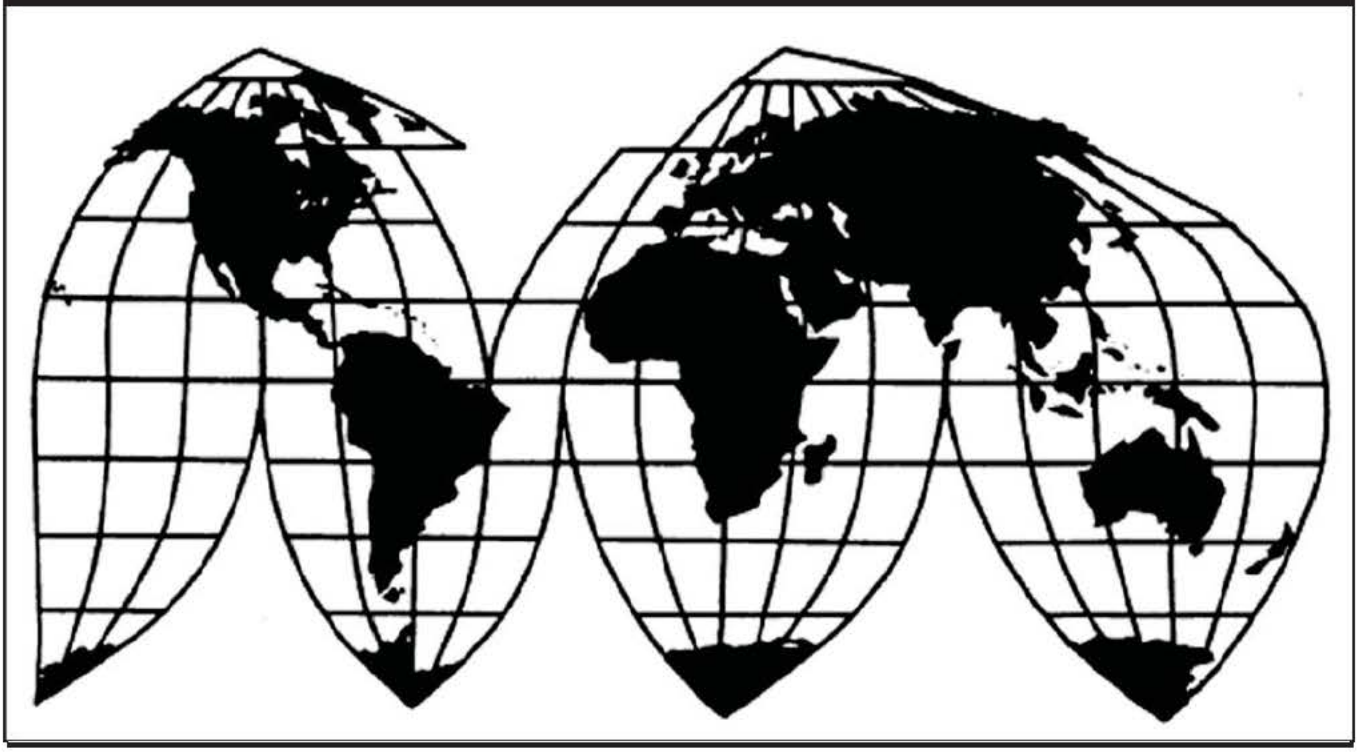
In the Matter of

CERTAIN VIDEO GAME SYSTEMS AND CONTROLLERS

Investigation No. 337-TA-743

Publication 4377 **February 2013**

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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U.S. International Trade Commission

Washington, DC 20436
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In the Matter of

CERTAIN VIDEO GAME SYSTEMS AND CONTROLLERS

Investigation No. 337-TA-743

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UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.

In the Matter of **CERTAIN VIDEO GAME SYSTEMS AND CONTROLLERS**	**Inv. No. 337-TA-743**

NOTICE OF FINAL COMMISSION DETERMINATION TO REVIEW-IN-PART AND AFFIRM THE FINAL INITIAL DETERMINATION OF NO VIOLATION; TERMINATION OF THE INVESTIGATION

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has determined to review-in-part and affirm the final initial determination of the administrative law judge that no violation of section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337), has been shown in the above-captioned investigation. The investigation is terminated.

FOR FURTHER INFORMATION: Clark S. Cheney, Office of the General Counsel, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone 202-205-2661. Copies of non-confidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone 202-205-2000. General information concerning the Commission may also be obtained by accessing its Internet server (*http://www.usitc.gov*). The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at *http://edis.usitc.gov*. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202-205-1810.

SUPPLEMENTARY INFORMATION: The Commission instituted this investigation on November 5, 2010, based on a complaint filed by Motiva, LLC of Dublin, Ohio ("Motiva"). 75 *Fed. Reg.* 68379 (Nov. 5, 2010). The complaint alleged violations of section 337 in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain video game systems and controllers by reason of infringement of claims 16, 27-32, 44, 57, 68, 81, and 84 of U.S. Patent No. 7,292,151 and claims 1-6 and 8-15 of U.S. Patent No. 7,492,268. The complaint named Nintendo Co., Ltd. of Kyoto, Japan and

Nintendo of America, Inc. of Redmond, Washington (collectively, "Nintendo") as the only respondents.

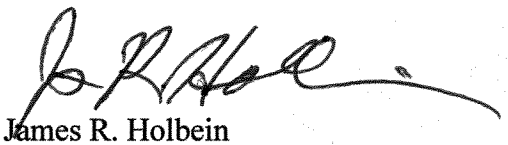
On November 2, 2011, the administrative law judge ("ALJ") issued his final initial determination ("ID") in this investigation finding no violation of section 337. Specifically, the ALJ found that the accused products do not infringe the asserted patents. The ALJ also determined that Motiva had not proven that a domestic industry exists or is in the process of being established with respect to the two asserted patents.

On November 15, 2011, complainant Motiva and the Commission investigative attorney ("IA") filed petitions for review of portions of the ID. On November 23, 2011, respondent Nintendo filed a response to both petitions and the IA filed a response to Motiva's petition.

Having examined the record of this investigation, including the ALJ's final ID and the parties' submissions, the Commission has determined to deny the petitions for review. The Commission has further determined to review two issues in the ID on its own initiative: (1) a statement in the ID connecting the relevant level of skill in the art to the skill of the inventors, and (2) the relevant time frame for considering whether a domestic industry exists or is in the process of being established. Upon review, the Commission has issued an opinion relating to those two issues. The Commission has determined not to review the remainder of the ID, thus affirming the ALJ's determination of no violation of section 337. The investigation is terminated.

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337), and in Part 210 of the Commission's Rules of Practice and Procedure (19 C.F.R. Part 210).

By order of the Commission.



James R. Holbein
Secretary to the Commission

Issued: January 5, 2012

CERTAIN VIDEO GAME SYSTEMS AND CONTROLLERS 337-TA-743

CERTIFICATE OF SERVICE

I, James R. Holbein, hereby certify that the attached **NOTICE** has been served by hand upon the Commission Investigative Attorney, David O. Lloyd, Esq., and the following parties as indicated, on **January 5, 2012**

James R. Holbein, Secretary
U.S. International Trade Commission
500 E Street, SW
Washington, DC 20436

On Behalf of Complainant Motiva, LLC:

Christopher D. Banys, Esq.
THE LANIER LAW FIRM, P.C.
2200 Geng Road, Suite 200
Palo Alto, CA 94303

( ) Via Hand Delivery
(X) Via Overnight Mail
( ) Via First Class Mail
( ) Other: _____

On Behalf of Respondents Nintendo of America, Inc. and Nintendo Co., Ltd.:

Steven E. Adkins, Esq.
ORRICK, HERRINGTON & SUTCLIFFE, LLP
1152 15th Street, NW
Washington, DC 20005

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UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.

In the Matter of **CERTAIN VIDEO GAME SYSTEMS AND CONTROLLERS**	**Investigation No. 337-TA-743**

ORDER

The Commission instituted this investigation on November 5, 2010, based on a complaint filed by Motiva, LLC of Dublin, Ohio ("Motiva"). 75 *Fed. Reg.* 68379 (Nov. 5, 2010). The complaint alleged violations of section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337) in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain video game systems and controllers by reason of infringement of two United States Patents. The complaint named Nintendo Co., Ltd. and Nintendo of America Inc. (collectively, "Nintendo") as the only respondents.

On January 6, 2011, Nintendo filed a motion for summary determination that the economic prong of the domestic industry is not satisfied. On February 11, 2011, the presiding ALJ issued the subject ID granting Nintendo's motion for summary determination and terminating the investigation. On March 1, 2011, Motiva and the Commission investigative attorney each filed a petition for review of the ALJ's summary ID. On March 8, 2011, Nintendo opposed both petitions for review.

Having reviewed the summary ID and the submissions by the parties, the Commission has determined to grant the petitions for review and vacate the grant of summary determination in the subject ID with respect to the economic prong of the domestic industry requirement. The

Commission has determined to remand the investigation to the ALJ for further proceedings.

Accordingly, the Commission hereby **ORDERS** that:

1. Motiva's petition for review is GRANTED.

2. The Commission investigative attorney's petition for review is GRANTED.

3. The summary ID is VACATED.

4. The investigation is remanded to the ALJ to conduct proceedings consistent with a Commission's opinion, which will issue shortly.

5. The Secretary shall serve copies of this Order upon each party of record in this investigation.

By order of the Commission.

James R. Holbein
Acting Secretary to the Commission

Issued:

CERTAIN VIDEO GAME SYSTEMS AND CONTROLLERS 337-TA-743

CERTIFICATE OF SERVICE

I, James R. Holbein, hereby certify that the attached **COMMISSION ORDER** has been served by hand upon the Commission Investigative Attorney, David O. Lloyd, Esq., and the following parties as indicated, on March 31, 2011.

James R. Holbein, Acting Secretary
U.S. International Trade Commission
500 E Street, SW
Washington, DC 20436

On Behalf of Complainant Motiva, LLC:

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On Behalf of Respondents Nintendo of America, Inc. and Nintendo Co., Ltd.:

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PUBLIC VERSION

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

In the Matter of **CERTAIN VIDEO GAME SYSTEMS AND CONTROLLERS**	**Inv. No. 337-TA-743**

COMMISSION OPINION

The Commission instituted this investigation on November 5, 2010, based on a complaint filed by Motiva, LLC of Dublin, Ohio ("Motiva"). 75 *Fed. Reg.* 68379 (Nov. 5, 2010). The complaint alleges violations of section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337), in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain video game systems and controllers by reason of infringement of claims 16, 27-32, 44, 57, 68, 81, and 84 of U.S. Patent No. 7,292,151 and claims 1-6 and 8-15 of U.S. Patent No. 7,492,268. The complaint named Nintendo Co., Ltd. of Kyoto, Japan and Nintendo of America, Inc. of Redmond, Washington (collectively, "Nintendo") as the only proposed respondents.

On November 2, 2011, the presiding administrative law judge ("ALJ") issued a final initial determination ("ID") in this investigation finding no violation of section 337. Specifically, the ALJ determined that the accused products, which are the Nintendo Wii video game system and associated video game controllers, do not infringe the asserted patents. The ALJ further found that Motiva had not proven that a domestic industry exists or is in the process of being established with respect to the two asserted patents.

On November 15, 2011, complainant Motiva and the Commission investigative attorney ("IA") filed petitions for review of the ID. Motiva challenges the ALJ's determinations that no domestic industry is in the process of being established and that the Nintendo Wii does not infringe the asserted patents. The IA challenges the ALJ's conclusion that Motiva was not in the process of establishing a domestic industry. Nintendo does not petition for review of the ID.

I. ANALYSIS

The Commission will grant a petition for review, in whole or in part, where it appears:

(i) that a finding or conclusion of material fact is clearly erroneous;

(ii) that a legal conclusion is erroneous, without governing precedent, rule or law, or constitutes an abuse of discretion; or

(iii) that the determination is one affecting Commission policy.

19 C.F.R. §§ 210.43(b)(1) & (d)(2).

The Commission has determined that the petitions for review filed by Motiva and the IA do not demonstrate that the ID contains clearly erroneous findings or conclusions, that the ID is without governing precedent, rule, or law, or constitutes an abuse of discretion, or that the ID raises significant policy issues that warrant review. Accordingly, the Commission has determined to deny the petitions for review.

The Commission has, however, determined to review certain portions of the ID on its own initiative (*see* 19 C.F.R. § 210.44) to address two issues not raised by the parties: (1) a statement in the ID connecting the relevant level of skill in the art to the skill of the inventors, and (2) the relevant time frame for considering whether a domestic industry exists or is in the process of being established. Upon review, the Commission provides this opinion relating to those two issues. The Commission's opinion does not alter the ALJ's conclusion that Motiva has

not proven a violation of section 337, and the Commission declines to review the portions of the ID not discussed in this opinion.

A. The Relevant Level of Skill in the Art

The first point we address arises in the ALJ's analysis of the validity of the asserted patent claims. Nintendo argued at the hearing that the claimed inventions are obvious in view of certain prior art and therefore the asserted patent claims are invalid. When considering Nintendo's obviousness argument, the ALJ evaluated what experience one of ordinary skill in the art would have had at the time of the relevant inventions. Nintendo's expert Dr. Colgate testified that he believed such an artisan would have at least a master's degree in engineering and, additionally, five years of relevant experience in a number of highly specialized subjects. *See* ID at 56. The ALJ noted that Dr. Colgate's standard would exclude both of the named inventors:

> In fact, neither Mr. Ferguson nor Mr. Gronachan would have qualified as one of ordinary skill in the art under Dr. Colgate's definition. (*See* CX-5065C at Q. 7; CX-5066C at Q. 9.) I find that a definition of one of ordinary skill in the art that excludes both inventors cannot be correct.

ID at 57. The ALJ ultimately concluded a person of ordinary skill in the art at the time of the inventions would have a bachelor's degree in computer science or electrical/computer engineering and 3 to 5 years of work experience in the fields of application of sensors and embedded computing systems to motion tracking. ID at 56.

Upon review of the ALJ's analysis, we note that a patent claim is invalid for obviousness if the differences between the subject matter of the claim and the prior art would have been obvious to a person of ordinary skill in the art at the time the invention was made. 35 U.S.C. § 103(a). "Obviousness is a question of law based on underlying questions of fact." *Scanner Techs. Corp. v. ICOS Vision Sys. Corp.*, 528 F.3d 1365, 1379 (Fed. Cir. 2008). The underlying

factual determinations include: "(1) the scope and content of the prior art, (2) the level of ordinary skill in the art, (3) the differences between the claimed invention and the prior art, and (4) objective indicia of non-obviousness." *Id.* (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966)).

We find no error in the ALJ's conclusion that a person of ordinary skill in the art at the time of the relevant inventions would have had a bachelor's degree in computer science or electrical/computer engineering and 3 to 5 years of work experience in the fields of application of sensors and embedded computing systems to motion tracking. However, we do not adopt the ALJ's statement connecting the relevant level of skill in the art to skill of the inventors. As the Federal Circuit has stated, "It is only that hypothetical person who is presumed to be aware of all the pertinent prior art. The actual inventor's skill is irrelevant to the inquiry." *Standard Oil Co. v. American Cyanamid Co.*, 774 F.2d 448, 454 (Fed. Cir. 1985). Accordingly, we vacate the ALJ's conclusion that "a definition of one of ordinary skill in the art that excludes both inventors cannot be correct." We decline to review the remainder of the ALJ's validity analysis.

B. The Relevant Timeframe for Evaluating Whether a Domestic Industry Exists or Is in the Process of Being Established

The second point we address concerns the relevant time for evaluating the existence or establishment of a domestic industry.[1] The ID states that the "date for determining whether a domestic industry exists is the filing date of the complaint." ID at 163 (quoting *Certain CD-ROM Controllers and Products Containing Same – II*, Inv. No. 337-TA-409, Comm'n Op. at 37 (Oct. 18, 1999)). The ID also considers the complainant's activities and investments at the time of filing of the complaint in evaluating whether an industry is in the process of being established.

[1] Relief under section 337(a)(1)(B) is available "only if an industry in the United States, relating to the articles protected by the patent . . . concerned, exists or is in the process of being established." 19 U.S.C. § 1337(a)(2).

ID at 170-75. In the context of this investigation, we find no error in the ALJ's analysis. *See Certain Stringed Musical Instruments & Components Thereof*, Inv. No. 337-TA-586, Comm'n Op. at 12-29 (May 16, 2008). *See also Certain Coaxial Cable Connectors, Components Thereof, and Products Containing Same*, Inv. No. 337-TA-650, Comm'n Op. at 51 n.17 (Apr. 14, 2010).

The Commission has held that the appropriate date for determining whether a domestic industry exists or is in the process of being established is the date of filing of the complaint. *See Coaxial Cable Connectors,* Inv. No. 337-TA-650, Comm'n Op. at 51 n.17 ("We note that only activities that occurred before the filing of a complaint with the Commission are relevant to whether a domestic industry exists or is in the process of being established under sections 337(a)(2)-(3)."). In a limited number of investigations, the Commission has evaluated whether a domestic industry exists based on evidence subsequent to the filing of the complaint, for example when a significant and unusual development has occurred after the complaint has been filed. *See, e.g., Certain Semiconductor Integrated Circuits and Products Containing the Same*, Inv. No. 337-TA-665, ID at 229-30 (Oct. 19, 2009) (examining a complainant's domestic industry where the complainant filed for bankruptcy after filing a complaint with the Commission) (unreviewed in relevant part); *Certain Variable Speed Wind Turbines and Components Thereof*, Inv. No. 337-TA-376, USITC Pub. No. 3003, Comm'n Op. at 22-26 (Nov. 1996) (same); *Certain Laser Imageable Lithographic Printing Plates*, Inv. No. 337-TA-636, ID at 93-94 (July 24, 2009) (examining technical evidence prepared after the filing of the complaint when evaluating domestic industry) (unreviewed in relevant part). Therefore, as a general matter, the only activities that are relevant to the determination of whether a domestic industry exists or is in the process of being established are those that occurred before the complaint was filed. *See Coaxial Cable Connectors,* Inv. No. 337-TA-650, Comm'n Op. at 51 n.17. However, in appropriate

situations based on the specific facts and circumstances of an investigation, the Commission may consider activities and investments beyond the filing of the complaint. *See Certain Electronic Devices, Including Mobile Phones, Portable Music Players, and Computers*, Inv. No. 337-TA-701, Order No. 58, at 6 (Nov. 18, 2010) (unreviewed) ("the International Trade Commission typically looks to the time a complaint is filed, but there have been a number of instances when it has been acceptable to look later in the investigation, either because of the development of new, relevant and timely disclosed evidence or because there is evidence that a complainant's domestic industry is dwindling."); *Certain Electronic Imaging Devices*, Inv. No. 337-TA-726, Order No. 18 (Feb. 7, 2011) (unreviewed) ("The Commission . . . has examined the existence of a domestic industry at various points in the investigation timeline, depending on the circumstances of the case."). Having clarified this point, the Commission declines to review the remainder of the ALJ's analysis of whether a domestic industry exists or is in the process of being established.

II. CONCLUSION

The Commission has determined to review the ID only with respect to the two issues noted above, and upon review the Commission has provided the clarification herein. The ALJ's conclusion that Motiva has not proven a violation of section 337 is correct and is the Commission's final determination. The investigation is terminated.

By order of the Commission.

James R. Holbein
Secretary to the Commission

Issued: January 20, 2012

CERTAIN VIDEO GAME SYSTEMS AND CONTROLLERS, 337-TA-743

CERTIFICATE OF SERVICE

I, James R. Holbein, hereby certify that the attached **COMMISSION OPINION** has been served by hand upon the Commission Investigative Attorney, David O. Lloyd, Esq., and the following parties as indicated, on **January 20, 2012**

James R. Holbein, Secretary
U.S. International Trade Commission
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PUBLIC VERSION

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

In the Matter of **CERTAIN VIDEO GAME SYSTEMS AND CONTROLLERS**	**Investigation No. 337-TA-743**

COMMISSION OPINION

On February 11, 2011, the presiding administrative law judge ("ALJ") issued an initial determination ("summary ID") granting the motion of respondents Nintendo Co., Ltd. and Nintendo of America Inc. (collectively, "Nintendo") for summary determination that a domestic industry does not exist. The Commission has determined to review and vacate the summary ID and remand the investigation to the ALJ for further proceedings consistent with this opinion.

I. BACKGROUND

A. Procedural History

The Commission instituted this investigation on November 5, 2010, based on a complaint filed by Motiva, LLC ("Motiva") of Dublin, Ohio. 75 *Fed. Reg.* 68379 (Nov. 5, 2010). The complaint alleged violations of section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337) in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain video game systems and controllers by reason of infringement of United States Patent Nos. 7,292,151 and 7,492,268 (collectively, "the asserted patents"). The complaint named Nintendo as the only respondent.

On January 6, 2011, Nintendo filed a motion for summary determination that the economic prong of the domestic industry is not satisfied. On January 18, 2011, Motiva and the

Commission investigative attorney ("IA") opposed this motion. On February 11, 2011, the ALJ issued the summary ID granting Nintendo's motion for summary determination and terminating the investigation. On March 1, 2011, Motiva and the IA each filed a petition for review of the ALJ's ID. On March 8, 2011, Nintendo opposed these petitions for review.

In its motion, Nintendo argued that Motiva could not carry its burden to establish a domestic industry under section 337(a)(3)(C) because the activities of Motiva and its principals occurred four years before the complaint was filed, and nearly all of the activities occurred before the asserted patents issued. Further, Nintendo argued that Motiva's investments were not relevant to the economic prong of the domestic industry requirement.

B. Complainant Motiva

Motiva opposed Nintendo's motion, and submitted declarations and documentary evidence of its activities and investments to raise issues of material fact to counter Nintendo's claim that no domestic industry exists or is in the process of being established. Kevin Ferguson and Donald Gronachan are the two principals of Motiva, and the inventors on the asserted patents. Confidential Declaration of Kevin Ferguson in Opposition to Respondents' Motion for Summary Determination ("Ferguson Decl.") at ¶ 1; Confidential Declaration of Donald Gronachan in Opposition to Respondents' Motion for Summary Determination ("Gronachan Decl.") at ¶¶ 1-2. These inventors researched and developed a fitness video game product in the United States, filed patent applications on their inventions, created prototypes, and approached fitness equipment companies to try to attract potential investors, manufacturers, or licensees. Gronachan Decl. at ¶¶ 5, 7-12, 15-17. Most of these activities occurred prior to issuance of the

asserted patents and at least three years before the section 337 complaint was filed. *Id.* at ¶ 19-20, 23; Ferguson Decl. at ¶¶ 4-19, 22. Nintendo's allegedly infringing product, the "Wii," was released during Motiva's efforts to attract interest in its technology. According to Motiva, the Wii's release eliminated any prospective interest in its technology. As a result, Motiva's activities subsequently shifted from developing its own product in conjunction with fitness companies to litigating the asserted patents against Nintendo. The only issue addressed by the summary ID is whether, based on these activities, Motiva can, as a matter of law, satisfy the domestic industry requirement under section 337(a)(3)(C).

C. The Summary ID

The ALJ made several findings that are relevant to our discussion. First, he concluded that "Motiva's engineering and research and development activities shall not be considered in the domestic industry analysis, because they ended prior to the issuance of either of the patents in suit, and therefore, cannot be an investment in the asserted patents' exploitation." ID at 11. Next, the ALJ declined to consider Motiva's efforts to attract investments, manufacturers, or licensees, characterizing them as mere "sales and marketing activities." ID at 13 (quoting *Certain Stringed Musical Instruments and Components Thereof*, Inv. No. 337-TA-586, Comm'n Op. at 13 (Dec. 2009) ("*Stringed Instruments*")). He further concluded that Motiva's efforts to "bring the technology of the Asserted Patents to market" ended in January 2007, more than three years before the section 337 complaint was filed. Thus, he found that "[t]hese non-contemporaneous activities . . . cannot serve as the basis for a finding that Motiva satisfies the domestic industry requirement." ID at 14.

In the three years preceding the filing of the complaint, Motiva's only domestic activities relating to the asserted patents are its district court litigation against Nintendo and its patent prosecution activities. The ALJ found that because Motiva admitted that it never tried to license the asserted patents, Motiva's litigation activities could not be an investment in exploitation of the asserted patents through licensing. ID at 14-15. The ALJ noted that Motiva has not argued that these litigation activities are related to engineering or research and development. According to the ALJ, Motiva's allegation that its litigation against Nintendo is intended to allow Motiva to enter the marketplace is "not sufficient to create a factual dispute regarding whether or not Motiva's litigation activities are related to engineering or research and development." ID at 17.

Finally, the ALJ declined to consider Motiva's patent prosecution activities, including the inventors' time and associated legal costs, expenses, and fees. ID at 14. He reasoned that "[a]llowing such activities to be considered in the domestic industry analysis would render the domestic industry requirement a nullity because every patent requires time and fees to prosecute." ID at 13-14 (citing *Certain Coaxial Cable Connectors and Components Thereof and Products Containing Same*, Inv. No. 337-TA-650, Comm'n Op. (Apr. 14, 2010) ("*Coaxial Cable Connectors*")). The ALJ concluded that, given Motiva's activities, it cannot, as a matter of law, satisfy the domestic industry requirement.

II. APPLICABLE LEGAL PRINCIPLES

A. Summary Determination

Under 19 C.F.R. § 210.18(a), "[a]ny party may move with any necessary supporting affidavits for summary determination in his favor upon all or any part of the issues to be

determined in the investigation." 19 C.F.R. § 210.18(a). Summary determination "shall be rendered if pleadings and any depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a summary determination as a matter of law." 19 C.F.R. § 210.18(b). Commission Rule 210.18 is analogous to Federal Rule of Civil Procedure 56. *See e.g., Certain Asian-Style Kamaboko Fish Cakes*, Inv. No. 337-TA-378, Order No. 15, at 3, 1996 WL 1056341 (September 1996) (unreviewed initial determination).

The moving party bears the initial burden of establishing that there is an absence of a genuine issue of material fact and that it is entitled to judgment as a matter of law. *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). When an initial showing is made, the burden shifts to the opposing party, who "must set forth specific facts showing that there is a genuine issue for trial." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 256 (1986). To avoid summary judgment, the non-moving party must produce evidence of sufficient caliber to support judgment in its favor. *Id.* at 252. Such evidence must be real and substantial, not merely colorable. *Id.* at 249-50.

B. The Law of Domestic Industry: Economic Prong

To prove a violation of section 337 in a patent-based action, a complainant must demonstrate that a domestic industry "exists or is in the process of being established." 19 U.S.C. § 1337(a)(2). For purposes of section 337(a)(2):

> [A]n industry in the United States shall be considered to exist if there is in the United States, with respect to articles protected by the patent . . . concerned
>
> (A) significant investment in plant and equipment;
>
> (B) significant employment of labor or capital; or

> (C) substantial investment in its exploitation, including engineering, research and development, or licensing.

19 U.S.C. § 1337(a)(3). The Commission has divided the domestic industry requirement into an economic prong (which requires a threshold level of domestic activities or investments with respect to protected articles) and a technical prong (which requires that these activities relate to the intellectual property at issue). 19 U.S.C. §§ 1337(a)(2) and (a)(3); *see Certain Variable Speed Wind Turbines and Components Thereof*, Inv. No. 337-TA-376, USITC Pub. 3003, Comm'n Op. at 14-17 (Nov. 1996).

III. ANALYSIS

As an initial matter, we find that the ALJ erred in declining to consider Motiva's activities that occurred before the issuance of the asserted patents. ID at 11. We find that the language of sections 337(a)(2) and 337(a)(3)(C) is broad enough to cover "investments" made before issuance of the patent. *See* 19 U.S.C. §§ 1337(a)(2), (a)(3)(C). Section 337(a)(3)(C) provides that Motiva may show that a domestic industry exists if there is in the United States "substantial investment in [the asserted patents'] exploitation, including engineering, research and development, or licensing." 19 U.S.C. § 1337(a)(3)(C). The express language of the statute requires the present existence of a "substantial investment" in certain types of activities which are directed toward exploitation of the intellectual property at issue in the United States.

For nascent industries that cannot yet show investments and activities sufficient to establish a domestic industry within the meaning of section 337(a)(3), the language of section 337(a)(2) permits such industries to make a showing that a domestic industry is "in the process of being established." The legislative history indicates that an industry is "in the process of being established" if the patent owner "can demonstrate that he is taking the necessary tangible

steps to establish such an industry in the United States," S. REP. 100-71 (1987) at 130, and there is a "significant likelihood that the industry requirement will be satisfied in the future." H. REP. 100-40 (1987) at 157.

