a packet sequence number (the "IV sequence number"). Housley Tr. 1388-89; Acampora Tr. 844; CX-383 at Sections 3.82, 8.3.2.1, 8.3.2.2.

The structure performing this function mirrors that disclosed in the '712 patent.

In both cases, a counter and related structure, implemented in circuitry and software, associates the count and the packet. CX-708C (Acampora WS) at 190-94; CX-404C at 13-15; Housley Tr. 1383 (agreeing that the assigning means includes a counter); CX-656C (Lambert Dep. Tr.) at 63-64. The source code of the Xbox confirms this. CX-404C at 13 (describing how the Marvell chip includes a [ ] that generates a [ ] that [ ] for each MPDU that is processed, and illustrating code that implements [ ].

The second element of claim 6 recites:

(b) updating means, operatively coupled to the assigning means, for updating a transmit overflow sequence number as a function of the packet sequence number; and

Motorola has not established that this claim limitation is satisfied.

The claim term "transmit overflow sequence number" has been construed to mean "a multi-bit number that counts the number of times that a 'packet sequence number' rolls over, which is used in the transmitter but is not transmitted to the receive unit."

There is no dispute that the accused extended initialization vector (IV) portion of the TKIP Sequence Counter (TSC) (i.e., TSC bytes 2-5) *is* transmitted to the receiver.

See Acampora Tr. 830 ("Q. Okay. And just so the record is clear, TSC bits 2, 3, 4 and 5 are sent in an Xbox to the router, right? A. That's correct. Q. They're actually transmitted? A. They're sent from the Xbox to the router; that's correct."). This

precludes infringement under the proper construction of "transmit overflow sequence number." Motorola does not contend the limitation is met under the doctrine of equivalents. *Id.* at 800.

The third element of claim 6 recites:

(c) encrypting means, operatively coupled to the assigning means and the updating means, for encrypting, prior to communicating the packet and the packet sequence number on the physical layer, the packet as a function of the packet sequence number and the transmit overflow sequence number.

Motorola has not established that this claim limitation is satisfied.

The "encrypting means" of this element is "operatively coupled" to the "updating means," which is the second element above. Inasmuch as Motorola has not satisfied the second element ("updating means") of claim 6, it cannot show that the accused products infringe the third element ("encrypting means") of claim 6.

#### Claim 8

Dependent apparatus claim 8 recites:

The transmitting communication unit of claim 6 wherein the data link layer device further comprises a buffer means, operatively coupled to the encrypting means, for buffering the encrypted packet and the transmitting communication unit further comprises a physical layer device, operatively coupled to the data link layer device, having transmitting means for transmitting the encrypted packet and the packet sequence number associated with the packet on the physical layer.

Motorola has not established that the limitations of this claim are satisfied.

Inasmuch as Motorola is unable to show that the accused Microsoft devices infringe

independent claim 6, it cannot show that the accused products infringe dependent claim 8.

#### Claim 17

Independent method claim 17 recites:

- 17. In a communication system having a physical layer, data link layer, and a network layer, a method for providing cryptographic protection of a data stream, comprising:
  - (a) assigning a packet sequence number to a packet derived from a data stream received from the network layer;
  - (b) updating a transmit overflow sequence number as a function of the packet sequence number; and
  - (c) encrypting, prior to communicating the packet and the packet sequence number on the physical layer, the packet as a function of the packet sequence number and the transmit overflow sequence number.

Motorola has not established that the limitations of this claim are satisfied. Claim 17 is a method claim counterpart of apparatus claim 6. CX-708C (Acampora WS) at 209. Aside from the means plus function claim element issues, the earlier discussion of apparatus claim 6 applies to this claim. Accordingly, Motorola is unable to show that the accused Microsoft devices infringe method claim 17.

#### 3. Indirect Infringement

Motorola has not shown that Microsoft's accused products indirectly infringe all asserted claims of the '712 patent. Without evidence of direct infringement, Motorola cannot establish contributory or induced infringement. *See*, *e.g.*, *Joy Techs.*, 6 F.3d at 774-76.

#### C. Validity of the '712 Patent

For the reasons set forth below, Microsoft has not shown by clear and convincing evidence that the asserted claims of the '712 patent are invalid.

#### 1. JPA Publication 4-326221 ("Kimura") (RX-199)

Kimura does not anticipate claim 6 or 17 of the '712 patent. CX-720C (Acampora RWS) at 40-46 and Tab F. Kimura is concerned with the encryption of a portion of the data part of a packet in a television broadcast station. Kimura refers to this portion as being the scrambled area. RX-380 at Fig. 2. There are several fields in the prefix portion of the data part which are sent unencrypted. In addition, there is an unencrypted header portion of the packet. Kimura does not disclose how this data packet was created; it merely accepts this packet as input. CX-720C (Acampora RWS) at 40.

First, Kimura does not disclose a communication system having physical, data link, and network layers. CX-720C (Acampora RWS) at 41-42; Housley Tr. 1431.

Therefore, it does not satisfy the limitations of the preamble of either claim 6 or 17. In addition, both claims 6 and 17 require that the assignment of sequence numbers, updating of overflow numbers, and encipherment of data packets occur in the data link layer. CX-720C (Acampora RWS) at 42; Acampora Tr. 837; Housley Tr. 1376. Kimura does not disclose this. In fact, as Microsoft's expert agrees, there is no mention of any layers in Kimura, let alone any mention of the OSI model's layers. Housley Tr. 1429-38.

Microsoft argues that the device in Kimura can be located in any layer where packet encryption is possible (including the data link layer). *Id.* at 1431; RX-311 (Housley WS) at 10. However, Microsoft's expert agreed that Kimura does not specify at which layer assignment of sequence numbers, updating of overflow numbers, or

encipherment would occur. Housley Tr. 1429 ("We don't know what layer any of this is taking place in. Kimura doesn't say one way or the other."); 1433 (there is nothing in Kimura that ties encryption to any particular layer); 1438. Based on Microsoft's expert's admissions, Kimura does not disclose assignment, updating or encryption in Layer 2. Housley Tr. 1429, 1433. Indeed, Microsoft's expert agreed that performing encryption at Layer 2 was discouraged, based on ISO publications. Housley Tr. 1436. People skilled in the art tend to follow recommendations by the ISO, and the ISO-7498 Standard is particularly relevant to the placement of security in the 7 layer model. Housley Tr. 1349-1352, 1434-1435. As such, Kimura fails to provide an explicit or inherent disclosure of layers, or operation in Layer 2, all of which are necessary for anticipation, and Microsoft has failed to meet its burden of showing the required layer structure in Kimura by clear and convincing evidence.

Because Kimura does not disclose any layers, let alone OSI layers, there is no basis for imposing an OSI organization on the various components and operations of Kimura. CX-720C (Acampora RWS) at 41. Indeed, Kimura is directed towards television broadcast technology, which is completely different from the wireless network technology in the '712 patent. Because Kimura is directed toward broadcast television, there is no need for routing information in the headers of the packets, which is a

<sup>&</sup>lt;sup>93</sup> In his written direct testimony, Microsoft's expert cites the ISO-7498-2 standard to support his allegation that encryption could occur at any of layers 1, 2, 3, 4 and 7 (physical, data link, network, transport and application layers). Housley Tr. 1351; RX-311 (Housley WS) at 9, 44-47. If this is an attempt to fill in for the fact that none of the asserted references discloses the OSI Data Link Layer requirements of the asserted claims (as discussed below), that attempt fails. The ISO-7498-2 standard states at Appendix C.1.5 that "encipherment at the data link layer is not recommended for future implementations." RX-198 at MS-MOTO 752 0005129740.

requirement of a packet created in the data link layer. *Id.* The translation of Kimura provided by Microsoft mentions two instances of alleged addresses: a service identifier and a sub-channel identifier, RX-199.021, both of which identify a television program being broadcast, not a particular device to receive the television program. Therefore these fields would not be addresses in the context of the OSI model.

Even if one were to impose an OSI organization upon Kimura, that reference still does not disclose all limitations of the '712 patent. In particular, claims 6 and 17 require that a sequence number is assigned to a packet derived from a data stream received from the Network layer. Kimura, by contrast, receives data packets that *already* include a sequence number. CX-720C (Acampora) 43; RX-199.0032. Kimura is silent about where and how the sequence number is generated. Housley Tr. 1429. There is no disclosure that the sequence number is generated by counting incoming packets and associating the count with the packet. CX-708C (Acampora WS) at 43. Thus, Kimura does not disclose an assigning means. CX-720C (Acampora RWS) at 44.

Further, because Kimura does not disclose an assigning means, Kimura cannot disclose an "updating means" that is operatively coupled to the assigning means or an "encrypting means" that is operatively coupled to both the assigning means and the updating means.

## 2. Kimura in combination with U.S. Patent No. 4,654,480 ("Weiss"") (RX-186)

Microsoft argues that dependent claim 8 would have been obvious to combine Kimura with Weiss to teach a buffer means. RRX-24C (Housley RWS) at 17-18.

Microsoft is misguided. Kimura relates to television broadcasting. RRX-24C (Housley

RWS) at 19. In television broadcast there is no need for an ARQ mechanism like that disclosed in the '712 patent, because it is better to ignore lost traffic than to retransmit it. CX-720C (Acampora RWS) at 45. Therefore, there would be no need for a buffer. Further, Weiss teaches away from transmitting a sequence number, stating that "count bits developed by counter 306 are not transmitted explicitly." *Id.*; RX-186 at col. 10, lns. 24-25. Thus, a person of skill in the art would not combine Weiss with Kimura, which requires transmission of a packet number with an encrypted packet.

#### 3. Indefiniteness

Microsoft argues that the disputed claim terms "encrypting means," "assigning means," and "updating means" are indefinite because the corresponding structures are not sufficiently described in the specification. Resp. Br. at 21-24. As discussed in the claim construction sections for those claim terms, *supra*, the undersigned found those claim terms to be not indefinite, and construed the terms.

As held in *Intel Corp.*, 319 F.3d at 1365-66:

Whether the specification adequately sets forth structure corresponding to the claimed functions must be considered from the perspective of one skilled in the art. Any fact critical to a holding on indefiniteness, moreover, must be proven by the challenger by clear and convincing evidence.

Microsoft has not met this burden.

#### D. Domestic Industry (Technical Prong)

Motorola's domestic industry products are Droid 2 and Droid X smart phones (collectively, "Droid").

For the reasons set forth below, Motorola has not satisfied the technical prong of the domestic industry requirement with respect to the '712 patent.

#### Claim 6

The preamble of independent apparatus claim 6 recites:

A transmitting communication unit for providing cryptographic protection of a data stream in a communication system having a physical layer, data link layer, and a network layer, transmitting communication unit comprising a data link layer device having:

Motorola has satisfied the preamble.

The Droid practices the preamble. When communicating with a router set for WPA security, the Droid is a transmitting communication unit. CX-708C (Acampora WS) at 236-237. Per 802.11, the Droid and router are part of a communication system having a physical layer, a data link layer, and a network layer. *Id.* The Droid's operations, per 802.11, mirror those performed by the Xbox. To the extent the relevant Xbox operations are performed in the data link layer, the relevant Droid operations are also performed in the data link layer. An engineer from Texas Instruments, the developer/manufacturer of the Wi-Fi chipset used in the Droid products, confirms that encryption occurs in the data link layer. CX-658C (Boger Dep. Tr.) at 35-36.

The first element of claim 6 recites:

(a) assigning means for assigning a packet sequence number to a packet derived from a data stream received from the network layer;

Motorola has satisfied this claim element.

