution has long been recognized by the Supreme Court, the Ninth
10 Circuit (in the pre-Federal Circuit era), and the Federal Circuit. *See Sheldon v. Metro-Goldwyn*
11 *Pictures Corp.*, 309 U.S. 390, 402 (1940); *Garretson v. Clark*, 111 U.S. 120, 121 (1884); *Velo-*
12 *Bind, Inc. v. Minnesota Min. & Mfg. Co.*, 647 F.2d 965, 973 (9th Cir. 1981); *LaserDynamics,*
13 *Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 69–70 (Fed. Cir. 2012); *Uniloc USA, Inc. v.*
14 *Microsoft Corp.*, 632 F.3d 1292, 1318 (Fed. Cir. 2011). Schmalensee endorsed the need for an
15 apportionment analysis, stating that if “you wanted to determine whether a royalty for
16 Motorola’s 802.11 standard-essential patents was consistent with its RAND obligation, you
17 would want to look at the value of the overall standard and Motorola’s contribution to that
18 value.” (11/19/12 Tr. 166.) No witness disputed this point; rather, as Simcoe testified, this
19 perspective on the RAND commitment “reflected commonly held views.” (11/16/12 Tr. 75.)

20 When many patents are implicated in a given standard, the payment of even a
21 seemingly modest amount to each patent holder can, in the aggregate, erect an economic
22 barrier to using the standard—the “stacking” problem. To avoid this problem, the magnitude
23 of any individual royalty claim also has to be assessed in light of the potential claims of all
24 other patent holders. The stacking problem becomes even more severe when all patents
25 essential to the *multiple* standards that apply to complex technological products are considered
26

1 together. Motorola conceded that stacking is a real risk in its pretrial proposed findings of fact.
2 (Dkt. No. 462 at ¶ 13.) Likewise, in a submission to the European Telecommunications
3 Standards Institute (“ETSI”), Motorola (together with two other companies) observed that the
4 increase in “multi-function, multi-technology products” covered by “ever more patents” has
5 given rise to “the phenomenon of ... ‘royalty-stacking.’” (Ex. 1031 at 2.) It then described a
6 proposed “clarification of existing [RAND] rules” to make clear that SEP holders must
7 grant licenses on terms that are objectively commercially reasonable, taking into
8 account the overall licensing situation, including the cost of obtaining all
9 necessary licenses from other relevant patent holders for all relevant
technologies in the end product.

10 (Ex. 1031 at 3.) It was necessary, according to Motorola, to send a “signal to judges in patent
11 litigation that they can and should look at the overall cumulative royalty costs for a given
12 standard, and not just assess whether the terms being offered by one particular licensor are fair
13 and reasonable *in vacuo*.” (*Id.*)

14 3. RAND Valuation Should Consider Other Economic Benefits Of 15 Standardization to Patentees.

16 A third economic principle underlying RAND is that firms can derive substantial
17 benefit from having their technology incorporated into standards, irrespective of whether they
18 ever seek or are paid royalties on their patents. As Professor Simcoe explained, these benefits
19 include diffusion of their technology, lower costs in implementing the chosen technology, and
20 faster time to market. (11/16/12 Tr. 40.) Motorola’s Ajay Luthra explained that getting
21 Motorola’s technology into the H.264 standard also provided opportunities for royalty-free
22 cross-licensing with other companies holding H.264 SEPs. (Ex. 420 at 1.) For many owners
23 of SEPs, those noncash benefits are more than a sufficient return on their investments in
24 research and development, and obviously sufficient to induce participation in the SSO process.
25 It is not unusual for companies to participate in SSOs and contribute their technology, but
26 never try to license their patents for cash. (*E.g.*, 11/19/12 Tr. 174 (Schmalensee) (“[P]atent

1 rights are often not asserted in this part of the world.”); 11/13/12 Tr. 160 (Murphy) (“[T]here’s
2 very little licensing of 802.11 patents, generally. . . . [T]he most common rate is actually zero,
3 that most people are actually collecting.”.) Even foundational contributors, such as Telenor in
4 H.264 development, forego patents and potential royalties entirely. (11/14/12 Tr. 115
5 (Orchard); 11/13/12 Tr. 215 (Sullivan).) These SSO participants are not walking away empty-
6 handed because they reap substantial benefits in ongoing and future sales of their products.

7 As the Institute of Electrical and Electronic Engineers (the “IEEE”), publisher of the
8 802.11 standard, recognized in its Operations Manual (part of the participants’ undertaking
9 when Motorola submitted its blanket letters of assurance), licensing SEPs on RAND terms
10 means (at least with respect to Motorola’s 802.11 patents) licensing at “nominal competitive
11 cost.” (11/16/12 Tr. 27–30 (Simcoe); Ex. 1130 at 19.) Motorola’s doomsday arguments about
12 the collapse of the standards system if companies cannot extract high royalties (*e.g.*, Dkt. No.
13 541 (Motorola Trial Br.) at 1, 10) are fallacious, because they overlook the myriad motivations
14 that companies have to contribute their technology to standards, the fact that an unchecked
15 effort to extract high royalties would itself doom standardization (11/13/12 Tr. 144–45
16 (Murphy)), and the fact that some SSOs actually require royalty-free licensing.

17 Finally, a RAND valuation must recognize that a license for only a standard-compliant
18 implementation has less value than an unrestricted license. RAND commitments do *not* entitle
19 implementers to use the patents for anything other than an implementation of the standard.
20 (*E.g.*, Ex. 2839). Because a RAND value can never exceed the value of an unrestricted license,
21 traditional patent damages law principles, such as the “entire market value rule,” that apply a
22 check on patent damages likewise serve as a further check on RAND valuation.

23 Motorola suggested that the Court should ignore hold-up and stacking because
24 (according to Motorola) they have not been problems in the past. (*E.g.*, 11/13/12 Tr. 177–78
25
26

1 (Murphy).¹ There are two fallacies in this argument. First, the evidence shows that there *has*
 2 been hold-up by Motorola, including in the very licenses it urges the Court to consider as
 3 “comparables.” (11/20/12 Tr. 101–03 (Dailey).) Second, even if other companies have
 4 complied with their obligations (so hold-up and stacking have not been problems), that proves
 5 nothing: the issue here is the royalty Motorola demands, which, if duplicated by others, would
 6 render implementation of the standards impossible. (11/16/12 Tr. 179 (Lynde); 11/13/12 Tr.
 7 145–46, 150–51, 201–02 (Murphy).) That is the true measure of “hold up” and stacking.

8 **B. These Core RAND Principles, Considered On This Record, Translate to a**
 9 **Comparable-Based Valuation Methodology.**

10 **1. RAND Valuation Requires Consideration of Alternatives.**

11 The Court must here translate the core economic principles underlying RAND into a
 12 workable methodology. Many commentators have proposed that one way of assessing a
 13 RAND royalty is to determine the value of the patent, before adoption or implementation of the
 14 standard, in comparison to available alternatives that could have been adopted instead. The
 15 primary consideration is the added benefit, if any, that stems from using the patented
 16 technology, separate and apart from its incorporation in the standard. *E.g.*, Swanson &
 17 Baumol, “Reasonable and Nondiscriminatory (RAND) Royalties, Standard Selection, and
 18 Control of Market Power,” 73 *Antitrust L.J.* 7–11 (2005) (Ex. 1013). As Schmalensee
 19 explained, “[i]f a technology is easy to invent around or has a ready supply of close substitutes,
 20 it is likely to receive a relatively lower compensation than others.” (11/19/12 Tr. 165.) Even
 21 where a patented technology conferred substantial benefit, if there were “multiple alternatives
 22 before the standard was settled, its incremental contribution, properly measured, may be close

23 _____
 24 ¹ Motorola also pointed to a letter sent by Microsoft to the FTC in 2011 as a supposed admission that hold-up
 25 has not been a problem. (11/16/12 Tr. 133 (Lynde); Ex. 2970.) Motorola ignores the context and antecedent of
 26 the statement, which clearly references a specific situation where the patent holder conceals its standard essential
 patents during development of the standard and then tries to exploit them after adoption. (*See* Ex. 2970 at
 MOTM_WASH1823_0054676 (understanding hold-up as “intentional or deceptive conduct in connection with
 patents that read on standards”).)