Neither the language of the statute nor the legislative history preclude from consideration engineering and research and development investments that precede the issuance of the patent in determining whether a domestic industry exists or is in the process of being established. Indeed, as one ALJ has acknowledged, "[o]ften the lion's share of the research and development costs are incurred before a patent is obtained." *Certain Battery-Powered Ride-On Toy Vehicles and Components Thereof*, Inv. No. 337-TA-314, Order No. 6, Initial Determination at 20, USITC Pub. 2420 (Aug. 1991) (unreviewed in pertinent part). Depending on the circumstances, in determining whether a domestic industry exists or is in the process of being established, it may be appropriate to credit engineering and research and development investments that predate the issuance of a patent. For example, a complainant may offer evidence of substantial investments in the United States to exploit its intellectual property that predate the issuance of the patent, such as the production of prototypes, technical collaboration with potential manufacturers, and other efforts to engage potential investors, manufacturers, or licensees, so long as these investments relate to the invention claimed in the later-granted patent(s). A complainant relying on engineering or research and development as "exploitation" activities must show these activities are related to the invention claimed in the asserted patent. *See Coaxial Cable Connectors*, at 53 (finding research and development expenses did not constitute the "substantial" investment required by section 337(a)(3)(C) because complainant "presented no evidence of any investment in research and development related to the [asserted] patent."). Because the language of the statute does not preclude that qualifying investments in engineering,

research, design and development could be made prior to the grant of the patent, we instruct the ALJ not to disregard Motiva's pre-patent efforts on that basis in his analysis of whether a domestic industry exists or is in the process of being established.

Certain pre-issuance activities related to the patent may not be germane to the domestic industry requirement under the facts and circumstances established by the complainant in a particular investigation. For example, depending on the facts and evidence, a complainant may not be able to show that patent prosecution activities are related to its engineering, research and development, or licensing "exploitation" activities for the asserted patents within the meaning of section 337(a)(3)(C). *See Coaxial Cable Connectors*, at 46 (noting that "patent litigation activities alone do not constitute 'exploitation' under section 337(a)(3)(C)"). Because all United States patents must be prosecuted in the United States Patent and Trademark Office before they can issue as a patent, patent prosecution activities alone would be insufficient to establish the domestic industry requirement under section 337(a)(3)(C). *See Id.* at 45 ("Congress clearly stated that it did not intend mere [patent] ownership to constitute domestic industry."); S. REPT. NO. 100-71 at 129-30; H. REPT. 100-41 at 157 ("mere ownership of a patent" is not sufficient).[1]

With respect to Motiva's litigation activities, Motiva submitted declarations and documentary evidence that raise a genuine issue of material fact as to whether its district court litigation activities between 2007 and the present are related to licensing and/or product development. The ALJ found that "Motiva has admitted that it has conducted absolutely no licensing activities at any time," ID at 16 (citing Motiva's Response to Statement of Undisputed

[1] Commissioner Aranoff notes that neither Motiva nor the IA petitioned for review of the ALJ's treatment of patent prosecution expenses, although that analysis is vacated pursuant to the Commission's order. While she concurs with most of the discussion provided here by her colleagues, she disagrees with the suggestion that patent prosecution expenses could, depending on the evidence, count as investments in the exploitation of a patent. She agrees with the ALJ that such efforts "are steps toward mere ownership" of a patent, not its exploitation. ID at 14.

Material Facts ("RSMF") at 25-26, 49-51). Although Motiva has never offered to license the asserted patents, it contends that its work between 2005 and 2007 was "to bring products to market by attracting investors and potential licensees"[2] and that "its litigation activities are related to the development of the patented technology and represent efforts to facilitate and hasten the practical application of the inventions of the patents in issue." RSMF at 37; Gronachan Decl. ¶ 29.

We have recognized types of "licensing" activities that qualify as "investment" in the "exploitation" of a patent per the statutory language of section 337(a)(3)(C). *Coaxial Cable Connectors*, at 49-50. The first is licensing that makes a "productive use" of the patent to encourage adoption and development of the technology by bringing a product to market, *i.e.*, production-driven licensing. The second involves "taking advantage of" the patent right solely to derive revenue from existing production, *i.e.*, revenue-driven licensing.[3] *Id.* Under the revenue-driven licensing scenario presented in *Coaxial Cable Connectors*, a complainant's failure to offer a potential licensee a license before engaging in litigation with the potential licensee may contradict its claim that its litigation activities are related to its licensing efforts. Motiva submitted declarations in opposition to Nintendo's motions, however, raising a factual dispute as to whether its activities resemble the production-driven licensing model. Specifically, Motiva alleges that it engaged in efforts to bring a new product to market by actively presenting its technology to potential manufacturers, investors, and licensees who were not already involved in existing production. RSMF at 37; Gronachan Decl. at ¶ 6-18.[4] Because we find that Motiva

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[2] The ALJ refers to these activities as "sales and marketing." (ID at 13).

[3] We recognize that there may be licensing activities that do not fit these general descriptions.

[4] It is not dispositive that Motiva was unable to consummate an agreement with a manufacturer, investor, or licensee. *See Coaxial Cable Connectors*, at 51 n.16 ("[T]he mere fact that a patent

raised a genuine issue of material fact as to whether its district court litigation against Nintendo is related to licensing efforts, we find that it was error for the ALJ to conclude that "the litigation against Nintendo clearly does not relate to licensing" because Motiva "has never engaged in any sort of licensing activities." ID at 16.

According to Motiva, between 2005 and 2007, it was actively trying to develop a commercial product by meeting with potential manufacturers, investors, and licensees when the release of the Wii called into question Motiva's ability to be the exclusive entity with the rights to use the technology embodied by the asserted patents. Motiva alleges that Nintendo's Wii caused all the interest in its technology to fade and that Motiva's district court action against Nintendo was a necessary step to establish its claim to the technology embodied in the asserted patents in order to bring its technology to market. For purposes of summary determination, we are required to view this evidence in the light most favorable to Motiva. *See Anderson*, 477 U.S. at 255 ("The evidence of the nonmovant is to be believed, and all justifiable inferences are to be drawn in his favor."). Viewed in that light, it may be that Motiva's only recourse was to sue Nintendo to bring its product to market and that its litigation activities may in fact be related to "licensing" under section 337(a)(3)(C). *See Coaxial Cable Connectors*, at 54.[5] We conclude, however, that the evidence on this question should be further developed at a hearing.

On remand, the ALJ is directed to address in the final ID, to the extent necessary, the following questions, which are relevant to whether a domestic industry exists or is in the process of being established:

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holder's efforts to obtain a license are unsuccessful does not *per se* mean that expenses associated with any related activities are not investments in the exploitation of the patent through licensing.").

[5] At this time, we take no position on whether it was possible for Motiva to file its section 337 complaint in 2007 and what effect (if any) this might have on the merits of its allegations.

1. What was the level of interest from potential manufacturers, investors, and licensees in Motiva's technology prior to release of the Wii? Did Nintendo's release of the Wii cause this interest to decrease? To what extent would the product(s) being developed by Motiva compete with Nintendo's Wii?

2. How close was Motiva's technology to being commercialized and/or production-ready?

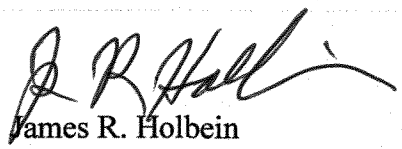
3. To what extent was Motiva's shift in product-oriented activities to litigation-oriented activities a strategic business decision not caused by Nintendo's activities? Could Motiva have continued its commercialization efforts without resorting to litigation? Was Motiva taking the "necessary tangible steps to establish" a domestic industry? *See Stringed Instruments*, at 13 (quoting S. Rep. 100-71 at 130)?

4. Do the steps "taken [by Motiva] indicate a significant likelihood that the industry requirement will be satisfied in the future?" *See Stringed Instruments*, at 13 (quoting H. Rep. 100-40 at 157). How likely is it that Motiva will have a domestic industry in the future (1) if no relief is issued against Nintendo or, alternatively, (2) if relief is issued against Nintendo?

IV. CONCLUSION

For the reasons set forth above, we vacate the summary ID and remand the investigation to the ALJ.

By Order of the Commission



James R. Holbein
Acting Secretary to the Commission

Date: April 14, 2011

CERTAIN VIDEO GAME SYSTEMS AND CONTROLLERS 337-TA-743

CERTIFICATE OF SERVICE

I, James R. Holbein, hereby certify that the attached **COMMISSION OPINION (PUBLIC VERSION)** has been served by hand upon the Commission Investigative Attorney, David O. Lloyd, Esq., and the following parties as indicated, on April 15, 2011.

James R. Holbein, Acting Secretary
U.S. International Trade Commission
500 E Street, SW
Washington, DC 20436

On Behalf of Complainant Motiva, LLC:

Christopher D. Banys, Esq.
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( ) Via Hand Delivery
( ) Via Overnight Mail
(X) Via First Class Mail
( ) Other: _____

On Behalf of Respondents Nintendo of America, Inc. and Nintendo Co., Ltd.:

Steven E. Adkins, Esq.
ORRICK, HERRINGTON & SUTCLIFFE, LLP
1152 15th Street, NW
Washington, DC 20005

( ) Via Hand Delivery
( ) Via Overnight Mail
(X) Via First Class Mail
( ) Other: _____

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

In the Matter of	
CERTAIN VIDEO GAME SYSTEMS AND CONTROLLERS	**Inv. No. 337-TA-743**

NOTICE OF COMMISSION DETERMINATION TO REVIEW AND VACATE AN INITIAL DETERMINATION GRANTING SUMMARY DETERMINATION THAT THE ECONOMIC PRONG OF THE DOMESTIC INDUSTRY REQUIREMENT IS NOT SATISFIED

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has determined to review and vacate an initial determination ("ID") (Order No. 12) granting summary determination that the economic prong of the domestic industry requirement is not satisfied in the above-captioned investigation.

FOR FURTHER INFORMATION: Daniel E. Valencia, Office of the General Counsel, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 205-1999. Copies of the ID and all other nonconfidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone 202-205-2000. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202-205-1810. General information concerning the Commission may also be obtained by accessing its Internet server (*http://www.usitc.gov*). The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at *http://edis.usitc.gov*.

SUPPLEMENTARY INFORMATION: The Commission instituted this investigation on November 5, 2010, based on a complaint filed by Motiva, LLC of Dublin, Ohio ("Motiva"). 75 *Fed. Reg.* 68379 (Nov. 5, 2010). The complaint alleged violations of section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337) in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain video game systems and controllers by reason of infringement of two United States Patents. The complaint named Nintendo Co., Ltd. and Nintendo of America Inc. (collectively, "Nintendo") as the only respondents.

On January 6, 2011, Nintendo filed a motion for summary determination that the economic prong of the domestic industry is not satisfied. On January 18, 2011, Motiva and the Commission investigative attorney ("IA") opposed this motion.

On February 11, 2011, the ALJ issued the subject ID granting Nintendo's motion for summary determination and terminating the investigation. On March 1, 2011, Motiva and the IA each filed a petition for review of the ALJ's summary ID. On March 8, 2011, Nintendo opposed both petitions for review.

Having reviewed the summary ID and the submissions by the parties, the Commission has determined to review and vacate the grant of summary determination in the subject ID with respect to the economic prong of the domestic industry requirement. The Commission has determined to remand the investigation to the ALJ to complete the investigation. A Commission Order is issuing herewith, and a Commission Opinion will issue shortly.

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337), and in section 210.42(h) of the Commission's Rules of Practice and Procedure (19 C.F.R. §§ 210.42(h) and 210.45(c)).

By order of the Commission.

James R. Holbein
Acting Secretary to the Commission

Issued: March 30, 2011

CERTAIN VIDEO GAME SYSTEMS AND CONTROLLERS 337-TA-743

CERTIFICATE OF SERVICE

I, James R. Holbein, hereby certify that the attached **NOTICE OF COMMISSION DETERMINATION TO REVIEW AND VACATE AN INITIAL DETERMINATION GRANTING SUMMARY DETERMINATION THAT THE ECONOMIC PRONG OF THE DOMESTIC INDUSTRY REQUIREMENT IS NOT SATISFIED** has been served by hand upon the Commission Investigative Attorney, David O. Lloyd, Esq., and the following parties as indicated, on March 31, 2011.

James R. Holbein, Acting Secretary
U.S. International Trade Commission
500 E Street, SW
Washington, DC 20436

On Behalf of Complainant Motiva, LLC:

Christopher D. Banys, Esq.
THE LANIER LAW FIRM, P.C.
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On Behalf of Respondents Nintendo of America, Inc. and Nintendo Co., Ltd.:

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PUBLIC VERSION

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.

In the Matter of	
CERTAIN VIDEO GAME SYSTEMS AND CONTROLLERS	**Inv. No. 337-TA-743**

INITIAL DETERMINATION ON VIOLATION OF SECTION 337 AND RECOMMENDED DETERMINATION ON REMEDY AND BOND

Administrative Law Judge Robert K. Rogers, Jr.

(November 2, 2011)

Appearances:

For Complainant Motiva, LLC:

Christopher D. Banys, Esq.; Daniel W. Bedell, Esq.; Daniel M. Shafer, Esq. of The Lanier Law Firm, P.C., Palo Alto, California

W. Mark Lanier, Esq.; Dara G. Hegar, Esq. of The Lanier Law Firm, P.C., Houston, Texas

J. James Li, Esq. of LILAW, Palo Alto, California

Lyle Vander Schaaf, Esq.; Jay Reiziss, Esq. of Brinks Hofer Gilson & Lione, Washington, DC

For Respondents Nintendo Co., Ltd. & Nintendo of America, Inc.:

Steven E. Adkins, Esq.; Richard A. Rinkema, Esq.; Jordan L. Coyle, Esq. of Orrick, Herrington & Sutcliffe, LLP, Washington, DC

Peter A. Bicks, Esq.; Alex V. Chachkes, Esq.; Elyse D. Echtman, Esq. of Orrick, Herrington & Sutcliffe, LLP, New York, New York

Robert W. Faris, Esq.; Joseph S. Presta, Esq. of Nixon & Vanderhye P.C., Arlington, Virginia

For the Commission Investigative Staff:

Lynn I. Levine, Esq., Director; David O. Lloyd, Esq., Supervisory Attorney; Matthew N. Bathon, Esq., Investigative Attorney; of the Office of Unfair Import Investigations, U.S. International

Trade Commission, of Washington, DC

TABLE OF CONTENTS

Pursuant to the Notice of Investigation and Rule 210.42 of the Rules of Practice and Procedure of the United States International Trade Commission, this is the Administrative Law Judge's Final Initial Determination in the matter of Certain Video Game Systems & Controllers, Investigation No. 337-TA-743.

The Administrative Law Judge hereby determines that a violation of Section 337 of the Tariff Act of 1930, as amended, has not been found in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain video game systems and controllers, in connection with U.S. Patent No. 7,292,151. Furthermore, the Administrative Law Judge hereby determines that a domestic industry in the United States does not exist and is not in the process of being established that practices U.S. Patent No. 7,292,151.[1]

The Administrative Law Judge hereby determines that a violation of Section 337 of the Tariff Act of 1930, as amended, has not been found in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain video game systems and controllers, in connection with U.S. Patent No. 7,492,268. Furthermore, the Administrative Law Judge hereby determines that a domestic industry in the United States does not exist and is not in the process of being established that practices U.S. Patent No. 7,492,268.[2]

[1] U.S. Patent No. 7,292,151 will be referred to as "the '151 patent."
[2] U.S. Patent No. 7,492,268 will be referred to as "the '268 patent."

The following abbreviations may be used in this Initial Determination:

CDX	Complainant's demonstrative exhibit
CIB	Complainant's initial post-hearing brief
CPX	Complainant's physical exhibit
CRB	Complainant's reply post-hearing brief
CX	Complainant's exhibit
Dep.	Deposition
JSRCC	Joint Statement Regarding Claim Construction
JSCI	Joint Stipulation of Contested Issues
JX	Joint Exhibit
RDX	Respondent's demonstrative exhibit
RIB	Respondent's initial post-hearing brief
RPX	Respondent's physical exhibit
RRB	Respondent's reply post-hearing brief
RX	Respondent's exhibit
SIB	Staff's initial post-hearing brief
SRB	Staff's reply post-hearing brief
Tr.	Transcript
CPHB	Complainants' pre-hearing brief
RPHB	Respondents' pre-hearing brief
SPHB	Staff's pre-hearing brief

I. BACKGROUND

A. Procedural History

On November 1, 2010, the Commission issued a Notice of Investigation in this matter to determine:

> [W]hether there is a violation of subsection (a)(1)(B) of section 337 in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain video game systems and controllers that infringe one or more of claims 16, 27-32, 44, 57, 68, 81, and 84 of the 151 patent and claims 1-6 and 8-15 of the '268 patent, and whether an industry in the United States exists as required by subsection (a)(2) of section 337.

(*See* Notice of Investigation.) The investigation was instituted upon publication of the Notice of Investigation in the *Federal Register* on November 5, 2010. *See* 75 Fed. Reg. 68379 (2010). 19 CFR § 210.10(b).

The complainant is Motiva, LLC ("Motiva"), 8156 Campden Lakes Boulevard, Dublin, Ohio 43106. The respondents are Nintendo Co., Ltd., 11-1 Kamitoba hokotate-cho, Minami-ku, Kyoto 601-8501, Japan, and Nintendo of America, Inc., 4820 150th Avenue, NE, Redmond, Washington 98052 (collectively "Nintendo"). The Commission Investigative Staff of the Office of Unfair Import Investigations ("Staff") is also a party in this investigation.

On February 11, 2011, I issued an Initial Determination granting Nintendo's motion for summary determination of no domestic industry. On March 30, 2011, the Commission issued a notice indicating that it was reviewing and vacating my Initial Determination. In the notice, the Commission remanded the investigation to me.

All other motions for summary determination were denied.

An evidentiary hearing was conducted before me from August 1, 2011 through August 5, 2011. Motiva, Nintendo, and Staff participated in the hearing. In support of its case-in-chief and

rebuttal case, Motiva called the following witnesses:

- Dr. Jaswinder Pal Singh (Expert Witness);
- Steven Rabin (Principal Software Support Engineer at Nintendo of America Inc.);
- David Smith (former investor in Motiva);
- Greg Highsmith (former employee of Life Fitness);
- James Reiss (President of Biodex Medical Systems);
- Dr. Paul Wazzan (expert witness);
- Wayne Hoeberlein (expert witness);
- Donald Gronachan (named inventor on the asserted patents); and
- Kevin Ferguson (named inventor on the asserted patents).

In support of its case-in-chief and rebuttal case, Nintendo called the following witnesses:

- Barry French (CEO of Trazer Technologies, Inc.);
- Dr. Blake Hannaford (expert witness);
- Keizo Ohta (Manager of Technology Group, EAD Technology Development Department, Entertainment Analysis and Development Division at Nintendo Co., Ltd.);
- Christopher Bakewell (expert witness); and
- Dr. J. Edward Colgate (expert witness).

In addition, various deposition transcripts were received into evidence in lieu of direct witness statements or live testimony.

After the hearing, post-hearing briefs and reply briefs were filed on August 26, 2011 and September 2, 2011, respectively.

B. The Private Parties

1. Motiva

Motiva is an Ohio company with its headquarters and principal place of business located at 8156 Campden Lakes Blvd., Dublin, Ohio 43106. Kevin Ferguson and Donald Gronachan are the two principals of Motiva and the named co-inventors on the asserted patents.

2. Nintendo

Nintendo Co., Ltd. is a Japanese corporation with its principal place of business at 11-1 Kamitoba hokotate-cho, Minami-ku, Kyoto 601-8501, Japan. Nintendo of America Inc. is a corporation formed under the laws of the State of Washington with its principal place of business at 4820 150th Avenue N.E., Redmond, WA 98052.

C. Overview Of The Patents At Issue

U.S. Patent No. 7,292,151 is entitled "Human Movement Measurement System." It was filed on July 22, 2005 and claims priority to a July 29, 2004 provisional application. It issued on November 6, 2007. U.S. Patent No. 7,492,268 is entitled "Human Movement Measurement System." It was filed on November 6, 2007, and is a continuation of U.S. Patent No. 7,292,151. It issued on February 17, 2009. Both patents name Kevin Ferguson and Donald Gronachan as the inventors. The Abstract of each patent states:

> A system for measuring the position of transponders for testing and training a user to manipulate the position of the transponders while being guided by interactive and sensory feedback through a bidirectional communication link to a processing system for the purpose of functional movement assessment for exercise and physical rehabilitation.

(JX-1; JX-3.)

D. Products At Issue

The products accused of infringement are the Nintendo Wii video game system and associated video game controllers. This includes the Wii Console, the Wii Remote, the Wii Remote Plus, the Wii Nunchuk, and the Wii MotionPlus. The Wii Console comes with a Wii Sensor Bar and other necessary components for operating the Wii Console.

II. JURISDICTION

A. Subject Matter Jurisdiction

The complaint alleges that Nintendo has violated Subsection 337(a)(1)(B) by the importation and sale of products that infringe the asserted patents. I find that Nintendo imports into the United States, sell for importation, and/or sells within the United States after importation products that Motiva has accused of infringement in this investigation. (June 21, 2011 Joint Stipulation at ¶ 3.) Thus, I find that the Commission has subject matter jurisdiction over this investigation under Section 337 of the Tariff Act of 1930. *See Amgen, Inc. v. United States Int'l Trade Comm'n*, 902 F.2d 1532, 1536 (Fed. Cir. 1990).

B. Personal Jurisdiction

Nintendo responded to the complaint and notice of investigation, participated in the investigation, made an appearance at the hearing, and submitted post-hearing briefs. Thus, I find that Nintendo submitted to the personal jurisdiction of the Commission. *See Certain Miniature Hacksaws*, Inv. No. 337-TA-237, Initial Determination, 1986 WL 379287 (October 15, 1986).

C. In Rem Jurisdiction

The Commission has *in rem* jurisdiction over the products at issue by virtue of the finding that accused products have been imported into the United States. *See Sealed Air Corp. v. United States Int'l Trade Comm'n*, 645 F.2d 976, 985 (C.C.P.A. 1981).

III. CLAIM CONSTRUCTION

A. Applicable Law

"An infringement analysis entails two steps. The first step is determining the meaning and scope of the patent claims asserted to be infringed. The second step is comparing the properly construed claims to the device accused of infringing." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (*en banc*), *aff'd*, 517 U.S. 370 (1996) (citation omitted). Claim construction "is a matter of law exclusively for the court." *Id.* at 970-71. "The construction of claims is simply a way of elaborating the normally terse claim language in order to understand and explain, but not to change, the scope of the claims." *Embrex, Inc. v. Serv. Eng'g Corp.*, 216 F.3d 1343, 1347 (Fed. Cir. 2000). "[O]nly those [claim] terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy." *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

Claim construction focuses on the intrinsic evidence, which consists of the claims themselves, the specification, and the prosecution history. *See generally Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*). The Federal Circuit in *Phillips* explained that in construing terms, courts must analyze each of these components to determine the "ordinary and customary meaning of a claim term," which is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." *Id.* at 1313.[3]

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" *Id.* at 1312 (citations omitted). "Quite apart from the written description and the prosecution history, the claims themselves provide substantial guidance as to the meaning of particular claim terms." *Id.* at 1314. For example, "the context in which a term is used in the asserted claim can be highly instructive," and "[o]ther

[3] I have defined the level of ordinary skill in the art in Section IV.B.2, *infra*.

claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment as to the meaning of a claim term." *Id.*

"[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'" *Id.* (citation omitted). "The longstanding difficulty is the contrasting nature of the axioms that (a) a claim must be read in view of the specification and (b) a court may not read a limitation into a claim from the specification." *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1117 (Fed. Cir. 2004). The Federal Circuit has explained that there are certain instances when the specification may limit the meaning of the claim language:

> [O]ur cases recognize that the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs. In other cases, the specification may reveal an intentional disclaimer, or disavowal, of claim scope by the inventor. In that instance as well, the inventor has dictated the correct claim scope, and the inventor's intention, as expressed in the specification, is regarded as dispositive.

Phillips, 415 F.3d at 1316.

In addition to the claims and the specification, the prosecution history should be examined if in evidence. "The prosecution history...consists of the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent. Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent." *Id.* at 1317 (citation omitted). "[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Id.*

If the intrinsic evidence does not establish the meaning of a claim, then extrinsic evidence

may be considered. Extrinsic evidence consists of all evidence external to the patent and the prosecution history, including dictionaries, inventor testimony, expert testimony and learned treatises. *Id.* at 1317. Extrinsic evidence is generally viewed "as less reliable than the patent and its prosecution history in determining how to read claim terms[.]" *Id.* at 1318. "The court may receive extrinsic evidence to educate itself about the invention and the relevant technology, but the court may not use extrinsic evidence to arrive at a claim construction that is clearly at odds with the construction mandated by the intrinsic evidence." *Elkay Mfg. Co. v. Ebco Mfg. Co.*, 192 F.3d 973, 977 (Fed. Cir. 1999).

B. The '151 Patent

1. "tracking movement of a user"

The phrase "tracking movement of a user" appears in each of the asserted claims. Specifically, the phrase is found in the preamble of independent claims 1 and 50.

Motiva's Position: Motiva contends that "tracking movement of a user" means "tracking changes of position and/or orientation of a user."

Motiva asserts that the parties' dispute centers on the meaning of the word "movement." Motiva claims that the intrinsic evidence makes clear that "movement" is a change in position and/or orientation.

Motiva states that Nintendo's construction omits the word "change." According to Motiva, the claims and specification of the '151 patent make clear that the claimed invention relates to measuring changes in position and/or orientation. (Citing CX-713.0015-0017; CX-5067C at Q. 418; JX-1 at 31:42-45, 32:5-14; JX-3 at 30:60-63, 31:25-34.) Motiva notes that Nintendo's proposed construction in the related district court case used the word "change," and

that Nintendo's expert Dr. Colgate agrees that movement means "changes in position and/or orientation." (Citing CX-694C.0003; RX-55C at Q. 36.)

Motiva asserts that movement is changes in position *and/or* orientation. Motiva explains that claim 40 depends on claim 1 and adds the requirement that "the processing system is adapted to determine position information." (Citing JX-1 at 38:9-10.) Motiva argues that this limitation would be rendered superfluous under Nintendo's proposed construction.

Motiva claims that the specification supports its construction. Motiva states that the specification separately discusses both "position tracking" and "orientation tracking." (Citing JX-1 at 2:47-50.) Motiva asserts that the specification describes embodiments where "orientation tracking" is optional, meaning that "tracking movement" does not always involve tracking orientation. (Citing JX-1 at 30:26-46.)

Motiva states that the prosecution history from the pending reexamination supports Motiva's position. According to Motiva, the Examiner agreed with Nintendo's assertion that "movement information" includes position information and/or orientation information. (Citing JX-174.0797-0798.)

In addition, Motiva claims that the extrinsic record supports its position on this issue. Motiva states that Steve Rabin testified that if something is rotating but not moving from one place to another, it is still moving. (Citing Tr. at 386:24-387:14.) Motiva argues that the dictionary definition of "move" and Dr. Singh's expert testimony provide further support. (Citing CX-685.0005; Tr. at 340:24-342:19; CX-5067C at Q. 416.)

Motiva alleges that Dr. Colgate offered a new proposed construction in his hearing testimony. Motiva argues that this new construction should be disregarded because it was not

included on the parties' Joint Claim Construction Statement. Motiva asserts that even if the new construction is considered, it does not find support in the intrinsic or extrinsic evidence.

Nintendo's Position: Nintendo contends that "tracking movement of a user" means "tracking the positions and orientations (poses) of the user as the user moves through 3D space."

Nintendo claims that both the '151 patent and common sense dictate that "movement" is defined by the changes in both position and orientation. Nintendo states that the specification states that the invention is a system for tracking pose, which is defined as position and orientation. (Citing RX-55C at Q. 37, 45; JX-1 at 2:36-41.)

According to Nintendo, the dependent claims would be rendered unintelligible if "movement" is construed as position or orientation. Nintendo states that claims 41-43 of the '151 patent require comparing "movement information" with "movement information defined by a reference movement trajectory." Nintendo argues that those claims make no sense if "movement information" can be just orientation information, because a "trajectory" is defined by changes in position.

Nintendo claims that in order to determine orientation, the invention must determine position. (Citing JX-1 at 29:37-45; RX-275C at Q. 161.) Thus, Nintendo argues that determining "position or orientation" means only to determine "position," because determining orientation implicitly requires determining position. (Citing RX-55C at Q. 42.)

Nintendo asserts that the claim construction expressly acknowledge that the invention was meant to track movement in three dimensional space. (Citing RX-55C at Q. 37.) Nintendo notes that Motiva's expert, Dr. Singh, agreed that the patented invention tracks in all three dimensions. (Citing Tr. at 215:10-216:21.)

Staff's Position: Staff contends that "tracking movement of a user" means "tracking changes of position and/or orientation of a user."

Staff notes that the claims do not use the word "pose," but instead used the ordinary word "movement." Staff claims that the ordinary meaning of "movement" encompasses changes in position or orientation. Staff states that Nintendo's expert does not suggest that "movement" has a specialized meaning in the relevant art. (Citing RX-55C at Q. 35-53.)