The Droid practices this claim element in the same way that the Xbox infringes. Pursuant to the 802.11 standard, when using TKIP, the MPDU data packets are counted, generating a 2-byte (16-bit) sequential count, comprising "TSC0" and "TSC1." CX-

708C (Acampora WS) at 237. TI's engineer confirmed the use of a counter that increments for each packet, and further confirmed that the data to be encrypted comes from the network layer. *Id.* at 36; CX-658C (Boger Dep. Tr.) at 16-17; CX-708C (Acampora WS) at 237-240.

The structure performing this function mirrors that disclosed in the '712 patent.

In both cases, a counter and related structure, implemented in circuitry and software, associates the sequence count and the packet. CX-708C (Acampora WS) at 239. Droid source code confirms this. CX-437C at 12 (describing how the TI chip includes a [ ] that generates a [ ] that [ ] for each MPDU that is processed, and illustrating the code that implements the [ ].

The second element of claim 6 recites:

(b) updating means, operatively coupled to the assigning means, for updating a transmit overflow sequence number as a function of the packet sequence number; and

Motorola has not satisfied this claim element.

The claim term "transmit overflow sequence number" has been construed to mean "a multi-bit number that counts the number of times that a 'packet sequence number' rolls over, which is used in the transmitter but is not transmitted to the receive unit."

For the same reason that the Xbox does not infringe this claim element, the Droid does not practice this claim element. The Droid does not transmit the extended IV portion of the TSC, which Motorola alleges to be the "transmit overflow sequence number," under the proper construction of the claim term "transmit overflow sequence number."

The third element of claim 6 recites:

(c) encrypting means, operatively coupled to the assigning means and the updating means, for encrypting, prior to communicating the packet and the packet sequence number on the physical layer, the packet as a function of the packet sequence number and the transmit overflow sequence number.

Motorola has not satisfied this claim element.

The "encrypting means" of this element is "operatively coupled" to the "updating means," which is the second element above. Inasmuch as Motorola has not satisfied the second element ("updating means") of claim 6, it cannot show that Droid products satisfy the third element ("encrypting means") of claim 6.

#### Claim 8

Dependent apparatus claim 8 recites:

The transmitting communication unit of claim 6 wherein the data link layer device further comprises a buffer means, operatively coupled to the encrypting means, for buffering the encrypted packet and the transmitting communication unit further comprises a physical layer device, operatively coupled to the data link layer device, having transmitting means for transmitting the encrypted packet and the packet sequence number associated with the packet on the physical layer.

Motorola has not satisfied this claim. Inasmuch as Motorola is unable to show that the Droid products practice independent claim 6, it cannot show that those products practice dependent claim 8.

#### Claim 17

Independent method claim 17 recites:

- 17. In a communication system having a physical layer, data link layer, and a network layer, a method for providing cryptographic protection of a data stream, comprising:
  - (a) assigning a packet sequence number to a packet derived from a data stream received from the network layer;
  - (b) updating a transmit overflow sequence number as a function of the packet sequence number; and
  - (c) encrypting, prior to communicating the packet and the packet sequence number on the physical layer, the packet as a function of the packet sequence number and the transmit overflow sequence number.

Motorola has not satisfied claim 17. Claim 17 is a method claim counterpart of apparatus claim 6. CX-708C (Acampora WS) at 256. The earlier discussion of apparatus claim 6 applies to this claim. Accordingly, Motorola is unable to show that the Droid products practice method claim 17.

#### X. Equitable Defenses – RAND

#### A. Brief Overview of the Parties' Arguments

Microsoft argues that four of the five patents Motorola asserts in this investigation (*i.e.*, the '571, '712, '596 and '094 patents) are subject to commitments Motorola made to standards setting organizations ("SSOs") to the effect that it would license those patents on reasonable and non-discriminatory ("RAND") terms. Resp. Br. at 245, 248; Resp. Reply at 80-94. It is argued that Motorola "stated unequivocally that those patents are essential to practicing the standards. As a result of its commitments to license patents on RAND terms, whether viewed under principles of contract, implied license, or waiver, [Motorola] cannot seek relief, either by injunction in the courts or an exclusion order in the Commission, that would exclude other companies from using the patents to practice

the standards. Its remedy for use of these patents in implementation of the standards, if any, is limited to a reasonable royalty." Additionally, Microsoft argues, "even if [Motorola] were not barred as a matter of law and equity from obtaining an exclusion order on patents that it committed to license on RAND terms, its conduct leading up to the institution of this Investigation gives rise to equitable estoppel, which independently forecloses the relief [Motorola] seeks here." *Id.* at 245; Ground Rule 12 Filing at 9 (Equitable Defenses – RAND: RAND Obligation, Implied License, Waiver, Equitable Estoppel).

Motorola opposes all of Microsoft's defenses. Motorola argues that "Microsoft's RAND defenses are based on a fundamental misunderstanding of SSOs, their patent policies and RAND assurances made under those policies," and that SSO policies require only that parties engage in good-faith negotiations to determine reasonable and non-discriminatory terms for standard-essential patents." Compls. Br. at 262. It is further argued that after Microsoft sued Motorola in federal district court, [

]. Motorola argues

that [ ], Motorola sent two offer letters to Microsoft in October 2010, each offering Motorola's 'standard' terms for its 802.11 or H.264 essential-patent portfolios." *Id.* at 262-63. No license resulted from those letters. Motorola argues that "[i]n the real world, parties negotiate to a RAND license. Microsoft chose not to do so. Instead, it chose to do battle in the courtroom rather than negotiate in the boardroom. Microsoft's forfeiture of any right to a RAND license is a direct result of that decision and, for that reason alone, Microsoft's RAND defenses should be rejected." *Id.* at 263; Compls. Reply at 80-93.

A review of Microsoft's brief relating to equitable defenses shows that it consists of two parts. First, in section IX(C), Microsoft addresses three defenses that are not based on Motorola's specific conduct after it entered into RAND agreements with SSOs, but rather on three legal theories under which Motorola's entrance into those agreements is said to bar Motorola from obtaining relief at the Commission. Resp. Br. at 249-50 ("MMI's Contractual Obligations to Offer RAND Licenses Alone Bar Relief"). Those first three defenses are: (1) what the parties have referred to in their Ground Rule 12 Filing as Microsoft's RAND obligation defense, and which is actually predicated on the "subordination of equity" (*i.e.*, the Commission's remedies) to law (*i.e.*, Motorola's RAND contractual obligations); (2) implied license; and (3) "implied waiver of the right to seek equitable or exclusionary remedies." *Id.* at 250-54. Second, in section IX(D), Microsoft presents its equitable estoppel defense, which is based in large part on allegations of Motorola misconduct, as well as Microsoft reliance. *Id.* at 254-75.

As seen in the organization of the parties' briefs and arguments, each of Microsoft's equitable defenses, and Motorola's responses thereto, stems from a common set of facts, discussed immediately below.

#### B. Outline of the Evidence

The technologies that SSOs incorporate into standards are frequently protected, in whole or in part, by patents. Thus, SSOs often request patent holders to commit that they will agree to licenses on RAND terms. 94 CX-758C (Holleman RWS) at 8; Teece Tr.

<sup>&</sup>lt;sup>94</sup> See RX-252 (IEEE-SA Standards Board Bylaws) at 16-19 ("IEEE standards may be drafted in terms that include the use of Essential Patent Claims. If the IEEE receives notice that a [Proposed] [sic] IEEE Standard may require the use of potential Essential Patent Claim, the IEEE shall request licensing assurance, on the IEEE Standards Board

2703-2704; CX-757. Pursuant to such policies, Motorola (or its predecessor in interest) submitted licensing declarations and letters of assurance relating to the H.264 standard and various portions of the 802.11 standard. *See, e.g.,* RRX-15; RRX-16; CX-758C (Holleman RWS) at 12-13. Motorola may have had a choice as to types of licenses, if any, that it would provide. In any event, in the specific documents that Motorola provided to the SSOs, and that are relevant to this investigation, Motorola stated that it was prepared to grant licenses for patents essential to the relevant standards to an unrestricted number of applicants on RAND terms and conditions. Motorola does not dispute that it made such RAND commitments. *Id*; Compls. Br. at 264.

Further, in accordance with SSO policies, both the IEEE and International Telecommunication Union (or ITU) documents submitted by Motorola indicate on their face that submission of the letter or assurance does not in itself imply that a license has been granted. RRX-15 at 30; RRX-16; CX-758C (Holleman WS) at 8, 12-13. Those in the relevant industries would understand that the terms of a license would depend upon the outcome of the RAND negotiations between the applicant and the patent holder. Murphy Tr. 2040 2041; RRX-16 at 11; CX-758C (Holleman RWS) at 10-13.

In the case of Motorola, Motorola's Corporate Vice President of Intellectual Property, Kirk Dailey, testified that [

]. Dailey Tr.

2611-2612, 2625-2630; CX-778C (Dailey RWS) at 1, 3. In Motorola's experience, [

approved Letter of Assurance form, from the patent holder or patent applicant. The IEEE shall request this assurance without coercion.").

CX-778C (Dailey RWS) at 27; Dailey Tr.

2625-2629. Ms. Jennifer Ochs, who is Marvell Semiconductor's director of IP litigation and who testified on behalf of Microsoft's supplier Marvell Semiconductor, stated that negotiations are common and expected, and can be complex and time-consuming. Ochs Tr. 1938, 1976-1979, 2008-2010.

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Dailey Tr. 2494-2495. [

Microsoft filed a section 337

complaint against Motorola, upon which the Commission instituted Investigation No. 337-TA-744.<sup>95</sup> Nevertheless, Motorola met with Microsoft, as scheduled. Dailey Tr. 2924-2925, 2621-2622. The precise content of the [

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Dailey Tr. 2498-2499, 2621-2622; Compls. Br. at 274; Resp. Br. at 255.

Subsequent to the October 2010 meeting, Mr. Dailey sent two letters, dated October 21 and 29, 2010, on behalf of Motorola to Microsoft's Deputy General Counsel, Horacio Gutiérrez, offering to license Motorola's 802.11 and H.264 patent portfolios, respectively. CX-597 (concerning the 802.11 standard); CX-598 (concerning the H.264 standard). Motorola's offer letters state that they were made to "confirm" discussions between Motorola and Microsoft. CX-597 at 1; CX-598 at 1; Dailey Tr. 2621-2622.

The letters offered Microsoft a worldwide, non-exclusive license under Motorola's portfolio of H.264 and 802.11 patents (and pending applications) at a rate of

<sup>&</sup>lt;sup>95</sup> See Certain Mobile Devices, Associated Software, and Components Thereof, Inv. No. 337-TA-744, Notice of Investigation (Nov. 1, 2010) ("the 744 investigation") (Motorola accused of infringing nine Microsoft patents).

2.25% applied to end-user products. The letter concerning the 802.11 patents also specified "e.g., each Xbox 360 product" and not component software; while the letter concerning the H.264 patents specified: "e.g., each Xbox 360 product, each PC/laptop, each smartphone, etc." and and not component software. CX-597; CX-598. Motorola also stated that if Microsoft was interested in only a portion of the 802.11 or H.264 portfolios, Motorola was willing to have such a discussion. CX-778C (Dailey RWS) at 2-3; CX-597 at 1; CX-598 at 1. In addition to proposing a rate of 2.25%, Motorola's offers were also made "subject to a grant back license...." CX-778C (Dailey RWS) at 2-3, 27; CX-597 at 1; CX-598 at 1.

Each letter also stated: "Motorola will leave this offer open for 20 days. Please confirm whether Microsoft accepts the offer." CX-597 at 1; CX-598 at 1. It is undisputed that Microsoft never provided a specific response to those letters.