1 to or equal to zero.” (11/19/12 Tr. 165–66 (Schmalensee).) Judge Posner agreed that a RAND
2 royalty should reflect only “the value conferred by the patent itself as distinct from the
3 additional value—the hold-up value—conferred by the patent’s being designated as standard
4 essential.” *Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d 901, 2012 WL 2376664, at *11 (N.D.
5 Ill. 2012). *See also* Layne-Farrar, Padilla, and Schmalensee, “Pricing Patents For Licensing in
6 Standard-Setting Organizations: Making Sense of FRAND Commitments,” 74 *Antitrust L.J.*
7 671, 672 (2007) (Ex. 1674).

8 Moreover, given the breadth of standards like H.264 and 802.11, a compliant product
9 must support many features, including those rarely used, so a patent that confers little benefit
10 may still have substantial hold-up value. This is especially true in situations where the
11 standard includes technology primarily to enable backward compatibility, such as support for
12 interlaced video in the H.264 standard or support for older “b” and “g” modulations in the
13 802.11 standard. (11/14/12 Tr. 52 (Sullivan); 11/15/12 Tr. 189–191 (Gibson).)

14 **2. Patent Pools Provide Real-World Comparables for RAND Valuation.**

15 Microsoft demonstrated that there were numerous, viable alternatives to the patents
16 Motorola has claimed are essential and that the value of Motorola’s contributions are therefore
17 slight. (*E.g.*, 11/15/12 Tr. 114–44 (Gibson); 11/14/12 Tr. 117–31 (Orchard).) But Microsoft
18 has not suggested that valuation of the Motorola patents rests on specific determinations of
19 their value (if any) over these alternatives alone. The value of Motorola’s patents is also
20 reflected in real-world, market-based comparables, which provide a reasonable approximation
21 of the value conferred by individual 802.11 or H.264 patents. Those comparables include
22 patent pool royalty rates—substantially corroborated by other sources demonstrating that pool
23 rates are reliable indicators of RAND royalties.

24 Pool rates must be reasonable, or the pool is unlikely to succeed. (11/13/12 Tr. 75
25 (Glanz); 11/13/12 Tr. 147 (Murphy) (“I have to have rates that are high enough to get
26

1 participation by the sellers, the patent holders, the holders of the intellectual property rights;
2 and I have to have rates low enough to get the end customers on board.”.) Where a patent
3 pool has licensed SEPs before widespread adoption of a standard, the risk of a “hold-up”
4 royalty is mitigated by market forces: prospective licensees could reject hold-up royalties, and
5 simply use a different standard. (11/13/12 Tr. 204 (Murphy).) In any event, because pools
6 often share the SSOs’ goal to promote widespread adoption of standards, they have the right
7 incentive to avoid hold-up. (*Id.* at 147. 155.)

8 If a patent pool contains large numbers of patents from multiple patent owners, the pool
9 rates must be set with an eye to the overall licensing situation, including the cost of obtaining
10 all necessary licenses from other relevant patent holders. If one pool participant insists on a
11 disproportionate royalty for its patents, the other licensors are unlikely to agree. For this
12 reason, as Professor Murphy explained, pool rates provide a benchmark that serves the “goal of
13 preventing royalty stacking.” (11/13/12 Tr. 153.) The per-patent amount received by pool
14 licensors also varies from year to year, due to the expiration of pool patents. Therefore, using
15 pool rates as a benchmark provides a mechanism for adjusting royalties over time as licensed
16 patents expire. (11/16/12 Tr. 104–05 (Lynde).)

17 Patent pools normally divide the collected royalties among the participating patent
18 owners based upon the number of patents contributed to the pools, providing a real world
19 illustration of how proportionality can be achieved when licensing SEPs. (11/13/12 Tr. 157–
20 58 (Murphy).) Where royalties are paid in a lump sum for multiple patents, simply allocating
21 the royalties among the different patents on a *pro rata* basis is a reasonable starting point, as
22 both Motorola’s former Vice President of Intellectual Property, Kirk Dailey, and Motorola’s
23 expert Charles Donohoe admitted. According to Dailey, where a license agreement involves a
24 lump sum royalty payment for three patents, [REDACTED]

25 [REDACTED] (11/20/12
26 [REDACTED])

1 Tr. 83–84.)

2 (11/20/12 Tr. 143.) Where, as
3 here, Motorola never showed its patents were worth more than the average pool patent, the *pro*
4 *rata* valuation approach is entirely appropriate. See Hovenkamp, “Competition in Information
5 Technologies” U. of Iowa Legal Studies Research Paper No. 12-32 at 8–9 (Oct. 2012); Farrell
6 et al., “Standard setting, patents, and hold-up,” 74 *Antitrust L. J.* 603, 643 (2008).

7 The reliability of pools as a relevant comparable is supported by Motorola’s own
8 actions. In its ETSI submission, Motorola endorsed the use of pools as a benchmark and
9 observed that pool rates can be expected to be “reasonable due to the dual role of most of the
10 members (IPR owners, and future licensees).” (Ex. 1033 at 2; 11/16/12 Tr. 34–35 (Simcoe).)
11 Motorola also participated in the formation of the MPEG LA H.264 pool, actively urged rates
12 on the scale ultimately adopted, and approved the press release that announced the agreed-upon
13 royalty rates. (11/13/12 Tr. 68–96 (Glanz).) Motorola’s parent company Google is a licensee
14 of the MPEG LA H.264 pool, and has agreed to license its patents and those of its affiliates at
15 the pool rates. (Ex. 103, § 8.3.)

16 In its trial brief, Motorola argued that pool rates were not a reliable comparable because
17 the “principal objective” of patent pools “is to minimize royalty exposure and maximize
18 freedom of operation for licensees” (Dkt. No. 541 (Motorola Trial Brief) 6). But the evidence
19 at trial showed the opposite, at least as to the MPEG LA H.264 pool. No fewer than four of the
20 licensor participants in that pool (Dolby Laboratories, Electronics and Telecommunications
21 Institute (ETRI), Fraunhofer-Gesellschaft, and Columbia University) derive “most or all of
22 their relevant revenue from licensing, as opposed to making and selling products”—meaning
23 that they have no “royalty exposure” or need to “maximize freedom of operation.” (11/16/12
24 Tr. 87–89 (Lynde).) While some pools may aim to minimize royalty payments, the MPEG LA
25 H.264 pool is different. It could not have attracted ETRI and the other similarly-situated

1 licensors unless its royalty rates generated respectable returns. And Motorola's own conduct
2 belies its arguments: in its ETSI submission, Motorola observed that pool rates can be
3 expected to be "reasonable due to the dual role of most of the members, IPR owners, and
4 future licensees." (Ex. 1033, p. 2; 11/16/12 Trial Tr. 34–35 (Simcoe).)²

5 Moreover, other participants have already reaped—as Motorola has—the benefits of
6 participating in setting the standard, including advance knowledge, faster product development
7 at reduced costs, and increased market size, so royalties flowing from broad licensing under a
8 pool rubric provide a potential bonus. (11/16/12 Tr. 39–41 (Simcoe).) Even if it truly were the
9 objective of the pools to set "low" rates, in testimony Motorola itself elicited, Schmalensee
10 confirmed that even such "low" rates could still be RAND (11/19/12 Tr. 180), and offered no
11 specific testimony as to whether he believed the MPEG LA H.264 Pool or Via Pool rates were
12 "low" or not RAND. Motorola's expert in patent pools, Roger Smith, did not testify at all.