Staff states that when the claims call for orientation information, they use the word "orientation." (Citing JX-1 at 36:50-54.) Staff states that when the claims call for position information, they use the word "position." (*Id.* at 38:3-10.) Staff states that when the claims relate to "pose," they use the word "pose." (*Id.* at 36:37-40.) Staff states that the claims at issue instead use the term "movement," and that different claim terms are presumed to have different meanings. Further, Staff asserts that because the dependent claims add requirements for either position information or orientation information, it would be an error to construe the independent claim to require both position and orientation. (Citing JX-1 at 36:52-54, 38:9-10.)

Construction to be applied: "tracking changes of position and/or orientation of a user"

The phrase "tracking movement of a user" appears in the preambles of independent claims 1 and 50. All of the asserted claims depend from either claim 1 or claim 50. While claim preambles do not always serve as claim limitations, there is no dispute among the parties that the "tracking movement of a user" language in the preamble serves as a claim limitation.

The full preamble of claim 1 recites "[a] system for tracking movement of a user." The full preamble of claim 50 recites "[a]n apparatus for use in tracking movement of a user." The primary dispute among the parties is whether "movement" is limited to require changes in both

"position and orientation" or is broad enough to allow the disjunctive reference to changes in "position and/or orientation."

The '151 patent uses the words "movement," "position," "orientation," and "pose." The specification provides a definition of "pose" in relation to position and orientation when it states that "[t]his invention relates to a system and methods for setup and measuring the position and orientation (pose) of transponders." (JX-1 at 1:11-13; *see also* JX-1 at 1:18-22.)

The specification does not provide a definition of "movement" in relation to position and orientation. (*See generally* JX-1.) The specification explains that "[h]uman movement is a response to external environmental forces which requires the accurate coordination of the distal segment(s) to compensate for these forces." (*Id.* at 10:36-38.) That explanation in no way restricts "movement" to require changes in both position and orientation. Rather, it can encompass a user's change in position, a change in orientation, or both.

Dependent claim 40 provides further guidance on the understanding of "movement." *Phillips*, 415 F.3d at 1314 ("Other claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment as to the meaning of a claim term.") Claim 40 depends from claim 1 and adds the requirement of "wherein the processing system is adapted to determine position information." If "movement" is understood to require changes in both position and orientation, then claim 40 would be rendered superfluous because the "movement information" of claim 1 would necessarily include "position information." *Haemonetics Corp. v. Baxter Healthcare Corp.*, 607 F.3d 776, 781-782 (Fed. Cir. 2010) (refusing to adopt claim construction that renders claim limitations superfluous); *Blackboard, Inc. v. Desire2Learn, Inc.*, 574 F.3d 1371, 1376 (Fed. Cir. 2009) (same).

As described *supra*, the '151 patent defines "pose" to refer to both position and orientation. In certain non-asserted claims, the word "pose" is used. (*See* JX-1 at 36:37-40, 39:48-50.) "When different words or phrases are used in separate claims, a difference in meaning is presumed." *Nystrom v. TREX Co.*, 424 F.3d 1136, 1143 (Fed. Cir. 2005). Nintendo seeks to construe "movement" to have the same meaning as "pose," but it fails to explain why the inventors used both "pose" and "movement" in the claims to refer to "position and orientation." Nintendo has not overcome the presumption that "pose" and "movement" have different meanings.

Nintendo argues that dependent claim 41 supports its proposed construction because the claim recites "movement information defined by a reference movement trajectory." According to Nintendo "trajectory" refers solely to changes in position, and Motiva's proposed construction would render claim 41 unintelligible. I do not find Nintendo's argument persuasive. A "trajectory" is merely a path something takes when moving through space. Use of the term "trajectory" does not limit movement to changes of position and orientation. Nintendo cites no evidence that the claim's use of the term "trajectory" is limited to changes in position. (*See* RIB at 38.) "Attorneys' argument is no substitute for evidence." *Johnston v. IVAC Corp.*, 885 F.2d 1574, 1581 (Fed. Cir. 1989).

Nintendo relies heavily on two passages in the specification where the inventors allegedly define the invention as a system for tracking pose. These passages state:

> This invention relates to a system and methods for setup and measuring the position and orientation (pose) of transponders. More specifically, for training the user to manipulate the pose of the transponders through a movement trajectory, while guided by interactive and sensory feedback means, for the purposes of functional movement assessment for exercise, and physical medicine and rehabilitation.

(JX-1 at 11-17.)

> The present invention is designed to provide such system and methods for high-fidelity tracking or registration of the poses of active transponders and engage the user to purposely manipulate the transponders' pose along a prescribed or choreographed movement trajectory in order to train and assess functional movement capability.
>
> (JX-1 at 2:37-42.)

In addition to the passages cited by Nintendo, the specification also includes similar passages that discuss the "invention" in terms of tracking a user's movement:

> This invention's system and methods facilitates biomechanical tracking and analysis of functional movement.
>
> (JX-1 at 2:6-7.)
>
> This invention addresses the need for an intuitive, interactive method to instruct, create, and deliver a movement trajectory command without necessarily relying on pre-programmed, regimented movement trajectories.
>
> (JX-1 at 5:9-12.)
>
> This invention addresses the need for adaptability of the registration system to different movement measurement scenarios.
>
> (JX-1 at 7:41-43.)

Therefore, the specification both refers to the "invention" in terms of tracking pose and tracking movement. To limit the invention to tracking pose would improperly limit the claims based on the specification. *Kara Tech. Inc. v. Stamps.com Inc.*, 582 F.3d 1341, 1348 (Fed. Cir. 2009) ("The patentee is entitled to the full scope of his claims, and we will not limit him to his preferred embodiment or import a limitation from the specification into the claims.")

Based on the foregoing, I find that "tracking movement of a user" means "tracking changes of position and/or orientation of a user." I find that examination of the extrinsic evidence offered by the parties is unnecessary because the intrinsic evidence is sufficient to understand the meaning of "tracking movement of a user." *Vitronics Corp. v. Conceptronic,*

Inc., 90 F.3d 1576, 1583 (Fed. Cir. 1996) ("In most situations, an analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term. In such circumstances, it is improper to rely on extrinsic evidence.")

2. "determine movement information for said first communication device" & "determine movement information of the second communication device"

The phrase "determine movement information for said first communication device" appears in asserted claims 16, 27, 28, 29, 30, 31, 32, and 44. The phrase "determine movement information of the second communication device" appears in asserted claims 27, 28, 29, 30, 31, and 32.

Motiva's Position: Motiva contends that "determine movement information for said first communication device" means "determine information about changes in position and/or orientation of the first (as distinguished from a second) communication device." Motiva contends that "determine movement information of the second communication device" means "determine information about changes in position and/or orientation of the second (as distinguished from a first) communication device." Motiva argues that these constructions are correct for the same reasons argued with respect to "tracking movement of a user."

Nintendo's Position: Nintendo contends that "determine movement information for said first communication device" means "determining the positions and orientations (poses) for the first communication device as it moves through 3D space." Nintendo contends that "determine movement information of the second communication device" means "determining the positions and orientations (poses) of the second communication device as it moves through 3D space." Nintendo argues that these constructions are correct for the same reasons argued with respect to "tracking movement of a user."

Staff's Position: Staff contends that "determine movement information for said first communication device" means "determine information about changes in position and/or orientation of the first (as distinguished from a second) communication device." Staff contends that "determine movement information of the second communication device" means "determine information about changes in position and/or orientation of the second (as distinguished from a first) communication device." Staff argues that these constructions are correct for the same reasons argued with respect to "tracking movement of a user."

Constructions to be applied: "determine information about changes in position and/or orientation of the first (as distinguished from a second) communication device" and "determine information about changes in position and/or orientation of the second (as distinguished from a first) communication device."

The parties' disputes concerning these phrases are identical to the disputes raised with respect to "tracking movement of a user." For the reasons addressed in Section III.B.1 *supra*, I find that the constructions proposed by Motiva and Staff are correct.

3. "position information"

The term "position information" appears in asserted claim 44.

Motiva's Position: Motiva contends that "position information" means "information about location relative to a reference location."

Motiva notes that the '151 patent discloses position relative to another location (reference position) and relative to an origin (absolute position). (Citing JX-1 at 2:21-23, 3:15-17, 3:23-25.) Motiva states that the specification and the reexamination proceedings also support the conclusion that position information can be inferred based on velocity and/or acceleration data. (Citing JX-1 at 31:42-45, JX-174.1138, 1272-1273, 1789, 1792, 1801-1802.) Motiva argues that

the extrinsic evidence, including dictionary definitions and testimony from Dr. Colgate, supports its proposed construction. (Citing CX-680; CX-681; RX-55C at Q. 46.)

Motiva claims that Staff's proposed construction is less helpful in clarifying the claim language because the term "point or area actually occupied" does not clarify the term "position." (Citing CX-5067C at Q. 423.) Motiva also asserts that Staff's construction improperly adds the limitation of "3D space."

Motiva notes that Nintendo claims that it would be "absurd" to track position in one or two dimensions. (Citing RPHB at 115.) Motiva states that the prior art relied on by Nintendo discloses tracking position in one or two dimensions. (Citing JX-175 at 14:17-20.) Motiva states that during reexamination, the Examiner agreed that "position tracking" included using one-, two-, or three-dimensional velocity or acceleration sensors to "infer" position. (Citing JX-175.0514, 0938-0939.)

Nintendo's Position: Nintendo contends that "position information" means "information specifying a location in 3D space."

Nintendo claims that the parties are in agreement with regard to the construction of "position information" except for whether or not to include the phrase "in 3D space." Nintendo claims that the "in 3D space" language should be included in the construction. (Citing RX-55C at Q. 56.) Nintendo believes that it would be absurd to permit infringement by a device that tracks in one or two dimensions. Nintendo claims that a one- or two-dimensional tracking system would be determine the "position of a user."

Nintendo believes that the mention of a reference location in Motiva's construction is not incorrect, but it is redundant. (Citing RX-55C at Q. 59.) Nintendo explains that a reference

location must always exist because positions and orientations must always be measured relative to some frame of reference. (*Id.*)

Staff's Position: Staff contends that "position information" means "information about the point or area in space actually occupied by an object."

Staff states that "position" is an ordinary English word and should be given its ordinary meaning. (citing WEBSTER'S THIRD NEW INT'L DICTIONARY 1769 (2002).) Staff asserts that he specification indicates that "position" generally involves the point in space occupied by an object, and there are also some references to the area occupied by an object. (Citing JX-1 at 5:22-32, 16:11-14.)

Staff believes that Motiva's inclusion of a "reference location" is confusing given that the patent refers to both relative and absolute positions. (Citing JX-1 at 1:24.) Staff believes that Nintendo's inclusion of "3D space" is confusing because real people occupy points or areas in three dimensions. Staff asserts that Nintendo's argument regarding "3D space" is a non-infringement argument rather than a claim construction argument.

Construction to be applied: "information specifying a location in 3D space."

The parties' proposed constructions do not vary greatly for this term. The primary dispute centers on Nintendo's inclusion of "3D space." As Nintendo explains, the claimed invention tracks the movement of a user. The specification explains that the invention may be used "for the purposes of functional movement assessment for exercise, and physical medicine and rehabilitation." (JX-1 at 1:16-17.) Such tracking requires knowledge of the user's location in 3D space. (RX-55C at Q. 55-56.) Thus, I find it appropriate to include express reference to 3D space in the proposed construction. Moreover, I find Nintendo's proposed construction to be

the clearest and most straightforward out of the three proposed constructions offered by the parties.

Motiva cites to no evidence from the '151 patent that supports a finding that the claimed invention may track position in only one or two dimensions. (*See* CIB at 40.) Motiva claims that the prior art Nishitani reference discloses tracking in one or two dimensions. (*Id.*) What Nishitani discloses is irrelevant; the focus here is on the disclosure of the '151 patent. Motiva also argues that the Examiner's statements during reexamination support its position. (CIB at 40.) I find that the statements made by the Examiner regarding claim construction are not persuasive. The Patent Office employs a broader standard for claim construction during reexamination. *In re Am. Acad. Of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004) (explaining that the "broadest reasonable construction" rule for claim construction applies to reexaminations). Furthermore, Nintendo notes that district courts have declined to consider materials from unconcluded reexamination proceedings when construing claims. *See, e.g., F5 Networks Inc. v. A10 Networks, Inc.*, 2011 WL 2681182, at *4 (W.D. Wash. July 8, 2011). Here, the reexamination of the '151 patent is not complete, and any findings made thusfar in the reexamination proceeding are subject to change. I concur with the sound reasoning of the district court in *F5 Networks* and find that it would be improper to consider an incomplete reexamination record when construing the claims.

4. "feedback or control data signals"

The phrase "feedback or control data signals" appears in asserted claims 57, 68, and 84. The phrase "data signals...for providing feedback or control data" appears in asserted claims 16, 27, 28, 29, 30, 31, 32, and 44.

Motiva's Position: Motiva contends that "feedback or control data signals" are "signals providing feedback or guidance information."

Motiva asserts that its construction is proper, and that Nintendo's construction is inconsistent with the specification. Motiva notes that the specification discloses an embodiment in which "an audio signal indicates the task has successfully completed" and in which feedback can "motivate individuals to extend their range of motion beyond their current capabilities." (Citing JX-1 at 17:34-48, 17:67-18:2, 18:5-8.) Motiva states that these signals do not guide "the user to specified locations in 3D space." Motiva cites further examples from the specification that it claims show Nintendo's proposed construction is incorrect. (Citing JX-1 at 18:9-11, 16:11-26, 18:62-19:11.)

Motiva claims that during reexamination, the Examiner made clear that "feedback" is not as limited as Nintendo would require. (Citing JX-174.) Motiva argues that the ordinary meaning of "feedback" as seen in a dictionary definition supports Motiva's construction. (Citing CX-711.) Finally, Motiva notes that Nintendo's prior proposed construction of this claim language in the district court litigation did not include the 3D limitation now asserted by Nintendo. (Citing CX-694C.)

Nintendo's Position: Nintendo contends that "feedback or control signals" are "feedback or control data signals to guide the user."

Nintendo argues that Motiva's approach of construing "control" as "guidance," but refusing to construe "feedback" is odd and leaves an ambiguity regarding the meaning of "feedback." (Citing RX-55C at Q. 61.) Nintendo asserts that the specification makes clear that the purpose of the feedback is to help guide a user to make desired motions. (Citing RX-55C at

Q. 61; JX-1 at 1:10-16.) Nintendo states that Dr. Singh testified that the invention "can give you feedback that tells you that you are straying from that trajectory..." (Citing Tr. at 222:7-9.) According to Nintendo, Motiva's proposed construction defeats the purpose of the invention. (Citing RX-55C at Q. 63.) Nintendo argues that the disclosed invention must give real-time guidance feedback to work, and that Motiva's construction permits embodiments that simply would not work. (*Id.*)

Staff's Position: Staff states that it "generally agrees" with Motiva's proposed construction of "feedback or control data signals."

Staff states that the '151 patent contains many different examples of feedback and control data. (Citing JX-1 at Abstract, 1:13-17, 2:7-12, 4:63-67, 6:7-14, 11:45-49, 12:4-6, 12:33-35, 14:51-64, 18:9-10, 18:63-19:11.) Staff asserts that the parties generally agree that the purpose of the feedback and control data is to provide guidance to the user. (Citing JX-1 at 1:13-17.) Staff states that the only difference between the proposed constructions appears to be Nintendo's insistence that the feedback and control data must "guide a user to make desired motions." (Citing RPHB at 116.) Staff does not believe that the construction should be so limiting in view of the fact that the specification discloses embodiments in which feedback is used to indicate whether or not a user has successfully completed a task or to provide motivation. (Citing JX-1 at 17:34-42, 18:5-8.)

Construction to be applied: "signals providing feedback or guidance information."

Independent claim 50 claims "[a]n apparatus for use in tracking movement of a user" comprising, *inter alia*, "a receiver for receiving signals wirelessly from a remote processing system." The claim further states:

> wherein the receiver is adapted to receive ***feedback or control data signals*** from the processing system, the ***feedback or control data signals*** derived from processed information including movement information of the apparatus; and
>
> wherein the receiver receives the data signals from the processing system and wherein the apparatus processes the received data signals to provide feedback or control information to the user.

(JX-1 at 38:53-61) (emphasis added).

As the claim language makes clear, the purpose of the feedback or control data signals is "to provide feedback or control information to the user." In addition, claim 1 states that the purpose is to "provide[] sensory stimuli according to the received data signals." (JX-1 at 35:53-54.) The specification describes different types of aural, visual, and tactile feedback that may be provided to a user. The feedback can be provided to inform a user regarding how well or how poorly he is performing a task. (*See, e.g.,* JX-1 at 16:61-17:5, 18:9-20, 18:62-19:11.) The feedback can also be provided to inform the user when he has completed a task. (*Id.* at 17:34-42.)

The parties' proposed constructions are very similar, but Nintendo makes clear that it intends to its construction to require that the signals "help guide a user to make desired motions." While the specification discusses feedback for the purpose of helping guide a user to make desired motions, it also discloses providing feedback for other purposes, such as informing a user when he completes a task. (*See* JX-1 at 16:61-17:5, 17:34-42, 18:9-20, 18:62-19:11.) Therefore, I find Nintendo's proposed construction, as further construed by Nintendo in its brief, is overly narrow because it ignores feedback signals beyond the ones provided to guide a user's motions. I find the construction proposed by Motiva and Staff adequately conveys the meaning of the claim language and remains consistent with the examples provided in the specification.

5. "processing system"

The term "processing system" appears in all asserted claims.

Motiva's Position: Motiva contends that a "processing system" is "a system that processes data."

Motiva argues that the Examiner's statements during reexamination support Motiva's proposed construction of "processing system." (Citing JX-174.1260-62, 1279, 1801, 1803.) Motiva also relies on dictionary definitions of "processor" to support its proposed construction. (Citing CX-680; CX-685.)

Motiva argues that Staff's proposed construction is overly limiting. According to Motiva, stating that the "processing system" processes data is more accurate than saying it manipulates data, to the extent that manipulating data might be understood as simply moving data around without computing new data.

Motiva asserts that the claim language demonstrates that Nintendo's proposed construction is incorrect. Motiva states that claims 36 and 78 depend from claims 1 and 50, respectively, and add the requirement of a receiver array. Therefore, Motiva argues that including the receiver array as part of the "processing system" of claims 1 and 50 would render claims 36 and 78 superfluous.

Motiva argues that Nintendo's construction is incorrect because it requires a "centralized position processor system." According to Motiva, the invention relates to the tracking of movement, and not just position. (Citing CX-5067C at Q. 433; JX-1 at 18:24-29, 15:8-12, 9:25-28.)

Motiva claims that Nintendo seeks to import limitations from a preferred embodiment in the specification. Motiva asserts that Nintendo's attempts to read in limitations from the text of the specification and the figures should be rejected.

Nintendo's Position: Nintendo contends that a "processing system" is "a system comprised of a centralized position processor system or unit and receiver constellation unit." Nintendo claims that "processing system" is actually defined in the '151 patent. (Citing RX-55C at Q. 69, 71; JX-1 at 10:7-9, 2:51-54.) Nintendo argues that based on the express definition provided in the specification, a "processing system" must include both a position processor system and a receiver constellation unit.

Staff's Position: Staff contends that a "processing system" is "a computer system that manipulates data."

Staff asserts that the ordinary meaning of "processing" is "the manipulation of data within a computer system." (Citing SX-15 at 423.) Staff argues that Nintendo's proposed construction is overly narrow. According to Staff, Nintendo imports limitations from a preferred embodiment depicted in Figure 5 of the '151 patent. (Citing JX-1 at 2:51-62, 19:14-21.) Staff asserts that Motiva is correct in claiming that reading the independent claims to require a receiver constellation unit would render certain dependent claims redundant. (Citing JX-1 at 37:61-67, 40:29-34.)

Staff notes that Motiva disagrees with Staff's use of the word "manipulates." Staff argues that the Microsoft Computer Dictionary clearly explains that manipulation is processing. (Citing SX-15 at 423.) Staff believes that the embodiments described in the specification are consistent with the cited definition of "processing." (Citing JX-1 at Fig. 5, 2:51-62, 5:27-32,

19:14-21.) Staff believes that there is no significant difference between Motiva's proposed construction and Staff's proposed construction.

Construction to be applied: "a system that processes data"

The term "processing system" appears in the following context in claim 1:

> a processing system, remote from the first communication device, for wirelessly receiving said transmitted signals from said first communication device, said processing system adapted to determine movement information for said first communication device and sending data signals to said first communication device for providing feedback or control data

(JX-1 at 35:44-50.)

Nintendo claims that the '151 patent defines a "processing system" in the specification. Nintendo points to the "Brief Description of the Drawings" section and notes that it states, "FIG. 5 illustrates a block diagram of the remote processing system of the present invention." (JX-1 at 10:7-8.) Specifically, Nintendo focuses on the fact that the description of Figure 5 is of the "remote processing system of ***the present invention***." (*Id.*) (emphasis added). According to Nintendo, this means that the processing system is limited to whatever is depicted in Figure 5, and Nintendo claims that Figure 5 shows a subsystem that has a centralized processor system and a receiver constellation unit. Nintendo also relies on a passage from the specification that describes the "processor unit" as "a subsystem comprised of a centralized position processor system or unit and receiver constellation unit[.]" (*Id.* at 2:51-54.)

Contrary to Nintendo's assertion, I do not find that the specification defines a "processing system." Nintendo relies on the brief description of Figure 5, and specifically, the use of the words "the present invention." (RIB at 42.)

The Federal Circuit has explained that:

> It is true that, in some circumstances, a patentee's consistent reference to a certain limitation or a preferred embodiment as "this invention" or the "present

> invention" can serve to limit the scope of the entire invention, particularly where no other intrinsic evidence suggests otherwise.

Absolute Software, Inc. v. Stealth Signal, Inc., --- F.3d ----, 2011 WL 4793149, at *12 (Fed. Cir. Oct. 11, 2011). But, the Federal Circuit has cautioned that use of "the present invention" in the specification does not always serve to limit the claims:

> On the other hand, we have found that use of the phrase "present invention" or "this invention" is not always so limiting, such as where the references to a certain limitation as being the "invention" are not uniform, or where other portions of the intrinsic evidence do not support applying the limitation to the entire patent.

Id.

Here, I find that the use of "the present invention" in the brief description of Figure 5 does not serve to limit the claims to the embodiment depicted in Figure 5 because there are other portions of the specification that do not support applying the limitations to the entire patent. Nintendo neglects to note that the detailed description of Figure 5 makes clear that the figure depicts a preferred embodiment. (JX-1 at 19:13-55.) The specification states:

> ***In the preferred embodiment***, the processor unit is comprised principally of a constellation of five (5) ultrasonic transducers and signal processing circuitry, thereof, and a signal processor that interfaces to this receiver group, performs the pose calculations, and interfaces to the transponders and host computer databases. The following interface descriptions for the processor unit are based upon the dependency flow represented by FIG. 5.

(JX-1 at 19:13-20) (emphasis added).

In addition, the other passage upon which Nintendo relies is clearly discussing the preferred embodiment: "[i]n ***the preferred embodiment***, the system is comprised of two subsystems: (1) a subsystem comprised of one or more active transponders...and (2) a subsystem comprised of a centralized position processor system or unit and receiver constellation unit[.]" (JX- 1 at 2:42-54) (emphasis added). These descriptions of the preferred embodiment do not

serve to limit the meaning of "processing system." *Absolute Software*, 2011 WL 4793149, at *12; *see also Phillips*, 415 F.3d at 1323 ("[W]e have expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.")

Having rejected Nintendo's overly narrow proposed construction, I turn to the constructions offered by Motiva and Staff. Motiva's and Staff's proposed constructions are similar, a point noted by Staff. (SIB at 32-33.) Both Motiva and Staff believe that the ordinary meaning of "processing" should be used, and both parties rely on dictionary definitions. Motiva defines "processing system" as "a system that processes data." Staff's proposed construction does little more than replace "processing" with "manipulates." While Motiva's construction is circular, all parties at least agree that a "processing system" is "a system that processes data." Therefore, I shall adopt Motiva's proposed construction of "processing system."

6. "transmitter for transmitting signals"

The phrase "transmitter for transmitting signals" appears in asserted claims 16, 27, 28, 29, 30, 31, 32, 44, 57, 68, and 84.

Motiva's Position: Motiva contends that "transmitter for transmitting signals" means "an apparatus that transmits signals."

Motiva asserts that the specification discloses several types of transmitters, and the claims should not be limited to a specific type of transmitter. (Citing JX-1 at 1:18-21, 1:27-28, 33:20, 33:48-49, 35:18-21.) Motiva claims that during the reexamination, the examiner agreed that the "transmitter" could be used to transmit data between "a controller and game machine." (Citing JX-174.) Motiva argues that extrinsic evidence supports its proposed construction.

Motiva points to multiple dictionary definitions for "transmitter." (Citing CX-680; CX-681; CX-685.)

Motiva argues that Staff's proposed construction adds unnecessary conditions to the claims. Motiva states that it is not clear what "electrically encoded information" means. (Citing CX-5067C at Q. 434-435.) Motiva claims that to the extent that "electrically encoded information" requires sending "electrically encoded signals," Staff's construction is unduly limiting. (Citing JX-1 at 33:20.)

Motiva notes that Nintendo seeks to limit the claims to ultrasonic transmitters. Motiva argues that this would be improper due to claim differentiation. Motiva states that claims 9 and 60 depend from claims 1 and 50, respectively, and add the limitation that the transmitted signals are "ultrasonic signals received by the processing system." (Citing JX-1 at 36:11-14, 39:29-32.) Motiva further notes that claims 35 and 67 also depend from claims 1 and 50, respectively, and require that the signals transmitted from the first communication device are radio frequency signals. (Citing JX-1 at 37:57-59, 39:23-58.) Thus, Motiva claims that the transmitter of claims 1 and 50 can include radio frequency transmitters for sending data.

Nintendo's Position: Nintendo contends that "transmitter for transmitting signals" means "a device that transmits signals from which location of the user in 3D space can be determined."

Nintendo states that the specification describes the transmission of various signals, but with the exception of ultrasonic, all of these are secondary: none of them is a signal that is transmitted in the absence of position information. (Citing RX-55C at Q. 74.) Nintendo claims that the patent requires that the essential information to be transmitted is information from which the location of a user in 3D space can be determined. (*Id.*)

Nintendo states that the specification reveals that other types of signals may be transmitted, but only in conjunction with positional signals. (Citing RX-55C at Q. 75.) Nintendo thus claims that Motiva's and Staff's proposed constructions are overly broad. Nintendo states that, for example, a transmitter that transmits only heart rate information would meet Motiva's and Staff's constructions. (*Id.*) Nintendo explains that its proposed construction does not prohibit additional information from being transmitted, but requires the transmission of positional information.

Staff's Position: Staff contends that "transmitter for transmitting signals" means "a circuit or electronic device designed to send electrically encoded data to another location." Staff argues that its proposed construction is consistent with the descriptions of the "transmitter" in the specification. (Citing JX-1 at 33:18-47, 35:18-31, Fig. 7.) Staff argues that its proposed construction is clear, as it is based on the definition found the Microsoft Computer Dictionary. (Citing SX-15.) Staff argues that Nintendo's construction is unnecessarily limiting because the requirement of transmitting location information is subsumed in other limitations of the claim. (Citing JX-1 at 35:47, 38:56.)

Construction to be applied: "a device that transmits signals"

Claim 1 of the '151 patent requires, *inter alia*, "a first communication device comprising a transmitter for transmitting signals..." The claim also makes clear that the signals are transmitted from the first communication device to the processing system: "a processing system, remote from the first communication device, for wirelessly receiving said transmitted signals from said first communication device." Claim 50 of the '151 patent likewise requires, *inter alia*, "[a]n apparatus for use in tracking movement of a user, comprising: a transmitter for transmitting signals..."

The parties agree that a transmitter is a device that transmits signals, just as the claim language requires. The parties' primary dispute is whether there should be an express requirement in the construction that the transmitter must transmit location information. Nintendo argues that the purpose of the invention is to track movement of a user, and that it is essential that the transmitter therefore transmit location information. Nintendo asserts that while the specification discloses other information that may be transmitted, the transmitter must transmit location information in addition to the other types of information. Motiva and Staff do not include such a limitation, arguing that it is improper.

I find that Nintendo's proposed construction is overly limiting. Dependent claims in the '151 patent demonstrate that it would be incorrect to adopt Nintendo's proposed construction. *Phillips*, 415 F.3d at 1314 ("Other claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment as to the meaning of a claim term.")

Claim 9, which depends from claim 1, adds the requirement "wherein the first communication device sends ultrasonic signals received by the processing system for determining movement information for the first communication device." Claim 17, which depends from claim 1, adds the requirement "wherein said first communication device transmits accelerometer signals to said processing system." Claim 18, which depends from claim 1, adds the requirement "wherein said first communication device transmits heart rate signals to said processing system." Claim 19, which depends from claim 1, adds the requirement "wherein said first communication device transmits signals containing orientation information to said processing system." Claims 69, 70, and 71 contain similar limitations and all depend from claim 50. The specification includes discussion of transmission of these types of signals, and other signals such as battery status and user I/O status. (*See, e.g.,* JX-1 at 33:18-47, 35:18-24.) The

claims and specification therefore demonstrate that the transmitter may transmit many types of signals besides just signals from which location of the user in 3D space can be determined.