On November 9, 2010, Microsoft filed a complaint in the Western District of Washington (No. 2:10-cv-01823) claiming that Motorola had breached its RAND assurances to both the IEEE and ITU. CX-599.

Motorola filed its complaint in this investigation on November 22, 2010. See Notice of Investigation. Shortly thereafter, [

] RRX-

98C; Ochs Tr. 1944-45, 1991-1994. [ ] admits that in general it had [

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] Ochs Tr.

1945, 1950-1951, 1986-1988, 1991-1998. Over seven months after [

] Ochs Tr. 1998-1999; RX-367C (Letter of

Marvell to Motorola dated July 18, 2011).

Motorola sent [ ] a Non Disclosure Agreement, which [ ] signed and sent back to Motorola about seven weeks later. RX-368, Ochs Tr. 1947, 2002; RRX-89C. Thereafter, a Motorola licensing attorney, Tim Kowalski, and [

], had numerous communications, both telephonically and by email. Mr. Kowalski explained to [ ] that Motorola had an established licensing program that focused on end users, [

]. Mr. Kowalski explained that Motorola would have to consider how it could modify its agreement to cover [ ]. Ochs Tr. 1949, 1983-1985, 2003-2004; CX-820C (11/22/2010 email from Kowalski to Ochs: [

]

Motorola sent [ ] a draft license agreement on November 25, 2011. RRX-88C (Email from Kowalski to Ochs, dated 11/2/2011 with attachment). Ochs Tr. 2007-2008. When Ms. Ochs received the email, [

] Ochs Tr. 1952-1956,

2007-2008. She was correct. As reflected in the evidence adduced during the hearing, Motorola admits in its brief that: "The draft license agreement was consistent with Motorola's practice of licensing end-user products and consistent with the terms offered to Microsoft in the October letters. For example, the license sought a running royalty of 2.25% of the end-user products [ ]" Compls. Br. at 277-78 (citing RRX-88C, CX-778C (Dailey RWS) at 3 and Dailey Tr. 2611-2621).

### C. Analysis and Conclusion As to Microsoft's RAND Obligation Defense

Microsoft indicated that it would set forth a "RAND Obligation" defense in section IX(C)(1) of its brief. Ground Rule 12 Filing at 9. As the first of "three distinct legal doctrines," Microsoft presents in section IX(C)(1) of its brief a two-paragraph argument based on Motorola's RAND commitments. Resp. Br. at 250-51. Microsoft's argument is as follows:

Equitable remedies generally supplement rather than destroy legal rights. Pursuant to the maxim that "equity follows the law," "wherever the rights or the situation of parties are clearly defined and established by law, equity has no power to change or unsettle those rights or that situation." Hedges v. Dixon County, 150 U.S. 182, 192 (1893); Fortis Benefits v. Cantu, 234 S.W.3d 642, 648-49 (Tex. 2007) ("Where a valid contract prescribes particular remedies or imposes particular obligations, equity generally must yield unless the contract violates positive law or offends public policy."); Pomeroy, Equity Jurisprudence § 425 (4th ed. 1918) ("Equity follows the law, in the sense of obeying it, conforming to its general rules and policy"). In this case, MMI has assumed by contract the legal obligation to grant RAND licenses to all comers. Potential licensees can sue MMI to enforce that obligation, and they have done so. E.g., RRX-126; Apple [Inc. v. Motorola Mobility, Inc., No. 11-cv-178,] 2011 U.S. Dist. LEXIS [] 72745. An exclusion order would conflict with a

judgment that MMI must license as a matter of contract law, and it therefore would be an inappropriate exercise of the Commission's equity powers. As the Commission has explained, "even though a royalty obligation might accrue, an injunction may not issue against the beneficiary of a promise, which, if enforced, would be inconsistent with suit for an injunction." [Certain Dynamic Random Access Memories, Components Thereof, and Products Containing Same] DRAM, [Inv. No. 337-TA-242,] 987 ITC LEXIS 95, at \*31 [(May 21, 1987)] (citing Medtronic, Inc. v. Catalyst Research Corp., 518 F. Supp. 946 (D. Minn. 1981), aff'd, 664 F.2d 660 (8th Cir. 1982)). Here, Microsoft is the beneficiary of MMI's promise to license, which if enforced would be antithetical to an exclusion order.

The subordination of equity to law forecloses the remedies available in this forum, but it does not bar MMI from seeking a reasonable royalty in court. Indeed, MMI itself elected the right to seek damages, and *only* damages, by assuming the contractual obligation to license.

Id. (emphasis in original).

There is no dispute that "equity follows the law," as observed by the Supreme Court in its *Hedges* opinion. It is, however, noteworthy that with all of the patents subject to RAND licensing obligations that may have ever come before the Commission, Microsoft was not able to cite one case in which a section 337 remedy was foreclosed due to the existence of RAND obligations. Microsoft has not relied on any court case in which an injunction was denied or set aside due simply to the existence of RAND obligations. Microsoft has not pointed to any statute that conflicts with the powers granted to the Commission by section 337. In this case, it has not been shown that the "rights or the situation of parties are clearly defined and established by law" so as to prohibit Motorola from obtaining relief from the Commission.

The *DRAMs* opinion relied on by Microsoft, which issued in the course of a section 337 investigation, was an opinion of an administrative law judge who was addressing circumstances in which "mutual obligations are incurred and relied upon with

respect to patent rights," in which case "a finding of infringement is inappropriate, even though royalties might be owed." 1987 LEXIS 95, at \*31. Specifically at issue were infringement allegations that were made by a complainant despite the fact that there was an ongoing dispute about the renewal of a cross-license. 1987 LEXIS 95, at \*26. That situation is not analogous to the case involving Motorola and its obligations, assumed by means of unilateral assurances to SSOs, to provide RAND licenses for essential technologies. In contrast to the "mutual obligations" discussed in *DRAMs*, Microsoft claims that it is already a "beneficiary of MMI's promise to license," but is silent as to any obligations that it may have to undertake before its products are actually licensed.

Motorola raises prior Microsoft statements that conflict with the arguments that Microsoft makes in this investigation, including one that, in particular, addresses the availability of section 337 to a patent holder with RAND obligations. Compls. Br. at 272, 274, 290. In fact, as discussed in this section of the Initial Determination, prior conflicting statements concerning the relationship of RAND licensing obligations to section 337 remedies have been made by both Microsoft and Motorola.

Microsoft admits that in a letter, dated June 14, 2011, to the Federal Trade Commission, it said that "the existence of a RAND commitment to offer patent licenses should not preclude a patent holder from seeking preliminary injunctive relief or commencing an action in the International Trade Commission just because the patent holder has made a licensing commitment to offer RAND-based licenses in connection with a standard." CX-805 at MOTMITC\_0697597. In that letter, Microsoft was addressing "patent 'hold-up' in connection with standardization effort." *Id.* at MOTMITC 0697585. In this investigation, Microsoft has addressed a similar issue,

explaining in its brief that "[a]ll of the witnesses at the hearing questioned on this basic economic principle agreed that the adoption of a standard may give owners of essential patents the ability to use the standard to 'hold up' those who wish to practice it. *See* RX-315C (Murphy) at Q17; Holleman Tr. 1319-20; Teece Tr. 2663-64." Resp. Br. 246-47. Microsoft now seeks to distance itself from the statement it made to the FTC, arguing that its letter "was directed to different concerns than those at issue in this Investigation, and *to the extent the letter conflicts with Microsoft's position here, the letter is incorrect.*When squarely faced with the issue in the 744 Investigation, Microsoft conceded MMI's position that RAND commitments are inconsistent with an exclusion order." Resp. Br. at 254 n.29 (emphasis added).

Ultimately, no prior statement by any party will determine whether as a matter of law the Commission's ability to issue a remedy in an appropriate case must yield to RAND licensing obligations. For the reasons stated above concerning *Hedges* and the interplay of law and equity, it has not been shown that the Commission is unable to issue a remedy in this investigation due to the existence of Motorola's RAND commitments.

Accordingly, it is found that Microsoft has not prevailed in its RAND obligations defense.

## D. Analysis and Conclusion As to Microsoft's Implied License Defense

In section IX(C)(2) of its brief, Microsoft argues that "[t]he same result—a bar on exclusionary but not legal remedies—obtains under the doctrine of implied license. MMI has consented to the use of its patented inventions, promising to 'grant a license,' and the only material question is the price for such use." Resp. Br. at 251 (apparently quoting the letter and assurance sent to the SSOs); Ground Rule 12 Filing at 9. It is argued that

"MMI's affirmative actions in connection with the ITU and IEEE clearly and conclusively demonstrate MMI's consent to the use of the technologies in the standards-essential patents by third parties who make products that implement the standards, subject to the 'subsequent settlement [of] what reasonable compensation, if any, it might claim for its license." *Id.* 251-52 (quoting *DeForest Radio Tel. & Tel. Co. v. United States*, 273 U.S. 236, 242 (1927)). Microsoft admits that the documents sent to the SSOs contain the statement "No license is implied" or similar terminology, but argues that "such language does not determine whether the 'entire course of conduct' reasonably led Microsoft 'to infer consent to manufacture and sell' products that practice the patents." *Id.* at 252 (quoting *Wang Laboratories, Inc. v. Mitsubishi Electronics America*, 103 F.3d 1571, 1581-82 (Fed. Cir. 1997)).

Microsoft has cited to no instance in which an executed document such as a letter of assurance sent to an SSO resulted in an implied license. Further, in this case, it is unclear upon precisely what "entire course of conduct" Microsoft would build its defense of implied license, and thus render ineffective Motorola's express statement of no implied license. As discussed above, the documents sent to the SSOs by Motorola explicitly state that no license should be implied. Moreover, the evidence of record indicates that Motorola has licensed its patents, including those deemed to be essential to SSO standards, only after negotiations, which were often lengthy negotiations. In the implied license portion of its brief, Microsoft points to no evidence to the contrary.

Accordingly, it is found that Microsoft has not carried its burden with respect to its defense of implied license.

### E. Analysis and Conclusion As to Microsoft's Waiver Defense

Microsoft indicated that it would present a waiver defense in section IX(C)(3) of its brief. Ground Rule 12 Filing at 9. Indeed, Microsoft argues that in addition to implied license, Motorola's conduct also supports a finding of implied waiver of the right to seek equitable or exclusionary remedies. It is argued that Motorola "told the public that it would license its patents for a reasonable royalty, impliedly renouncing any right to enforce the patents through injunctive or exclusionary relief." Resp. Br. at 263 (citing *Qualcomm v. Broadcom Corp.*, 548 F.3d 1004, 1021 (Fed. Cir. 2008)).

With respect to the *Qualcomm* case, Microsoft argues that "the patent holder had failed to disclose essential patents relating to the H.264 standard despite an obligation to do so, and the Federal Circuit held that the patent holder had thus impliedly waived its right to enforce its patents." It is argued that the principle at work in *Qualcomm* "applies with even greater force here, for *Qualcomm* involved a mere failure to disclose, whereas MMI's affirmative assurances directly support a waiver. MMI promised the SSOs and their members that it would demand only a reasonable royalty, knowing full well that doing so meant forgoing equitable relief." <sup>96</sup> *Id*.

<sup>&</sup>lt;sup>96</sup> Microsoft argues that Motorola took the same position in the 744 investigation when it stated in certain discovery responses that [

<sup>(</sup>quoting RRX-124C (Motorola Mobility, Inc.'s Amended Supplemental Objections and Responses to Complainant Microsoft Corporation's Interrogatory Nos. 30-32, 35-38 & 130-131 and Second Amended Supplemental Objections and Responses to Complainant Microsoft Corporation's Interrogatory Nos. 27 & 28, dated May 27, 2011, in the 744 Investigation.)). Without assuming to know all the relevant facts and context of the 744 investigation, it seems that Motorola's assertion was an overstatement of the law because it failed to account for the fact that a RAND license is not automatic, but RAND terms must ultimately be accepted by the parties, including the potential licensee. As indicated in the discussion above concerning Microsoft's letter to the FTC, Microsoft also seemed aware, by its prior statements, that by assuming RAND obligations, one is not automatically foreclosing the possibility of a section 337 remedy.