13 Motorola advanced a straw man argument that Microsoft's valuation approach
14 somehow forces Motorola to join pools against its will. (Dkt. No. 541 (Motorola Trial Br.) at
15 1, 5–9.) But Microsoft is not asking the Court to order Motorola to join the MPEG LA H.264
16 pool or any other pool. Nor is Microsoft asking the Court to compel Motorola to participate in
17 any particular standard-setting process. Microsoft merely showed that pool rates provide "the
18 best available comparables" for determining the RAND royalty that Motorola is contractually
19 obliged to charge. (11/16/12 Tr. 31 (Simcoe).)

20 Pools are not the only real-world comparable that may be considered in determining a
21 RAND royalty. For example, sometimes the standard is substantially embodied in a

22 ² Motorola tried to cite to various Microsoft documents to suggest that pools provide low rates, but Motorola
23 misreads the documents. Exhibit 2345 is an email by Sullivan in which he correctly stated that SSOs and pools
24 are separate and different organizations. He recognized that fundamentally-important IP may have greater value
25 than the average patent in a pool, but based on his personal knowledge of H.264 and Motorola's contributions, he
26 believes that none of Motorola's patents fall into that category. (11/14/12 Tr. 57 (Sullivan).) Motorola also points
to a blog post written by Microsoft's Dean Hachamovitch suggesting that revenue played no part in Microsoft's
decision to join the MPEG LA pool. (Hachamovitch Dep. at 227–32, 238–39; Ex. 2840. The post makes clear
that he was not saying that the pool rates were low, merely that Microsoft had other motivations for joining.

1 component sold as a separate unit—for example, in a Marvell or Atheros 802.11 chipset.
2 (11/14/12 Tr. 62–63 (Ochs); 11/15/12 Tr. 24, 48–49 (Del Castillo); 11/19/12 Tr. 113–15
3 (Williams).) Where such a component substantially embodies the standard’s functionality, as
4 802.11 chipsets do (11/14/12 Tr. 62 (Ochs)), the market value of the component reflects all of
5 the costs associated with manufacture and distribution, other IP and the value of compliance
6 with the overall standard. 802.11 chipsets are commodity items with cents per-unit profit
7 margins, demonstrating that the value of a single company’s portfolio of 802.11 SEPs is likely
8 to be very low—consistent with the IEEE requirement that the RAND royalty be “nominal” for
9 802.11 RAND licenses. (Ex. 1130 at § 6.3.2.)

10 At trial, Motorola advanced the unsupported assertion that the 802.11 chip is not the
11 smallest saleable unit with respect to its SEPs because the chips need support from other
12 components of a computer, such as computer memory to store an 802.11 network password.
13 (11/19/12 Tr. 99–100 (Williams).) The law is otherwise. Patent exhaustion “provides that the
14 initial sale of a patented item terminates all patent rights to that item.” *Quanta Computer, Inc.*
15 *v. LG Elecs., Inc.*, 553 U.S. 617, 625 (2008). Exhaustion merely requires the authorized sale of
16 a component substantially embodying an invention, and the Supreme Court has specifically
17 held that a product may substantially embody an invention *even if* additional components are
18 necessary to practice the patent. *Id.* at 631–34.

19 A product substantially embodies a patent for the purposes of patent exhaustion if it
20 “embodie[s] essential features of [the] patented invention” and its “only reasonable and
21 intended use [is] to practice the patent.” *Id.* at 631. The Marvell chip is compliant with the
22 802.11 standard, and contains substantially all of what is needed to provide 802.11
23 functionality to a product like the Xbox 360. (11/14/12 Tr. 62 (Ochs).) Accordingly, the
24 Marvell chip embodies essential features of any inventions disclosed in patents Motorola
25 deems essential to 802.11. Further, the reasonable and intended use of the Marvell chip is to
26

1 allow consumer devices like the Xbox 360 to access wireless networks using 802.11. (*Id.*) So
2 the Marvell chip substantially embodies any of Motorola's 802.11 patents—even those that
3 involve storing a password in Xbox or computer memory—and that is why [REDACTED]

4 [REDACTED]
5 [REDACTED]
6 (11/20/12 Tr. 111–12.)

7 **3. Bilateral Agreements Are Unlikely To Provide RAND Comparables.**

8 While purely bilateral license agreements for SEPs may provide information relevant to
9 a RAND valuation, such agreements pose significant problems. RAND licenses must be
10 provided at reasonable, *non-discriminatory* royalties to any and all comers, regardless of their
11 identity. While royalty structures might broadly vary by categories of products, RAND
12 royalties should be essentially the same for each and every licensee—as the IEEE requires,
13 RAND royalties must be “demonstrably free of unfair discrimination.” (11/16/12 Tr. 175
14 (Lynde); Ex. 3394.) Those royalties should reflect the absolute value of the patents, not their
15 relative value based on what the patent holder can extract from a particular licensee. A patent
16 holder that wishes to pursue hold-up in violation of its RAND commitment would do so
17 through a bilateral agreement. (11/19/12 Tr. 158 (Schmalensee).)

18 Before relying on a bilateral agreement as probative of a RAND royalty, the Court
19 would have to be satisfied that the license did not reflect hold-up value and is free of unfair
20 discrimination. *See LaserDynamics*, 694 F.3d at 79. A bilateral negotiation inherently reflects
21 the specific situations and bargaining power of two particular firms, one of which is a patent
22 holder armed with the power of a successful standard and the other an implementer at the
23 mercy of the patent holder. The outcome of this bilateral negotiation could turn on how
24 desperate the implementer is to preserve its ability to sell standard-compliant products, not on
25 the value of the patent holder's innovation or, as Motorola euphemistically put it, the “industry
26

1 conditions and other commercial considerations,” or “unique licensing circumstances of each
2 situation.” (Dkt. No. 541 (Motorola Trial Br.) 2.) [REDACTED]

3 [REDACTED]
4 [REDACTED] (11/20/12 Tr. 64.) This may be “bilateral negotiation,”
5 but by definition, it is decidedly not RAND.

6 In support of its attempted reliance on bilateral license agreements, before trial
7 Motorola urged a RAND valuation based on a “modified” *Georgia-Pacific* analysis. (Dkt. No.
8 541 (Motorola Trial Brief) 2.) However, as Schmalensee acknowledged, in the RAND context
9 many of the individual *Georgia-Pacific* factors are suspect or irrelevant. (11/19/12 Tr. 150
10 (*Georgia-Pacific* “does not contemplate the RAND obligation,” so “one would want to modify
11 it to take that into account.”).) For example, considering whether the patent holder might
12 choose to maintain exclusivity over patent rights (Factor 4), or whether the patent holder
13 competes with the prospective licensee (Factor 5), would be directly contrary to the RAND
14 commitment. Likewise, the *Georgia Pacific* hypothetical negotiation is ordinarily set at the
15 time of the prospective licensee’s first infringement, which in this case would be long after
16 widespread implementation of the standards, and would maximize the patent owner’s ability to
17 capture hold-up value.

18 Schmalensee had no idea what modifications to *Georgia-Pacific* were needed to ensure
19 that the outcome of its hypothetical negotiation would be RAND: “I didn’t have a proposal,
20 other than to entrust to an experienced and knowledgeable licensing professional the task of
21 modifying that analysis in light of the RAND commitment.” (11/19/12 Tr. 161–62.) Donohoe,

22 Motorola’s license expert, [REDACTED]

23 [REDACTED] (11/20/12 Tr. 137–38.) If one were to try to
24 modify the *Georgia-Pacific* analysis to fit the RAND context, that first factor—the “royalties
25 received by the patentee for the licensing of the patent in suit, proving or tending to prove an
26

1 established royalty”—would have to be modified. As Schmalensee admitted, “if the holder of
2 a standard-essential patent approached a user of the standard, and succeeded in holding the
3 user up, the ‘hold-up’ royalty would be reflected in a bilateral agreement.” (11/19/12 Tr. 158.)
4 Such royalties would obviously exceed a RAND royalty, and would either need to be excluded
5 from the analysis altogether or adjusted downward to remove any “hold-up” portion. No
6 Motorola witness explained how that might be done.