Nintendo argues that without the transmission of location information from the first communication device to the processing system, the claimed invention will not work for its intended purpose. As Staff correctly notes, the idea that the first communication device must transmit location information is already subsumed in other limitations of the claim. Besides the transmitter language, claim 1 also requires "[a] system for tracking movement of a user," and a "processing system adapted to determine movement information for said first communication device." Therefore, a system where the transmitter of the first communication device only transmits heart rate signals will not meet all of the requirements of claim 1 because there will be no tracking of movement. It is unnecessary and redundant to include the location information requirement in the "transmitter" construction, as the other claim language already covers what Nintendo seeks to address.

Staff's proposed construction – "a circuit or electronic device designed to send electrically encoded data to another location" – is taken directly from the Microsoft Computer Dictionary. (*See* SX-15.) I find that the meaning of the term "electrically encoded data" is unclear. The term "signal" is not part of the parties' dispute here, and I find that replacing "signal" with an ambiguous term like "electrically encoded data" will create more confusion regarding the meaning of the claim language. I find that adopting Staff's proposed construction would go against the stated purpose of claim construction, which is to "understand and explain" the scope of the claims. *Embrex*, 216 F.3d at 1347. Based on the foregoing, I find that a "transmitter for transmitting signals" means ""a device that transmits signals."

7. "adapted to be hand-held"

The phrase "adapted to be hand-held" appears in asserted claims 16, 27, 28, 29, 30, 31, 32, and 44.

Motiva's Position: Motiva contends that "adapted to be hand-held" means "suited by nature, character or design to be held in one hand."

Motiva asserts that the insertion of Nintendo's proposed construction into the claims results in several nonsensical claims. (Citing CX-5067C at Q. 429.) Motiva states that the prosecution history demonstrates that "adapted to be hand-held" means "being hand-held." (Citing JX-2.0369.) Motiva claims that this is consistent with how the phrase "adapted to be" us used in patent drafting. (Citing MPEP § 2111.01.) Motiva argues that Nintendo's proposed construction is unduly narrow because it is based on only one figure from the '151 patent.

Nintendo's Position: Nintendo contends that "adapted to be hand-held" means "modified from an original form to enable the device to be hand-held."

Nintendo asserts that Figure 1B of the '151 patent supports its proposed construction, as Figure 1B shows a transponder being modified from an original form by being snapped into a holder with a handle attached. (Citing RX-55C at Q. 83.) Nintendo claims that the modification shown in Figure 1B is critical to the invention because without the modification, there can be no "tracking position of a user."

Staff's Position: Staff contends that "adapted to be hand-held" means "suited by nature, character or design to be held in one hand."

Staff states that "adapted" is an ordinary English word that means "suited by nature, character or design to a particular use, purpose or situation. (Citing WEBSTER'S THIRD NEW INT'L DICTIONARY 24 (2002).) Staff claims that this is consistent with the general rules of patent

drafting, where phrases such as "adapted to" do not generally function to limit a claim. (Citing MPEP § 2111.04.) Staff argues that Nintendo's proposed construction finds no support in the text of the patent and is unreasonable.

Construction to be applied: "structured or designed to be held in one hand"

Claim 1 requires a first communication device "adapted to be hand-held." The specification, in multiple locations, refers to a "hand-held" transponder. (See, e.g., JX-1 at 4:34-39, 12:33-37, 30:43-46.) The "adapted to be hand-held" language was added through an amendment during prosecution. (JX-2.0355.) In making the amendment, the applicants explained that "[c]laim 1 is also amended to limit the first communication device to being 'hand-held'..." (JX-2.0369; *see also* JX-2.0370-0371.) I find that "adapted to be hand-held" should be given its plain and ordinary meaning, which is "structured or designed to be held in one hand."

The parties' dispute goes to the meaning of the phrase "adapted to." This phrase is commonly found in claim language, as evidenced by MPEP § 2111.04, which addresses "adapted to," "adapted for," "wherein," and "whereby" clauses. Other courts have construed "adapted to" in a manner consistent with the adopted construction. In one case, the court explained that the claim language "a pair of sleeves . . . each sleeve of said pair adapted to be fitted over the insulating jacket of one of said cables" requires that "[e]ach sleeve is so structured or dimensioned that it can be fitted over the insulating jacket of a cable." *In re Venezia*, 530 F.2d 956, 959 (C.C.P.A. 1976); *see also Sta-Rite Indus., LLC v. ITT Corp.*, 682 F. Supp. 2d 738, 753 (E.D. Tex. 2010) (construing "adapted to" to mean "designed or configured to").

Nintendo claims that "adapted to be hand-held" requires that the first communication device is "modified from an original form to enable the device to be hand-held." According to

Nintendo's logic, a first communication device that is always hand-held cannot meet this claim limitation, as it must be first "modified from an original form" to become hand-held.

To support its overly narrow construction, Nintendo relies on Figure 1B in the '151 patent specification. Figure 1B depicts a transponder being placed into a "modular extension piece" to enable the transponder to be hand-held. (JX-1 at 11:35-44, Fig. 1B.) Simply because the transponder shown in the embodiment depicted in Figure 1B must be modified from an original form to become hand-held does not mean that the claims should be so limited. The '151 patent provides no indication that the inventors sought to limit the claims to the embodiment depicted in Figure 1B. Nintendo's construction therefore seeks to improperly import a limitation from Figure 1B into the claims. *Kara Tech. Inc.*, 582 F.3d at 1348 ("The patentee is entitled to the full scope of his claims, and we will not limit him to his preferred embodiment or import a limitation from the specification into the claims.")

C. The '268 Patent

The '268 patent is a continuation of the '151 patent. Therefore, any common claim terms found in both patents shall be given the same meaning. *NTP, Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282, 1293 (Fed. Cir. 2005) ("Because NTP's patents all derive from the same parent application and share many common terms, we must interpret the claims consistently across all asserted patents."); *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1334 (Fed. Cir. 2003) ("[W]e presume, unless otherwise compelled, that the same claim term in the same patent or related patents carries the same construed meaning.")

The only claim language unique to the '268 patent that is necessary to construe is "calibrating the first communication device to establish a reference position," found in claim 4 of the '268 patent.

Motiva's Position: Motiva contends that "calibrating the first communication device to establish a reference position" means "establishing an initial position for the first communication device."

Motiva asserts that the specification supports its proposed construction. (Citing JX-1 at 5:22-25, 9:40-41.) Motiva claims that the specification describes the calibration as establishing a point, or points, that the system uses as a reference or initial position for comparison. Motiva further claims that the dictionary definition of "calibration" supports its construction. (Citing CX-685.)

Motiva claims that Staff's construction is improper because the terms "point or area" do not clarify the term "position." Motiva argues that Staff's construction is incorrect because there is an embodiment where the controller is calibrated, but the controller is not adjusted. (Citing JX-1 at 14:17-21.) Motiva claims that Nintendo's inclusion of "3D space" is incorrect for the reasons previously discussed.

Nintendo's Position: Nintendo contends that "calibrating the first communication device to establish a reference position" means "using the first communication device to establish a reference location in 3D space."

Nintendo asserts that its proposed construction follows from the purpose and context of the claimed invention. (Citing RX-55C at Q. 85.) Because humans exist in 3D space, Nintendo argues that the calibration must establish a reference position in 3D space. (*Id.*) Nintendo states that the specification uses the word "calibration: in three-dimensional, human-movement contexts. (Citing RX-55C at Q. 86.) Nintendo asserts that its proposed construction is more consistent with the only figure that addresses calibration, Figure 3C. (Citing RX-55C at Q. 87.)

Staff's Position: Staff contends that "calibrating the first communication device to

establish a reference position" means "adjusting the first communication device to establish a point or area in space used as a reference."

Staff claims that the specification explains that the process of calibration is one of adjusting the device to the desired parameters. (Citing JX-3 at 5:22-26, 9:35-36, 14:11-15.) Staff combines this evidence with its previously-stated alleged ordinary meaning of "position" to result in the proposed construction.

Staff notes that Motiva claims that there is an embodiment of the invention where calibration takes place without the controller being adjusted. (Citing CPHB at 201.) Staff argues that in the embodiment identified by Motiva, the initial "calibration phase" clearly involves adjusting the system. (Citing JX-3 at Fig. 3C.) Staff claims that Nintendo's inclusion of "3D space" is confusing and unnecessary because the real world is three dimensional. (Citing RPHB at 185-186.)

Construction to be applied: "establishing a reference location in 3D space for the first communication device"

Claim 4 recites: "[t]he system of claim 3, wherein: the user input device is adapted for calibrating the first communication device to establish a reference position." Claim 3 states that "the first communication device comprises a user input device adapted for communication with the processing system through the transmitter."

The specification refers to calibration, but provides little detail. For example, the specification makes the following references to calibration:

- "In summary, one embodiment of the present invention is comprised of: a means is to provide a movement trajectory learning modality that allows the user to calibrate and create the desired endpoints, midpoints, and/or total reference movement trajectory through user programmer entry of an input device resident on the transponder;" (JX-3 at 5:20-26);

- "Calibrate the transponder movement vector to establish its reference pose;" (*Id.* at 9:35-36);

- "This system improves upon the practicality and user interactive aspects of setup, deployment, calibration, execution, feedback, and data interpretation of a tracking system designed for function human movement." (*Id.* at 10:32-35);

- "In the preferred embodiment, the system doesn't require complicated, time consuming sensor setup and calibration by virtue of it minimalist sensor requirements and uncomplicated sensor mounting." (*Id.* at 11:24-27); and

- "During the Calibration Phase (FIG. 3C), a simple calibration procedure may be requested to evaluate transponder function and specific user range of motion constraints. Typically, this information is determined beforehand and saved in the system's database. Also, practicality of this system is claimed for lack of extensive calibration requirements." (*Id.* at 14:11-16.)

The parties' proposed constructions are all similar in substance. The parties agree that calibration of the first communication device involves setting an initial or reference location for the device. I find that the adopted construction best conveys this concept, and stays fully consistent with the adopted construction of "position information," which is "information specifying a location in 3D space." Motiva and Staff criticize Nintendo's use of the phrase "3D space," but asserted claim 4 concerns "[a] system for tracking position of a user," and a user's position will necessarily be found in 3D space. Using anything less than 3D dimensions does not enable the system to determine a user's position.

IV. INVALIDITY

A. Applicable Law

It is the respondent's burden to prove invalidity, and the burden of proof never shifts to the patentee to prove validity. *Scanner Techs. Corp. v. ICOS Vision Sys. Corp. N.V.*, 528 F.3d 1365, 1380 (Fed. Cir. 2008). "Under the patent statutes, a patent enjoys a presumption of validity, *see* 35 U.S.C. § 282, which can be overcome only through facts supported by clear and convincing evidence[.]" *SRAM Corp. v. AD-II Eng'g, Inc.*, 465 F.3d 1351, 1357 (Fed. Cir.

2006). The clear and convincing standard was recently reaffirmed by the Supreme Court. *Microsoft Corp. v. i4i Ltd. P'ship*, 131 S.Ct. 2238 (2011) (upholding the Federal Circuit's interpretation of 35 U.S.C. § 282).

The clear and convincing evidence standard placed on the party asserting the invalidity defense requires a level of proof beyond the preponderance of the evidence. Although not susceptible to precise definition, "clear and convincing" evidence has been described as evidence which produces in the mind of the trier of fact "an abiding conviction that the truth of a factual contention is 'highly probable.'" *Price v. Symsek*, 988 F.2d 1187, 1191 (Fed. Cir. 1993) (citing *Buildex, Inc. v. Kason Indus., Inc.*, 849 F.2d 1461, 1463 (Fed.Cir.1988).)

1. Anticipation

"A patent is invalid for anticipation if a single prior art reference discloses each and every limitation of the claimed invention. Moreover, a prior art reference may anticipate without disclosing a feature of the claimed invention if that missing characteristic is necessarily present, or inherent, in the single anticipating reference." *Schering Corp. v. Geneva Pharm., Inc.*, 339 F.3d 1373, 1377 (Fed. Cir. 2003) (citations omitted).

"When no prior art other than that which was considered by the PTO examiner is relied on by the attacker, he has the added burden of overcoming the deference that is due to a qualified government agency presumed to have properly done its job[.]" *Am. Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F.2d 1350, 1359 (Fed. Cir. 1984). Therefore, the challenger's "burden is especially difficult when the prior art was before the PTO examiner during prosecution of the application." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1467 (Fed.Cir.1990).

2. Obviousness

Section 103 of the Patent Act states:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

35 U.S.C. § 103(a) (2008).

"Obviousness is a question of law based on underlying questions of fact." *Scanner Techs. Corp. v. ICOS Vision Sys. Corp. N.V.*, 528 F.3d 1365, 1379 (Fed. Cir. 2008). The underlying factual determinations include: "(1) the scope and content of the prior art, (2) the level of ordinary skill in the art, (3) the differences between the claimed invention and the prior art, and (4) objective indicia of non-obviousness." *Id.* (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966)). These factual determinations are often referred to as the "*Graham* factors."

"When no prior art other than that which was considered by the PTO examiner is relied on by the attacker, he has the added burden of overcoming the deference that is due to a qualified government agency presumed to have properly done its job[.]" *Am. Hoist & Derrick Co.*, 725 F.2d at 1359. Therefore, the challenger's "burden is especially difficult when the prior art was before the PTO examiner during prosecution of the application." *Hewlett-Packard Co.*, 909 F.2d at 1467.

The critical inquiry in determining the differences between the claimed invention and the prior art is whether there is a reason to combine the prior art references. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417-418 (2007). In *KSR*, the Supreme Court rejected the Federal Circuit's rigid application of the teaching-suggestion-motivation test. The Court stated that "it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does." *Id.* at 418. The Court

described a more flexible analysis:

> Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue...As our precedents make clear, however, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.

Id.

Since *KSR* was decided, the Federal Circuit has announced that, where a patent challenger contends that a patent is invalid for obviousness based on a combination of prior art references, "the burden falls on the patent challenger to show by clear and convincing evidence that a person of ordinary skill in the art would have had reason to attempt to make the composition or device, . . . and would have had a reasonable expectation of success in doing so." *PharmaStem Therapeutics, Inc. v. Viacell, Inc.*, 491 F.3d 1342, 1360 (Fed. Cir. 2007).

In addition to demonstrating that a reason exists to combine prior art references, the challenger must demonstrate that the combination of prior art references discloses all of the limitations of the claims. *Hearing Components, Inc. v. Shure Inc.*, 600 F.3d 1357, 1373-1374 (Fed. Cir. 2010) (upholding finding of non-obviousness based on the fact that there was substantial evidence that the asserted combination of references failed to disclose a claim limitation); *Velander v. Garner*, 348 F.3d 1359, 1363 (Fed. Cir. 2003) (explaining that a requirement for a finding of obviousness is that "all the elements of an invention are found in a combination of prior art references").

B. The '151 Patent

1. Anticipation

a. Nishitani

Nintendo's Position: Nintendo contends that U.S. Patent Application No. 2001/0015123 ("Nishitani") anticipates claims 16, 44, 57, 68, and 84 of the '151 patent. (Citing RX-113.)

Nintendo states that claims 16 and 68 contain virtually the same language, with claim 16 depending from claim 1 and claim 68 depending from claim 50. Nintendo asserts that clear and convincing record evidence shows that Nishitani contains every element in claims 1, 16, 50, and 68 of the '151 patent. (Citing RX-56 at Q. 87, 88-133, 250-276.)

Nintendo states that claims 16 and 68 relate to the hand-held device being able to accept various mechanical extension pieces depending on the application desired. Nintendo states that Nishitani discloses two different types of detachable upper casing members, one of which is transparent and another of which is semi-transparent. (Citing RX-113 at ¶228; Tr. 1696:14.) Nintendo claims that these detachable upper casing members are mechanical extension pieces that can be attached and detached depending on the application desired. (Citing RX-113 at ¶¶ 127, 158, 228, 230.)

In addition, Nintendo claims that Table 1 of Nishitani shows that the handheld controller can accept additional mechanical extensions, depending on the disclosed applications such as a sword, a cudgel, drum sticks, musical conducting and twirling batons, etc. (Citing RX-113 at Table 1; Tr. at 1699:11-21.) According to Nintendo, Nishitani further discloses that the handheld unit can be "sword-shaped." (Citing RX-113 at ¶ 192.)

Nintendo asserts that the evidence at trial showed that Nishitani meets all of the limitations of claim 44, including those from the related claims. (Citing RX-56 at Q. 211-249.)

Nintendo states that Motiva suggests that Nishitani is missing two limitations of claim 44: (1) the limitation of claim 41 "said processing system is adapted to determine the error between the actual movement information of said first communication device and a movement information defined by a reference movement trajectory"; and (2) "said feedback stimuli are aural instructions to the user for guiding the user's movements to conform to said reference movement trajectory." (Citing CPHB at 181-182.)

With respect to the first limitation, Nintendo claims that Figures "8A and 8B schematically show exemplary hand movement trajectories . . . when the participant makes conducting motions with the one-dimensional acceleration sensor MSa held by his or her hand." (Citing RX-113 at ¶ 165.) According to Nintendo, Nishitani also discloses identifying which conducting trajectory the user is making. (Citing RX-113 at ¶ 179.) Thus, Nintendo believes that the system of Nishitani does disclose using "sensors capable of detecting acceleration, velocity, position, gyroscopic position, impact, inclination, angular velocity and/or the like" to determine the error between the actual movement information of the first communication device and the movement information defined by a reference movement trajectory (the exemplary hand movement trajectories). (Citing RX-113 at ¶ 115.)

With respect to the second limitation, Nintendo states that Nishitani teaches that "the information to be transmitted from the personal computer 103 to the hand controller 101 . . . may be metronome information indicative of . . . tempo deviation information indicative of a degree of deviation from a predetermined tempo, etc. Such information can become performance guide information for the human operator. . . ." (Citing RX-113 at ¶ 281.) Nintendo claims that "degree of deviation" is, of course, another term for error.

Nintendo claims that the evidence at trial showed that claim 57 of the '151 patent is invalid as anticipated by Nishitani. (Citing RX-56 at Q. 301-309.) According to Nintendo, Motiva asserts that Nishitani does not anticipate claim 57 because Nishitani does not disclose the following three limitations: (1) "said processing system is adapted to determine the error between the actual movement information of said apparatus and a reference movement trajectory" (2) "wherein the processing system is adapted to send feedback signals to said apparatus based on said error" and (3) "wherein said feedback stimuli are aural instructions to the user for guiding the user's movements to conform to said reference movement trajectory." (Citing CPHB at 183.)

With respect to the first limitation that Motiva claims is absent, Nintendo states that Nishitani's figures "8A and 8B schematically show exemplary hand movement trajectories . . . when the participant makes conducting motions with the one-dimensional acceleration sensor MSa held by his or her hand." (Citing RX-113 at ¶ 165.) With respect to the second and third limitations that Motiva claims are missing, Nintendo claims that Nishitani discloses that "the information to be transmitted from the personal computer 103 to the hand controller 101 . . . may be metronome information indicative of . . . tempo deviation information indicative of a degree of deviation from a predetermined tempo, etc. Such information can become performance guide information for the human operator. . ." (Citing RX-113 at ¶ 281.)

Nintendo notes that Staff asserted that Nishitani does not disclose a system that "determines an error between the actual movement of the motion detector compared against a reference movement trajectory." (Citing SPHB at 63.) Nintendo argues that such an error is determined by Nishitani's system as, for example, information that indicates a tempo deviation from a predetermined tempo. (Citing RX-113 at ¶ 281.)

Finally, Nintendo asserts that the evidence established that Nishitani anticipates claim 84 of the '151 patent. (Citing RX-56 at Q. 332-335.) Nintendo states that Motiva claims that Nishitani does not anticipate this claim because "claim 84 requires communication directly between two hand-held controller devices [and] . . . there is no disclosure in Nishitani of any such direct communication . . . ." (Citing CPHB at 185.) Nintendo argues that neither the claim language nor Motiva's proposed construction of the claim language requires any such *direct* communication. Moreover, Nintendo claims that Nishitani plainly discloses communication between the two devices. (Citing RX-56 at Q. 146; RX-113 at Fig. 13.)

Motiva's Position: Motiva contends that Nintendo failed to prove that Nishitani anticipates any of the asserted claims of the '151 patent.

Motiva argues that Nishitani does not anticipate claim 16 because it lacks the disclosure of being adapted to accept various mechanical extension pieces depending on the application desired. Motiva asserts that the "upper casing member" of Nishitani is not a mechanical extension piece, but rather an integral part of the controller that is simply detachable from the rest of the device. (Citing Tr. at 1719:16-1721:22; CX-5765C at Q. 184-198.) Motiva claims that there is no disclosure in Nishitani that the hand controller device is designed to accept any mechanical extension pieces that are provided separately from the controller. (Citing Tr. at 1721:1-22.)

Motiva argues that Nishitani does not anticipate claim 44 for two reasons. First, Motiva claims that Nishitani does not disclose determining error between actual movement and a reference movement. (Citing CX-5765C at Q. 146-152.) Second, Motiva claims that Nishitanai lacks the disclosure of providing aural instructions to the user for guiding the user's movements because Dr. Hannaford only identifies non-aural feedback. (Citing CX-5765C at Q. 157-158.)

Motiva argues that Nishitani does not anticipate claim 57. Motiva asserts that Nishitani does not disclose determining the error between a user's actual movement and a reference movement. (Citing CX-5765C at Q. 166-174.) Motiva argues that Nishitani also lacks the disclosure of providing aural instructions to the user for guiding the user's movements. (Citing CX-5765C at Q. 175-181.)

Motiva argues that Nishitani does not anticipate claim 68 for the same reasons as discussed with respect to claim 16.

Motiva argues that Nishitani does not anticipate claim 84 because it does not disclose the limitation that requires a first transponder adapted for communicating with a second transponder, also hand-held by the user. Motiva asserts that there is no evidence that the hand controllers disclosed in Nishitani communicate directly with one another. (Citing CX-5765C at Q. 208-214.)

Staff's Position: Staff contends that Nintendo has failed to demonstrate that Nishitani anticipates any of the asserted claims of the '151 patent.

Staff asserts that Nishitani does not anticipate claim 44 because it does not disclose a system that determines an error between the actual movement of the controller compared to a reference movement trajectory. (Citing CX-5765C at Q. 147.) Staff does not believe that Nishitani's disclosure of "performance guides, display or warning" satisfies this claim limitation. (Citing RX-113 at ¶ 282; RX-56 at Q. 243-244.)

Staff asserts that Nishitani does not anticipate claim 57 because Nintendo has not identified any disclosure that teaches that Nishitani's processing system determines and error between the actual movement of the motion detector compared against a reference movement trajectory. (Citing CX-5765C at Q. 167, 172.)

Staff asserts that Nishitani does not anticipate claims 16 and 68, which require an apparatus adapted to accept various mechanical extension pieces depending on the application desired. Staff believes that Nishitani's upper casing member is an integral part of the controller itself, and not a "mechanical extension piece" within the meaning of claim 68. (Citing CX-5765C at Q. 190; Tr. at 1722:15-1723:4.) Staff claims that the additional portions of Nishitani relied on by Nintendo fail to disclose any type of mechanical extension piece that can be added to the hand-held controller depending on the application desired. (Citing CX-5765C at Q. 185.)

Finally, Staff asserts that Nishitani does not anticipate claim 84, which requires a first transponder adapted for communicating with a second transponder. Staff argues that while Nishitani discloses the use of multiple sensors, there is no disclosure of the host system tracking the movement of one sensor with respect to the other sensor, and there is no disclosure of the sensors communicating directly with each other. (Citing RX-113 at ¶ 294.)

Discussion and Conclusions: Based on the evidence in the record, I find that Nintendo has not produced clear and convincing evidence that Nishitani anticipates any of asserted claims 16, 44, 57, 68, and 84.

Claim 16 depends from claim 1 and adds the requirement that the "first communication device is adapted to accept various mechanical extensions pieces depending on the application desired." Claim 68 depends from claim 50 and adds the requirement that the "apparatus is adapted to accept various mechanical extensions pieces depending on the application desired." The '151 patent specification provides examples of extension pieces for the transponder. (*See* JX-1 at 11:34-13:12.) I find that Nintendo has failed to demonstrate that Nishitani discloses the "mechanical extension pieces" limitation of claims 16 and 68.

Nintendo claims that Nishitani includes disclosures of the "mechanical extension pieces" of claims 16 and 68. Nintendo claims that the "upper casing member" of Nishitani, which is item 110 in Figure 14B, constitutes a "mechanical extension piece." Figures 14A and 14B depict the hand controller of Nishitani. In describing the hand controller, the reference states:

> In FIGS. 1A and 14B, the hand controller 101 is shown as tapering toward its center, and a casing of the hand controller 101 includes a pair of upper and lower casing members 110 and 111 demarcated from each other along the center having the smallest diameter...The upper casing member 110 is transparent or semi-transparent so that its interior is visible from the outside. Further, the upper casing member 110 is detachable from the body of the hand controller 101, so that when the upper casing member 110 is detached, the circuit board 113 is exposed to permit manipulation, by a user or the like, of any desired one of switches on the board 113.

(RX-113 at ¶ 228, Figs. 14A, 14B.)

I do not find that the upper casing member 110 of Nishitani is a "mechanical extension piece." I find that the upper casing member 110 of Nishitani is merely a structural component of the hand controller, and not a "mechanical extension piece." I concur with Dr. Singh's opinion that the upper casing member 110 is "not a mechanical extension piece accepted by the controller to enable or enhance a particular type of application. Rather, it is a removable part of the controller itself." (CX-5765C at Q. 190; see also Tr. at 1720:1-14.) The upper casing member of Nishitani is analogous to the cover over the battery compartment in the Wii Remote. (Tr. at 1722:15-1723:4.)

Nintendo claims that Table 1 of Nishitani discloses the "mechanical extension piece" claim limitation. Table 1 lists "[v]arious possible applications" of the light-emitting toy 120 seen in Figures 53A and 53B. (RX-113 at ¶¶ 407, 422, Figs. 53A, 53B.) Table 1 does not give any indication that the light-emitting toy 120 is used in conjunction with any mechanical extension

pieces. I find that Table 1 does not present clear and convincing evidence of this claim limitation. (CX-5765C at Q. 191.)

Nintendo also points to paragraph 192 of Nishitani to support its position. Paragraph 192 states that sensors described in the reference may be "installed within a sword-shaped performance operator or operation unit..." (RX-113 at ¶ 192.) This passage merely explains that the controller may be in the shape of a sword; it does not disclose a controller "adapted to accept various mechanical extensions pieces." (*Id.*)

Claim 44 recites "[a] system according to claim 43, wherein said feedback stimuli are aural instructions to the user for guiding the user's movements to conform to said reference movement trajectory." Claim 44 indirectly depends from claim 40, which requires that the "processing system is adapted to determine the error between the actual movement information of said first communication device and a movement information defined by a reference movement trajectory."

I find that Nintendo has failed to produce clear and convincing evidence that Nishitani discloses a processing system that determines the error between actual movement information and movement information defined by a reference movement trajectory. Nintendo relies on Figures 8A and 8B of Nishitani, and paragraphs 165, 179, and 115. (RIB at 86.) Nowhere in these paragraphs is there a disclosure of comparing the movement of the controller to a reference movement trajectory to determine the error between the two.

I find that Nintendo has failed to produce clear and convincing evidence that Nishitani discloses aural instructions to the user for guiding the user's movements to conform to a reference movement trajectory. To meet this limitation, Nintendo relies on paragraph 281 of Nishitani. (RIB at 86-87.) Paragraph 281 of Nishitani discloses the transmission of "metronome

information" to the hand controller. (RX-113 at ¶ 281.) Nothing in paragraph 281 expressly states that the "metronome information" is aural. I find that there is no clear and convincing evidence that this "metronome information" is aural in view of the disclosure in Nishitani that the information "may be visually shown on the display 116." (*Id.*) In addition, Nishitani discloses that "metronome information" is "indicative of a basic swinging tempo, tempo deviation information indicative of a degree of deviation from a predetermined tempo, etc." (*Id.*) Nintendo relies on this language to assert that the "metronome information" is the aural instruction to the user for guiding the user's movements to conform to a reference movement trajectory. (RIB at 87.) This passage includes no disclosure about the error generated from comparing a user's movement to a reference movement trajectory. Instead, it is concerned with a predetermined tempo, and the degree of deviation from that predetermined tempo. Nintendo has not shown that "tempo" in Nishitani is in anyway related to "movement" as stated in claim 44.

Claim 57 is similar in substance to claim 44. (*See* JX-1.) For the reasons as described *supra* with respect to claim 44, I find that Nintendo has failed to prove by clear and convincing evidence that Nishitani anticipates claim 57.