As indicated by Microsoft, the *Qualcomm* case centered on a plaintiff that had not disclosed essential patents to the SSO. There is no such allegation in this case. Rather, as discussed above, Motorola disclosed all of the patents at issue, and it has not been shown that in doing so, Motorola granted an implied license to any of them. As recognized by Microsoft, implied license and waiver, in the manner raised by Microsoft in this investigation, are two sides of the same coin. <sup>97</sup> It has not been shown how Motorola's conduct, especially the fact that it "told the public that it would license its patents for a reasonable royalty," supports a waiver defense.

Accordingly, Microsoft has not prevailed in its waiver defense.

## F. Analysis and Conclusion As to Microsoft's Equitable Estoppel Defense

## 1. Summary of the Parties' Arguments in Equitable Estoppel

Microsoft indicated that it would present an equitable estoppel defense in section IX(D) of its brief. Ground Rule 12 Filing at 9. Indeed, Microsoft argues that "[e]ven if MMI had not relinquished any right to an exclusion order by virtue of having committed to license its standard-essential patents on RAND terms, MMI should be barred from such relief in this case under the doctrine of equitable estoppel. This is because its license 'offers' to Microsoft were shams specifically designed to set up this and other litigation and breached MMI's RAND assurances on which Microsoft had reasonably relied." Resp. Br. at 254.

<sup>&</sup>lt;sup>97</sup> Microsoft argues, "Implied license and implied waiver of equitable remedies are interchangeable in this forum because money damages are unavailable. But there is a difference between the two, for to the extent MMI impliedly licensed Microsoft's use of the patents, MMI cannot obtain infringement damages—it can only sue for royalties under the license. An implied waiver of equitable remedies still permits infringement liability, although only for money damages." Resp. Br. at 253 n.26.

With respect to its allegation that Motorola disregarded its RAND obligations "to set up this litigation and other litigation with Microsoft," Microsoft details its argument that after Microsoft brought a complaint at the Commission against Motorola, Motorola set its alleged scheme into motion. *Id.* at 254-58. For example, it is argued that "MMI devised a strategy of circumventing its RAND obligations so it could assert its standard-essential patents against Microsoft and gain leverage from the threat of exclusionary relief. [

] Id. at 254-55 (citing Dailey Tr. 2621-2622).

It is further argued that [

] "MMI sent two sham license offers in admitted retaliation for Microsoft's Android complaint," knowing that Microsoft could not accept the terms stated therein. *Id.* at 255. The alleged sham letters were briefly discussed above in this section of the Initial Determination, and both proposed a royalty rate of 2.25% on end products.

Microsoft argues that Motorola's "demands" were unreasonable because they were based on the value of the end product, even though Motorola's patents provide little, if any, value to the products. *Id.* at 259-61. Indeed, it is argued, "MMI's standardsessential patents relate not to Xbox's primary uses but to peripheral features whose primary function is to ensure compliance with the standards. MMI's 802.11 patents relate only to security for the 802.11 standard, but Xbox utilizes its own encryption and therefore has no use for MMI's patents apart from their inclusion in the standard." *Id.* at 259 (citing RX-317C (Caruana WS) at Q48-49, Holleman Tr. 1312; Dailey Tr. 2516). Similarly, it is argued, "MMI's H.264 patents relate only to interlaced video, which is not even utilized when Xbox is used for playing games or videos." *Id.* (citing RX-361C

(Rossini WS) at Q20; Holleman Tr. 1312-1313; Murphy Tr. 2061-2062; Teece Tr. 2658-2661).

I to obtain a license from Further, Microsoft argues that it asked [ Motorola so that there would be a "genuine license" under the 802.11 essential patents. Id. at 261-62. Yet, it is argued, Motorola's response was once again a sham designed to I to pay past and future royalties of be unacceptable inasmuch as it would require [ ] customers' products, regardless of how 2.25% on the end price of [ might be in the final product. Id. at 262-63. In fact, it inconsequential the [ is argued, the royalties sought by Motorola exceed any relevant benchmark, such that the royalty Motorola sought for WiFi patents exceeded the price of the [ ] that provides all 802.11 functionality for Xbox. Id. at 263-65. Further, it is argued, if Motorola had followed its own stated policies of licensing end users, it would not have sought from Microsoft "a royalty from Microsoft for all Windows-based computers and smartphones, even though Microsoft sells Windows software, which is only a component of computers and smartphones sold by its customers." Id. at 265.

Microsoft argues that Motorola's attempts to justify its unreasonable and discriminatory licensing attempts are unavailing, and instead demonstrate that Motorola was never interested in good-faith negotiations with Microsoft or in offering Microsoft a license on RAND terms. Thus, it is argued, Motorola's infringement claims are barred under equitable estoppel. *Id.* at 266-74.

As indicated above, Motorola opposes Microsoft's defense. Motorola argues that it has not engaged in misleading conduct, and that its October 2010 letters to Microsoft complied with RAND standards in that they showed that Motorola was willing to enter

into negotiations for RAND licenses. Compls. Br. at 282-88. Further, it is argued, there is no evidence that Microsoft relied on any allegedly misleading conduct, or that Microsoft would be materially prejudiced by an exclusion order if found to violate section 337. Rather, it is argued, Microsoft should not be allowed to infringe another party's patents with impunity. *Id.* at 288-89.

# 2. Application of Legal Standards; Conclusion on Equitable Estoppel

The Federal Circuit's opinion in *A.C. Aukerman Co. v. R.L. Chaides Constr. Co.*, 960 F.2d 1020 (Fed. Cir. 1992) sets forth the standard to be applied with respect to a defense of equitable estoppel in a patent case. It is relied upon by both Microsoft and Motorola. Resp. Br. at 272; Compls. Br. at 281-82, 289. In *Aukerman*, the Federal Circuit held, *inter alia*, that "[e]quitable estoppel is cognizable under 35 U.S.C. § 282 as an equitable defense to a claim for patent infringement;" that "[w]here an alleged infringer establishes the defense of equitable estoppel, the patentee's claim may be entirely barred;" that three elements must be established to bar a patentee's suit by reason of equitable estoppel; and that "[n]o presumption is applicable to the defense of equitable estoppel." 960 F.2d at 1028. The three elements that must be established in an equitable estoppel case are the following: (1) "the statements or conduct of the patentee. ... must communicate something in a misleading way;" (2) "[t] accused infringer must show that, in fact, it substantially relied on the misleading conduct of the patentee in connection with taking some action;" and (3) "the accused infringer must establish that it

<sup>&</sup>lt;sup>98</sup> The Federal Circuit, contrasting equitable estoppel with laches (also at issue in the *Aukerman* appeal) held, "Because the whole suit may be barred, we conclude that the defendant should carry a burden to establish the defense based on proof, not a presumption." *Aukerman*, 960 F.2d at 1043.

would be materially prejudiced if the patentee is now permitted to proceed." Id. at 1042-43. "Finally, the trial court must, even where the three elements of equitable estoppel are established, take into consideration any other evidence and facts respecting the equities of the parties in exercising its discretion and deciding whether to allow the defense of equitable estoppel to bar the suit. 100 Id. at 1043.

The First Element: Misleading Communication

As to the first element that must be established in an equitable estoppel case (*i.e.*, "the statements or conduct of the patentee . . . must communicate something in a misleading way"), the Federal Circuit explained in *Aukerman* that "[t]he 'something' with which this case, as well as the vast majority of equitable estoppel cases in the patent field is concerned, is that the accused infringer will not be disturbed by the plaintiff patentee in the activities in which the former is currently engaged." 960 F.2d at 1042 (footnote omitted).

There is no evidence of anything that could be construed as direct communication between Motorola and Microsoft concerning Motorola's willingness to license the patents at issue, or willingness not to disturb Microsoft's conduct with respect to the accused devices, until shortly before Motorola sent the two October 2010 offer letters at issue. The record, which is discussed above, shows that the parties [

<sup>&</sup>lt;sup>99</sup> "As with laches, the prejudice may be a change of economic position or loss of evidence." *Aukerman*, 960 F.2d at 1043.

The Federal Circuit also held that "since no special considerations are implicated by the defense of equitable estoppel as we have defined it herein, we adopt the preponderance of evidence standard in connection with the proof of equitable estoppel factors, absent special circumstances, such as fraud or intentional misconduct." *Aukerman*, 960 F.2d at 1046.

] the ensuing October 2010 letters from Motorola to Microsoft, with their licensing offers, are in evidence. Moreover, the documents that Motorola had already sent to the SSOs concerning RAND licensing, and the obligations it thereby undertook, were designed to provide assurances to the SSOs and their members that Motorola would provide RAND licenses to patents essential to the specified standards. Thus, Motorola has "communicated something," as required by the first element of equitable estoppel, when Motorola sent its letters and assurance to the SSOs. Yet, to address fully the requirement of the first element of equitable estoppel, it must be determined whether or not those communications were in fact misleading. As discussed immediately below, Motorola's statements and conduct toward Microsoft, and also toward [

], show that Motorola's statements to the SSOs were misleading.

The evidence shows that the royalty rate offered by Motorola of 2.25%, both as to its amount and the products covered, could not possibly have been accepted by Microsoft. The evidence shows that Motorola has entered into licenses with at least [ ] companies for Motorola essential patents at a rate that is at or near 2.25%. In each license, [ ] was included in that grant. CX-778C (Dailey RWS) at 3-23; CX-62C to 66C; CX-70C; CX-73C; CX-74C; 75C; CX-77C; CX-83C; CX-91C; CX-92C; CX-93C; CX-94C, CX-96C to 101C, CX-104C, CX-105C, CX-582C, CX-681C, CX-782C. For [ ] of the negotiations preceding the licenses, Motorola identified correspondence that showed an opening offer at or around 2.25%. CX-778C (Dailey RWS) at 3-4. Yet, there are likely differences between the products covered by

those licenses and the products at issue in this investigation because, as Motorola admits, some of the licenses were for Motorola's cellular essential portfolios, and thus "not necessarily the 802.11 or H.264 portfolios." Compls. Br. at 272-73. Indeed, Motorola

] Dailey Tr. 2639-2640.

Use of the functionality related to the H.264 standard, which is covered by a plain reading of the Motorola offer, is likely to be encountered only by a user of interlaced video, and its use is thus far from universal in the accused Xbox devices. None of the normal uses of the Xbox console – playing games or DVDs or viewing most Internet content – use this functionality. RX-361C (Rossini WS) at Q20; Holleman Tr. 1312-13, Murphy Tr. 2061-62, Teece Tr. 2658-2661. In addition, on the face of the Motorola offer, the 2.25% royalty covers the end price of all products containing Windows or Windows Phone software. Even if the royalty were based only on the value of Windows software, rather than the entire value of computers and smartphones that incorporate Windows, it would amount to \$400 million per year, or [

] See Dailey Tr.

2547-2549; CX-15. Motorola's own corporate vice president of intellectual property was

] Dailey Tr. 2529,

2531. Indeed, there is no evidence that any company would agree to the offer that Motorola sent to Microsoft.

Motorla's offer to [ ] covered past and future royalties of 2.25% on the end price of [ ] customers' products, regardless of how [

]. The royalty on even the least expensive of end products incorporating [ ] would likely exceed the price of [ ], which [ ]. See RRX-97C (Murphy) at Q6; Ochs Tr. 1941, 1958-1960. For example, the royalty applied to a gaming console that wholesales for \$200 would be \$4.50, or more than the price of [ ]. Ochs Tr. 1942-1943, 1961-1962; Dailey Tr. 2524-2525, 2525. In addition to such a high rate, Motorola's offer specifically excluded any [

]. RRX-88C at § 3.5 and Annex C; Ochs Tr. 1943-1943, 1958-1960.