7 **II. A RAND ROYALTY FOR MOTOROLA’S H.264 STANDARD-ESSENTIAL**
8 **PATENTS IS A CAPPED AMOUNT IN THE RANGE OF 0.065 TO JUST OVER**
9 **0.2 CENTS PER UNIT.**

10 **A. The Value of the Complex H.264 Standard Bears No Relationship To**
11 **Motorola’s Technology.**

12 The H.264 standard is large and technically complex, developed with the goal of
13 providing improved compression capability relative to prior video standards. (Ex. 610;
14 11/13/2012 Tr. 211 (Sullivan).) H.264 provided a 50% improvement over existing technology,
15 a result that was achieved by the summer of 2001, before Motorola began its participation in
16 the H.264 standards setting process. (11/13/2012 Tr. 215–16 (Sullivan).) The H.264 standard
17 resulted from the contributions of roughly 170 entities, who submitted over 2300 contribution
18 documents as part of the H.264 development process. (11/14/12 Tr. 108 (Orchard).) The
19 Telenor Group was the largest contributor of technology to the H.264 standard. It submitted
20 the proposal that became the basis of the first draft of the design, and contributed many of the
21 core innovations of H.264. (*Id.* at 115; 11/13/12 Tr. 215 (Sullivan).)

22 Telenor did not seek patents on its contributions, and thus most of the innovations
23 reflected in the H.264 standard are not covered by patents. (11/14/12 Tr. 115 (Orchard).) In
24 contrast to the patents in the MPEG-LA pool and the contributions of companies like Telenor,
25 Motorola’s patents play a minuscule role in the technologies associated with H.264. (*Id.* at
26 114.) Fourteen out of the sixteen patents that Motorola claims are essential relate to interlaced

1 video, an old technology that is an artifact of earlier analog television, which has been fading
2 into disuse because virtually all modern displays, such as those on smartphones, televisions,
3 and computer screens, are progressive. (*Id.* at 104; 11/14/12 Tr. 48 (Sullivan).) Indeed, when
4 asked why Motorola Mobility, Inc.’s parent corporation, Google, Inc., did not support
5 interlaced content on the popular YouTube site, Motorola’s technical expert testified that “it
6 might have something to do with how they see the future.” (11/19/12 Tr. 61 (Drabik); Ex.
7 592.)

8 H.264 development was originally directed solely to progressive video coding because
9 the video compression community recognized that modern digital compression technologies
10 are superior to the primitive technique of interlaced video scanning and concluded that
11 interlaced video was waning in importance. (11/13/2012 Tr. 214 (Sullivan); 11/14/2012 Tr. 48
12 (Sullivan).) Motorola, which was a “late bird” to the standards setting process and wanted to
13 ensure that it had a “seat at the table” with the companies that had actually done the lion’s
14 share of the work in developing the standard, pushed for the inclusion of special coding
15 features for interlaced video contents, especially in the areas of MBAFF and PICAFF—
16 technologies that had been used in prior video standards and were not invented by Motorola.
17 (*Id.* at 12–13, 15–16, 56–57; Ex. 420 at 1.)

18 The record shows that the Motorola H.264 patents have little value. No Motorola
19 expert performed a rigorous infringement analysis to show that the patents are actually
20 essential to the standard, nor did any expert consider their validity, either to assess their value
21 or simply to measure the significance of the patents in relation to prior art. (11/19/12 Tr. 49–
22 50 (Drabik).) The absurd, deeply-flawed survey evidence Motorola sought to offer through its
23 expert R. Sukumar only demonstrates the lengths to which Motorola had to go to make even a
24 failed attempt to demonstrate any relevance of its H.264 technology to Microsoft’s products.
25 (11/19/12 Tr. 193–200.)

1 There were suitable alternatives for all of Motorola's interlaced patents. (11/14/12 Tr.
2 117 (Orchard).) Single macroblock MBAFF that had been used in prior video coding
3 standards was a suitable alternative for Motorola's three PICAFF patents (*id.* at 120), and was
4 known to provide *better* compression for interlaced video than PICAFF (*id.* at 124–25). At
5 trial Motorola could praise PICAFF only by comparing it to what was known *not* to be the
6 state of the art for compressing interlaced video. (11/16/12 Tr. 211–12 (Luthra).) Likewise,
7 single macroblock MBAFF was a suitable alternative to Motorola's eight patents related to
8 paired macroblock MBAFF (11/14/12 Tr. 120 (Orchard)), and no test results show that the
9 paired version performed any better. (*Id.* at 121.) Similarly, alternate scans proposed by Sony
10 were alternatives to Motorola's two alternate scan patents (*id.* at 126, 128), and test results
11 show that for interlaced video those scans provided better compression over the progressive-
12 optimized zigzag scan than did Motorola's approach. (*Id.* at 127–28, 129–30.) Using three
13 different neighboring blocks was an alternative to Motorola's interlaced-motion-vector-
14 prediction patent, and could have been done without degrading performance. (*Id.* at 117, 131.)

15 The two Motorola H.264 patents not directed to interlaced video are limited by their
16 means-plus claim language to specific disclosed hardware embodiments, which means they
17 cannot cover Microsoft's software implementations of the H.264 standard. (Exs. 270 ('419
18 patent), 283 ('968 patent).) One of these two patents expired shortly after Microsoft
19 incorporated support for H.264 into its products, and the other will expire in less than four
20 months. (*Id.*; 11/14/12 Tr. 133, 138 (Orchard); 11/19/12 Tr. 56–57 (Drabik).)

21 **B. The MPEG LA H.264 Patent Pool Royalties Establish a RAND Royalty for**
22 **Motorola's H.264 Standard-Essential Patents.**

23 The MPEG LA H.264 pool includes over 2,400 SEPs from 26 different patent owners;
24 the pool patents have now been licensed by more than 1,100 licensees. (11/16/12 Tr. 85
25 (Lynde); Ex. 1544.) Licensor participants include technology powerhouses like Apple, Sony,
26 Ericsson, LG, Cisco, Toshiba, and Fujitsu, as well as Microsoft. (*Id.* at 90–91.) The MPEG

1 LA H.264 patent pool is “broad” and “rich,” covering all fundamental aspects of the patented
2 portions of the H.264 standard. (11/14/12 Tr. 112–14 (Orchard).) MPEG LA has evaluated
3 each of these patents and confirmed their essentiality to H.264. (*Id.* at 111–12.) The pool rates
4 were negotiated before widespread adoption of the H.264 standard, and H.264 faced
5 competition at the time from other video compression standards. (11/13/12 Tr. 204 (Murphy).)

6 The reasonableness of the pool rates was assured by the fact that many of the licensors
7 (who negotiated the rates among themselves) were also future licensees, so there were “both
8 sides on board” and the rate negotiation was a “two-way street.” (*Id.* at 156 .) The licensed
9 patents are all SEPs for the same standard at issue here—H.264. (*Id.* at 157.) And, according
10 to Garrett Glanz, who participated in the negotiations that established the pool, “the motivation
11 for participating in the pool is to both ensure the success of the standard” and “to generate a
12 reasonable revenue stream from your patents” that is consistent with your “RAND
13 commitment to the standards organization.” (11/13/12 Tr. 133–34.)

14 Net receipts from the pool are divided among the patent owner participants based upon
15 the number of patents contributed to the pool. (11/13/12 Tr. 157 (Murphy); Exs. 1160–64.)
16 Because of the large number of licensed patents, the large number of licensees, and the fact
17 that the pool patents are all H.264 standard-essential patents, the per-patent pool royalty for the
18 most recent year provides a good initial estimate of the RAND royalty for an average H.264
19 SEP. (11/13/12 Tr. 157–58 (Murphy).)