Claim 84 recites "[a]n apparatus according to claim 50, wherein the apparatus is a first transponder adapted for communicating with a second transponder, also hand held by the user." Nintendo claims that this limitation is met by the disclosure in Nishitani that multiple controllers can engage in bidirectional communications with a communications unit. (RIB at 88; RX-56 at Q. 335; RX-113 at ¶¶ 225-227, Fig. 13.) I do not concur. Nintendo has not identified any portion of Nishitani that actually discloses that there is communication between the controllers,

even if such communication takes place through the communications unit. (*Id.*; CX-5765C at Q. 126, 209, 214.)

b. Zalewksi

Nintendo's Position: Nintendo contends that U.S. Patent No. 5,991,693 ("Zalewski") anticipates claims 27, 28, 29, 30, 32, and 84 of the '151 patent.

With regard to claim 27, Nintendo claims that it has offered clear and convincing evidence of anticipation. (Citing RX-56 at Q. 138-140, 143-145, 148-150, 153-154.) Nintendo states that the only dispute is whether or not Zalewski discloses the "adapted to be handheld" limitation. (Citing SPHB at 57; CPHB at 167-170.) Nintendo claims that the bodies disclosed in Zalewski are each suited by nature, character, or design to be held in the hand of the user. (Citing Tr. at 1359:7-1361:10; RX-56 at Q. 106; RX-114 at 1:9.)

Regarding claim 28, Nintendo argues that Zalewski uses movement information to calculate a displacement vector. (Citing RX-56 at Q 158-169.) Nintendo points to Figure 27 of Zalewski as disclosing the requirements of claim 28. (Citing RX-114 at 6:63-64, 5:47, 22:5-9.) In addressing claim 29, Nintendo argues that Zalewski discloses that the host adapter and computer is adapted to compare the displacement vector to a reference vector position. (Citing RX-56 at Q. 172; RX-114 at 10:27-32.)

With regard to claim 30, Nintendo argues that Zalewski discloses that the processing system sends feedback signals to the first communication device based on a numerical result. (Citing RX-56 at Q. 182; RX-114 at 10:34-38.) Nintendo claims that all of Motiva's arguments contesting anticipation of claim 32 are incorrect for the reasons stated with respect to claims 27, 29, and 30.

Nintendo argues that Zalewski discloses all of the elements of claim 50, from which claim 84 depends. (Citing RX-56 at Q. 250-280.) Nintendo claims that Motiva's additional arguments concerning claim 84 all relate to Motiva's assertion that the wireless bodies of Zalewski are not hand-held. Nintendo claims that it has already demonstrated that the bodies of Zalewski are hand-held.

Motiva's Position: Motiva contends that Zalewski does not anticipate claims 27, 28, 29, 30, 32, or 84 of the '151 patent.

Motiva argues that Zalewski fails to disclose a "system for tracking movement of a user" because Zalewski only discloses a system of tracking the relative locations of the blocks. (Citing CX-5765C at Q. 235-245; RX-114 at 1:5-13, 5:33-34, 12:42-48, 27:59-60.) Motiva asserts that because the blocks of Zalewski are not in continuous contact with the user, tracking of the bodies is not equivalent to tracking the movements of the user. (Citing Tr. at 1713:22-1714:1.)

Motiva argues that Zalewski does not disclose first or second communication devices that are "adapted to be hand-held." Motiva claims that there is no disclosure in Zalewski that makes it clear that the blocks are "suited by nature, character, or design to be held in one hand." Motiva asserts that Nintendo ignores the passages of Zalewski that specifically teach away from devices that the user must either hold onto or wear in order to operate the system. (Citing RX-114 at 1:44-53, 3:9-30, 4:36-41.) According to Motiva, these passages show that Zalewski did not intend the blocks to be held by a user.

In addressing claim 28, Motiva argues that there is no disclosure in Zalewski of a processing system determining movement information of a second communication device relative to a first communication device, and then using that information to calculate a displacement vector. (Citing CX-5765C at Q. 255-261.) Motiva argues that Zalewski does not

disclose the limitation of claim 39 requiring a processing system that compares a displacement vector to a reference vector position to calculate a numerical result. (Citing RX-56 at Q. 172-177; CX-5765C at Q. 262-268.)

Regarding claim 30, Motiva claims that Zalewski fails to disclose a processing system that sends feedback signals to the first communication device based on a numerical result. (Citing RX-56 at Q. 180-183; CX-5765C at Q. 269-275.) Motiva states that Dr. Hannaford fails to even disclose what he believes to be the "numerical result" in Zalewski. Motiva argues that Zalewski does not anticipate claim 32 for the same reasons as offered for claims 29 and 30. (Citing CX-5765C at Q. 276-282.) Motiva argues that Zalewski does not anticipate claim 84 because the blocks of Zalewski are not "hand-held." (Citing CX-5765C at Q. 307-308, 315-316.)

Staff's Position: Staff contends that Nintendo failed to prove that Zalewski anticipates claims 27, 28, 29, 30, 32, or 84 of the '151 patent.

Staff argues that Zalewski fails to disclose a first communication device that is "adapted to be hand-held." Staff states that while Zalewski identifies the wireless bodies as "hand moveable," the bodies are described as blocks or other geometric shapes with numerous flat surfaces. (Citing RX-114 at 1:9, Figs. 1, 3, 12.) Staff states that just because the blocks are small enough to be held in one's hand does not make then "adapted to be hand-held." (Citing CX-5765C at Q. 247.)

Staff notes that the blocks are not intended to be continuously held by a user. According to Staff, the blocks are intended to be kept on a flat surface such as a table or floor except when they are being moved. (Citing RX-114 at 3:64-4:5, Fig. 1.) Staff states that the system tracks the positions and orientations of the blocks as arranged by the user, instead of tracking the

movement of the user. (Citing CX-5765C at Q. 236.) Therefore, Staff believes that Zalewski fails to disclose a system for "tracking movement of a user" as required by the '151 patent.

Discussion and Conclusions: Based on the evidence in the record, I find that Nintendo failed to produce clear and convincing evidence that Zalewski anticipates any of asserted claims 27, 28, 29, 30, 32, and 84 of the '151 patent.

Zalewski discloses "a set of interactive, trackable, autonomous, independent, hand-movable, and wireless bodies" that communicate with a "host adapter" connected to a computer. (RX-114 at 1:8-10, 4:58-5:13.) The "bodies" described in Zalewski are shown as blocks in the patent's figures. (*See, e.g., id.* at Figs. 1, 3, 12, 27.) The invention discloses "real-time position and orientation tracking of the bodies." (*Id.* at 5:34.) The invention is intended to serve as a learning tool for "developing" students such as children or the mentally challenged. (*Id.* at 1:29-32.)

Claim 1 of the '151 patent requires a "first communication device adapted to be hand-held." Claim 50 of the '151 patent requires an "apparatus" that is "hand-held." All of the claims at issue depend from either claim 1 or claim 50. I construed "adapted to be hand-held" to mean "structured or designed to be held in one hand."

Nintendo asserts that the "bodies" of Zalewski comprise the "first communication device" of claim 1 and the "apparatus" of claim 50. (RX-56 at Q. 106-109.) Nintendo focuses on the fact that the bodies are described by Zalewski as "hand-moveable." (RX-114 at 1:9; *see also id.* at 4:49-50.) As Dr. Hannaford testified, "user manipulable bodies 10 are the size of small children's block that are suited by nature, character or design for the user to pick up and hold on one hand in order to rearrange them into different patterns." (RX-56 at Q. 109.) Dr. Hannaford further stated that "it is the nature of Zalewski's hand-moveable user manipulable

bodies 10 for the user to move and change their orientations by holding the body in one hand in order to move them." (*Id.*) At trial, Dr. Hannaford explained:

> So a child or user would presumably be presented with a random arrangement of blocks, would move them around. While they are moving them, that movement is tracked and compared against reference arrangements of the letters. Namely, correct words or correct sentences.

(Tr. at 1360:2-7.)

I find that the bodies of Zalewski are structured or designed to be held in one hand. The bodies are blocks that may be picked up and moved around using one hand. (RX-114 at 1:9, 4:49-50.) I find Dr. Hannaford's testimony to be credible on this point. (RX-56 at Q. 109.) Therefore, I find that Zalewksi discloses the "hand-held" limitations of claims 1 and 50.

Claim 1 requires "[a] system for tracking movement of a user." Claim 50 requires "[a]n apparatus for use in tracking movement of a user." Each of the claims at issue depend from either claim 1 or claim 50. I construed "tracking movement of a user" to mean "tracking changes of position and/or orientation of a user." Dr. Hannaford testified that "Zalewski's system tracks changes of position and/or orientation of a user moving user manipulable body 10." (RX-56 at Q. 90.)

Zalewski does not disclose tracking changes of position and/or orientation of a user. Instead, it discloses tracking the changes in position and/or orientation of the bodies. (*See, e.g.*, RX-114 at 1:5-13, 5:33-34, 12:42-48, 27:59-60.) This is confirmed by Dr. Singh's expert testimony that "the system of Zalewski tracks wireless bodies (or user-manipulated bodies), not users." (CX-5765C at Q. 235.) The system of Zalewski is concerned with the position and/or orientation of the bodies relative to one another; it is not concerned with tracking the user's movements or the trajectories the bodies took to get to their resting states. (*Id.* at 232, 236-238.)

I find that the system of Zalewski is not the same as "tracking the movement of a user" as required by claims 1 and 50. (*Id.*)

Based on the foregoing, I find that Nintendo failed to demonstrate that Zalewski anticipates any of asserted claims 27, 28, 29, 30, 32, and 84 of the '151 patent.

2. Obviousness

Nintendo's Position: Nintendo contends that claims 16 and 68 of the '151 patent are obvious in view of Nishitani.

Nintendo claims that Staff argued in its pre-hearing brief that the only issue preventing Nishitani from anticipating claims 16 and 68 was the fact that the light-emitting toy of Nishitani did not include an antenna. (Citing SPHB at 61.) Nintendo argues that it would have been obvious for one of ordinary skill in the art to add an antenna to the light-emitting toy that is discussed in Table 1 of Nishitani. (Citing RX-113 at ¶¶ 244, 407, 426.) Nintendo further argues that if the "upper casing member" of Nishitani is not found to be a mechanical extension piece, any difference would have been obvious to one of ordinary skill in the art based on the teachings of Nishitani. Nintendo argues that Motiva has not offered sufficient objective evidence of non-obviousness, as the evidence is all directed to the Wii, and the Wii does not infringe the asserted patents.

Motiva's Position: Motiva contends that Nintendo has failed to demonstrate that claims 16 and 68 are obvious in view of Nishitani.

Motiva states that Dr. Hannaford's obviousness opinion is wholly conclusory and unsupported by any evidence. (Citing RX-56 at Q. 311.) Motiva argues that the evidence of secondary considerations strongly support the non-obviousness of claims 16 and 68. Specifically, Motiva relies on the following secondary considerations: (1) the commercial

success of the Nintendo Wii; (2) public statements regarding the long-felt but unresolved need for the tracking functionality in the Wii system; (3) skepticism in the industry faced by Nintendo; and (4) the widespread praise received by Nintendo for the Wii.

Staff's Position: Staff contends that Nintendo has failed to demonstrate that claims 16 and 68 are obvious in view of Nishitani. Staff notes that I struck Nintendo's expert testimony concerning obviousness. (Citing Tr. at 32:9-10.) According to Staff, the only remaining evidence of record as to the obviousness of claims 16 or 68 is a single conclusory statement by Dr. Hannaford. (Citing RX-56 at Q. 311.) Staff therefore believes that there is insufficient evidence to prove obviousness.

Discussion and Conclusions: Based on the evidence in the record, I find that Nintendo has failed to prove by clear and convincing evidence that claims 16 or 68 are obvious in view of Nishitani.

Before addressing the parties' contentions regarding the disclosure in Nishitani, it is necessary to determine the level of ordinary skill in the art for the '151 and '268 patents. *Scanner Techs. Corp.*, 528 F.3d at 1379. Motiva states that a person of ordinary skill in the art would have a bachelor's degree in computer science or electrical/computer engineering, or the equivalent, and 3 to 5 years experience in the field of computer systems and applications of computer systems. (CIB at 13; CX-5067C at Q. 396-397.) Nintendo's expert Dr. Hannaford opines that one of ordinary skill in the art would have a master's degree in electrical or mechanical engineering, or alternatively, a bachelor's degree in electrical or mechanical engineering combined with 3 to 5 years of experience in the fields of application of sensors and embedded computing systems to motion tracking. (RX-56 at Q. 49.) Nintendo's expert Dr. Colgate opines that one of ordinary skill in the art would have a master's degree in electrical

engineering or mechanical engineering, and at least five years of practical experience in mechatronic or sensor systems. (RX-55C at Q. 25.) Dr. Colgate further believes that one of ordinary skill in the art would also need experience in biomechanics, and the assessment of human movement for rehabilitation, exercise and functional movement assessment. (*Id.*) Staff believes that one of ordinary skill in the art would have a bachelor's degree in computer science or electrical/computer engineering with three to five years of relevant work experience. (SIB at 11-12.)

The definitions offered by Motiva and Nintendo's expert Dr. Hannaford are similar, with the primary difference being the technical fields of experience. I find that the fields of experience asserted by Motiva – "computer systems and applications of computer systems" – are too generalized and do not guarantee that a person of ordinary skill in the art has any experience with the tracking of human movement. The asserted patents concern motion tracking and the use of sensors, and I find that relevant experience in these fields would be necessary for one to be a person of ordinary skill in the art. (*See, e.g.,* JX-1, JX-3.) Therefore, I find that a person of ordinary skill in the art would have a bachelor's degree in computer science or electrical/computer engineering and 3 to 5 years of work experience in the fields of application of sensors and embedded computing systems to motion tracking.

Nintendo's expert Dr. Colgate asserts that one of ordinary skill in the art would need at least a master's degree in engineering plus five years of relevant experience in a number of highly specialized subjects. (RX-55C at Q. 25.) This is much more schooling and experience than what Nintendo's other expert, Dr. Hannaford, proposes. (RX-56 at Q. 49.)

I find that the level of skill articulated by Dr. Colgate goes beyond the level of ordinary skill in the art. Dr. Colgate has not offered a sufficient justification regarding why a person of

ordinary skill in the art would need both a master's degree and five years of highly specialized experience. *Standard Oil Co. v. American Cyanamid Co.*, 774 F.2d 448, 454 (Fed. Cir. 1985) ("A person of ordinary skill in the art is…presumed to be one who thinks along the line of conventional wisdom in the art and is not one who undertakes to innovate, whether by patient, and often expensive, systematic research or by extraordinary insights, it makes no difference which.") In fact, neither Mr. Ferguson nor Mr. Gronachan would have qualified as one of ordinary skill in the art under Dr. Colgate's definition. (*See* CX-5065C at Q. 7; CX-5066C at Q. 9.) I find that a definition of one of ordinary skill in the art that excludes both inventors cannot be correct.

Nintendo claims that it would have been obvious to modify the light-emitting toy of Nishitani to arrive at a device that "is adapted to accept various mechanical extensions pieces depending on the application desired," as required by claims 16 and 68. Specifically, Nintendo claims that the necessary modification would be adding an antenna to the light-emitting toy. (RIB at 89.) Nintendo's proposed modification would still not resolve the problem with the light-emitting toy listed in Table 1 of Nishitani that I explained in Section IV.B.1.a *supra*. Table 1 of Nishitani does not provide any indication that the light-emitting toy is used in conjunction with any mechanical extension pieces. (RX-113 at ¶¶ 407, 422, Figs. 53A, 53B; CX-5765C at Q. 191.) Adding an antenna does not fix this deficiency.

Nintendo also offers a two-sentence argument that any difference between a "mechanical extension piece" of claims 16 and 68 and the "upper casing member" of Nishitani would have been obvious to one of ordinary skill in the art. Nintendo offers no further explanation, and no supporting evidence. (RIB at 90-91.) I find that this conclusory assertion by Nintendo is insufficient to meet the clear and convincing standard required to demonstrate obviousness.

Because I conclude that Nintendo's obviousness arguments lack merit, it is unnecessary to address Motiva's contentions regarding secondary considerations. Assuming *arguendo* that it is necessary to address secondary considerations, I find that the evidence cited by Motiva is not relevant. All of the evidence relied upon by Motiva relates to the Nintendo Wii. (CIB at 95-96.) It is possible to point to evidence related to the accused product when asserting secondary considerations. *See Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1579 (Fed. Cir. 1997) (finding evidence of commercial success based on sales of defendant's accused product). In order for the secondary considerations evidence related to the accused product to be relevant and material, it must be demonstrated that the accused product infringes the asserted patents. *Id.* Otherwise, evidence related to the accused product does not have any bearing on the patented invention. Because I have concluded in Section VII.B *infra*, that Motiva has failed to prove that the Nintendo Wii infringes any of the asserted claims, I find that Motiva's secondary considerations assertions are not relevant to the obviousness analysis.

3. Inventorship

Nintendo's Position: Apple contends that the '151 patent is invalid for improper inventorship pursuant to 35 U.S.C. §§ 102(f) and 116.

Nintendo explains that Mr. Ferguson worked with Barry French at both Arena and Impulse under various contracts from November 5, 1995 through January 8, 2004. Nintendo states that throughout Mr. Ferguson's employment with Arena and Impulse, Mr. Ferguson and Mr. French were named as co-inventors on eight patents. Nintendo asserts that Mr. French testified that he was responsible for conceiving product ideas and Mr. Ferguson would perform the engineering work necessary to develop those ideas into commercial products. (Citing Tr. at 1128:20-1130:4; RX-131.)

Nintendo argues that Mr. French provided unrebutted testimony, which is corroborated by documentary evidence, that he conceived of the following claim elements: tracking movement of a user, the use of a wireless position trackers, and using a hand-held device. (Citing Tr. at 1117:21-1119:8, 1135:20-23, 1141:7-11.) Nintendo states that these elements are all part of claim 1 of the '151 patent. Nintendo asserts that the remaining elements of claim 1 were part of the Trazer idea developed while Mr. Ferguson was employed by Arena and Impulse. (Citing Tr. at 1134:2-1135:15, 1139:9-1141:6, Tr. at 1220:2-16, RX-650 at 33:45-51; RX-131; JX-134; JX-135.)

Nintendo states that Mr. French provided further testimony that he conceived of several dependent claims in the '151 patent including: providing real time measurements, determining acceleration, using an interactive format for the user, and control of virtual objects. (Citing Tr. at 1137:6-16, 1152:20-1153:14, 1120:5-10, 1156:24-1157:24.) Nintendo claims that Mr. Ferguson's testimony regarding the differences between the Trazer technology and the Motiva invention does not contradict the evidence that Mr. French conceived of at least one element of the '151 patent. (Citing CX-5065C at Q. 31.)

Nintendo argues that Motiva's assertion that the PTO has already considered the issue of inventorship is inaccurate. (Citing Tr. at 1312:7-1321:20.) Nintendo claims that the PTO can only correct inventorship upon an application of all parties involved. (Citing 35 U.S.C. § 256.) Nintendo claims that during reexamination, the PTO only considered whether or not the '151 patent should be deemed invalid based upon prior art French patents – it did not address the issue of the inventorship of the '151 patent.

Motiva's Position: Motiva contends that Nintendo has not proven that Barry French is a co-inventor of the '151 patent.

Motiva claims that Mr. French's uncorroborated testimony that he is a co-inventor is insufficient to meet the applicable standard. (Citing Tr. at 1111:4-13, 1220:2-16.) According to Motiva, all of the concepts allegedly conceived by Mr. French were well-known in the art. (Citing Tr. at 1250:10-1255:23.) Motiva claims that one who provides the inventor with well-known principles does not qualify as a co-inventor. Further, Motiva argues that Nintendo failed to show that Mr. French ever had a firm and definite idea of the claimed combinations as a whole. (Citing Tr. at 1111:14-24.)

Staff's Position: Staff contends that Nintendo has failed to prove invalidity due to improper inventorship.

Staff notes that while Mr. French provided testimony that he believes he is a co-inventor, he could not identify any evidence of record that demonstrates his own contribution to the claimed inventions. (Citing Tr. at 1131:8-1160:18.) Staff argues that none of the documents provided by Mr. French corroborate Mr. French's testimony. (Citing RX-650; JX-134; JX-138; Tr. at 1268:3-20.) According to Staff, Mr. French's uncorroborated testimony that he is a co-inventor is insufficient to prove invalidity.

Discussion and Conclusions: Based on the evidence in the record, I find that Nintendo has failed to offer clear and convincing evidence that the '151 patent is invalid for failure to name Barry French as an inventor.

"Patent issuance creates a presumption that the named inventors are the true and only inventors." *Ethicon, Inc. v. U.S. Surgical Corp.*, 135 F.3d 1456, 1460 (Fed. Cir. 1998). Nintendo brings its claim of improper inventorship under 35 U.S.C. § 102(f). Section 102(f) states that "[a] person shall be entitled to a patent unless – he did not himself invent the subject matter sought to be patented." The Federal Circuit has explained that, pursuant to 35 U.S.C. §

102(f), "if nonjoinder of an actual inventor is proved by clear and convincing evidence...a patent is rendered invalid." *Pannu v. Iolab Corp.*, 155 F.3d 1344, 1349 (Fed. Cir. 1998).

The Federal Circuit has explained the standard for determining whether an individual is a co-inventor of a patent:

> All that is required of a joint inventor is that he or she (1) contribute in some significant manner to the conception or reduction to practice of the invention, (2) make a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention, and (3) do more than merely explain to the real inventors well-known concepts and/or the current state of the art.

Pannu, 155 F.3d at 1351. The court has further elaborated:

> [F]or the conception of a joint invention, each of the joint inventors need not "make the same type or amount of contribution" to the invention. Rather, each needs to perform only a part of the task which produces the invention. On the other hand, one does not qualify as a joint inventor by merely assisting the actual inventor after conception of the claimed invention. One who simply provides the inventor with well-known principles or explains the state of the art without ever having "a firm and definite idea" of the claimed combination as a whole does not qualify as a joint inventor.

Ethicon, 135 F.3d at 1460 (citations omitted). Moreover, "a co-inventor need not make a contribution to every claim of a patent. A contribution to one claim is enough." *Id.* (citation omitted).

"An alleged co-inventor's testimony, standing alone, cannot rise to the level of clear and convincing evidence; he must supply evidence to corroborate his testimony." *Symantec Corp. v. Computer Assocs. Int'l, Inc.*, 522 F.3d 1279, 1295 (Fed. Cir. 2008). Corroborating evidence may come in the form of: contemporaneous documents, circumstantial evidence about the inventive process, or oral testimony of someone other than the alleged co-inventor. *Ethicon*, 135 F.3d at 1461. The Federal Circuit has explained:

> Under the "rule of reason" standard for corroborating evidence, the trial court must consider corroborating evidence in context, make necessary credibility

> determinations, and assign appropriate probative weight to the evidence to determine whether clear and convincing evidence supports a claim of co-inventorship.

Id. at 1464 (citation omitted). "[T]here need not be corroboration for every factual issue contested by the parties." *Id.*

I find that Mr. French's testimony does not demonstrate that he is a co-inventor of the '151 patent. Mr. French testified that he conceived of a number of different concepts found in the claims of the '151 patent. (*See generally* Tr. at 1133:9-1160:18.) Specifically, Mr. French claims that he conceived of the concepts of tracking movement of a user, the use of a wireless position tracker, and using a hand-held device. (Tr. at 1117:21-1118:15, 1118:16-1119:8, 1141:7-11.) All of these concepts are found in claim 1 of the '151 patent. Mr. French further claims that he conceived of several elements found in dependent claims. (RIB at 98.) Mr. French's claims are based on the work he did with Mr. Ferguson, when he employed Mr. Ferguson at a series of companies. Mr. French claims that he conceived of a movement tracking system (named "Trazer") and hired Mr. Ferguson to develop the system. (Tr. at 1112:11-1120:10; RX-131.) Mr. French asserted that he and Mr. Ferguson had complementary skill sets, in that Mr. French conceives of ideas, while Mr. Ferguson had the engineering skills to take Mr. French's ideas and turn them into an actual product. (Tr. at 1128:23-1130:5.)

Mr. French's testimony does not provide clear evidence that he is a joint inventor of the '151 patent. When asked, Mr. French could not identify any specific claims from the '151 patent that he co-invented. (Tr. at 1111:17-24.) Mr. French provided Mr. Ferguson with very generalized, broad concepts regarding motion tracking. As Mr. French acknowledged in cross-examination, these concepts that he allegedly conceived of were already known concepts in the art. (Tr. at 1249:20-1259:2.)

Specifically, Mr. French acknowledged the existence of a journal article from 1983 describing the monitoring of human movement using wireless transducers attached to the human body. (*Id.* at 1251:6-1252:12.) Mr. French acknowledged that "tracking 3D movement...that was in the literature for 50 years." (*Id.* at 1255:21-23.) As the Federal Circuit stated: "[o]ne who simply provides the inventor with well-known principles or explains the state of the art without ever having 'a firm and definite idea' of the claimed combination as a whole does not qualify as a joint inventor." *Ethicon*, 135 F.3d at 1460. I find that Mr. French merely provided Mr. Ferguson with well-known concepts in the art regarding systems for the tracking of human movement.

In addition, I find that Nintendo failed to offer sufficient evidence to corroborate Mr. French's claims of co-inventorship. Nintendo offers multiple documents in an attempt to corroborate Mr. French's claims. Nintendo points to the 1995 Consultant Agreement entered into by Impulse Technology and Mr. Ferguson. (RX-131.) This contract provides a generalized, high-level description of a movement tracking system that Mr. Ferguson was responsible for developing. (*Id.*) I do not find that this generalized, high-level description of a movement tracking system supports a finding that Mr. French is a co-inventor of the '151 patent, as Nintendo has not shown how the description in the agreement is specifically tied to the '151 patent, and not the prior knowledge in the art of movement tracking systems. (*See* Tr. at 1249:20-1259:2.)

Nintendo cites to eight patents assigned to Barry French's companies where Mr. French and Mr. Ferguson are named as co-inventors. (JX-169; RX-648; RX-649; RX-650; RX-651; RX-652; RX-653; RX-654.) Six of these patents were expressly considered by the Patent Office during the prosecution of the '151 patent. (JX-1.) Nintendo fails to adequately explain how

these patents corroborate Mr. French's testimony. The fact that Mr. French and Mr. Ferguson are co-inventors on a number of patents related to tracking human movement does not support Mr. French's claim that he is a co-inventor of the '151 patent. "[S]eparate patents describe 'separate and distinct [inventions],'" and the fact that Mr. French and Mr. Ferguson collaborated on past inventions related to motion tracking does not lead to the conclusion that Mr. French is now a co-inventor of the work Mr. Ferguson performed after leaving Mr. French's companies. *Comair Rotron, Inc. v. Nippon Densan Corp.*, 49 F.3d 1535, (Fed. Cir. 1995) (citation omitted). While it may be true that the French/Ferguson patents disclose some generalized movement tracking concepts also found in the '151 patent, the claims of the '151 patent are patentably distinct from the prior art French/Ferguson patents.

Nintendo relies on business documents from Trazer Technologies, Inc. that disclose details regarding Trazer's movement tracking system. (JX-134; JX-135; JX-138.) These documents do not provide sufficient corroboration. Even if these documents disclosed the inventions found the in the '151 patent, there is no way to attribute the ideas found in the documents to Mr. French. Mr. Ferguson was an employee of Trazer at the time these documents were drafted, and Nintendo fails to explain how the documents demonstrate that it was Mr. French that conceived of all of the concepts disclosed in the documents. (*Id.*; Tr. at 1014:21-1015:11.)

Based on the foregoing, I conclude that Nintendo failed to offer clear and convincing evidence that the '151 patent is invalid pursuant to 35 U.S.C. § 102(f).

C. The '268 Patent

1. Anticipation

a. Nishitani

Nintendo's Position: Nintendo contends that Nishitani anticipates asserted claim 11 of the '268 patent. (Citing RX-56 at Q. 491-505, 508-512.) Nintendo states that Motiva argues that Nishitani does not anticipate claim 11 because it does not disclose data signals for controlling the output of sensory stimuli to the user that are derived by comparing the position information transmitted to reference position information. (Citing CPHB at 233.) Nintendo argues that Nishitani discloses that limitation when it teaches that its system controls output sensory stimuli to the user that is derived by determining the deviation of a user's tempo from the predetermined tempo. (Citing RX-113 at ¶ 281.)

Motiva's Position: Motiva contends that Nintendo failed to demonstrate that Nishitani anticipates claim 11 of the '268 patent. Motiva asserts that claim 11 is not anticipated because there is no disclosure in Nishitani of any data signals for controlling the output of sensory stimuli to the user that are "derived by comparing the position information transmitted to reference position information," as required by the claims. (Citing CX-5765C at Q.219-225.)

Staff's Position: Staff contends that Nintendo failed to demonstrate that Nishitani anticipates claim 11 of the '268 patent.

Staff argues that Nishitani does not disclose a system for "tracking position of a user," as required by claim 11. Staff states that Nishitani discloses that the system can determine the position of the hand-held controller by double integrating the output from an accelerometer. (Citing RX-113 at ¶ 194.) Staff notes that in discussing the infringement issues, Dr. Colgate opined that double integrating accelerometer data to obtain position information is "not workable

in practice." (Citing RX-275C at Q. 13-17.) Based on Dr. Colgate's testimony regarding the problems with this approach to determining position, Staff asserts that Nintendo has not shown that Nishitani discloses this claim limitation required by claim 11.