The offers made to Microsoft show that although Motorola assured the SSOs and the public that it would provide reasonable and non-discriminatory licenses for the patents essential to certain standards, those communications were misleading. This fact is only made more apparent by Motorola's dealings with [ ]. While Motorola's offers need not be the same as the terms that might eventually be contained in a RAND license, Motorola admits that it is bound to negotiate in good faith. Compls. Br. at 263-63, 279-82 (citing, *inter alia*, CX-758C (Holleman WS) at 8-13; CX-759C (Teece WS) at 6, 11, 16; Holleman Tr. 1323-1325, 1328-1329). Motorola's answer to the evidence concerning the terms that it actually offered is that through negotiations Microsoft could have explained the nature of its business, and eventually (perhaps over the course of lengthy negotiations lasting months or years, based on past negotiations) Motorola would have provided a reasonable and non-discriminatory license. *See* Dailey Tr. 2496-2497, 2634-2635; Compls. Br. at 284-89. Yet, in view of the terms offered, there is nothing in

the record to suggest that even that scenario is likely. As discussed above, the evidence supports Microsoft's conclusion that Motorola was not interested in good faith negotiations and in extending a RAND license to it.<sup>101</sup>

Microsoft argues that the letters it received from Motorola made "take it or leave it" offers, based largely on the closing of each letter, which stated that the offer was open for only 20 days, and would Microsoft please confirm. *See* Resp. Br. 270, CX-597C; CX-598C. That provision of Motorola's letters is described in more detail above, and does not weigh heavily in the determination that Motorola made misleading communications, as required under *Aukerman*. Especially if Motorola were otherwise engaged in an attempt at good-faith negotiations toward a RAND license, that statement by Motorola would not necessarily indicate a "take it or leave it" demand, but only that if one delayed in negotiations, after 20 days one would have to begin on a different, and possibly less advantageous, footing. In the actual circumstances presented, Microsoft had no interest in using Motorola's offer as a starting point for negotiations.

Consequently, the first element to be considered with respect to an equitable estoppel defense has been established.

The Second Element: Reliance

As to the second element that must be established in an equitable estoppel case (i.e, "[t]he accused infringer must show that, in fact, it substantially relied on the misleading conduct of the patentee in connection with taking some action"), the Federal

] See Dailey Tr. 2519, 2543-2545.

<sup>&</sup>lt;sup>101</sup> Indeed, Motorola claims that before writing to Microsoft, Motorola [

Circuit explained in *Aukerman* that "[r]eliance is not the same as prejudice or harm, although frequently confused. An infringer can build a plant being entirely unaware of the patent. As a result of infringement, the infringer may be unable to use the facility. Although harmed, the infringer could not show reliance on the patentee's conduct. To show reliance, the infringer must have had a relationship or communication with the plaintiff which lulls the infringer into a sense of security in going ahead with building the plant." 960 F.2d at 1043.

Microsoft argues that it "reasonably relied on the promise of a RAND license when it made investments implementing the H.264 and 802.11 standards in its products, including its Xbox gaming consoles. Microsoft had no reason to doubt that MMI would honor its Letters of Assurance, for MMI itself participated in and benefited from the standard-setting process—a process which depends on reliable and enforceable RAND assurances." Resp. Br. at 273 (citing a text from the year 2000, but no evidence of record). In its reply, Microsoft argues that "MMI asserts that there is no evidence Microsoft relied on its RAND promises, but the evidence demonstrates Microsoft made investments implementing the 802.11 and H.264 standards, which are now sunk costs." Resp Reply at 92-93. Microsoft, however, never explains what those costs were or, more importantly, that it undertook them in consideration of Motorola's communications with the SSOs in which it assumed RAND obligations. Motorola's communications to the SSOs may have been misleading, as betrayed by Motorola's subsequent conduct toward ] which is discussed above, but there is no evidence that Microsoft Microsoft [ relied on any statement by Motorola to embark on, or to continue in, any course of conduct.

Consequently, the second element to be considered with respect to an equitable estoppel defense has not been established.

The Third Element: Material Prejudice

As to the third element that must be established in an equitable estoppel case (*i.e.*, "the accused infringer must establish that it would be materially prejudiced if the patentee is now permitted to proceed"), the Federal Circuit explained in *Aukerman* that "the prejudice may be a change of economic position or loss of evidence." 960 F.2d at 1043.

There is no dispute that if Motorola obtains an exclusion order, Microsoft would be prohibited from importing its profitable Xbox console, and possibly controllers or other products used with the consoles. As is evident from the discussion above in connection with the revenues to be gained merely from royalties on the accused products, the loss of revenues to Microsoft resulting from an exclusion order would be large, at least until such time as the products could be redesigned (and there is no estimate in the record of how long that would take).

Motorola argues that "one who chooses to infringe should not be heard to complain that he has to pay the penalty for his infringement." Compls. Br. at 289 (citing *Robert Bosch LLC v. Pylon Mfg. Corp.*, 659 F.3d 1142, 1156 (Fed. Cir. 2011)). Motorola, however, misses the point. If equitable estoppel were to be found, then Microsoft's infringement would have occurred in reliance on Motorola's misleading statements. <sup>102</sup> In that case, Microsoft would have good reason to complain of the economic or other injury it would suffer.

When a patent holder made misleading statements to the infringer who relied on those statements, the application of equitable estoppel would not run contrary to the *Bosch* 

Consequently, the third element to be considered with respect to an equitable estoppel defense has been established.

Conclusion on Equitable Estoppel

The test set forth in *Aukerman* would require a trial court, even where the three elements of equitable estoppel are established, to consider any other evidence and facts respecting the equities of the parties in exercising its discretion and deciding whether to allow the defense of equitable estoppel to bar the suit. 960 F.3d at 1043. As discussed above, all three elements have not been established because it has not been shown that there was the requisite reliance. All "three elements must be established to bar a patentee's suit by reason of equitable estoppel." 960 F.2d at 1028.

Accordingly, it is not found that equitable estoppel bars Motorola's request for a remedy.

#### XI. Economic Prong; Determinations on Domestic Industry

As indicated above in section IV.D., in order for a section 337 violation to be found as to any of the five asserted patents, Motorola must establish that the domestic industry requirement has been satisfied as to that individual patent. <sup>103</sup> Thus, for each

opinion, cited by Motorola. In *Bosch*, the Federal Circuit was concerned with the equitable factors relative to the granting of a permanent injunction. The court held, "A party cannot escape an injunction simply because it is smaller than the patentee or because its primary product is an infringing one." 659 F.3d at 1156. Nevertheless, it was determined in *Bosch* that the hardships balanced in favor of granting the injunction. Moreover, the Federal Circuit's *Aukerman* opinion is specifically concerned with an infringer that seeks the application of estoppel against the patent holder.

<sup>&</sup>lt;sup>103</sup> The statute allows the domestic industry requirement to be satisfied in some instances when a domestic industry is in the process if being established. Further, the statute does not restrict the definition of a domestic industry to only the domestic investments or other activities of the complainant. *See* 19 U.S.C. § 1337(a)(2)-(3). Nevertheless, Motorola is

patent, Motorola must show that is satisfies section 337(a)(3)(A), (B) or (C) (i.e., that with respect to each individual patent, it has significant investment in plant and equipment; significant employment of labor or capital; or substantial investment in exploitation of the patent, such as through engineering, research and development ("R&D"), or licensing).

Motorola argues that as to each patent, it has satisfied the domestic industry requirement under section 337(a)(3)(A), (B) and (C). Compls. Br. at 262. First, in reverse order to the way that the definition of a domestic industry is presented in the statute, Motorola argues that under section 337(a)(3)(C), its investments in licensing, as well as engineering and R&D, satisfies the definition of a domestic industry, and thus the domestic industry requirement, with respect to each patent. *See Id.* at 244-61. Second, Motorola argues that under section 337(a)(3)(A) and (B), it has satisfied both the technical and economic prongs with respect to each patent. Motorola's arguments with respect to its investments and activities relative to section 337(a)(3)(A) and (B) refer back to its previous arguments concerning section 337(a)(3)(C). *See Id.* at 244, 261-62.

Motorola's domestic industry case is discussed below generally in the order argued by Motorola (section 337(a)(3)(C), followed by section 337(a)(3)(A) and (B)). Finally, the conclusion on domestic industry is provided for each patent. As to each patent, a statement is made as to whether or not the domestic industry requirement is satisfied through licensing, engineering or R&D (*i.e.*, investment in exploitation as defined by section 337(a)(3)(C)), and then a statement is made as to whether or not a

relying on domestic industries alleged to be already in existence as to each asserted patent; and further, Motorola relies only on it own investments or other activities. *See* Compls. Br. at 244.

domestic industry exists as defined in section 337(a)(3)(A) or (B). With respect to the latter, the technical prong conclusion as to each patent (set forth in earlier sections of this Initial Determination) is combined with the economic prong analysis contained below.

#### A. Section 337(a)(3)(C)

#### 1. Licensing

#### a. The Legal Standard Applied to Licensing

Section IV.D. of this Initial Determination contains an overview of the domestic industry requirement, and shows that, in certain circumstances, a complaint can show that the requirement is satisfied by relying on section 337(a)(3)(C), and particularly, upon substantial investments made to license an asserted patent. In its opinion in *Navigation Devices*, initially cited in section I.D., the Commission summarized and highlighted statutory provisions and case precedent to shed light on the steps that a complainant must could take, and in some cases might take, in order to arrive at a successful showing of domestic industry based on licensing.

Each complainant seeking to satisfy the domestic industry requirement by its investment in patent licensing must establish that its asserted investment activities satisfy three requirements of section 337(a)(3)(C). First, the investment must relate to exploitation of the asserted patent. Second, the investment relate to "licensing." Third, any alleged investment must be domestic, *i.e.*, it must occur in the United States. After determining the extent to which a complainant's investments fall within these statutory parameters, *i.e.*, the required nexus to the asserted patent, nexus to licensing and nexus to the United States, one can evaluate whether a complainant's qualifying investments are "substantial," as required by the statute. *Navigation Devices*, Comm'n Op. at 4.

"Because the statute requires that investments satisfy all three of these requirements, the absence of a nexus to any one of them will defeat complainant's attempt to satisfy the domestic industry requirement." *Id.* at 7 n.12.

Nexus to the Asserted Patent

If a complainant's activity is only partially related to licensing the asserted patent in the United States, the Commission examines the strength of the nexus between the activity and licensing the asserted patent in the United States. *Id.* at 4. A complainant may be able to establish the strength of the nexus between the asserted patent and its licensing activities through evidence showing that its licensing activities are particularly focused on the asserted patent among the group of patents in the portfolio, or through other evidence that demonstrates the relative importance or value of the asserted patent within the portfolio. *Id.* at 5 (citing *Certain Coaxial Cable Connectors and Components Thereof and Products Containing Same*, Inv. No. 337-TA-650, Comm'n Op. at 44-51 (Apr. 14, 2010) (evidence clearly showed that one patent was more important and more valuable than the other)).