20 **C. Motorola’s H.264 Standard-Essential Patents Are Worth No More Than the**
21 **Average MPEG LA Pool Patent.**

22 The *pro rata* approach to the allocation of royalties for a portfolio of SEPs is entirely
23 reasonable. First, all essential patents are equal in that they are required to implement the
24 standard. Accordingly, most, if not all, pool licensing arrangements for SEPs adopt the *pro*
25 *rata* approach. Second, Motorola’s own practices demonstrate that portfolio licensing
26

1 arrangements also reflect a *pro rata* approach, in that no individual patents are singled out for
2 one-off valuation—instead, the patents in the group are licensed together at a uniform rate.

3 While in theory an individual patent may be of particular value, this takes on less
4 significance where an entire portfolio is licensed. In any event, Motorola never proved that
5 any of its H.264 SEPs was more valuable than the average pool patent, and thus was somehow
6 entitled to a premium over the MPEG LA H.264 pool rates. Kirk Dailey, when asked,

7 responded: [REDACTED]

8 (11/20/12 Tr. 110.) If anyone at Motorola ever did make that study, it has never seen the light
9 of day, and no Motorola expert offered such any such opinion. Dr. Drabik also said he had not
10 performed any comparison of the Motorola H.264 SEPs with the MPEG LA H.264 pool
11 patents. (11/19/12 Tr. 60.) Instead, the evidence strongly suggests that the Motorola patents
12 have far less value than the thousands of patents in the pool, including those relating to all the
13 “core components” of the H.264 standard. (11/14/12 Tr. 112 (Orchard).)

14 **D. Google Has Agreed That the MPEG LA Pool Rates Are Presumptively RAND**
15 **Royalties for Motorola’s H.264 Standard-Essential Patents.**

16 Motorola’s corporate parent, Google, Inc., is a licensee of the MPEG LA H.264 pool,
17 and its license agreement obliges it to license its affiliates’ H.264 SEPs to other MPEG LA
18 pool licensees (such as Microsoft), upon request. (Ex. 103, ¶ 8.3.) While a royalty would be
19 payable in connection with such a license, Google’s agreement with MPEG LA recites that the
20 “Licensors’ per patent share of royalties” paid by Google to the MPEG LA pool “shall be
21 presumed to be a fair and reasonable royalty rate” for any Motorola H.264 SEPs. (*Id.*)
22 Motorola’s parent company therefore has agreed that a RAND royalty for the specific
23 Motorola H.264 patents at issue is presumed to be the very MPEG LA H.264 pool rates upon
24 which Microsoft bases its proposed RAND royalty. This is powerful, if not conclusive,
25 evidence that the MPEG LA H.264 pool rates are RAND. (11/16/12 Tr. 97 (Lynde).)
26

E. A RAND Royalty For Motorola's H.264 Standard-Essential Patents Is a Capped Amount In the Range of \$167,000 (0.065 Cents Per Unit) to \$521,000 (Just Over 0.2 Cents Per Unit) With the Best RAND Royalty Estimate Being \$502,000 (Just Under 0.2 Cents Per Unit).

Dr. Matthew Lynde performed the necessary calculations and determined what the MPEG LA H.264 pool rates work out to be when applied to Motorola's H.264 SEPs. The best RAND royalty estimate can be obtained with reference to the MPEG LA royalty formula, after adding the Motorola H.264 SEPs but otherwise leaving the MPEG LA H.264 pool unchanged. Lynde calculated what Motorola's share of the annual pool royalties paid by Microsoft would have been in this scenario: just under 0.2 cents per unit, or a total of \$502,000 for the most recent year. (11/16/12 Tr. 99–100 (Lynde).) Lynde used the same annual royalty caps in the MPEG LA H.264 pool. (*Id.* at 99–100, 104; Ex. 1161.) Basing a RAND royalty for Motorola on the MPEG LA H.264 pool rates is generous to Motorola because it has already enjoyed the benefits of getting its patented technology included in the standard: diffusion of Motorola technology, lower cost to Motorola in implementing the H.264 standard, and faster time to market for its own H.264-compliant products. (11/16/12 Tr. 40 (Simcoe).) The licensor-members of the MPEG LA H.264 pool that do not sell standard-compliant products receive pool royalties only and enjoy no such benefits. (11/16/12 Tr. 87–89 (Lynde).)

Lynde noted that the documents governing the MPEG LA H.264 pool permit the licensors “to increase the pool rates up to a maximum of ten percent should they deem that useful and appropriate, for example, if there were more patents in the pool.” (*Id.* at 100.) Lynde then performed an alternative calculation, assuming that the inclusion of Motorola's H.264 SEPs would have prompted the 10% rate increase. In that case, Motorola's share of the annual pool royalties paid by Microsoft would increase to 0.204 cents per unit, or \$521,000 for the most recent year. (*Id.* at 161.) This provides an upper bound on the RAND royalty.

Finally, Lynde looked at what Motorola would receive if Google complied with its obligations under its own MPEG LA license. In that case, Motorola would be obliged to

1 accept “Licensors’ per patent share of royalties” paid by Google to the MPEG LA pool as “a
2 fair and reasonable royalty rate” for Motorola’s H.264 SEPs. (Ex. 103, ¶ 8.3.) Royalties paid
3 by pool licensees are subject to annual caps (Ex. 103, ¶ 3.1.1), and Google’s cap reduces the
4 effective per unit rate substantially. On this basis, Motorola would be entitled to a royalty of
5 0.065 cents per unit, or \$167,000 for the most recent year. (11/16/12 Tr. 102–04 (Lynde).)

6 As Lynde explained, all of these calculations could easily be performed for other years,
7 including future years, and counterpart figures determined for those years, taking account of
8 patent expirations over time. (11/16/12 Tr. 104 (Lynde).) Therefore, if the Court adopts one
9 of these approaches as the basis for a RAND royalty for the most recent year, the parties ought
10 to be able to agree on the annual royalty amount that is payable for other years, using the same
11 approach. Failing agreement, the Court could resolve the issue.

12 **III. A RAND ROYALTY FOR MOTOROLA’S 802.11 STANDARD–ESSENTIAL**
13 **PATENTS IS AN AMOUNT IN THE RANGE OF 3 TO 6 CENTS PER UNIT.**

14 **A. The Broad 802.11 Standard is Dominated By Unpatented Technology and**
15 **Motorola’s Patents Reflect At Most Marginal Contributions.**

16 Motorola’s 802.11 SEPs concern, at most, only a small portion of a limited number of
17 technology areas in the 802.11 standard and are not central to enabling those technology areas;
18 at best, these patents cover less than one percent of the 802.11 standard. (11/16/12 Tr. 85,
19 154–55 (Gibson).) Like H.264, the 802.11 standard is immense and technically complex; the
20 current draft of the standard is almost 2800 pages long. (11/16/12 Tr. 88–89 (Gibson); Ex.
21 386a.) The development of the first draft of the 802.11 standard took seven years and
22 development of the standard continues today. (11/16/12 Tr. 92–93 (Gibson); Ex. 520.) Over
23 1,000 companies have participated in the 802.11 standard-setting process. (Ex. 1594; 11/16/12
24 Tr. 94–95 (Gibson).) Today, over 450 representatives from 150 organizations are actively
25 working on the standard. (11/16/12 Tr. 94–95 (Gibson); Ex. 514.) Over 350 patents have been
26 specifically identified as essential to the 802.11 standard via letters of assurance to the IEEE,

1 and 94 companies have filed “blanket” LOAs, including wireless communication industry
2 leaders such as Atheros, Broadcom, Qualcomm, Research in Motion, and Intel. (11/15/12 Tr.
3 99–100 (Gibson); Exs. 7, 1592; 11/19/12 Tr. 118–19 (Williams).) Marvell also has a very
4 valuable 802.11 portfolio and owns a few hundred issued patents essential to the 802.11
5 standard. (11/14/12 Tr. 64 (Ochs).) Even all of these patents taken together represent just a
6 fraction of the technology in 802.11, because the majority of the technology in the 802.11
7 standard (such as data modulation, direct sequence spread spectrum, error control coding,
8 orthogonal frequency division multiplexing, etc.), is not patented, predates the Motorola
9 patents, and was based on a long history of research and development by companies,
10 government agencies, and academic institutions. (11/16/12 Tr. 96–97, 154 (Gibson).) Only a
11 very small number of companies holding 802.11 SEPs actively seek royalty-bearing licenses.
12 (11/13/2012 Tr. 160 (Murphy).)