Discussion and Conclusions: Based on the evidence in the record, I find that Nintendo failed to demonstrate by clear and convincing evidence that Nishitani anticipates claim 11 of the '268 patent.

Claim 11 depends from claim 10. Claim 10 requires "a receiver for receiving feedback or control data signals wirelessly from the remote processing system, the data signals derived from processed signals form the transmitter from the transmitter." Claim 11 adds the requirement that "the data signals are derived by comparing the position information transmitted to reference position information."

To meet the limitation found in claim 11, Nintendo relies on paragraph 281 of Nishitani. (RIB at 110.) That paragraph discloses that the personal computer may transmit information to the hand controller. (RX-113 at ¶ 281.) That information may include "metronome information indicative of a basic swinging tempo, tempo deviation information indicative of a degree of deviation from a predetermined tempo, etc." (*Id.*) Nintendo asserts that "Nishitani teaches that its system controls output sensory stimuli to the user that is derived by determining the deviation of a user's tempo from the predetermined tempo." (RIB at 110.)

Claim 11 requires a comparison of "position information." The "position information" relates to the position of a user, a point made clear in claim 10. I find that the reference in Nishitani to tempo deviation information does not meet the requirement of claim 11. Nintendo fails to explain how this tempo deviation information is related in any way to the position of a user. (CX-5765C at Q. 225.) The mere disclosure of comparing a user's tempo to a

predetermined tempo does not satisfy the clear and convincing standard required to invalidate claim 11.

b. Zalewski

Nintendo's Position: Nintendo contends that Zalewski anticipates asserted claims 2, 4, 11, and 14 of the '268 patent.

Nintendo asserts that Zalewski anticipates claim 2 of the '268 patent. (Citing RX-56 at Q. 419-438.) Nintendo states that Motiva argues that Zalewski does not anticipate claim 2 because it does not disclose a system for tracking a user's location relative to a reference location. (Citing CPHB at 229.) Nintendo argues that Motiva is incorrect for the same reasons explained with regard to the analysis of whether or not Zalewski anticipates claim 27 of the '151 patent. Nintendo claims that despite the arguments raised by Motiva, there is clear and convincing evidence that Zalewski anticipates claim 2. (Citing RX-56 at Q. 419-438.)

Nintendo asserts that Zalewski anticipates claim 4 of the '268 patent. (Citing RX-56 at Q. 439-443, 449-453.) Nintendo claims that Motiva's only argument in opposition is the same argument raised with respect to claim 2. According to Nintendo, Motiva is incorrect for the same reasons as offered with respect to claim 2.

Nintendo asserts that Zalewski anticipates claim 11 of the '268 patent. (Citing RX-56 at Q. 491-507, 508-514.) Nintendo claims that Motiva's only argument in opposition is the same argument raised with respect to claim 2. According to Nintendo, Motiva is incorrect for the same reasons as offered with respect to claim 2.

Nintendo asserts that Zalewski anticipates claim 14 of the '268 patent. (Citing RX-56 at Q. 529-533.) Nintendo states that Motiva argues that Zalewski does not disclose the element of claim 14 that requires "an interactive interface such that movement of the apparatus controls the

movement of an object in a computer-generated virtual environment." (Citing CPHB at 231.) Nintendo argues that Zalewski discloses this limitation, and relies on Dr. Hannaford's supporting testimony. (Citing RX-56 at Q. 532; RX-114 at 1:5-13, 4:16-17, 4:22-23, 20:38-42.)

Motiva's Position: Motiva contends that Nintendo failed to demonstrate that Zalewski anticipates any of asserted claims 2, 4, 11, and 14 of the '268 patent.

Motiva argues that Zalewski does not anticipate claims 2, 4, 11, or 14 because it does not disclose a system for tracking the position of a user. According to Motiva, Zalewski system at best tracks the location of the blocks, not the user. In addition, Motiva states that there is no evidence that the system tracks the user's location relative to any reference location. (Citing CX-5765C at Q. 317-323.)

Motiva argues that Zalewski does not anticipate claim 2 because it does not disclose communication devices adapted for being attached to or held by a user. Motiva claims that the blocks in Zalewski are not designed to be attached to or held by a user. (Citing CX-5765C at Q. 324-325.) Motiva argues that Zalewski does not anticipate claim 14 because it does not include the required interactive interface of claim 14. Motiva states that there is no disclosure in Zalewski that movement of the blocks will cause any movement of corresponding objects in any computer-generated virtual environment. (Citing CX-5765C at Q. 346-351.)

Staff's Position: Staff contends that Nintendo failed to demonstrate that Zalewski anticipates any of asserted claims 2, 4, 11, and 14 of the '268 patent.

Staff argues that Zalewski does not anticipate claims 2 or 4 for the same reasons as described with respect to the '151 patent – the bodies of Zalewski are not hand-held, and the system of Zalewski does not track the position of a user. (Citing CX-5765C at Q. 318.)

Staff argues that Zalewski does not anticipate claims 11 and 14 because it does not disclose tracking the position of a user. Staff states that Zalewski tracks one or more wireless bodies manipulated by a user, and that this is different than tracking the position of a user. (Citing CX-5765C at Q. 318, 339.)

Discussion and Conclusions: Based on the evidence in the record, I find that Nintendo has failed to prove by clear and convincing evidence that Zalewski anticipates any of asserted claims 2, 4, 11, and 14 of the '268 patent.

Claims 2 and 4 depend from claim 1, which claims "[a] system for tracking position of a user." Claims 11 and 14 depend from claim 10, which claims "[a]n apparatus for use in conjunction with a remote processing system for tracking position of a user." I find that Zalewski fails to clearly disclose a system "for tracking position of a user" for the same reasons I concluded that Zalewski fails to clearly disclose "tracking movement of a user" in the '151 patent.

Zalewski does not disclose tracking changes of position and/or orientation of a user. Instead, it discloses tracking the changes in position and/or orientation of the bodies. (*See, e.g.,* RX-114 at 1:5-13, 5:33-34, 12:42-48, 27:59-60.) This is confirmed by Dr. Singh's expert testimony that "the system of Zalewski tracks wireless bodies (or user-manipulated bodies), not users." (CX-5765C at Q. 235; *see also id.* at Q. 318.) The system of Zalewski is concerned with the position and/or orientation of the bodies relative to one another; it is not concerned with tracking the user's movements or the trajectories the bodies took to get to their resting states. (*Id.* at 232, 236-238, 318.) In sum, I find that the system of Zalewski is not equivalent to "tracking position of a user" as required by claims 2, 4, 11, and 14. (*Id.*)

2. Inventorship

Nintendo's Position: Nintendo contends that the '268 patent is invalid due to the failure to name Barry French as a co-inventor. Nintendo relies on the arguments it raised with respect to the '151 patent.

In addition, Nintendo notes that claim 4 of the '268 patent discloses a user input device adapted for calibrating the first communication device to establish a reference position. Nintendo states that Arena previously considered the use of a "push button for control of calibration" of the Trazer beacon, and disclosed this in the Health Measurement Technologies business plan drafted in 2003. (Citing JX-135.)

Motiva's Position: Motiva contends that the '268 patent is not invalid due to improper inventorship for all of the reasons discussed with respect to the '151 patent.

Staff's Position: Staff contends that Nintendo has failed to prove that the '268 patent is invalid pursuant to 35 U.S.C. § 102(f) for the same reasons as articulated with respect to the '151 patent.

Discussion and Conclusions: Based on the evidence in the record, I find that Nintendo has failed to provide clear and convincing evidence that the '268 patent is invalid for failure to name Barry French as an inventor.

The parties mainly rely on their arguments raised with regard to the '151 patent. For all of the reasons stated in Section IV.B.3, *supra*, I find that Nintendo has failed to satisfy its burden in proving that the '268 patent is invalid pursuant to 35 U.S.C. § 102(f).

Nintendo additionally claims that the limitation of dependent claim 4 was disclosed in a business plan drafted in 2003. Claim 4 requires that "the user input device is adapted for calibrating the first communication device to establish a reference position." To support the

claim that Mr. French is a co-inventor of this claim, Nintendo cites to a business plan for the Trazer Medical Appliance that discloses use of a "push button for control of calibration" of the Trazer beacon. (JX-135.) At the time the document was drafted, Mr. Ferguson was employed by Mr. French. (Tr. at 1014:21-1015:11.) This document fails to provide sufficient corroboration, as the document fails to make clear that Mr. French was the individual who conceived this calibration concept. It includes no author name, and does not attribute any concepts or ideas to any specific individual.

V. STANDING

Under the Commission Rules, a private party may bring an action at the Commission only if it is the owner or exclusive licensee of the intellectual property rights at issue. *See* 19 C.F.R. § 210.12(a)(7). Thus, Motiva has standing in this investigation if it is the owner of all rights covered by the patents at issue. *See SiRF Tech, Inc. v. U.S. Int'l Trade Comm'n*, 601 F.3d 1319, 1326 n.4 (Fed. Cir. 2010). The party bringing the action bears the burden of establishing that it has standing. *Id.*; *see also Ortho Pharmaceutical Corp. v. Genetics Institute, Inc.*, 52 F.3d 1026, 1033 (Fed. Cir. 1995) (quoting *Whitmore v. Arkansas*, 495 U.S. 149, 154 (1990)) ("It is well established ... that before a federal court can consider the merits of a legal claim, the person seeking to invoke the jurisdiction of the court must establish the requisite standing to sue."). While the recording of an assignment with the PTO does not determine the validity of the assignment, "it creates a presumption of validity as to the assignment and places the burden to rebut such a showing on one challenging the assignment." *SiRF Tech.*, 601 F.3d at 1327-28.

In that regard, Kevin Ferguson and Donald Gronachan are the two named inventors on the patents at issue (JX-1; JX-3), and Motiva recorded an assignment of all right and interest in those patents with the U.S. Patent and Trademark Office. (JX-46.) Therefore, Motiva's

recording of the assignment with the PTO "creates a presumption of validity as to the assignment and places the burden to rebut such a showing" on Nintendo. *SiRF Tech.*, 601 F.3d at 1328.

By way of background, the record evidence shows that on August 13, 1999, Mr. Ferguson signed a consulting agreement ("1999 Consultant Agreement") with Arena, Inc. ("Arena") to work on a product called TRAZER. (JX-151C.) The Agreement states that TRAZER is a "computer simulator" which was "conceived by" Impulse Technology, LTD ("Impulse")[4] and it "employs wireless optical position tracking sensing means for the enhancement of human performance." (*Id.*) This 1999 Consultant Agreement "supersedes and renders null and void all prior agreements" between Mr. Ferguson and Impulse. (*Id.* at p. 1; Tr. at 1226:20-1227:2, 1294:11-17, 1295:3-5.) The Agreement further shows that Mr. Ferguson's "TRAZER work product" is to be owned in its entirety by Impulse. (JX-151C at Background.)

Motiva's Position: Motiva contends that Mr. Ferguson and Mr. Gronachan independently invented the Motiva inventions and that Mr. Ferguson was not obligated to assign the inventions to Impulse. (*Citing* JX-14.) Motiva asserts that Mr. Ferguson was not obligated to assign his inventions for at least five reasons: (1) Arena breached the 1999 Consultant Agreement by June 2003;[5] (2) both parties terminated the 1999 Consultant Agreement by October 6, 2003 (CIB at 22); (3) the 1999 Consultant Agreement does not cover Ferguson's work on the Motiva inventions (*id.* at 22-26); (4) as interpreted by Nintendo, the terms of the 1999 Consultant Agreement are unconscionable (*id.* at 26); and (5) Arena and Impulse released Ferguson from any claim they had to his 2003 work (*id.*). (CIB at 16.)

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[4] The Agreement shows that Impulse is Arena's "Licensor" of the Trazer computer simulator. (*Id.* at Background.) In 2000 Arena changed its name to Trazer Technologies, Inc. ("Trazer Inc." or "TRAZER Inc."). (Tr. at 1105:17-20.) Arena, Trazer Inc., and Impulse were all controlled by Mr. Barry French. (*Id.* at 1105:2–1106:15.)

[5] Specifically, Motiva argues that Mr. Ferguson had no obligation to assign his work on the Motiva inventions because Arena breached the 1999 Consultant Agreement by failing to pay Ferguson royalties, salary, and retirement. (CIB at 19.)

Nintendo's Position: Nintendo argues that Motiva is not the sole owner of the asserted patents because Mr. Ferguson and Mr. Gronachan purported to assign their interest in the asserted patents to Motiva in October 2008, but Mr. Ferguson had no interest to assign because his interest had been assigned to his employer Impulse years earlier.[6] (RIB at 14-21.) Nintendo contends that Mr. Ferguson conceived of the Motiva invention no later than early 2003 while he was still employed by Arena, and had begun to implement the TRAZER improvements well before the termination of his employment. (*Id.* at 13, 21-24.) Nintendo also claims that even if Mr. Ferguson conceived of the Motiva invention on a date in October 2003 after the October 6 termination date, the invention still belongs to Impulse because Mr. Ferguson was bound to assign his "ideas," "inventions" and other work product to Impulse pursuant to the 1999 Consultant Agreement in effect until early-January 2004. (*Id.* at 13, 28-29.)

Staff's Position: Staff contends that if the 1999 Consultant Agreement was no longer in effect at the time Mr. Ferguson and Mr. Gronachan conceived of the claimed inventions in October 2003, Mr. Ferguson was under no obligation to assign the patented inventions to Impulse. (SIB at 16-17.) Staff further submits that even if the 1999 Consultant Agreement remained in effect until January 8, 2004, however, the evidence shows that Mr. Ferguson's work on the claimed inventions do not fall within the scope of the duties required from Mr. Ferguson as either an employee or a former employee under the 1999 Consultant Agreement, which were limited to technical information regarding the TRAZER product. (*Id.* at 17-19.)

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Discussion and Conclusions: Based on the evidence in the record, I find that Nintendo has not met its burden to rebut the presumption that Motiva is the sole owner of the asserted patents and thus has standing in this investigation.

Mr. Ferguson began consulting with Arena on a part-time basis at some point in the late 1980's. (Tr. at 1346:5-12.) Beginning in November 1995, Mr. Ferguson's work as an employee and/or consultant for Arena was governed by a series of employment and consulting agreements. (*Id.* at 1345:25–1346:4.) As noted, on August 13, 1999, Mr. Ferguson signed a Consultant Agreement with Arena to work on a computer simulator called TRAZER. (JX-151C.) TRAZER was "conceived by" Impulse and Mr. Ferguson's "TRAZER work product" was to be owned by Impulse. (*Id.* at Background.)

According to this 1999 Consultant Agreement, Mr. Ferguson had "primary responsibility for the technical development, manufacturing and future technical enhancement of TRAZER," a "computer simulator conceived by Impulse . . . [that] employs wireless optical position tracking sensing means for the enhancement of human performance." (*Id.*) During his full-time employment with Arena, Mr. Ferguson was required to provide Impulse with current technical documentation regarding TRAZER. (*Id.* at ¶ 1.a.) If Mr. Ferguson was no longer a full-time Arena employee, he was required to consult with Impulse for up to 120 hours to transfer to Impulse any and all of his technical information regarding TRAZER so that another engineer could assume Mr. Ferguson's technical duties. (*Id.* at ¶ 1.b.)

In the 1999 Consultant Agreement, Arena and Mr. Ferguson further agreed that Mr. Ferguson's "TRAZER work product, whether performed prior, during, or subsequent to [his] Arena employment, is owned in its entirety by Impulse." (*Id.* at 1.) The Agreement included an express "Ownership of Work Product" provision:

> All work performed by you under this Agreement and all patentable and unpatentable inventions, discoveries, ideas, software, systems, data and materials which you make or conceive in the course of, or as a result of, the services you perform under this Agreement (the "Work Product") shall be the sole and exclusive property of Impulse and be deemed a work made for hire. To the extent that title to any such works may not, by operation of law, vest in Impulse or such works may not be considered works made for hire, you hereby irrevocably assign to Impulse all rights, title and interest in the Work Product.

(*Id.* at ¶ 6 (underlines in original).) Thus, while the 1999 Consultant Agreement was in effect, Impulse was to receive an assignment of any inventions Ferguson conceived "in the course of, or as a result of, the services you perform ***under this Agreement.***" (*Id.* (emphasis added).)

The record shows that on January 8, 2004, the parties entered into an Employment Termination and Consulting Agreement (the "2004 Agreement") that stated, *inter alia*, that Ferguson's employment with Trazer Inc. pursuant to a May 2, 1997 Employment Agreement[7] "was terminated on October 6, 2003." (RX-313 at Article I.A) Thus, the evidence clearly shows that Mr. Ferguson's status as a full-time employee of Arena (TRAZER Inc.) as Vice President of Engineering, ended no later than October 6, 2003. (RX-313; CX-497C.)

What remains in dispute is the effective termination date of the 1999 Consultant Agreement. The record evidence shows that, on October 7, 2003, Mr. Ferguson's attorney sent a letter informing Trazer that it was in breach of the Agreement and purporting to terminate the 1999 Consultant Agreement. (CX-498.) Nintendo, however, contends that the 1999 Consultant Agreement remained in force until the parties signed the January 8, 2004 Employment Termination and Consulting Agreement (RIB at 28).

Staff asserts that "the Termination Agreement only stated that as of January 8 the parties 'acknowledge and confirm the termination of the TRAZER Consulting Agreement,' not that the Consulting Agreement was in effect up and until that date." (SIB at 17; *see also* CIB at 21.) I do

[7] Under this 1997 Agreement, Ferguson had been employed by TRAZER Inc. as its "Vice President of Engineering with the responsibility for managing TRAZER's engineering and product design effort." (*Id.* at 1.)

not find this argument persuasive. On January 8, 2004, Mr. Ferguson and Arena executed a fully integrated[8] Termination Agreement which clearly provides in the preamble that "TRAZER and Ferguson have terminated the TRAZER Employment Agreement" and later provides "TRAZER and Ferguson desire to terminate" the 1999 Consultant Agreement as of the effective date, January 8, 2004. (RX-313 at p. 1.)

The 2004 Agreement states in Section II, under the title "Termination of TRAZER Consulting Agreement," that "upon the effective date" (i.e. January 8, 2004) Trazer and Ferguson "acknowledge and confirm the termination of [the 1999 Consultant Agreement]." I concur, therefore, that the 1999 Consultant Agreement was terminated effective January 8, 2004. (RX-313 at II.)

Motiva and Staff erroneously focus on the language "acknowledge and confirm" to assert that the 1999 Consultant Agreement may have terminated on some earlier date. This reading is inconsistent with the present tense language in the preamble in which the parties state, in the present tense, that they "desire to terminate" the 1999 Consultant Agreement. The parties specifically elected to use the past tense to demonstrate that the Employment Agreement had already terminated, and they used present tense language to show that the 1999 Consultant Agreement had not yet terminated.

Notwithstanding the fact that the 1999 Consultant Agreement remained in effect until January 8, 2004, I find that the record evidence shows that Mr. Ferguson's work on Motiva's claimed inventions does not fall within the scope of the duties required from Mr. Ferguson as a former employee under the 1999 Consultant Agreement.

[8] The 2004 Agreement expressly "constitutes the entire agreement between the parties with respect to the subject matter hereof, superseding all prior understandings or agreements (whether written or oral) with respect thereto." (RX 313 at ¶ VII.B.)

As part of the 2004 Agreement, Ferguson agreed to provide additional, limited consulting services to Cybex International, Inc. ("Cybex") to transfer Ferguson's knowledge of and technical information related to the TRAZER simulation system. (*Id.* at IV.A-B.) The Termination Agreement did not include an express intellectual property assignment provision, although Mr. Ferguson agreed that he would "not contest TRAZER's ownership of the TRAZER Patents."[9] (*Id.* at VI.C.)

The 1999 Consultant Agreement limited Mr. Ferguson's assignment obligation to work performed "***under this Agreement***" and things made or conceived "in the course of, or as a result of, the services you perform ***under this Agreement***." (JX-151C at ¶ 6 (emphasis added).) Indeed, the definition of "Work Product" in the 1999 Agreement is limited to work performed "***under this Agreement***." (JX-151C at ¶ 6 (emphasis added), ¶ 11 ("in the course of [Ferguson's] service hereunder").)

Paragraph 1 of the 1999 Consultant Agreement defines the scope of work performed thereunder. As stated therein, if Mr. Ferguson is a full-time employee of Arena, his duties are to provide Impulse the "most current technical documentation regarding development, manufacturing, use and service of TRAZER." (JX-151C at ¶ 1.) And if Mr. Ferguson is not a full-time employee of Arena, his duties are to "provide, on a best efforts workman-like basis, up to 120 hours of consulting ... the purpose [of which] is the transfer (conveying) of any and all technical information in [his] possession pertaining to TRAZER." (*Id.*)

The 1999 Consultant Agreement defines "TRAZER" as "a computer simulator conceived by Impulse." (JX-151C at p. 1.) Thus, any assignment under the 1999 Consultant Agreement is limited to work Ferguson performed: (a) in providing Impulse the most current technical

[9] The term "TRAZER Patents" is not defined in the Agreement. (*See generally id.*)

documentation for the TRAZER or (b) in transferring technical information for the TRAZER. Indeed, at trial Mr. French admitted that any responsibility Ferguson had as a consultant under the 1999 Consultant Agreement was limited to "transitioning what intellectual property knowledge [Arena] already had." (Tr. at 1273:23-1274:6.) But Nintendo presented no evidence that Mr. Ferguson performed his work on the Motiva inventions as part of providing Impulse technical documentation under Paragraph 1.a or that he performed his work on the Motiva inventions as part of transferring technical information about the TRAZER product under Paragraph 1.b of the 1999 Consultant Agreement. (JX-151C at ¶ 1.)

Moreover, while the claimed inventions share some similarities with the TRAZER system, the two are not identical, and the asserted patents describe and claim functionality not provided by the TRAZER system. The record shows that the inventions claimed in the asserted patents are sufficiently distinct from Mr. Ferguson's work on the TRAZER system such that he had no obligation to assign the patents to Impulse. Significantly, Mr. French testified that the asserted patents disclose and claim functionality not provided by the TRAZER system. (Tr. at 1311:4–1321:20.) Likewise, David Smith, an investor familiar with both Arena and Motiva, testified that compared to the TRAZER system, the Motiva invention "was a different idea completely." (*Id.* at 507:12.)

Indeed, the USPTO allowed the claims of the asserted patents to issue after considering numerous patents directed to the TRAZER system.[10] Because Mr. Ferguson's duties pursuant to the 1999 Consultant Agreement were limited to the TRAZER system (JX-151C at ¶ 1), and the assignment provision was expressly limited to work performed "under this Agreement (*id.* at ¶ 6), Mr. Ferguson had no obligation to assign the claimed Motiva inventions to Impulse.

[10] *See* JX-1 at 2 (listing U.S. Patent Nos. 6,098,458 (JX-169); 6,749,432 (RX-650); 6,765,726 (RX-651); 6,876,496 (RX-652); as well as U.S. Patent Nos. 6,073,489; 6,308,565; and 6,430,452 (TRAZER patents from which subsequent Impulse patents (RX-653 and RX-654) claim priority).

Assuming *arguendo* that one finds that the the assignment provisions in the 1999 Consultant Agreement are ambiguous, extrinsic evidence may be considered to determine the parties' intent. The 1999 Consultant Agreement states that it is governed by Ohio law (*id.* at ¶ 22), which provides that "where a contract is ambiguous, a court may consider extrinsic evidence to ascertain the parties' intent" to resolve the ambiguity. *Westfield Ins. Co. v. Galatis*, 797 N.E.2d 1256, 1261-62 (Ohio 2003). With regard to the assignment of intellectual property rights in employment/consulting agreements, relevant extrinsic evidence includes evidence of the parties' conduct, *i.e.*, evidence regarding whether or not the parties regarded the invention as falling within the agreement. *SiRF Tech., Inc.*, 601 F.3d at 1327.

To the extent that such extrinsic evidence is considered, it shows that Arena and Impulse did not assert that the claimed inventions fell within the scope of the 1999 Consultant Agreement until several years after Mr. Ferguson's work for Arena had ended. (JX-159C; Tr. at 1217:23-1218:24.) Specifically, the evidence shows that Mr. French became aware of the patent application that led to patents-in-suit soon after the application was published in 2006. (JX-159C.) Despite this awareness, Mr. French testified that neither he nor his companies have taken any affirmative action to assert ownership since that time. (*Id.*; Tr. at 1120:15–1123:16.) While Mr. French now offers a number of reasons why he chose not to do so, the fact that Impulse failed to assert its ownership for five years despite its awareness of the patents strongly suggests that Impulse did not consider itself the rightful owner. *See SiRF Tech.*, Inc., 601 F.3d at 1327.

Moreover, Mr. French admitted that he had no "direct evidence" that Mr. Ferguson conceived of the claimed inventions while he was still working for Arena, and Mr. French's assertion of co-inventorship now is based on his "sixth sense." (Tr. at 1218:11-1219:18.)

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I turn to a remaining dispute regarding the conception date of the claimed inventions. Motiva asserts that the evidence of conception shows that the named inventors conceived of the claimed inventions "in or around October 2003." (CRB at 3-4.) Nintendo contends that Mr. Ferguson conceived of the Motiva invention no later than early 2003 while he was still employed by Arena, and had begun to implement the TRAZER improvements well before the termination of his employment. (*Id.* at 13.) Staff agrees with Motiva. (SIB at 17.)

Mr. Ferguson testified that he and Mr. Gronachan conceived of the claimed inventions in October, 2003. (Tr. at 967:12-18; CX-5065C at Q. 32.) The documentary evidence of record corroborates this date. The first entry regarding the Motiva inventions in Mr. Ferguson's invention journal was on October 27, 2003. (JX-14C.1.) In that entry, Mr. Ferguson wrote that he planned to "evaluate new technologies." (JX-14C.1.) Two days later, Mr. Ferguson recorded that he continued research and began ordering parts to continue his investigation. (JX-14C.2) In contrast, Nintendo has offered no direct evidence that Mr. Ferguson conceived of the inventions in the asserted patents any earlier. In fact, Mr. French admitted that he has no "direct evidence" of when Ferguson conceived of the inventions in the Motiva patents, describing his belief as variously a "sixth sense" and "spider sense." (Tr. at 1218:3-1219:18)

Finally, the 2004 Agreement contains broad parallel releases that released any claim Arena may have had to the Motiva inventions. (RX-313 at ¶ VI.) At trial, Mr. French acknowledged that the 2004 Agreement "released any claims for anything from the beginning of

the world that arose out of [Mr. Ferguson and Arena's] employment contracts." (Tr. at 1284:17-21, 1286:21-25.) Mr. French also acknowledged the broad release in response to a 2004 email from Mr. Ferguson. In his response, Mr. French stated that the release in the 2004 Termination Agreement "clearly resolves all issues between the parties." (CX-185C (emphasis in original).) When asked about this email at trial, Mr. French affirmed that he stood by the terms of the release. (Tr. at 1293:13-16.)[11]

Based on the foregoing, I find that Nintendo has not met its burden to rebut the presumption that Motiva is the sole owner of the asserted patents and thus has standing in this investigation.

VI. INEQUITABLE CONDUCT

Nintendo's inequitable conduct argument is based on the claim that Barry French is a co-inventor of the '151 and '268 patents. (RIB at 102-104, 114.) According to Nintendo, Mr. Ferguson and Mr. Gronachan committed inequitable conduct by deliberately withholding the identity of Mr. French as a co-inventor. (*Id.*) Because I have concluded in Sections IV.B.3 and IV.C.2 *supra* that Nintendo has not proven that Mr. French is a co-inventor of either the '151 or '268 patents, I find that Nintendo's inequitable conduct argument lacks merit.

VII. INFRINGEMENT

A. Applicable Law

A complainant must prove either literal infringement or infringement under the doctrine of equivalents. Infringement must be proven by a preponderance of the evidence. *SmithKline Diagnostics, Inc. v. Helena Labs. Corp.*, 859 F.2d 878, 889 (Fed. Cir. 1988). A preponderance of the evidence standard "requires proving that infringement was more likely than not to have

[11] In view of the findings *supra*, I find the remaining arguments by the parties pertaining to the "standing" issue to be moot.

occurred." *Warner-Lambert Co. v. Teva Pharm. USA, Inc.*, 418 F.3d 1326, 1341 n. 15 (Fed. Cir. 2005).

Literal infringement is a question of fact. *Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323, 1332 (Fed. Cir. 2008). Literal infringement requires the patentee to prove that the accused device contains each and every limitation of the asserted claim(s). *Frank's Casing Crew & Rental Tools, Inc. v. Weatherford Int'l, Inc.*, 389 F.3d 1370, 1378 (Fed. Cir. 2004).

As for the doctrine of equivalents:

> Infringement under the doctrine of equivalents may be found when the accused device contains an "insubstantial" change from the claimed invention. Whether equivalency exists may be determined based on the "insubstantial differences" test or based on the "triple identity" test, namely, whether the element of the accused device "performs substantially the same function in substantially the same way to obtain the same result." The essential inquiry is whether "the accused product or process contain elements identical or equivalent to each claimed element of the patented invention[.]"