When a large patent portfolio is at issue, a potentially important consideration is whether the licensee's efforts relate to "an article protected by" the asserted patent under section 337(a)(2)-(3). For example, if a licensee's product is an "article protected by" the patent, then the license at issue is connected to that patent. <sup>104</sup> *Id.* at 5. In general, the

<sup>&</sup>lt;sup>104</sup> "Evidence that the patent-at-issue is practiced or infringed in the United States may also be relevant to the value of the patent and may suggest a high value relative to that of the other patents in the portfolio. Conversely, evidence that a patent is not practiced or infringed may indicate relatively less value." *Navigation Devices*, Comm'n Op. at 6.

Commission may also consider other factors, including, but not limited to: (1) the number of patents in the portfolio;

(2) the relative value contributed by the asserted patent to the portfolio; (3) the prominence of the asserted patent in licensing discussions, negotiations and any resulting license agreement; and (4) the scope of technology covered by the portfolio compared to the scope of the asserted patent. *Id*.

"Evidence demonstrating the relative value and/or importance of an asserted patent in a portfolio may indicate the focus of complainant's investment and, in turn, may reflect the strength of the nexus between these activities and the asserted patent." Id. The Commission has stated, by way of example, that "the asserted patent may be shown to be particularly important or valuable within the portfolio where there is evidence that (1) it was discussed during the licensing negotiation process, (2) it has been successfully litigated before by complainant, (3) it relates to a technology industry standard, (4) it is a base patent or a pioneering patent, (5) it is infringed or practiced in the United States, or (6) the market recognizes its value in some other way." *Id.* Yet, the Commission recognizes that "certain facts pertaining to the importance or value of a particular patent in a portfolio may, in some instances, be difficult to establish as a result of the varying perspectives of the complainant, potential licensees, and third parties." Id. Indeed, "a patent may be important to the patentee or the potential licensee for different reasons. Frequently, there is no evidence as to what motivated the licensee to agree to take a license. Nevertheless, this type of evidence, when present in the record, is useful in determining the focus of complainant's licensing activity. A showing that the asserted patent is relatively important within the portfolio is not required to show a nexus between

that patent and the licensing activities . . . but may be one indication of the strength of the nexus." *Id*.

"All things being equal, the nexus between licensing activities and an asserted patent may be stronger when the asserted patent is among a relatively small group of licensed patents. The scope of the technology covered by the license and the congruence of the patents contained in the portfolio may also indicate the strength of the nexus to a particular patent." *Id.* (citing *Certain Dynamic Sequential Gradient Compression Devices and Component Parts Thereof*, Inv. No. 337-TA-335, Final ID, USITC Pub. 2575 at 63 (Nov. 1992) ("To include activities which are in the same field of technology but which do not have the requisite nexus to the patent would be contrary to the statute.") (footnote omitted)). Consequently, "[e]vidence showing how the asserted patents fit together congruently with other patents in the portfolio covering a specific technology may demonstrate a stronger nexus to the licensing activity than evidence indicating that the patents cover a wide variety of technologies bearing only a limited relationship to one another." *Id.* 

Nexus to Licensing

A complainant's activities relied upon to show investment in licensing may be solely related to licensing. Yet, when activities serve multiple purposes, a complainant cannot rely on all related expenditures to prove domestic industry. *Id.* "For example, the evidence may show that analyzing another company's product for infringement may

<sup>&</sup>lt;sup>105</sup> "The burden is on complainant to show that there is a nexus between its alleged licensing activities and an asserted patent. A complainant cannot establish that the asserted patent is more valuable than the remainder of the patents in a portfolio merely by filing a section 337 action alleging infringement of that patent." *Navigation Devices*, Comm'n Op. at 6.

relate to licensing, but it may also occur with an eye toward litigation seeking injunctive relief against that company." *Id.* Indeed, the Court of Appeals for the Federal Circuit has held that "expenditures on patent litigation do not automatically constitute evidence of the existence of an industry in the United States established by substantial investment in the exploitation of a patent." *Mezzalingua v. Int'l Trade Comm'n*, 660 F.3d 1322, 1328 (Fed. Cir. 2011). "The fact that litigation adversaries eventually enter into a license agreement does not . . . mean that all of the prior litigation expenses must be attributed to the licensing effort." *Id.* at 1329. Rather, a nexus must be shown between litigation expenses and licensing. *Id.* at 1328.

Nexus to the United States

"The most obvious requirement of section 337(a)(3) is that the investment occur in the United States." *Id.* (citing 19 U.S.C. § 1337(a)(3)). When a complainant's licensing activity is performed and directed within the United States, the facts weighs in favor of a strong nexus between the activities and the United States. *Id.* "The Commission's analysis is a fact-focused and case-specific inquiry that takes into account the extent to which the complainant conducts its licensing operations in the United States, including the employment of U.S. personnel and utilization of U.S. resources in its licensing activities." *Id.* (footnote omitted).

Whether the Investment Is "Substantial"

Once it has been shown that a complainant's investment is in licensing the asserted patent in the United States, the next inquiry is whether the investment is substantial, as that term is used in the statute. *See Id.* As indicated in section I.D. of this Initial Determination, in the general discussion of section 337(a)(3)(c), this inquiry is a

fact-dependent inquiry for which the complainant bears the burden of proof. *Stringed Musical Instruments*, Comm'n Op. at 8.

There is no minimum monetary expenditure that a complainant must demonstrate to qualify as a domestic industry under the "substantial investment" requirement; nor is there a need to define or quantify an industry in absolute mathematical terms. Rather, "the requirement for showing the existence of a domestic industry will depend on the industry in question, and the complainant's relative size. *Id.* at 14. Indeed, as explained in the *Navigation Devices* opinion, the Commission "has adopted a flexible approach whereby a complainant whose showing on one or more of the three section 337(a)(3)(C) requirements is relatively weak may nevertheless establish that its investment is "substantial" by demonstrating that its activities and/or expenses are of a large magnitude." *Navigation Devices*, Comm'n Op. at 7 (footnote omitted). The type of efforts that are considered a "substantial investment" under section 337(a)(3)(C) will vary depending on the nature of the industry and the resources of the complainant." *Id.* 

Thus, the Commission has stated that:

Other factors that might be relevant in determining whether a complainant's investment is substantial are (1) the existence of other types of "exploitation" of the asserted patent such as research, development, or engineering, (2) the existence of license-related ancillary activities such as ensuring compliance with license agreements and providing training or technical support to its licensees, (3) whether complainant's licensing activities are continuing, and (4) whether complainant's licensing activities are those that are referenced favorably in the legislative history of section 337(a)(3)(C). The complainant's return on its licensing investment (or lack thereof) may also be circumstantial evidence of the complainant's investment.

*Id.* at 7.

#### b. Summary of the Arguments of the Parties

Motorola argues that it (and its predecessor) have made, and continue to make, substantial investments in licensing the asserted patents. Motorola argues that it has developed "a robust intellectual property management and licensing business concerning its extensive portfolio of patents." Compls. Br. at 245-46. It is argued that although Motorola has more than 24,000 patents and patent applications worldwide, covering inventions in numerous industries, it traditionally enters into licenses covering [ It is further argued that from 2000 through February 2011, Motorola has received approximately [ I in licensing revenue, and that cumulative royalties under licenses involving the asserted patents range from [ ] to [ Motorola argues that its licensing group directly employs [ ] people, [ ] of whom are located in the Untied States; and that in 2010, the combined salaries of [ ] people employed in the United States, who are involved in patent licensing activities, approximated [ lt is argued that [ have also been spent in litigation and negotiations that have expanded Motorola's licensing. Id. at 244-50; Compls. Reply at 93-95. Further, it is argued that the evidence shows that Motorola's investments have the required nexus to licensing, the required nexus to the patents, and are substantial, in satisfaction of the domestic industry requirement. Compls. Br. at 250-

Microsoft argues that Motorola's licensing activities fail to establish a domestic industry. It is argued that few of Motorola's licenses identify specific patents, and fewer identify the asserted patents. Further, it is argued that Motorola has made no effort to allocate revenues and costs to specific asserted patents. Indeed, it is argued that most of

55.

the licenses relied upon by Motorola were signed before 2007, while the alleged investment information is from a period of time after 2007. Microsoft argues that while Motorola's expenditures may be substantial in an absolute sense, they are not significant when viewed in terms of the asserted patents. Resp. Br. at 276-279; Resp. Reply at 94-96. Indeed, Microsoft argues, Motorola's evidence fails to show that the asserted patents were sufficiently important to Motorola's licensing activities, and fails to show that Motorola's litigation activity constitutes a domestic industry. Resp. Br. at 276-281.

#### c. Analysis and Conclusion on Licensing

An examination of the required nexus to the asserted patent, the nexus to licensing, and the and nexus to the United States must precede an evaluation of whether Motorola's investments are "substantial." *See Navigation Devices*, Comm'n Op. at 4.

Nexus to the Patents

Motorola has shown that there is a nexus between its licensing investments and each of the asserted patents.

Although not specifically called out in each license agreement, the '712 patent has been licensed at least [ ] times since 2000. CX-544C. Motorola's licensing activities with respect to the '712 patent are currently ongoing. Motorola recently concluded a license with [ ] that expressly includes the '712 patent. CX-778C (Dailey RWS) at and 23; CX-782C at 29. [

]. CX-789C. Other licensing discussions involving the '712 patent are taking place with [ ] and [ ]. CX-715C (Dailey WS) at 17-19, 21; CX-714C (Leonard WS) at 15-16.

The importance of the '712 patent is further demonstrated by the fact that it has been incorporated into many wireless communication protocols. It is and/or has been declared essential to at least the 3G, 3GPP LTE, UMTS, 802.16 WiMax Profile Annex and WLAN 802.11 standards. CX-586C; CX-715C (Dailey WS) at 19; CX-714C (Leonard WS) at 11. The '712 patent is one of relative few patents that [

# ] CX-715C (Dailey WS) at 22.

Motorola also has identified the '571 and '896 patents as essential to the 802.11 standard. CX-715C (Dailey WS) at 19; CX-714C (Leonard WS) at 11. Both of these patents are also among the relatively few that Motorola [

CX-715C (Dailey WS) at 22. The technology in the '896 patent was also incorporated into the widely-used Bluetooth wireless protocol. CX-712C (Madisetti) 3-4; Leeper Tr. 138-139. The '571 and '896 patents have been licensed approximately [ ] times each as part of Motorola's 802.11-essential patent portfolio. CX-714C (Leonard WS) at 13-14. In fact, [ ] of Motorola's executed license agreements and license negotiations since 2007 have included the '571 and '896 patents as essential patents in the 802.11 portfolio. Dailey Tr. 2570.

Motorola is currently in negotiations with handset makers [ ], and [ ] regarding a license to the '571 and '896 patents. CX-715C (Dailey WS) at 17-19, 21; CX-714C (Leonard WS) at 15-16. [

]. CX-789C. [ ] also

obtained a license in [ ] to Motorola's 802.11 patents (expressly including the '571 and

'896 patents), stating it intended to create 802.11-compliant [ ]. Dailey Tr.
65-67; CX-782C at 30. [ ] currently is making other 802.11-compliant products,
including a [ ]. See, e.g., CX-844; Dailey Tr. 2589. 106
Motorola has declared and licensed the '596 and '094 patents as essential to the
H.264 video coding standard. CX-715C (Dailey WS) 19; CX-714C (Leonard WS) 11.
Both of these patents are among the relative few that Motorola [
] CX-715C (Dailey WS) at
22. The '596 and '094 patents have been licensed approximately [ ] times each. CX-
544C. [ ] of Motorola's executed license agreements and license
negotiations since 2007 have involved the '596 and '094 patents as part of the H.264 and
video coding patent portfolios, including agreements reached with major handset
manufacturers such as [ ] and [ ]. See Dailey Tr. 62, 2570. Motorola is currently in
negotiations with handset makers [ ], and [ ] regarding a license to
the '596 and '094 patents. CX-715C (Dailey WS) at 17-19, 21. Furthermore, [
licensing request and subsequent agreement explicitly referenced Motorola's H.264
patents (including the '596 and '094 patents) for use in future products. Dailey Tr. 65-
67; CX-782C at 22.