13 No Motorola expert conducted a rigorous infringement analysis to determine
14 definitively which patents are actually essential to 802.11. (11/19/12 Tr. 67–134 (Williams).)
15 Nor did any expert consider the validity of the patents or specifically refute testimony provided
16 by Gibson that suitable alternatives existed for all of them. (*Id.*) Moreover, the Motorola
17 802.11 patents are rapidly expiring and have diminishing value.

18 Even as the 802.11 standard dominates the market today for short and mid-range
19 wireless network devices, development continues on new versions. Much of that development
20 draws upon technology contributed by companies such as Marvell, Atheros, and Intel that
21 make the semiconductors that substantially embody the commercial implementation of the
22 standard. These are commodity chips, used in broad ranges of end products, but providing the
23 same wireless connectivity regardless of the end product involved. Market prices rest on
24 strong competition, and are now about \$3–4 per chip. Chip makers both rely on their own
25 intellectual property and license-in intellectual property to be used in developing chips.
26

1 License rates for fundamental IP, including patent rights, designs, and commercial know-how,
2 are typically in the range of 1% of chip price. (11/14/12 Tr. 71–72 (Ochs).)

3 **B. Relevant Benchmarks Establish an Appropriate Royalty for Motorola’s 802.11**
4 **Patents.**

5 The starting point in determining a RAND royalty for Motorola’s portfolio of 802.11
6 SEPs is Motorola’s contract with the IEEE, the SSO that issued the 802.11 standard. Under
7 that contract, Motorola could recover only “nominal” royalties from sellers of 802.11 standard-
8 compliant products. Specifically, the 1994 operations manual for the IEEE standards is “part
9 of the RAND commitment” that Motorola made, and it requires that RAND-committed SEPs
10 be “made available at nominal competitive costs to all who seek to use it for compliance with
11 an incorporated IEEE standard.” (11/16/12 Tr. 28–29 (Simcoe); Ex. 1130 at § 6.3.2.)

12 One benchmark is the 802.11 patent pool operated by Via Licensing Corporation. *See*
13 *Fujitsu Ltd. v. Belkin Int’l, Inc.*, No. 10–CV–03972–LHK, 2012 WL 5835741, at *3 (N.D. Cal.
14 Nov. 16, 2012) (denying motion to exclude reasonable royalty testimony based on the Via pool
15 agreement). Taken alone, this pool is not an ideal benchmark because it has not enjoyed
16 widespread success: it has only five licensors/licensees (ETRI, Japan Radio, Phillips, LG, and
17 Nippon Telegraph), and six additional licensees that pay royalties to the pool but have
18 contributed no SEPs. (11/16/12 Tr. 106–07 (Lynde).) The pool was formed around the time
19 that the 802.11 standard was first being widely adopted. This timing may have allowed the
20 pool to capture higher royalties, “because the investments” in making 802.11 standard-
21 compliant products “had already been made, and therefore licensors would have had more
22 leverage when they went to get licenses.” (*Id.* at 107–08.) The fact that the Via pool has only
23 attracted six licensees (compared to the more than 1,100 licensees in the MPEG LA H.264
24 pool) suggests that the “rates are too high.” (*Id.* at 117.)

25 Another way of estimating a RAND royalty for Motorola’s 802.11 patents can be
26 derived from the testimony of Jennifer Ochs of Marvell. Marvell makes the 802.11 chip which

1 contains “substantially all that is needed to provide 802.11 functionality” to Microsoft’s Xbox
2 console. (11/14/12 Tr. 62 (Ochs).) In the context of patent damages, reasonable royalties are
3 “based not on the entire product, but instead on the ‘smallest salable patent-practicing unit,’”
4 unless the patent(s) in question form the basis for customer demand for the entire product.
5 *LaserDynamics*, 694 F.3d at 67. The law is clear that this standard is not met merely because a
6 functionality is important or even critical to a product. *Id.* at 68. Motorola presented no
7 evidence that its 802.11 patents form the basis for customer demand for the Xbox. The
8 evidence shows that Xbox games drive customer demand for the console. (11/25/12 Tr. 12
9 (Del Castillo).)

10 Accordingly, a reasonable royalty (and certainly any RAND royalty) for Motorola’s
11 802.11 patents must be reasonable with respect to the smallest salable patent-practicing unit—
12 the Xbox’s 802.11 Marvell chipset. Marvell views its license from ARM Holdings (which
13 provides “significant IP that can be readily incorporated into a semiconductor chip,” including
14 patent licenses, design, and know-how that is “ready to use”) as setting the “high ceiling” for
15 inbound intellectual property licenses applied to its chips. (11/14/12 Tr. 71–72 (Ochs).) The
16 royalty rate for the ARM license is “1% of the average selling price of a chip.” (*Id.*) If
17 Motorola had been paid a royalty for its 802.11 patents that was equal to 1% of the \$3 selling
18 price for Marvell’s 802.11 chipset, it would have received 3 cents per unit, or \$428,000 in the
19 most recent year. (Ex. 1167; 11/15/12 Tr. 25 (Del Castillo).)

20 Motorola also failed to prove that its 802.11 patents have any unique value. No
21 competent evidence was offered on a patent-by-patent basis that Motorola’s patents are, in fact,
22 essential. While Gibson testified about specific alternatives that could have been adopted in
23 the 802.11 standard in lieu of the technology supposedly embodied in *each* of the Motorola
24 patents, Motorola’s expert Williams addressed only two of those patents. (11/15/12 Tr. 114–
25 44 (Gibson); 11/19/12 Tr. 102–06 (Williams).) Williams tried to wave all of this aside by
26

1 insisting that he considered something to be an alternative only if it could have been inserted
2 into the standard without requiring any other change (11/19/12 Tr. 115–16), but as Gibson
3 explained, the engineers developing the standard were fully capable of modifying related
4 sections to accommodate alternatives (11/15/12 Tr. 115–16).

5 Beyond that, the evidence showed that the core Motorola patents are old, that many are
6 useful only for backwards compatibility with a declining share of the total installed base, and
7 that they are rapidly expiring. (11/20/12 Tr. 156 (Lynde).) Motorola’s portfolio has far less
8 value than modern portfolios like those of Marvell, which are pertinent to the newest versions
9 of the standard. (11/14/12 Tr. 64 (Ochs).)

10 **C. A RAND Royalty for Motorola’s 802.11 Standard-Essential Patents Is in the**
11 **Range of \$428,000 (3 Cents per Unit) to \$920,000 (6.5 Cents per Unit), with the**
12 **Best RAND Royalty Estimate Being \$736,000 (5 Cents per Unit).**

13 As indicated above, a RAND royalty calculated at 1% of the \$3 selling price for
14 Marvell’s 802.11 chipset would work out to 3 cents per unit, or \$428,000 in royalties in the
15 most recent year. Adopting the Via pool’s framework, Dr. Lynde offered calculations based
16 on sales volumes and the Via pool’s fee structure, and on the assumption that Motorola’s
17 802.11 SEPs had been included in the pool, along with all other 802.11 patents that were
18 specifically identified in letters of assurance provided to IEEE. (Ex. 1167.) Dr. Lynde gave
19 Motorola every benefit of the doubt because he assumed that all of the patents asserted to be
20 essential by Motorola were actually essential, and he added to the pool only those patents that
21 have been specifically identified by companies filing letters of assurance. On this basis,
22 Motorola’s share of Microsoft’s payment in the most recent year would have been 5 cents per
23 unit or \$736,000. (11/16/12 Tr. 114–15 (Lynde); Ex. 1167.)