TIP Sys., LLC v. Phillips & Brooks/Gladwin, Inc., 529 F.3d 1364, 1376-77 (Fed. Cir. 2008) (citations omitted).

Thus, if an element is missing or not satisfied, infringement cannot be found under the doctrine of equivalents as a matter of law. *London v. Carson Pirie Scott & Co.*, 946 F.2d 1534, 1538-39 (Fed. Cir. 1991). Determining infringement under the doctrine of equivalents "requires an intensely factual inquiry." *Vehicular Techs. Corp. v. Titan Wheel Int'l, Inc.*, 212 F.3d 1377, 1381 (Fed. Cir. 2000).

B. The '151 Patent

1. Claim 16

Motiva's Position: Motiva argues that the Wii Remote and the Wii Nunchuk both contain motion sensors that output data that the Wii Remote sends to the Wii Console. Motiva says the Wii Remote contains a three-axis gyroscope, a three-axis accelerometer, and a CMOS

camera that Nintendo calls the direct-pointing-device (DPD). (Citing CX-406C, pages 22-30, 32-37, 60-63.) Motiva alleges that the Wii Nunchuk contains a three-axis accelerometer that sends data to the Wii Console via the Wii Remote. (Citing CX-406C, pages 32-37, 19-21.) {

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Motiva alleges that the Wii Remote (including the Wii Remote Plus or the Wii Remote with Wii MotionPlus) contains a rate gyroscope that measures "angular velocity in the pitch, yaw, and roll directions." (Citing CX-406C, page 59.) {

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Motiva alleges that the Wii Remote and Wii Nunchuk contain accelerometers that measure linear acceleration in three dimensions. {

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Motiva asserts that the Wii Remote comprises a communication device because it communicates with the Wii Console and with the Wii Nunchuk. (Citing CX-406C, pp. 19, 64; CX-0207C at RFAs 126-28; CX-5067C at Q. 645-48.)

Motiva says its construction for "a transmitter for transmitting signals" is "an apparatus that transmits signals." Motiva avers that Staff proposes that this phrase should be construed as "a circuit or electronic device for sending electrically encoded information to another location." Motiva argues that under either of these constructions, the Wii Remote meets this element, as it contains a Bluetooth radio-frequency device used for transmitting signals to the Wii Console. (Citing CX-386C at 41:3-20; CX-431C, p. 9; CX-207C at RFAs11-14; Tr. at 163:21-25, 187:8-10; CX-5067C at Q. 649-55.)

Motiva adds that, even under Nintendo's construction, the Wii Remote satisfies this element because it transmits signals via Bluetooth to the Wii Console from which the Wii Console can determine the location of the Wii Remote in three dimensions. (Citing CX-5067C at Q. 656-58.)

Motiva alleges that the Wii Remote contains a Bluetooth radio-frequency device used for receiving signals from the Wii Console, and argues, therefore the Wii Remote comprises "a receiver for receiving signals." (Citing CX-386C at 41:3-20; CX-207C at RFAs 3, 16, 17, 20, 21, 89, 90; CX-5067C at Q. 659-61.)

Motiva states that the Wii Remote has a built-in speaker that outputs sound and a rumble motor that outputs vibrations, and therefore, comprises "an output device." (Citing CX-406C, pp. 12, 41; CX-5067C at Q. 662-63.)

Motiva says its proposed construction of "adapted to be hand-held" is "suited by nature, character or design to be held in one hand," and the Wii Remote is suited by nature, character

and design to be held in one hand. Motiva argues that the Wii Remote satisfies the limitation that the first communication device is "adapted to be hand-held." (Citing CX-406C, p. 12; CX-0358C, p. 5; CX-386C, p. 11 at 37:7-150; CX-207C at RFAs 35, 43; CX-5067C at Q. 664-665.)

Motiva says that Staff has proposed that "adapted to be hand-held" should be construed as "suited by nature, character or design to be held in one or both hands," and argues that even under this construction, the Wii Remote is "adapted to be hand-held," since a user can hold the Remote using one or two hands depending on the video game. (Citing CX-5067C at Q. 667-669; CX-0262C, p. 14.)

Motiva says that Nintendo argues the Wii Remote is not "adapted to be hand-held" based on its construction of this phrase as "modified from an original form to enable the device to be held in one or both hands." Motiva argues even under Nintendo's construction, the Wii Remote is "adapted to be hand-held" because the outer shell of the Wii Remote is made from plastic that Nintendo had to modify from an original form to the current shape of the Wii Remote. (Citing CX-5067C at Q. 670-72.)

Motiva says its proposed construction of "a processing system" is "a system that processes data," and under this construction, the Wii Console is a "processing system," as it contains a microprocessor CPU that processes data. (Citing CX-390C, p. 8; CX-425C at 112:24-113:9; CX-207C at RFAs 45, 133, 136, 137, 186, 187; Tr. at 165:19-166:3; CX-5067C at Q. 673-675, 683.) Motiva adds that Staff proposes a construction similar to Motiva's: "a computer system that manipulates data," and under this construction, the Wii Console is a "processing system" because data processing, which the Wii Console undisputedly performs, is a manipulation of data. (Citing CX-5067C at Q. 677-679.)

Motiva asserts that the Wii Console is physically separate from the Wii Remote, and therefore meets the limitation in claim 1 that the processing system is "remote from the first communication device." (Citing CX-386C at 41:3-20; CX-207C at RFA 46; CX-262C, p. 13; CX-5067C at Q. 684-85.)

Motiva argues that the Wii Console receives data from the Wii Remote derived from the DPD, accelerometer, and gyroscope in the Wii Remote via a Bluetooth transceiver. Motiva reasons, thus, the Wii Console meets the limitation of a processing system "for wirelessly receiving transmitted signals from the first communication device." (Citing Tr. at 1480:7-14, 187:8-15; CX-420C, p. 12; CX-421, p. 2; CX-292C, p. 1; CX-466C, p. 1; CX-778C at 30:12-30:20; CX-386C, p. 13 at 42:6-9; CX-5067C at Q. 686-87.)

Motiva says its and Staff's construction for "determine movement information" is "determine information about changes in position and/or orientation." Referring to CIB Sections III.B.4.a and III.B.3, Motiva alleges that the Wii Console can determine information about changes in the position and/or orientation of the Wii Remote based on the data received from the Remote's DPD, accelerometer, and gyroscope. Motiva argues that the Wii therefore meets the limitation "said processing system adapted to determine movement information for said first communication device."

Motiva asserts that even under Nintendo's construction, the Wii Console "determines movement information" for the Wii Remote since the user and the Wii Remote inherently reside and move in three-dimensional space. {

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Motiva says that it and Staff both propose that the claim 1 language "data signals to said first communication device for providing feedback or control data" should be construed as "data signals to the first communication device for providing feedback or guidance information," and under this construction, the Wii Console meets this limitation. (Citing CX-386C at 77:17-25; CX-5067C at Q. 702-06.) Motiva says, for example, the Wii Console is capable of sending data signals to the Wii Remote that result in the Remote's speaker producing a sound or the rumble motor producing vibrations, which are feedback. (Citing CX-206C at RFAs 91-94.)

Motiva argues even under Nintendo's construction, the Wii Console meets this limitation. Motiva notes that Dr. Singh explained, in the Wii Menu, when the cursor on the screen is moved over a button using the Wii Remote, the Console sends a signal to the Remote to vibrate. (Citing Tr. at 181:7-182:18.) Motiva says if the user moves off the button and then back on, the vibration stops and then happens again. (*Id.*) Motiva argues that feedback such as vibration is helping guide the user to the desired location, by providing positive (or negative) reinforcement. Motiva reasons even though the screen and menu are 2-D, the user resides and is moving in 3-D space, and can move the Remote to any location in 3-D space that causes the cursor to be over the button. (Citing CX-5067C at Q. 707-10.)

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} Motiva concludes that the Remote satisfies the limitation that the "first communication device receives and processes said data signals … and wherein the output device provides sensory stimuli according to the received data signals." (Citing CX-353C, p. 10; CX-363C; CX-

420C, p. 24; CX-386C at 42:20-43:18; CX-207C at RFAs 89-90; CX-406C, p. 38, 41; Tr. at 175:17-176:4; 177:3-7; 182:5-16; 186:12-20; CX-5067C at Q. 711-712.)

Motiva next turns to the elements of claim 16, noting that it reads: "[a] system according to claim 1, wherein the first communication device is adapted to accept various mechanical extension pieces depending on the application desired." (Citing JX-1, p. 31.) Motiva reiterates that the Wii System satisfies all elements of claim 1.

Motiva adds, the Wii Remote meets the additional element in claim 16, because Nintendo sells mechanical extension pieces such as the Wii Zapper and Wii Wheel to be attached to the Remote depending on the video game to be played. (Citing CX-386C at 90:23-91:4, 91:12-22; CX-207C at RFAs 104-107; CDX-56; CX-5067C at Q. 715-17.) Motiva argues that the relative size of the Remote and the various mechanical extensions is irrelevant. Motiva says Dr. Singh noted that the Remote has holes in it that are specifically designed so that it can be securely attached to passive devices such as the Zapper and Wheel that operate as mechanical extension pieces. (Citing Tr. at 310:8-311:15.)

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Nintendo's Position: Regarding claim 1, Nintendo argues that the accused Wii system is not a system for tracking movement of a user.

Nintendo avers that the Wii Remote (and Remote Plus) uses a Direct Pointing Device ("DPD"). {

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Nintendo asserts that all of the parties' proposed constructions for "tracking movement of the [a] user" and "tracking position of a user" (elements of all asserted claims) contain the word "tracking." {

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Nintendo argues that tracking the positions and orientations of a handheld unit is not same as tracking positions and orientations of the "user." (Citing CPHB at 168; CX-5765C at Q. 245.) Nintendo asserts there is a difference between the Wii system and the system disclosed in the asserted patents. Nintendo says with the Wii, there is no fixed relation between the Wii Remote and the user's hand. (Citing RX-275C at Q. 88.) Nintendo continues that with the system in Motiva's patents (referring to RIB Section II(A)(3)(h)) there is a handheld unit with a concave handle and handle guard that constrains the user to hold it in a particular way. The concave handle and handle guard constrains the user to hold it in such a way as to require "zero grip strength to grasp," which Prof. Singh confirmed. (Citing Tr. at 329:10-16.)

Nintendo adds that, as Prof. Singh agreed, there is no fixed relationship between the Wii Remote and the user's hand. (Citing Tr. at 331:14-19.) Nintendo notes there are numerous ways

the Wii Remote can be held and there is nothing that prevents the user from using any one of the many possible holding styles when playing the Wii. (Citing RX-275C at Q. 88.) Nintendo says there is also nothing that prevents the user from changing the holding style at any time during gameplay. (Citing RX-275C at Q. 88.) Nintendo argues that Prof. Singh agreed there is nothing in the Wii that is capable of determining how the user is holding the Wii, and there is nothing that can determine if the player has changed his holding style during gameplay. (Citing *Id.*; Tr. at 313:23-314:1.)

Nintendo argues that the Wii Console does not send signals to the Wii Remote to guide the user to specified locations in 3D space, as required under Nintendo's construction for "feedback or control data [signals]," which Nintendo notes is an element of all asserted claims. (Citing RX-275C at Q. 94.) Nintendo asserts that, because the system does not know the location of the Wii Remote, it is impossible for any sound or vibration produced by the Wii Remote to guide the user to a specified location. (*Id.*)

Nintendo argues that its proposed construction for a "processing system" or "processing system . . . for wirelessly receiving" requires a "receiver constellation unit" as explicitly defined in the patents. Nintendo alleges that the Wii has no "receiver constellation unit." (Citing RX-275C at Q. 97.) Nintendo says that Prof. Singh argues a doctrine of equivalents analysis by claiming that the Sensor Bar is equivalent to a "receiver constellation unit." (Citing CX-5067C at Q. 682.) Nintendo says that the Sensor Bar is not "equivalent" to a "receiver constellation unit. (Citing RX-275C at Q. 100.) {

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Nintendo argues that its proposed construction of a "transmitter for transmitting signals" is "a device that transmits signals from which location of the user in 3D space can be determined." Nintendo contends that it is impossible for the Wii to determine the location of the user in three dimensions (x, y, and z). Nintendo reasons, therefore, that the Wii does not have a "transmitter for transmitting signals." (Citing RX-275C at Q. 102.)

Nintendo admits that the Wii Remote was designed to be handheld without any modification. (Citing RX-275C at Q. 91.) Nintendo asserts that the Wii was not "modified from an original form" to be handheld as required under Nintendo's construction. (*Id.*)

Regarding claim 16, specifically, Nintendo argues The Wii Remote is not "adapted to accept" accessories like the Wii Zapper and Wii Wheel. Rather, it is those accessories that accept the Wii Remote. (Citing RX-275C at Q. 117.)

Nintendo contends that a cavity within the Wii wheel accepts the Wii Remote, and the Wii Remote does not "accept" mechanical extensions. Nintendo argues that the '151 patent clearly discloses "active device" type mechanical extensions (e.g., the Fig. 2A extension containing a motor, and the Fig. 2D extension containing light emitting diodes, see JX-1.5) that are accepted by the Figure 1B handle. (Citing JX-1.4; JX-1.19 at 11:45-12:11.)

In its reply brief, Nintendo argues that Motiva has changed its infringement argument to say that the Wii infringes by simply measuring acceleration or angular velocity. (Citing CIB at 55.) Nintendo responds that this fails for two main reasons.

First, Nintendo contends, this is a new theory and Motiva cannot raise it now, only *after* trial has concluded. (Citing G.R. 8.2.) Nintendo asserts that Motiva never argued that

determining acceleration or angular velocity was, on its own, "movement information," construed by Motiva to be "changes of position and/or orientation." Nintendo says that Motiva's pre-trial papers stated otherwise. (Citing CPHB at 12, 14, 104-105 and 113.)

Second, Nintendo asserts this theory is not consistent with infringement under the proposed constructions. Nintendo says all parties agree "movement information" is framed in terms of position and orientation (the difference being whether infringement requires the tracking of just one, or of both). {

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Nintendo argues that Motiva waived any argument that "gesture recognition" is "movement information," because that argument does not appear once in Motiva's Pre-Trial Brief. (Citing G.R. 8.2.)

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Staff's Position: Staff argues that if the claims are construed as Staff recommends, the accused Wii System does not "track movement of a user" or "determine movement information for said first communication device" as required by the asserted claims.

Staff argues that, to satisfy the limitations "tracking movement of a user" and "determine movement information for said first communication device," the accused products must track either changes of a user's position or changes of a user's orientation. Staff says that Motiva relies on the outputs from various sensors in the Wii Remote in an attempt to show that the Wii System determines and tracks changes in a user's position and orientation. Staff is of the view, however, that Motiva has not established that the accused Wii System track changes in either position or orientation as required by claim 16.

Staff says that the Wii Remote contains both a Direct Pointing Device ("DPD") camera and an accelerometer. Staff notes, in addition, the Wii MotionPlus and Wii Remote Plus both include a gyroscopic sensor. (Citing CX-5067C at Q. 537, 545; RX-275C at Q. 2, 7 and 19.)

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Staff turns to the accelerometer, and says this sensor measures accelerations undergone by the Wii Remote. (Citing RX-275C at Q.7.) Staff contends that acceleration is a rate of change of velocity, and velocity is a rate of change of position. (Citing RX-55 at Q. 22.) Staff says that Dr. Singh points out, by integrating acceleration, one can calculate velocity, and by

integrating velocity, one can calculate position. (Citing CX-5067C at Q. 690.) {

} Staff concludes that the evidence does not show that the accused Wii System uses accelerometer data to determine the position of the Wii Remote or to track changes in position of the Wii Remote.

Staff argues that Motiva has not shown that the accused Wii System tracks changes in orientation of a user within the meaning of claim 1 (and claim 16). {

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Turning to the gyroscopic sensor located in the Wii MotionPlus and Wii Remote Plus components, Staff notes that a rate gyroscope measures the angular velocity around three axes – the length, width, and height of the Remote. (Citing CX-5067C at Q. 563.) {

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Staff addresses testimony regarding source code for the accused products and whether or not the code supports a conclusion that the Wii satisfies each limitation of the asserted claims. Staff asserts that most of the cited portions of source code relate to the position and orientation of virtual objects in Wii games, as opposed to the position or orientation of the Wii controllers or a Wii user. (Citing RX-275C at Q. 39.) Staff says the latter is what is required by the asserted claims. Staff notes, for example, claim 1 of the '151 Patent requires "tracking movement of a user" and determining "movement information for [the] first communication device."

Staff says that, in an attempt to bridge this disconnect, Dr. Singh presented testimony that "the movement and positions of the hands in the virtual game environment and on-screen are

derived from the movement of the physical user's hands or controllers. The former represent the latter, and there is a correspondence between them in that the relative positioning of one is derived from that of the other." (Citing CX-5067C at Q. 623.) Staff states that Dr. Singh further testified that certain virtual objects depicted on the screen (the boxer's gloves in the Boxing game, for example) are representations of Wii controllers in the physical coordinate system (the real world), which in his opinion means they can be used interchangeably. (*Id.* at Q. 624; Tr. at 270-72.) {

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Discussion and Conclusions: Based on the evidence in the record, I find that Motiva has failed to prove by a preponderance of evidence that the accused products infringe claim 16 of the '151 patent.

Claim 16 depends from claim 1, and a finding that the accused products infringe claim 16 necessarily requires a finding that the accused products infringe claim 1. I begin with the fundamental limitation of claim 1, that an accused product is a system "for tracking movement of a user."[12] In Section III.B.1, *supra*, I construed that term to mean "tracking changes of position and/or orientation of a user."

The question becomes whether or not the accused products "track changes of position and/or orientation of a user." I find that they do not.

[12] The parties do not dispute that this term in the preamble serves as a claim limitation.

Motiva's position is based on the fact that the accused Wii Remote contains a three-axis gyroscope, a three-axis accelerometer, and a CMOS camera, called the direct-pointing-device (DPD). Motiva argues that these three devices contained within the Wii send movement and position information to the Wii console, which in turn receives the signals from the Wii remote, decodes the signals, stores them and determines movement and position information of, for example the Wii Remote and Nunchuk. Motiva says the Wii Console executes functions – { } – that process the data from the Wii Remote and make movement and position information available to Wii games. Motiva concludes that the Wii Console also executes games that perform further calculations to determine additional movement and position information from data that the libraries provide.

Motiva's argument appears to have several logical disconnects. The evidence adduced at the hearing demonstrates that the three key devices in the Wii Remote – the three-axis gyroscope, the three-axis accelerometer, and the DPD – do not, in fact, track the movement of the user or provide information regarding the position or orientation of the user.

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[13] Mr. Rabin told software developers for both the Wii Remote and Nunchuk to stop trying to detect position, because they would not be able to solve the problem and that the influence of error and gravity make double integration calculation inaccurate and not practical. (RX-600.)

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Dr. Singh said, "the movement and positions of the hands in the virtual game environment and on-screen are derived from the movement of the physical user's hands or controllers. The former represent the latter, and there is a correspondence between them in that the relative positioning of one is derived from that of the other." (CX-5067C at Q. 623.) Dr. Singh also said that certain virtual objects depicted on the screen (the boxer's gloves in the Boxing game, for example) are representations of Wii controllers in the physical coordinate system (the real world), which in his opinion means they can be used interchangeably. (*Id.* at Q. 624; Tr. at 270:1-272:10.)

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[14] I note that Dr. Singh made reference to a number of codes in his testimony, and Mr. Ohta explained that each of the codes referenced did not track the remote or the hand of the user. Instead they related to movements of the character in the game. (RX-413C.)

To summarize, while Dr. Singh asserts that the Wii accused products track movement of the user (i.e. position and/or orientation), he admits that he found no evidence that the Wii products in fact locate the Wii remote in the real world. He relies instead on the manifestations shown on the screen during a game. {

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After careful review of the record evidence, I find that Motiva has failed to meet its burden to demonstrate that the Wii accused products track the movement of a user.

Nintendo also contends that the Wii accused products do not practice the limitation in claim 1 that teaches a first communication device comprising a transmitter for transmitting signals. Nintendo bases its argument on its proposed construction of a "transmitter for transmitting signals" as "a device that transmits signals from which location of the user in 3D space can be determined." Nintendo contends that it is impossible for the Wii to determine the location of the user in three dimensions (x, y, and z). Nintendo reasons, therefore, that the Wii does not have a "transmitter for transmitting signals."

In Section III.B.6 *supra*, I rejected Nintendo's proposed construction as too limiting, and I construed the term "transmitter for transmitting signals" as "a device that transmits signals." Absent the requirement espoused by Nintendo that the device transmit "signals from which the location of the user in 3D space can be determined," there is no dispute among the parties that the Wii handheld remote practices this element. Motiva has offered undisputed evidence that the Wii remote contains a Bluetooth radio-frequency device used for transmitting signals to the Wii

Console. (CX-386C at 41:3-20; CX-431C, p. 9; CX-207C at RFAs 11-14; Tr. at 163:21-25, 187:8-10; CX-5067C at Q. 649-655.)

Nintendo next contends that the Wii accused products do not practice the element that teaches the device is "adapted to be hand-held." Nintendo bases its argument on its construction of that term, requiring that the device be "modified from an original form to enable the device to be hand-held." In Section III.B.7 *supra*, I construed the term "adapted to be hand-held" to mean "structured or designed to be held in one hand." Nintendo admits that the Wii Remote was designed to be handheld without any modification. (RX-275C at Q. 91.) I find, therefore, that the Wii accused products are designed to be hand-held.

Nintendo argues that its proposed construction for a "processing system" or "processing system . . . for wirelessly receiving" requires a "receiver constellation unit" as explicitly defined in the patents. Nintendo alleges that the Wii has no "receiver constellation unit." Nevertheless, in Section III.B.5 *supra*, I declined to adopt Nintendo's added requirement for a "receiver constellation unit."

Absent the requirement for a "receiver constellation unit," there is no disagreement that the Wii accused products include a "processing system, remote from the first communication device, for wirelessly receiving said transmitted signals." (Tr. at 1480:7-14, CX-420C, p. 12; CX-466C, p. 1; CX-778C, page 9 at 30:12-20; CX-386C, p. 13 at 42:6-9, 20-25; CX-5067C at Q. 686-687.)

Notwithstanding the findings, *supra*, that the Wii accused products include a processing system and contain a transmitter for transmitting signals, I have also found that the Wii accused products do ***not*** track the movement of the user and that the system does not track the movements of the Wii remote device. It follows that the processing system is ***not*** "adapted to

determine movement information for said first communication device" as taught by element 2 of claim 1.

Based upon all of the foregoing, I find that Motiva has failed to prove by a preponderance of evidence that the accused products infringe claim 1 of the '151 patent.

Based upon the evidence before me, I find, too, that Motiva has failed to show by a preponderance of the evidence that the accused Wii products infringe claim 16 of the '151 patent. Claim 16 directly depends from claim 1, and I have found that Motiva failed to prove infringement for claim 1. Thus it follows that Motiva failed to prove infringement of claim 16. *Wahpeton Canvas Co. v. Frontier, Inc.*, 870 F.2d 1546, 1552 n. 9 (Fed. Cir. 1989) ("One who does not infringe an independent claim cannot infringe a claim dependent on (and thus containing all the limitations of) that claim.")

If, however, the Commission determines that claim 1 is infringed by Nintendo, then I find that Motiva has demonstrated infringement of claim 16. Claim 16 adds the limitation that "said first communication device is adapted to accept various mechanical extensions pieces."

Nintendo bases its argument that the Wii Remote is not "adapted to accept" accessories like the Wii Zapper and Wii Wheel on the premise that a cavity within the Wii wheel "accepts the Wii Remote."

Motiva argues persuasively that the Wii Remote meets the additional element in claim 16, because the Wii remote uses mechanical extension pieces sold by Nintendo, such as the Wii Zapper and Wii Wheel, to be attached to the Remote depending on the video game to be played. (CX-386C at 90:23-91:4, 91:12-22; CX-207C at RFAs 104-107; CDX-056; CX-5067C at Q. 715-717.) Motiva argues correctly that the relative size of the remote and the various mechanical extensions is irrelevant.

Nowhere in claims of the '151 patent is there any requirement regarding the relative size of the first communication device to the "various mechanical extensions pieces" that the first communication device is to "accept." Neither do the claims specify the manner in which the Wii remote must accept the mechanical extensions. (*See* JX-1.) While Nintendo points to the specification at Fig. 2A showing an extension containing a motor, and the Fig. 2D extension containing light emitting diodes, that are accepted by the Figure 1B handle, these are only examples of the preferred embodiment and do not serve to further limit the claims.

Dr. Singh testified that the Wii Remote has holes in it that are specifically designed so that it can be securely attached to passive devices such as the Zapper and Wheel that operate as mechanical extension pieces. (Tr. at 310:8-311:15.)

Using the term "adapted" consistent with its use in Section III.B.7 ("adapted" to be hand held), I find that the Wii remote is "structured or designed" to accept mechanical extensions such as, for example the Zapper and the Wheel.

Based upon the foregoing, I find that the Wii accused products practice the element added by dependent claim 16 of the '151 patent.

2. Claim 27

Motiva's Position: Motiva contends that the Wii system infringes claim 27 of the '151 patent. Claim 27 depends from claim 1.

Motiva asserts that the Wii Nunchuk is the "second communication device" required by claim 27. (Citing CX-207C at RFAs 126-128; CX-386C at 86:24-87:4; Tr. at 154:1-2; CX-5067C at Q. 722.) Motiva argues that the Wii Nunchuk is adapted to be hand-held under any proposed construction. (Citing CX-406C; CX-390C; CX358C; CX-207C at RFA 124; CX-5067C at Q. 723-728.) Motiva claims that the Wii Nunchuk is in electrical communication with

the Wii Remote because the Nunchuk transmits electrical signals to the Wii Remote, and vice versa. (Citing CX-406C; CX-431C; CX-358C; CX-386C at 86:16-22, 90:2-13; CX-207C at RFAs 126-128, 176; Tr. at 297:6-8; CX-5067C at Q. 729-730.) Finally, Motiva claims that Wii Console is adapted to determine movement information of the Wii Nunchuk relative to the Wii Remote. (Citing CX-346C; Tr. at 187:16-189:7, 164:13-14; CX-5067C at Q. 733-740.)

Nintendo's Position: Nintendo contends that Motiva failed to prove infringement of claim 27. Nintendo argues that because Motiva failed to prove that the Wii can determine either the Nunchuk's position or orientation, Motiva cannot prove that the Wii determines the positions and/or orientations of the Nunchuk relative to the positions and/or orientations of the Wii Remote. (Citing RX-275C at Q. 118-121; Tr. at 164:13-16.) Nintendo further claims that the Nunchuk is not "adapted to be hand-held." (Citing RX-275C at Q. 118.)

Staff's Position: Staff offers no independent analysis for this claim, but instead relies on the analysis of claim 1.

Discussion and Conclusions: Based on the evidence in the record, I find that Motiva has failed to prove by a preponderance of the evidence that the Wii infringes claim 27 of the '151 patent.

Claim 27 depends from claim 1 and adds the limitation: "a second communication device, adapted to be hand held, in electrical communication with the first communication device, with the processing system adapted to determine movement information of the second communication device relative to the first communication device." Claim 27 is not infringed because Motiva has failed to demonstrate that the Wii meets all of the claim limitations of claim 1. *Wahpeton*, 870 F.2d at 1552 n. 9.

In addition, I find that the Wii does not include a "processing system adapted to determine movement information of" a second communication device. Motiva identifies the Wii Nunchuk as the "second communication device." (CX-5067C at Q. 722.) For the reasons explained with respect to claim 1, I find that Motiva failed to demonstrate that the Wii determines "movement information." (*See* RX-275C at Q. 118-121.)

3. Claim 28

Motiva's Position: Motiva contends that the Wii system infringes claim 28 of the '151 patent. Claim 28 indirectly depends from claim 1.

Motiva argues that the Wii can calculate a displacement vector from the movement information for both the first and second communication devices. Motiva claims that testimony from the deposition of a Nintendo witness and Dr. Singh demonstrate that the Wii meets this claim limitation. (Citing CX-5067C at Q. 746; CX-425C at 120:22-121:17.)

Nintendo's Position: Nintendo contends that Motiva failed to prove infringement of claim 28. Nintendo argues that the Wii does not "calculate a displacement vector from said movement information" because the Wii does not determine movement information, as discussed with respect to claim 1.

Staff's Position: Staff offers no independent analysis for this claim, but instead relies on the analysis of claim 1.

Discussion and Conclusions: Based on the evidence in the record, I find that Motiva has failed to prove by a preponderance of the evidence that the Wii infringes claim 28 of the '151 patent.

Claim 28 depends from claim 27 and adds the limitation: "said processing system is adapted to determine movement information for both said first and second communication

devices and to calculate a displacement vector from said movement information." Claim 28 is not infringed because Motiva has failed to demonstrate that the Wii meets all of the claim limitations of claims 1 and 27. *Wahpeton*, 870 F.2d at 1552 n. 9.