Nexus to Licensing

The investments relied upon by Motorola overwhelmingly pertain to licensing.

There is little dispute as to that fact. Motorola does, however, include litigation within its licensing argument. Specifically, Motorola references litigation against RIM and Apple

<sup>&</sup>lt;sup>106</sup> This "production-driven" licensing activity connected with the [ ] agreement is precisely the type that Congress intended to encourage. *See Navigation Devices*, Comm'n Op. at 12.

in litigation, and in particular the fact that the RIM litigation led to a license of Motorola's entire [ ]. Compls. Br. at 251. Motorola has not, however, made a connection between specific litigation expenses and licensing. Rather, it appears that the license in question may have arisen simply as an outcome of litigation. See Mezzalingua, 660 F.3d at 1328-29.

Nexus to the United States

It has not been disputed that Motorola's licensing investments have been made almost entirely in the United States. The record evidence supports such a nexus. *See*, *e.g.*, CX-715C (Dailey WS) at 9-10; CX-542; CX-555C; CX-714C (Leonard WS) 6-8.

Whether the Investments Are Substantial

Motorola argues that "the magnitude of its licensing investments is sufficiently large as to overcome any possible concerns about the strength of the nexus." Compls. Br. at 253 (relying on *Navigation Devices*). While the legal principle cited by Motorola is correct, *see Navigation Devices*, Comm'n Op. at 7, as indicated above, the evidence also shows a strong nexus between Motorola licenses and the asserted patents. Although the asserted patents are only five of many patents owned and licensed by Motorola, they play an important part in Motorola's licensing business. In any event, Motorola's investments in licensing are quite large. The investments are so large, that even when one considers only investments made since 2007, as argued by respondent, the evidence shows that the investments are substantial.

As argued by Motorola, its licensing group currently employs [ ] people, [ ] of whom are located in the United States. CX-715C (Dailey WS) at 9; CX-555C; CX-714C (Leonard WS) 6-7. When one includes employees in other Motorola departments (such

as the legal department) who perform at leas	t some activities in support of licensing, the
total is [ ] employees, who earned [	] in salary in 2010. <sup>107</sup> CX-685C; CX-
715C (Dailey WS) 9-10; CX-542C; CX-714	C (Leonard WS) at 6-8. The result of
Motorola's licensing investments is [	] every year in royalties paid under
licenses that cover the each of the asserted p	atents, with cumulative royalty revenues in
the decade before the complaint was filed th	at ranged from [ ] (attributed to
the [ ] licenses that cover the '596 and '09	94 patents) to [ ] (attributed to the '712
patent, which is covered by [ ] licenses	relied upon by Motorola's expert). See CX-
682C; CX-683C; CX-715C (Dailey WS) at	12; CX-544C; CX-714C (Leonard WS) at 13-
14.	

Accordingly, it is found that Motorola's investments in licensing are substantial, including the licensing of each asserted patent. Thus, Motorola has satisfied the domestic industry requirement as to each asserted patent by exploiting that patent through licensing.

#### 2. Engineering and R&D

#### a. The Legal Standard Applied to Engineering and R&D

Section 337(a)(3)(C) lists engineering and R&D, along with licensing, as areas in which substantial investment may satisfy the domestic industry requirement. As indicated above in the discussion of licensing, the Commission "has adopted a flexible approach whereby a complainant whose showing on one or more of the three section

<sup>&</sup>lt;sup>107</sup> Notwithstanding the litigation against RIM, at least [ ] Motorola employees were directly or indirectly involved in the negotiations with RIM, which began in mid-2007 and culminated in the aforementioned license agreement. *See* CX-715C (Dailey WS) at 15; CX-714C (Leonard WS) at 20-21.

337(a)(3)(C) requirements is relatively weak may nevertheless establish that its investment is 'substantial' by demonstrating that its activities and/or expenses are of a large magnitude." *Navigation Devices*, Comm'n Op. at 7 (footnote omitted). "The type of efforts that are considered a 'substantial investment' under section 337(a)(3)(C) will vary depending on the nature of the industry and the resources of the complainant." *Id*.

For example, in some cases, the Commission has considered work performed by contractors when assessing the strength of a complainant's case. *See Certain GPS Chips, Associated Software and Systems, and Products Containing Same*, Inv. No. 337-TA-596, Order No. 37 (Initial Determination), 2008 WL 838257, at 2 (Feb. 27, 2008) (and cases cited therein) (recognizing work performed by contractors as sufficient to support a domestic industry), Notice of Comm'n Decision Not to Review (Mar. 20, 2008). In other circumstances, the Commission has found that domestic R&D expenditures directed to products that incorporate the patented technologies at issue are sufficient to satisfy the economic prong of the domestic industry requirement under 337(a)(3)(C). *See, e.g., Certain NOR and NAND Flash Memory Devices and Products Containing Same*, Inv. No. 337-TA-560, Order No. 37 at 6 (Nov. 17, 2006), Notice of Comm'n Decision Not to Review (Dec. 8, 2006).

#### b. Summary of the Arguments of the Parties

Motorola argues that it "commits substantial resources to engineering and [R&D] efforts to create new products and improve current products that practice the Asserted Patents." Compls. Br. at 255. It is argued that "Motorola's substantial investment in product-specific engineering and R&D related to its Droid 2 and Droid X products in the United States satisfies the economic prong of the domestic industry products with regard

to the '712, '571, and '896 patents." *Id.* at 256. With respect to the '596 and '094 patents, Motorola relies on R&D related to VIP12XX series set-top boxes. *Id.* at 260; Compls. Reply at 96.

Microsoft argues that Motorola cannot establish that a domestic industry exists based on non-licensing activities. Resp. Br. at 281 (combining all non-licensing arguments in one section). It is argued that Motorola failed to allocate its activities and expenditures properly to the specific products alleged to practice the asserted patents, and failed to show substantial non-licensing investment in the exploitation of the patents under section 337(a)(3)(C). *Id.* at 282; Resp. Reply at 96-97.

#### c. Analysis and Conclusions on Engineering and R&D

Engineering and R&D Related to Droid X and Droid 2 Products

The initial step in the manufacturing process of the Droid X and Droid 2 is the

[	]. Although some		] are made in [	], a
significant proporti	on of [	] prototypes are	developed and ma	ade in the
United States durin	g the R&D stage, in Mot	torola's facilities in		]. CX-
716C (Deardorff W	VS) at 5; CX-714C (Leon	ard WS) 24. Motor	rola has incurred	
equipment and mat	erials costs (excluding po	ersonnel costs) of [	] associ	iated with
the domestic devel	opment of [	] for its		
Droid 2 and Droid	X products. CX-716C (l	Deardorff WS) at 5;	, CX-690C at 1, 3	-5; CX-
714C (Leonard WS	S) at 24.			

Additionally, Motorola conducts the majority of its product-specific R&D for the Droid X and Droid 2 in the United States. For example, from 2009 through February 2011, U.S. employees accounted for [ ] of the total time spent on R&D related to

these products. CX-716C (Deardorff WS) at 4; CPX-19C; CX-549C; CX-714C (Leonard WS) 27-28. During that time, Motorola employees worked approximately [ ] hours in the United States on product-specific R&D related to the Droid X and Droid 2 products (without regard to the earlier handsets, which may have provided a foundation for the Droid X and Droid 2 projects). CX-716C (Deardorff WS) at 4; CPX-19C; CX-550C; CX-714C (Leonard WS) 25-26.

In 2010, at least [ ] Motorola employees performed these R&D activities in at least [ ] facilities across the United States, including facilities in [ ]. CX-716C (Deardorff WS) at 3-4; CPX-19C; CX-546C; CX-714C (Leonard WS) 27-29. Motorola spent approximately [ ] on employee expenses for the aforementioned domestic R&D related to the Droid X and Droid 2. CX-716C (Deardorff WS) at 4; CPX-19C; CX-551C; CX-714C (Leonard WS) 25-26.

Post-assembly engineering, programming and testing related to the Droid X and Droid 2 also take place in the United States. While the physical assembly of all Motorola handsets for commercial sale occurs in [ ], the handsets are not usable by carriers and consumers until the post-assembly loading of vendor-specific software and testing has taken place. CX-716C (Deardorff WS) at 6; CX-714C (Leonard WS) 29-30. These post-assembly activities occur for all handsets sold in the United States at a facility owned by a Motorola contractor, [ ], in [ ]. CX-716C (Deardorff WS) at 6; CX-714C (Leonard WS) 29. After software installation, the handsets undergo 30 to 45 minutes of [ ] testing at the [ ] facility. CX-716C (Deardorff WS) at 6. After the software is loaded, and testing is complete, [ ]

packages the handsets individually and distributes them to carriers and consumers from the [ ] facility. CX-716C (Deardorff WS) at 6; CX-714C (Leonard WS) 29.

In 2010, Motorola incurred [ ] in total expenses associated with activities in [ ], including expenses for [ ] Motorola personnel involved in managing and supporting these activities. CX-716C (Deardorff WS) at 6-7; CX-691C at 1-3; CX-553C; CX-714C (Leonard WS) 30, 32. While these expenses relate to production and distribution operations for all handsets sold in the United States over this period, Droid 2 and Droid X collectively account for [ ] of such sales. CX-716C (Deardorff WS) at 7; CX-715C (Dailey WS) 6; CX-553C; CX-714C (Leonard WS) 30, 32. Thus, during this period, Motorola incurred over [ ] in final production, testing, packaging and distribution activities in the U.S. associated with Droid X and Droid 2. *See* CX-716C (Deardorff WS) at 7; CX-553C; CX-714C (Leonard WS) 30.

Furthermore, Motorola invests [ ] in other domestic activities related to engineering for Droid 2 and Droid X, such as post-sale customer service, technical support, and warranty repair services. CX-716C (Deardorff WS) at 7-12; CX-714C (Leonard WS) 32-37. These expenses include costs for Motorola engineers as well as third-party contractors. CX-716C (Deardorff WS) at 10-12; CX-714C (Leonard WS) 35-38. Employees in Motorola's warranty operations and post-sales support departments provide input during the product development process on design features and assembly procedures, and monitor product quality throughout the product's lifecycle to help improve product performance and customer satisfaction. CX-716C (Deardorff WS) at 13; CX-714C (Leonard WS) 40.

Motorola's domestic investments in engineering and R&D related to the Droid 2 and Droid X are substantial, both in terms of the amount of expenditures that Motorola has made, and in terms of the value added, to the amount devices alleged to practice three of the asserted patent. Without Motorola's domestic engineering and R&D, the final manufactured Droid 2 and Droid X products would not function properly. Without the aforementioned investments, if the Droid 2 and Droid X products existed, their existence would have been due to substantial expenditures made overseas rather in the United States. Due to its substantial investment in engineering and R&D, Motorola has satisfied the economic prong of the domestic industry requirement for the '712, '571, and '896 patents.

#### R&D Related to VIP12XX Set-Top Boxes

The current circumstances relevant to Motorola's VIP12XX set-top boxes in many ways stand in contrast to those of the vibrant economic circumstances surrounding the Motorola Droid products, discussed above. Motorola admits in its brief that the VIP12XX set-tops boxes represent a "mature" product line. Compls. Br. at 260 n.118 (quoting Richards Tr. 96, 99). Respondent favors the use of other quotes by Motorola personnel at the hearing to the effect that the VIP12XX is [

] and that there is [ ] with respect to these set-top boxes.