24 In addition, to generate an upper bound for the RAND royalty estimates, Lynde applied
25 the optional increase of 25% that the Via pool allowed “should, for example, the participation
26 and contribution of patents increase.” (11/16/12 Tr. 115–16 (Lynde).) This produced an

1 estimated annual Motorola royalty for the most recent year of 6.5 cents per unit or \$920,000.
2 (*Id.*) Under the governing IEEE contract specifying “nominal” compensation for essential
3 patents, the RAND royalties proposed by Microsoft’s experts are assuredly above—not
4 below—the nominal compensation Motorola obligated itself to accept.

5 Royalty estimates based on the Via pool rates are generous to Motorola in at least two
6 respects. First, given the available data, Motorola’s “share” of patents in the “reconstituted”
7 Via pool was grossly overstated. Lynde used the number of Motorola SEPs identified in the
8 original 2010 demand letter, not the much lower number asserted at trial. And Lynde used a
9 low number for other SEPs. Many of the 802.11 letters of assurance that were provided to
10 IEEE were “blanket” letters of assurance that did not identify specific RAND-committed
11 patents. The exact number of unidentified patents is unknown, but is “certainly in the
12 thousands.” (11/16/12 Tr. 114 (Lynde).) Had the large portfolios from companies such as
13 Marvell, Atheros, Qualcomm, and other 802.11 pioneers been accounted for, the estimate of
14 Motorola’s RAND royalty would have been considerably less, because Motorola’s
15 proportional share of pool royalties would shrink. Second, as explained above, the Via pool
16 rate starting point was likely “too high.” (11/16/12 Tr. 117 (Lynde).)

17 **IV. CHARLES DONOHUE’S RAND ROYALTY ESTIMATES ARE**
18 **UNSUPPORTED BY EVIDENCE AND DEEPLY FLAWED.**

19 Charles Donohoe, an attorney, provided all of the testimony concerning Motorola’s
20 estimate of a RAND royalty in this case. Donohoe based his analysis on

21 [REDACTED]
22 [REDACTED] (11/20/12 Tr. 137–38.)
23 [REDACTED]
24 [REDACTED]
25 [REDACTED]

26 (*Id.* at 138.)

1 Donohoe never actually provided a royalty for Motorola’s H.264 or 802.11 patents.
2 Instead, he purported to provide a royalty specific to Windows (for its use of H.264 patents)
3 and for Xbox and the wireless adapter (for their use of 802.11 patents). Donohoe offered no
4 testimony as to what royalties Microsoft would pay for the Xbox’s use of Motorola’s H.264
5 patents. In the case of Windows and H.264, Donohoe gave sparse testimony.

[REDACTED]

[REDACTED]

(*Id.* at 145.)

[REDACTED]

[REDACTED]

(*Id.* at 146.)

[REDACTED]

[REDACTED]

(*Id.* at 145–46.)

[REDACTED]

[REDACTED]

(11/20/12 Tr.

[REDACTED]

142.)

[REDACTED]

[REDACTED]

(*Id.* at 142, 148.)³

[REDACTED]

[REDACTED]

(11/20/12 Tr. 138–39 (Donohoe); Ex. 13.)

[REDACTED]

[REDACTED]

[REDACTED]

(Ex.

3373; 11/20/12 Tr. 96–100 (Dailey).)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

1 [REDACTED] (11/20/12 Tr. 100 (Dailey).) Under any *Georgia-Pacific* analysis
2 (modified or otherwise), the Vtech license is irrelevant under Factor 1, which concerns
3 “royalties received by the patentee” that prove or tend to prove “an *established royalty*.”
4 *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 869 (Fed. Cir. 2010) (emphasis added).

5 Further, the 802.11 and H.264 portfolio licenses were inextricably linked to the
6 settlement of Motorola’s substantial infringement claims against Vtech involving patents
7 unrelated to the standards at issue here. Motorola had sued Vtech in 2007 for infringing its
8 cordless and corded phone patents. [REDACTED]

9 [REDACTED]
10 [REDACTED] (11/20/12 Tr. 87–
11 89 (Dailey).)

12 [REDACTED] (*id.* at 89), [REDACTED]
13 [REDACTED] (*Id.* at 89–91; Ex. 1681 at MOTM_WASH1823_0392621.)

14 By October 2011, Motorola’s 802.11 and H.264 portfolios had been injected into the
15 settlement discussions. (Ex. 2832.) The Vtech agreement followed shortly thereafter. [REDACTED]

16 [REDACTED]
17 [REDACTED] (11/20/12 Tr. 93 (Dailey); Ex. 13 at §§ 3.1(a)-(b),
18 4.1), [REDACTED]

19 [REDACTED] (11/20/12 Tr. 93–94

20 (Dailey); Ex. 13.) Because Vtech licensed Motorola’s H.264 and 802.11 portfolios as part of
21 package deal, that license has no relevance to the value of Motorola’s H.264 and 802.11
22 portfolios. (11/13/12 Tr. 184–85, 192–93 (Murphy).) Vtech had every incentive to agree to an
23 excessive royalty to Motorola’s H.264 and 802.11 patents—a rate it might never actually
24 pay—in order to reduce its actual exposure on Motorola’s non-SEP infringement claims. And
25 Motorola had every incentive to engage in the same trade. Within a month of signing the 2011

1 Vtech agreement, Dailey

2
3 (11/20/12 Tr. 94–95 (Dailey).)

4
5
6 (11/20/12 Tr. 139 (Donohoe).)

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12 (Ex. 2833; 11/20/12 Tr. 104–06 (Dailey).)

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16 (11/20/12 Tr. 106–07 (Dailey).)

17
18 (11/20/12 Tr. 115–16 (Dailey); Ex. 2800.) As Schmalensee testified,

19 if H.264 video standard essential patents were licensed together with patents
20 that were essential for other standards, one would need to estimate the value of
the other patents and subtract it out.

21 (11/19/12 Tr. 160.) See *LaserDynamics*, 694 F.3d at 79; *ResQNet.com*, 594 F.3d at 869, 872.

22 While Schmalensee said that the required apportionment of the value of these different
23 portfolios [redacted] was a “tough thing to do” (11/19/12 Tr. 160), the record
24 demonstrates that the “value of the other patents”—the cellular patents—represented the entire
25 value [redacted], which means that the additional
26

1 value of the 802.11 and H.264 patents [REDACTED] is zero. [REDACTED]

2 [REDACTED]
3 [REDACTED] (11/20/12 Tr. 74.)

4 Leaving aside the fact that [REDACTED] provides no evidence of the value of
5 Motorola's 802.11 and H.264 patents, the agreement was obviously the product of hold-up.