Resp. Br. at 283-84 (quoting Richards Tr. 86, 96).

<sup>&</sup>lt;sup>108</sup> There is no dispute that the VIP12XX set-top boxes are made in [ ]. Richards Tr. 98.

Motorola urges that the Commission to look not only at Motorola's current investments with respect to the VIP12XX, but also to its R&D investments in the past, and to vaguely described "next generation" set-top boxes that "employ the H.264 technology at issue." Motorola conspicuously does not rely on both engineering and R&D, as it does in relation to the Droid products, but rather expressly relies only on R&D.<sup>109</sup> Motorola Br. at 261-62. Yet, Motorola reaches back as far as 2005 to gather together expenditures in support of its arguments, without explaining why there should be an economic continuity between R&D that may have taken place seven years ago and a product that is nearing its end. Motorola also fails to explain the connection of the current VIP12XX set-top boxes to next generation products. In its post-hearing brief, Motorola provides no technical argument relating to next generation products; and based on the vague description of such products, it appears that respondent correctly argues that next generation products were excluded from Motorola's pre-hearing brief. Consequently, the question presented is not whether an industry relating to the VIP12XX set-top boxes is in decline, or whether an industry is in the making with respect to a new generation of set-top boxes. Rather, the question is whether there still is a domestic industry based on R&D relating to the products relied upon by Motorola, which are the VIP12XX set-top boxes.

The evidence reveals that little, if any, R&D (or any other type of engineering) is taking place in the United States with respect to the VI12XX set-top boxes. It is hard to discern any R&D expenditures that are currently taking place, or that took place

<sup>&</sup>lt;sup>109</sup> In particular, Mr. Richards, Motorola's economic witness on the '094 and '596 patents testified that in his analysis, he did not rely on repairs. *See* Richards Tr. 78.

Accordingly, it has not been shown that, based on investments in R&D, the economic prong of the domestic industry requirement is satisfied with respect to the '596 and '094 patents.

# B. Section 337(a)(3)(A) and (B)

# 1. The Legal Standard Applied to section 337(a)(3)(A) and (B)

As indicated in section I.D. of this Initial Determination, to determine whether a complainant's investments are "significant" under section 337(a)(3)(A) and (B), the Commission examines the facts in each investigation, the article of commerce, and the realities of the marketplace, as well as the nature of the investment and/or employment activities in the industry in question, and the complainant's relative size. *Printing and Imaging Devices*, Comm'n Op. at 27.

In determining whether a complainant's activities are significant with respect to the articles protected by the intellectual property right concerned, the Commission has considered, among other things, the value added to the article in the United States by the domestic activities; the relative domestic contribution to the protected article by comparing complainant's product-related domestic activities to its product-related foreign

activities; and the nature of complainant's activities to determine whether they are directed to the practice of one or more claims of the asserted patent. *Id.* at 27-28.

#### 2. Summary of the Arguments of the Parties

Motorola devotes only two paragraphs of its main brief to the question of whether it has satisfied the requirements of section 337(a)(3)(A) and (B) as to each asserted patents, and relies primarily on the showings it made relative to section 337(a)(3)(C). Motorola argues that its "aforementioned activities, in combination with other evidence introduced by Motorola, also show that Motorola satisfies the economic domestic industry requirement for each of the Asserted Patents under prongs (A) and (B). Motorola's domestic activities constitute significant investments in plant and equipment and significant employment of labor and capital relating to the Droid 2, Droid X, and VIP12XX products that are protected by the asserted patents." Compls. Br. at 261-62 (citing CX-716C (Deardorff WS) at 7-14; CX-717C (Richards WS) at 3-6; and CX-714C (Leonard WS) 28-29, 44-46)). It is argued that "[t]he sophisticated domestic activities undertaken by Motorola employees and contractors add significant value to Droid 2, Droid X, and VIP12XX products as compared to the assembly work done overseas concerning those products, e.g., developing and designing the products, rendering the products operational by loading and testing software, as well as other high-value activities." Id. Motorola provides few specific arguments in its reply. See Compls. Reply at 96-97.

Microsoft argues that Motorola failed to establish a domestic industry based on non-licensing activities. Although Microsoft combines a discussion of section 337(a)(3)(A) and (B) with non-licensing activities under section 337(a)(3)(C), with

respect to the former statutory provisions, Microsoft clearly faults Motorola's reliance on the VP 12XX set-top boxes because those products are at their end of life cycle, and few employees work with the products in the United States; and Microsoft faults Motorola for failing to correlate the employees and facilities specifically to the Droid X and Droid 2 products. Resp. Br. at 281-285. Microsoft objects to any reliance by Motorola on "next generation" set-top boxes or repair services (discussed above with respect to engineering and R&D), arguing that such products were raised only after pre-hearing briefs were filed. Resp. Reply at 96-97.

# 3. Analysis and Conclusion under section 337(a)(3)(A) and (B)

Motorola has not focused its arguments under section 337(a)(3)(C) to show with specificity how large an investment it has made in plant and equipment, or provided details about the employment of labor or capital. <sup>110</sup> Moreover, Motorola's briefing does not show how economic evidence presented in the context of section 337(a)(3)(C) translates to the requirements of section 337(a)(3)(A) or (B), or how the evidence breaks down by patent.

Accordingly, it has not been shown by a preponderance of the evidence that the economic prong of the domestic industry requirement, as set forth in section 337(a)(3)(A) or (B), is satisfied.

In response to Microsoft's brief, Motorola admits that most of the VIP12XX set-top boxes are shipped directly from [ ] to customers in the United States, such as AT&T, while others are shipped through a facility in [ ]. Yet, Motorola erroneously argues that this disparity between foreign and domestic operations is of little importance, and does not provide details about the [ ] facility. See Compls. Reply at 96.

## C. Conclusions on Domestic Industry

Accordingly, for the reasons set forth above, the following domestic industry findings are made.

With respect to the '896 patent, it has been shown that a domestic industry exists under section 337(a)(3)(C) based on licensing, and based on engineering and R&D. The technical prong of the domestic industry requirement has been satisfied, but it has not been shown that the economic prong has been satisfied with respect to section 337(a)(3)(A) or (B).

With respect to the '094 patent, it has been shown that a domestic industry exists under section 337(a)(3)(C) based on licensing, but not based on R&D. The technical prong of the domestic industry requirement has been satisfied, but it has not been shown that the economic prong has been satisfied with respect to section 337(a)(3)(A) or (B).

With respect to the '596 patent, it has been shown that a domestic industry exists under section 337(a)(3)(C) based on licensing, but not based on R&D. The technical prong of the domestic industry requirement has been satisfied, but it has not been shown that the economic prong has been satisfied with respect to section 337(a)(3)(A) or (B).

With respect to the '571 patent, it has been shown that a domestic industry exists under section 337(a)(3)(C) based on licensing, and based on engineering & R&D. The technical prong of the domestic industry requirement has been satisfied, but it has not been shown that the economic prong has been satisfied with respect to section 337(a)(3)(A) or (B).

With respect to the '712 patent, it has been shown that a domestic industry exists under section 337(a)(3)(C) based on licensing, and engineering and R&D. The technical

prong of the domestic industry requirement has not been satisfied, and it has not been shown that the economic prong has been satisfied with respect to section 337(a)(3)(A) or (B).

#### XII. Conclusions of Law

- 1. The Commission has subject matter, personal, and *in rem* jurisdiction in this investigation.
  - 2. The importation requirement is satisfied.
- 3. Respondent's accused products infringe asserted claims 1 and 12 of the '896 patent.
- 4. Respondent's accused products infringe asserted claims 7, 8, and 10 of the '094 patent.
- 5. Respondent's accused products infringe asserted claims 1 and 2 of the '596 patent.
- 6. Respondent's accused products infringe asserted claims 12 and 13 of the '571 patent.
- 7. Respondent's accused products do not infringe asserted claims 6, 8, and 17 of the '712 patent.
- 8. It has not been shown by clear and convincing evidence that any asserted claim of the '896, '094, '571, or the '712 patents is invalid.
- 9. It has been shown by clear and convincing evidence that asserted claim 1 of the '596 patent is invalid as anticipated. It has not been shown by clear and convincing evidence that asserted claim 2 is invalid as anticipated.

- 10. The domestic industry requirement is satisfied with respect to all asserted patents.
  - 11. Respondent has not prevailed on any equitable or RAND defense.

#### XIII. Initial Determination and Order

Accordingly, it is the INITIAL DETERMINATION of the undersigned that a violation of section 337 (19 U.S.C. § 1337) has occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain gaming and entertainment consoles, related software, and components thereof, with respect to asserted claims 1 and 12 of U.S. Patent No. 6,069,896; asserted claims 7, 8, and 10 of U.S. Patent No. 7,162,094; claim 2 of U.S. Patent No. 6,980,596; and asserted claims 12 and 13 of U.S. Patent No. 5,357,571. A violation of section 337 has not occurred with respect to asserted claim 1 of U.S. Patent No. 6,980,596, or asserted claims 6, 8, or 17 of U.S. Patent No. 5,319,712.

Further, this Initial Determination, together with the record of the hearing in this investigation consisting of (1) the transcript of the hearing, with appropriate corrections as may hereafter be ordered, and (2) the exhibits received into evidence in this investigation, is CERTIFIED to the Commission.

In accordance with 19 C.F.R. § 210.39(c), all material found to be confidential by the undersigned under 19 C.F.R. § 210.5 is to be given *in camera* treatment.

The Secretary shall serve a public version of this ID upon all parties of record and the confidential version upon counsel who are signatories to the Protective Order, as amended, issued in this investigation.

To expedite service of the public version, each party is hereby ORDERED to file

with the Commission Secretary by no later than May 7, 2012, a copy of this Initial

Determination with brackets that show any portion considered by the party (or its

suppliers of information) to be confidential, accompanied by a list indicating each page

on which such a bracket is to be found. At least one copy of such a filing shall be served

upon the office of the undersigned, and the brackets shall be marked in red. If a party

(and its suppliers of information) considers nothing in the Initial Determination to be

confidential, and thus makes no request that any portion be redacted from the public

version, then a statement to that effect shall be filed.

Pursuant to 19 C.F.R. § 210.42(h), this Initial Determination shall become the

determination of the Commission unless a party files a petition for review pursuant to

§ 210.43(a) or the Commission, pursuant to § 210.44, orders on its own motion a review

of the ID or certain issues herein.

David P. Shaw

Administrative Law Judge

Issued: April 23, 2012

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# CERTAIN GAMING AND ENTERTAINMENT CONSOLES, RELATED SOFTWARE, AND COMPONENTS THEREOF 337-TA-752

# PUBLIC CERTIFICATE OF SERVICE

VIOLATION has been served upon the	ne following parties as indicate	cated, on	
May 11, 2012			
	1	3	
	111-		
	Lisa R. Barton, Acti	ng Secretary	
	U.S. International Trade Commission 500 E Street SW, Room 112A		
	Washington, D.C. 20436		
	MA MODILITY INC		
FOR COMPLAINANT MOTORO	CODDODATION.		
AND GENERAL INSTRUMENT	CURPURATION:		
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Stephen J. Rosenman, Esq.		( ) Via Hand Denvery (X) Via Overnight Mail	
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One Metro Center		( ) Other:	
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Washington, D.C. 20005			
FOR RESPONDENT MICROSO	FT CORPORATION:		
		( ) Via Hand Delivery	
Brian R. Nester, Esq.		() Via Hand Benvery (X) Via Overnight Mail	
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# CERTAIN GAMING AND ENTERTAINMENT CONSOLES, RELATED SOFTWARE, AND COMPONENTS THEREOF 337-TA-752

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