6 [REDACTED]
7 [REDACTED] (11/20/12 Tr. 101 (Dailey).)
8 [REDACTED]

9 (Ex. 1672; 11/20/12 Tr. 102-03 (Dailey).) Even if an agreement entered into under such
10 circumstances could be thought remotely comparable to a true RAND license, the hold-up
11 element would need to be subtracted out. [REDACTED]

12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED] (11/20/12 Tr. 140 (Donohoe).)
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]

19 [REDACTED] (11/20/12 Tr. 140, 147.) In fact, the stark

20 differences confirm that these agreements are wholly incomparable. [REDACTED]

21 [REDACTED]
22 [REDACTED] (11/20/12 Tr. 81-82 (Dailey); Ex. 1589), and would have

23 played absolutely no role even in the hypothetical negotiation Donohoe suggested should
24 inform a RAND royalty in this case. [REDACTED]

25 [REDACTED] (11/20/12 Tr. 81-82.) [REDACTED]
26 [REDACTED]

1 [REDACTED] (*Id.* at 84–
2 85.) [REDACTED] (11/20/12 Tr.
3 140), [REDACTED]
4 [REDACTED] (11/20/12 Tr. 81 (Dailey).)
5 [REDACTED]
6 [REDACTED] (11/20/12 Tr. 138),
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED] (11/20/12 Tr. 152–53.)
13 [REDACTED]

14 While in the cases of both Windows and Xbox,

15 [REDACTED] (*id.* at 143–45),
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]

22 (11/20/12 Tr. 137.) No Motorola witness presented any plausible reason why the long
23 established entire market value rule can be disregarded in the RAND context.

24 The absurdity and bad faith inherent in Motorola’s blind application of a 2.25% rate to
25 end products was made abundantly clear in Motorola’s dealings with chip supplier Marvell.

1 As Marvell's Jennifer Ochs explained, when she wrote to Motorola requesting a license to
2 Motorola's 802.11 portfolio that would protect Marvell's customers (including Microsoft),
3 Motorola responded with a proposed agreement that would require Marvell to pay a 2.25%
4 royalty based on the end products incorporating its 802.11 chipsets and sold by Marvell's
5 customers—whether a \$400 Xbox⁴ or \$100,000 automobile. (11/14/12 Tr. 63, 68–70 (Ochs);
6 Ex. 16.) As Ochs explained, it would be a “going-out-of-business model to pay such rates”
7 because even in the case of the Xbox the “royalty is slightly higher than the cost of the chip
8 itself.” (11/14/12 Tr. 70, 69.) That cannot be RAND.

9 Donohoe's claim that Motorola's opening licensing demand “is RAND” lacks any
10 support in the record, and is a worthless *ipse dixit*. See *General Elec. Co. v. Joiner*, 522 U.S.
11 136, 146 (1997); *Wendler & Ezra, P.C. v. Am. Intern. Group, Inc.*, 521 F.3d 790, 791 (7th Cir.
12 2008) (per curiam) (“An expert who supplies nothing but a bottom line supplies nothing of
13 value to the judicial process.”) (quotation marks omitted); *Hathaway v. Bazany*, 507 F.3d 312,
14 318 (5th Cir. 2007) (“[A]n expert's testimony that ‘it is so’ is not admissible.”).

15 Even if it had any basis beyond Donohoe's say-so, Motorola's proposal is facially not
16 RAND. Donohoe sought to determine how much could Motorola extract from Microsoft in a
17 bilateral negotiation. Thus, [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED] (11/20/12 Tr. 144.) Donohoe did not explain how that
21 position could be reconciled with Motorola's contractual obligation to grant nondiscriminatory
22 licenses. Moreover, under Donohoe's approach, the significance of Motorola's patents to
23 Microsoft's products would be important, but no Motorola witness testified as to what specific
24

25 ⁴ Actually, Motorola's proposed license to Marvell explicitly excluded any protection for Microsoft even
26 thought Marvell had specifically sought it. (11/14/12 Tr. 68 (Ochs).)

1 value its patents provided to Microsoft's products, beyond talking about the legally-irrelevant
2 value of standard compliance. (11/19/12 Tr. 211–13 (Dansky).) That only confirms
3 Motorola's effort to capture the hold-up value of standardization in violation of its RAND
4 commitment. (11/19/12 Tr. 169 (Schmalensee).) The hold-up effort is further confirmed by
5 Motorola's refusal to acknowledge the expiration of its patents: Motorola seeks the full 2.25%
6 royalty so long as it still has a single unexpired SEP. That is the very definition of hold-up.

7 **V. DETERMINING A GOOD FAITH RANGE**

8 At the end of the trial, the Court asked the parties to address the "standard of what
9 constitutes a good-faith range." (11/20/12 Tr. 171.) There are potentially two aspects to a
10 "range"—the range of royalties that are truly RAND, or the range of royalties demanded by the
11 patent holder that, while not RAND, may be deemed consistent with a contracting party's good
12 faith obligations. As to the former, in Microsoft's view, one applies the RAND principles as
13 described above and then looks for an upper bound for the RAND royalty that is supported by
14 the economic evidence. A RAND-committed patent holder can always agree to a royalty-free
15 license; the upper bounds were provided by Dr. Lynde.

16 As to the latter, in Microsoft's view, RAND (and good faith) requires that the patent
17 holder's demands hew closely to what is actually RAND. Whether Motorola's demands were
18 made in good faith will be determined during the "breach" phase of this case, consistent with
19 Washington law and its implied covenant of good faith and fair dealing. Washington adopts
20 the definition set forth in Restatement (Second) of Contracts § 205. *Edmonson v. Popchoi*, 172
21 Wn.2d 272, 280, 256 P.3d 1223 (2011); *Frank Coluccio Const. Co., Inc. v. King Cty.*, 136 Wn.
22 App. 751, 766, 150 P.3d 1147 (2007). The Restatement provides examples of violation of the
23 duty of good faith in performance of contractual obligations ("evasion of the spirit of the
24 bargain, lack of diligence and slacking off, willful rendering of imperfect performance, abuse
25 of a power to specify terms, and interference with or failure to cooperate in other party's
26

1 performance”) and in the “assertion, settlement and litigation of contract claims and defenses”
2 (such as “dishonest conduct such as conjuring up a pretended dispute, asserting an
3 interpretation contrary to one’s own understanding, or falsification of facts”). § 205 cmts. d, e.
4 Bad faith includes “‘obstinate conduct that necessitates legal action’ to enforce a clearly valid
5 claim or right,” “vexatious conduct during the course of litigation,” or the “intentional bringing
6 of a frivolous claim [or] defense with improper motive.” *Rogerson Hiller Corp. v. Port of Port*
7 *Angeles*, 96 Wn. App. 918, 927–28, 982 P.2d 131 (1999).

8 Microsoft submits that a demand exceeding the upper bound of what is actually RAND
9 would presumptively violate the duty of good faith and fair dealing, as the very purpose of the
10 RAND commitment is to make non-discriminatory offers that anyone can accept, especially
11 where, as here, the patent holder is concurrently seeking injunctive relief and has an incentive
12 to forestall the consummation of a license. Any offer above the high end of RAND would
13 require proof of extenuating circumstances to establish that the offer was legitimately made in
14 good faith. When the patent holder makes the RAND commitment, it gives up the right to
15 employ the conventional process of negotiation to extract all that the traffic will bear from
16 individual implementers. Because the non-discriminatory royalty has to be equally available to
17 all, the demand cannot be justified by the posture or needs of any individual implementer. It is
18 not a rug bazaar. A multiple of a RAND royalty would be very difficult to justify under any
19 circumstances because that would skew the ensuing discussions away from, not toward RAND.

20 CONCLUSION

21 For Motorola’s H.264 SEPs, the Court should find that a RAND royalty for Microsoft
22 is no more than \$502,000 for the most recent year. For Motorola’s 802.11 SEPs, the Court
23 should find that a RAND royalty is no more than \$736,000. The Court should direct the
24 parties to try to reach agreement on annual royalty amounts for other years, using the same
25 basic approach, and to report back to the Court.

1 DATED this 14th day of December, 2012.

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CERTIFICATE OF SERVICE

I, Linda Bledsoe, swear under penalty of perjury under the laws of the State of Washington to the following:

- 1. I am over the age of 21 and not a party to this action.
- 2. On the 17th day of December, 2012, I caused the preceding document to be served on counsel of record in the following manner:

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DATED this 17th day of December, 2012.

s/ Linda Bledsoe
LINDA BLEDSOE