In addition, I find that the Wii does not "determine movement information for both said first and second communications devices." For the reasons explained with respect to claim 1, I find that Motiva failed to demonstrate that the Wii determines "movement information" for the Wii Remote or Nunchuk.

4. Claim 29

Motiva's Position: Motiva contends that the Wii system infringes claim 29 of the '151 patent. Claim 29 indirectly depends from claim 1.

Motiva claims that the Wii is adapted to compare the calculated displacement vector to a reference vector position and calculate a numerical result. {

}

Nintendo's Position: Nintendo contends that Motiva failed to prove infringement of claim 29.

Nintendo asserts that Motiva relies exclusively on game software in its attempt to show infringement of claim 29. (Citing CX-5067C at Q. 754.) Nintendo argues that the game software is outside of the scope of the investigation and is not alleged to infringe. Nintendo further argues that claim 29 is not infringed because the "reference vector position" identified by

Motiva exists entirely in the virtual world. (Citing RX-275C at Q. 109.) Because of this, Nintendo states that the "numerical result" cited by Motiva is not the "numerical result" that is claimed. (*Id.*)

Staff's Position: Staff offers no independent analysis for this claim, but instead relies on the analysis of claim 1.

Discussion and Conclusions: Based on the evidence in the record, I find that Motiva has failed to prove by a preponderance of the evidence that the Wii infringes claim 29 of the '151 patent.

Claim 29 depends from claim 28 and adds the limitation: "said processing system is adapted to compare said calculated displacement vector to a reference vector position and to calculate a numerical result." Claim 29 is not infringed because Motiva has failed to demonstrate that the Wii meets all of the claim limitations of claims 1, 27, and 28. *Wahpeton*, 870 F.2d at 1552 n. 9.

5. Claim 30

Motiva's Position: Motiva contends that the Wii system infringes claim 30 of the '151 patent. Claim 30 indirectly depends from claim 1.

Motiva asserts that the Wii Console sends feedback signals to the Wii Remote based on the numerical results it calculates, for example a feedback signal to trigger a sound in Wii Boxing. (Citing CX-5067C at Q. 755-758.)

Nintendo's Position: Nintendo contends that Motiva failed to prove infringement of claim 30.

Nintendo asserts that Motiva relies exclusively on game software in its attempt to show infringement of claim 30. (Citing CX-5067C at Q. 758.) Nintendo argues that the game

software is outside of the scope of the investigation and is not alleged to infringe. Nintendo further argues that the "numerical result" cited by Motiva is not the "numerical result" that is claimed. (Citing RX-275C at Q. 109.)

Staff's Position: Staff offers no independent analysis for this claim, but instead relies on the analysis of claim 1.

Discussion and Conclusions: Based on the evidence in the record, I find that Motiva has failed to prove by a preponderance of the evidence that the Wii infringes claim 30 of the '151 patent.

Claim 30 depends from claim 29 and adds the limitation: "said processing system sends feedback signals to said first communication device based on said numerical result." Claim 30 is not infringed because Motiva has failed to demonstrate that the Wii meets all of the claim limitations of claims 1, 27, and 28. *Wahpeton*, 870 F.2d at 1552 n. 9.

6. Claim 31

Motiva's Position: Motiva contends that the Wii system infringes claim 31 of the '151 patent. Claim 31 indirectly depends from claim 1.

Claim 31 requires the system to be able to determine a user's movement efficiency. Motiva states that in Wii Boxing, the Wii Console determines the type and speed of a punch by comparing data from the Wii Remote and Wii Nunchuk to a reference vector. (Citing CX-5067C at Q. 754, 758.) Motiva states that in the Cycling game in Wii Sports Resort, the user must alternatively swing the Wii Remote and Nunchuk up and down rapidly to simulate the pedaling of a bicycle. (Citing CX-5067C at Q. 693; CX-405.) Motiva claims that the efficiency of the user's swinging motions is tracked by the system and determines how quickly the virtual cyclist moves as well as the cyclist's level of fatigue. (Citing CX-5067C at Q. 693; CX-405.)

Nintendo's Position: Nintendo contends that Motiva has failed to prove that claim 31 is infringed.

Nintendo argues that Dr. Singh never discusses how the Wii determines a user's movement efficiency. (Citing RX-275C at Q. 125.) Nintendo asserts that the term "movement efficiency" suggests that pose information must be tracked, which the Wii does not do.

Staff's Position: Staff offers no independent analysis for this claim, but instead relies on the analysis of claim 1.

Discussion and Conclusions: Based on the evidence in the record, I find that Motiva has failed to prove by a preponderance of the evidence that the Wii infringes claim 31 of the '151 patent.

Claim 31 depends from claim 30 and adds the limitation: "a user's movement efficiency can be determined." Claim 31 is not infringed because Motiva has failed to demonstrate that the Wii meets all of the claim limitations of claims 1, 27, and 28. *Wahpeton*, 870 F.2d at 1552 n. 9. In addition, to the extent that a determination of movement efficiency requires the ability to track the movement of a user, the Wii does not meet this claim limitation because it is not "[a] system for tracking movement of a user," as required by claim 1.

7. Claim 32

Motiva's Position: Motiva contends that the Wii system infringes claim 32 of the '151 patent. Claim 32 indirectly depends from claim 1.

Motiva asserts that the Wii Console is adapted to determine movement information for both the Wii Remote and Wii Nunchuk and compare the movement information to a reference. (Citing CX-5067C at Q. 766.) Motiva claims that the Wii Remote includes an output device for

providing feedback stimuli to the user in response to the received feedback signals. (Citing CX-5067C at Q. 766.)

Nintendo's Position: Nintendo contends that Motiva has failed to prove that claim 32 is infringed.

Nintendo argues that claim 32 is not infringed for the same reasons stated with respect to claims 28-30. In addition, Nintendo argues that the Wii does not determine movement information for either the Wii Remote or Nunchuk for the reasons discussed with respect to claim 1.

Staff's Position: Staff offers no independent analysis for this claim, but instead relies on the analysis of claim 1.

Discussion and Conclusions: Based on the evidence in the record, I find that Motiva has failed to prove by a preponderance of the evidence that the Wii infringes claim 32 of the '151 patent.

Claim 32 depends from claim 27 and adds the limitation: "wherein said processing system is adapted to determine movement information for both said first and second communication devices and wherein a vector is calculated and compared to a desired reference vector to calculate a numerical result and wherein said processing system sends feedback signals to said first communication device based on said numerical result, said first communication device further comprised of an output device for providing feedback stimuli to the user in response to said received feedback signals." Claim 32 is not infringed because Motiva has failed to demonstrate that the Wii meets all of the claim limitations of claims 1 and 27. *Wahpeton*, 870 F.2d at 1552 n. 9.

In addition, the Wii does not meet the claim limitation of claim 32 because it is not "adapted to determine movement information for both said first and second communication devices," for the reasons discussed with respect to claim 1.

8. Claim 44

Motiva's Position: Motiva contends that the Wii system infringes claim 44 of the '151 patent. Claim 44 indirectly depends from claim 1.

Motiva argues that the Wii system is adapted to determine position information, under any of the parties' constructions for "position information." Motiva refers back to its discussion regarding the DPD, accelerometer, and gyroscope of the Wii system. Motiva claims that the Wii is adapted to determine the error between the actual movement information of the first communication device and movement information defined by a reference movement trajectory. Motiva cites the Sword Play game as an example of where the Wii Console computes the error between the actual movement information of the Wii Remote and movement information by a reference movement trajectory. (Citing CX-5067C at Q. 792-797; Tr. at 176:21-177:16, 177:21-178:14.)

Motiva claims that the Wii system sends feedback signals to the Wii Remote based on an analysis of the movement information provided by the Wii Remote. (Citing CX-5067C at Q. 804.) Motiva asserts that the Wii Remote provides feedback stimuli to the user in response to the received feedback signals. (Citing CX-5067C at Q. 807.)

Motiva states that the Wii Remote can emit sounds to direct the user to alter his or her movements to conform with the reference movement trajectory. Motiva claims that in Wii Boxing and Sword Play, sound guides the user as to when and how the user should move the Wii

Remote in order to throw a punch or swing the sword. (Citing CX-420C; Tr. at 176:21-177:16, CX-5067C at Q. 810.)

Nintendo's Position: Nintendo contends that Motiva failed to prove that claim 44 is infringed.

Nintendo argues that, for reasons already stated in the claim 1 analysis, the Wii does not determine position information or movement information. Nintendo claims that Motiva failed to show that the Wii defines a reference movement trajectory, or determines the error between the actual movement and a reference movement trajectory. (Citing Tr. at 241:20-242:2; RX-275C at Q. 104.)

Staff's Position: Staff offers no independent analysis for this claim, but instead relies on the analysis of claim 1.

Discussion and Conclusions: Based on the evidence in the record, I find that Motiva has failed to prove by a preponderance of the evidence that the Wii infringes claim 44 of the '151 patent.

Claim 44 depends from claims 43, 42, 41, 40, and 1, thereby incorporating all of the limitations of those claims. Because I have found that the Wii does not infringe claim 1, it follows that the Wii does not infringe claim 44. *Wahpeton*, 870 F.2d at 1552 n. 9.

In addition, claim 44 requires a "processing system...adapted to determine position information." I construed "position information" to mean "information specifying a location in 3D space." For all of the reasons discussed with respect to claim 1, I find that Motiva has failed to demonstrate that the Wii is adapted to determine position information. (RX-275C at Q. 127.)

9. Claim 57

Motiva's Position: Motiva contends that the Wii system infringes claim 57 of the '151 patent. Claim 57 indirectly depends from claim 50.

Motiva states that all of the elements of claim 50 are identical or highly similar to the elements of claim 1. Motiva states that the Wii infringes claim 50 for all of the reasons discussed with respect to claim 1. (Citing CX-5067C at Q. 813-815.) Motiva states that the Wii infringes claim 57 for all of the reasons discussed with respect to claim 44. (Citing CX-5067C at Q. 818, 821, 824.)

Nintendo's Position: Nintendo contends that Motiva failed to prove that claim 57 is infringed.

Nintendo asserts that claim 50 is not infringed for all of the same reasons discussed with respect to claim 1. In addition, Nintendo asserts that the limitations added by claim 57 are not infringed for the reasons explained with respect to claim 44.

Staff's Position: Staff offers no independent analysis for this claim, but instead relies on the analysis of claim 1.

Discussion and Conclusions: Based on the evidence in the record, I find that Motiva has failed to prove by a preponderance of the evidence that the Wii infringes claim 57 of the '151 patent.

Claim 57 indirectly depends from claim 50. Claim 50 requires "[a]n apparatus for use in tracking movement of a user." For the same reasons that I found that the Wii does not meet the "system for tracking movement of a user" limitation of claim 1, I find that the Wii does not meet this similar limitation from claim 50. (RX-275C at Q. 132.) In addition, for the reasons

previously discussed with respect to claim 1, the Wii does not meet the "movement information" limitations of claim 57. (*Id.*)

10. Claim 68

Motiva's Position: Motiva contends that the Wii system infringes claim 68 of the '151 patent. Claim 68 depends from claim 50. Motiva asserts that the Wii infringes claim 68 for the same reasons discussed with respect to claim 16. (Citing CX-5067C at Q. 827.)

Nintendo's Position: Nintendo contends that Motiva has failed to prove that claim 68 is infringed. Nintendo asserts that the limitations of claim 68 are not satisfied for all of the reasons discussed with respect to claim 16.

Staff's Position: Staff offers no independent analysis for this claim, but instead relies on the analysis of claim 1.

Discussion and Conclusions: Based on the evidence in the record, I find that Motiva has failed to prove by a preponderance of the evidence that the Wii infringes claim 68 of the '151 patent.

Claim 68 depends from claim 50 and adds the limitation: "wherein said apparatus is adapted to accept various mechanical extensions pieces depending on the application desired." I have already concluded that the Wii meets the same limitation found in claim 16. Because I have concluded that the Wii does not infringe claim 50, it follows that the Wii does not infringe claim 68. *Wahpeton*, 870 F.2d at 1552 n. 9.

11. Claim 84

Motiva's Position: Motiva contends that the Wii system infringes claim 84 of the '151 patent. Claim 84 depends from claim 50.

Motiva asserts that the Wii Remote serves as a first transponder, and the Wii Nunchuk is a second transponder, and is hand held by the user. (Citing CX-406C; CX-5067C at Q. 645-648, 723, 833; CX-207C at RFAs 126-128; CX-386C at 86:24-87:4.) Motiva states that it is undisputed that the Wii Remote communicates with the Wii Nunchuk. (Citing CX-406C; CX-5067C at Q. 648.)

Nintendo's Position: Nintendo contends that Motiva has failed to prove that claim 84 is infringed.

Nintendo argues that claim 84 requires two wireless devices, and that the Nunchuk connects to the Wii Remote using a wire. (Citing Tr. at 296:24-297:2; RPX-10; RPX-11.) Nintendo claims that Dr. Singh admitted that the Nunchuk contains no wireless technology. (Citing Tr. at 298:13-17.) Nintendo argues that Motiva has failed to identify any specific signals sent or the specific replies of the Wii Remote and Nunchuk. (Citing RX-275C at Q. 138.)

Staff's Position: Staff offers no independent analysis for this claim, but instead relies on the analysis of claim 1.

Discussion and Conclusions: Based on the evidence in the record, I find that Motiva has failed to prove by a preponderance of the evidence that the Wii infringes claim 84 of the '151 patent.

Claim 84 depends from claim 50 and adds the limitation: "wherein the apparatus is a first transponder adapted for communicating with a second transponder, also hand held by the user." Because I have concluded that the Wii does not infringe claim 50, it follows that the Wii does not infringe claim 84. *Wahpeton*, 870 F.2d at 1552 n. 9.

12. Indirect Infringement

Motiva claims that Nintendo is liable for both contributory infringement and inducement. As described *supra*, I have found that Motiva failed to demonstrate any direct infringement of the asserted claims of the '151 patent. Without a showing of direct infringement, there can be no indirect infringement. *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1374 (Fed. Cir. 2003) (explaining that direct infringement "is a prerequisite to indirect infringement.") Therefore, I find that Motiva has failed to prove by a preponderance of the evidence that Nintendo is liable for either contributory infringement or inducement.

C. The '268 Patent

1. Claim 2

Motiva's Position: Motiva contends that the Wii system infringes claim 2 of the '268 patent.

Claim 2 depends from claim 1. Motiva argues that the Wii meets all of the limitations of claim 1 for the same reasons as discussed with respect to claims 1 and 40 of the '151 patent. Motiva argues that the Wii meets all of the limitations of claim 2 for the same reasons as discussed with respect to claims 1, 27, 41, and 84 of the '151 patent.

Nintendo's Position: Nintendo contends that Motiva failed to prove that the Wii infringes claim 2 of the '268 patent.

For all of the reasons discussed with respect to the '151 patent, Nintendo argues that the Wii is not a "system for tracking position of a user" and does determine "position information." Nintendo further argues that the Wii does include "a second communication device, in electrical communication with the first communication device and in wireless communication with the processing system." {

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Staff's Position: Staff contends that Motiva failed to prove infringement of claim 2. Staff argues that the Wii fails to satisfy the "tracking position of a user" claim language in the preamble of claim 1. Staff argues that this limitation is not met for the same reasons as discussed with respect to the "tracking movement of a user" claim language from the '151 patent. Staff argues that the Wii does not meet the limitation requiring "determining position information for the first communication device." Staff argues that for the reasons discussed with respect to claim 16 of the '151 patent, the Wii system does not determine the position of the Wii Remote.

Discussion and Conclusions: Based on the evidence in the record, I find that Motiva has failed to prove that the Wii infringes claim 2 of the '268 patent.

Claim 2 depends from claim 1. Claim 1 requires "[a] system for tracking position of a user." Claim 1 further requires a processing system for, *inter alia*, "determining position information for the first communication device." I construed "position information" to mean "information specifying a location in 3D space."

In addressing the '151 patent, I found that Motiva failed to prove that the Wii is "[a] system for tracking movement of a user." (

} All of the parties concur that the analysis regarding the "tracking movement" claim language for the '151 patent is applicable to the determination of whether or not the

"tracking position of a user" and "position information" limitations are met. (CIB at 72-73, 101; RIB at 106-107; SIB at 78-79.) For all of the reasons stated in Section VII.B, *supra*, I find that Motiva failed to demonstrate that the Wii system tracks the position of a user or determines position information for the first communication device.

2. Claim 4

Motiva's Position: Motiva contends that the Wii infringes claim 4 of the '268 patent. Motiva claims that the Wii Remote is designed to receive inputs from the user, such as through the buttons on the device that the user pushes in order to trigger actions in the game that is being played. (Citing CX-5067C at Q. 855; CX-262C.) Motiva states that the pressing of these buttons results in the Wii Remote sending a data signal through its transmitter to the processing system on the Wii Console, so that the appropriate action can be triggered in the game. (Citing CX-5067C at Q. 855.)

{

. } (Citing Tr. at 171:22-175:6, 183:16-24, 185:8-11, 189:8-192:2, 388:25-389:16, 390:6-10, 397:7-15, 419:1-7, 420:1-7, 420:21-24, 444:15-445:1, 485:14-18.) Motiva points to evidence in the instruction manuals in various Wii games and portions of Nintendo's source code that allegedly supports the conclusion that the Wii infringes claim 4. (Citing CPX-2; CPX-3; CPX-4; CX-5067C at Q. 858-866; CX-467C; CX-468C; CX-472C; CX-4899C; CX-4935C.)

Nintendo's Position: Nintendo contends that Motiva failed to prove that the Wii infringes claim 4 of the '268 patent.

For all of the reasons discussed with respect to the '151 patent, Nintendo argues that the Wii is not a "system for tracking position of a user" and does determine "position information." Nintendo further argues that the Wii cannot establish a reference position, and that Motiva cited no evidence of any software that establishes a reference position.

Staff's Position: Staff contends that Motiva failed to prove infringement of claim 4. Staff argues that the Wii fails to satisfy the "tracking position of a user" claim language in the preamble of claim 1. Staff argues that this limitation is not met for the same reasons as discussed with respect to the "tracking movement of a user" claim language from the '151 patent. Staff argues that the Wii does not meet the limitation requiring "determining position information for the first communication device." Staff argues that for the reasons discussed with respect to claim 16 of the '151 patent, the Wii system does not determine the position of the Wii Remote.

Discussion and Conclusions: Based on the evidence in the record, I find that Motiva has failed to prove that the Wii infringes claim 4 of the '268 patent.

Claim 4 indirectly depends from claim 1. Claim 1 requires "[a] system for tracking position of a user." Claim 1 further requires a processing system for, *inter alia*, "determining position information for the first communication device." I construed "position information" to mean "information specifying a location in 3D space."

In addressing the '151 patent, I found that Motiva failed to prove that the Wii is "[a] system for tracking movement of a user." {

}

{ } All of the parties concur that the analysis regarding the "tracking movement" claim language for the '151 patent is applicable to the determination of whether or not the "tracking position of a user" and "position information" limitations are met. (CIB at 72-73, 101; RIB at 106-107; SIB at 78-79.) For all of the reasons stated in Section VII.B, *supra*, I find that Motiva failed to demonstrate that the Wii system tracks the position of a user or determines position information for the first communication device.

3. Claim 11

Motiva's Position: Motiva contends that the Wii infringes claim 11 of the '268 patent. Claim 11 depends from claim 10. Motiva asserts that the Wii infringes claim 10 for all of the reasons stated with respect to claim 1 of the '268 patent and claims 1 and 40 of the '151 patent.

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Nintendo's Position: Nintendo contends that Motiva failed to prove that the Wii infringes claim 11 of the '268 patent.

For all of the reasons discussed with respect to the '151 patent, Nintendo argues that the Wii is not a "system for tracking position of a user" and does determine "position information." Nintendo further argues that Dr. Singh fails to identify any "reference position information." According to Nintendo, Dr. Singh identifies information that is entirely in the virtual world. (Citing RX-275C at Q. 149.)

Staff's Position: Staff contends that Motiva failed to prove infringement of claim 11.

Staff argues that the Wii fails to satisfy the "tracking position of a user" claim language in the preamble of claim 1. Staff argues that this limitation is not met for the same reasons as discussed with respect to the "tracking movement of a user" claim language from the '151 patent. Staff argues that the Wii does not meet the limitation requiring a transmitter for transmitting "position information signals to the remote processing system." Staff argues that for the reasons discussed with respect to claim 1 of the '151 patent, the Wii system does not determine the position of the Wii Remote.

Discussion and Conclusions: Based on the evidence in the record, I find that Motiva has failed to prove that the Wii infringes claim 11 of the '268 patent.

Claim 11 depends from claim 10. Claim 10 requires "[a]n apparatus for use in conjunction with a remote processing system for tracking position of a user." Claim 10 further requires, *inter alia*, "a transmitter for transmitting position information signals to the remote processing system." I construed "position information" to mean "information specifying a location in 3D space."

In addressing the '151 patent, I found that Motiva failed to prove that the Wii is "[a] system for tracking movement of a user." {

} All of the parties concur that the analysis regarding the "tracking movement" claim language for the '151 patent is applicable to the determination of whether or not the "tracking position of a user" and "position information" limitations are met. (CIB at 72-73, 101, 105; RIB at 106-108; SIB at 78-80.) For all of the reasons stated in Section VII.B, *supra*, I find

that Motiva failed to demonstrate that the Wii system tracks the position of a user or determines position information for the apparatus.

4. Claim 14

Motiva's Position: Motiva contends that the Wii infringes claim 14 of the '268 patent. Motiva claims that the Wii includes an interactive interface such that movement of the apparatus controls the movement of an object in a computer generated virtual environment. (Citing CX-349C; CX-842C; CX-347C; CX-348C; CX-843C; CX-406C; CX-346C; CX-5067C at Q. 915-916.)

Nintendo's Position: Nintendo contends that Motiva failed to prove that the Wii infringes claim 14 of the '268 patent.

For all of the reasons discussed with respect to the '151 patent, Nintendo argues that the Wii is not a "system for tracking position of a user" and does determine "position information." {

} (Citing RX-275C at Q. 37-39, 152.)

Staff's Position: Staff contends that Motiva failed to prove infringement of claim 14. Staff argues that the Wii fails to satisfy the "tracking position of a user" claim language in the preamble of claim 1. Staff argues that this limitation is not met for the same reasons as discussed with respect to the "tracking movement of a user" claim language from the '151 patent. Staff argues that the Wii does not meet the limitation requiring a transmitter for transmitting "position information signals to the remote processing system." Staff argues that for the reasons discussed with respect to claim 1 of the '151 patent, the Wii system does not determine the position of the Wii Remote.

Discussion and Conclusions: Based on the evidence in the record, I find that Motiva has failed to prove that the Wii infringes claim 14 of the '268 patent.

Claim 14 depends from claim 10. Claim 10 requires "[a]n apparatus for use in conjunction with a remote processing system for tracking position of a user." Claim 10 further requires, *inter alia*, "a transmitter for transmitting position information signals to the remote processing system." I construed "position information" to mean "information specifying a location in 3D space."

In addressing the '151 patent, I found that Motiva failed to prove that the Wii is "[a] system for tracking movement of a user." {

} All of the parties concur that the analysis regarding the "tracking movement" claim language for the '151 patent is applicable to the determination of whether or not the "tracking position of a user" and "position information" limitations are met. (CIB at 72-73, 101, 105; RIB at 106-108; SIB at 78-80.) For all of the reasons stated in Section VII.B, *supra*, I find that Motiva failed to demonstrate that the Wii system tracks the position of a user or determines position information for the apparatus.

5. Indirect Infringement

Motiva claims that Nintendo is liable for both contributory infringement and inducement. As described *supra*, I have found that Motiva failed to demonstrate any direct infringement of the asserted claims of the '268 patent. Without a showing of direct infringement, there can be no indirect infringement. *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1374 (Fed. Cir. 2003)

(explaining that direct infringement "is a prerequisite to indirect infringement.") Therefore, I find that Motiva has failed to prove by a preponderance of the evidence that Nintendo is liable for either contributory infringement or inducement.

VIII. DOMESTIC INDUSTRY

A. Applicable Law

In patent-based proceedings under section 337, a complainant must establish that an industry "relating to the articles protected by the patent...exists or is in the process of being established" in the United States. 19 U.S.C. § 1337(a)(2) (2008). Under Commission precedent, the domestic industry requirement of Section 337 consists of an "economic prong" and a "technical prong." *Certain Data Storage Systems and Components Thereof*, Inv. No. 337-TA-471, Initial Determination Granting EMC's Motion No. 471-8 Relating to the Domestic Industry Requirement's Economic Prong (unreviewed) at 3 (Public Version, October 25, 2002).

The "economic prong" of the domestic industry requirement is satisfied when it is determined that the economic activities set forth in subsections (A), (B), and/or (C) of subsection 337(a)(3) have taken place or are taking place. *Certain Variable Speed Wind Turbines and Components Thereof*, Inv. No. 337-TA-376, USITC Pub. No. 3003, 1996 ITC LEXIS 556, Comm'n Op. at 21 (Nov. 1996). With respect to the "economic prong," 19 U.S.C. § 1337(a)(2) and (3) provide, in full:

> (2) Subparagraphs (B), (C), (D), and (E) of paragraph (1) apply only if an industry in the United States, relating to the articles protected by the patent, copyright, trademark, mask work, or design concerned, exists or is in the process of being established.
>
> (3) For purposes of paragraph (2), an industry in the United States shall be considered to exist if there is in the United States, with respect to the articles protected by the patent, copyright, trademark, mask work, or design concerned-

(A) significant investment in plant and equipment;

(B) significant employment of labor or capital; or

(C) substantial investment in its exploitation, including engineering, research and development, or licensing.

Given that these criteria are listed in the disjunctive, satisfaction of any one of them will be sufficient to meet the domestic industry requirement. *Certain Integrated Circuit Chipsets and Products Containing Same*, Inv. No. 337-TA-428, Order No 10, Initial Determination (Unreviewed) (May 4, 2000), citing *Certain Variable Speed Wind Turbines and Components Thereof*, Inv. No. 337-TA-376, Commission Op. at 15, USITC Pub. 3003 (Nov. 1996).

To meet the technical prong, the complainant must establish that it practices at least one claim of the asserted patent. *Certain Point of Sale Terminals and Components Thereof*, Inv. No. 337-TA-524, Order No. 40 (April 11, 2005). "The test for satisfying the 'technical prong' of the industry requirement is essentially same as that for infringement, i.e., a comparison of domestic products to the asserted claims." *Alloc v. Int'l Trade Comm'n*, 342 F.3d 1361, 1375 (Fed. Cir. 2003). The technical prong of the domestic industry can be satisfied either literally or under the doctrine of equivalents. *Certain Excimer Laser Systems for Vision Correction Surgery and Components Thereof and Methods for Performing Such Surgery*, Inv. No. 337-TA-419, Order No. 43 (July 30, 1999).

B. Economic Prong

Motiva's Position: Motiva contends that it has satisfied the economic prong of the domestic industry requirement. Instead of trying to summarize Motiva's lengthy arguments myself, I provide Motiva's own summary of its argument regarding the economic prong:

> Motiva surpasses the threshold for satisfaction of the economic prong of the domestic industry requirement for standing: that an industry relating to the articles protected by the patent exists or is in the process of being established in the

United States. This requirement is satisfied (1) because Motiva has made substantial domestic investments in engineering, R&D, and licensing, amounting to over { } in value; and (2) because Motiva took necessary tangible steps in furtherance of these activities from October 2003 until the filing date of the Complaint in this Investigation, and is likely to make additional substantial investments going forward.

Broadly speaking, Motiva's operational history has had two phases: one before the launch of the Wii, and the second after the launch of the Wii. In the pre-Wii phase, from 2003 through 2006, Motiva's goal was to develop and patent a new human movement technology, then partner with and license it to manufacturers who would bring a finished product to market (i.e., "productive-use licensing"). To accomplish this, Motiva used seed investment, self-funding, and thousands of hours of sweat equity, collectively valued in excess of { }. These efforts entailed a full range of business activities, including the successful prototyping of its new invention and active marketing of the resulting intellectual property to potential productive-use licensees. There is no serious dispute that these pre-Wii efforts amounted to a substantial domestic industry investment.

If there is a genuine dispute over domestic industry, it arises with respect to Motiva's operations after the launch of the infringing Wii in late 2006 – a development that scared off Motiva's potential licensees, forcing it to make a strategic shift to litigation against Nintendo in order to realize its business goals.

But Motiva meets its burden here as well, presenting ample evidence that the litigation – which seeks, by enjoining Nintendo's infringement, to remedy the harm it has caused to Motiva's business – is a necessary continuation of its pre-Wii plans to commercialize its technology. As detailed below, knowledgeable players in the fitness industry have testified that Motiva's technology is a commercially ready working product, and that there was and still is demand for it, but that the infringing Wii's presence on the market is a barrier to Motiva's ability to continue commercializing its technology.

Further evidence shows that Motiva is in direct competition with Nintendo's Wii not only in the fitness market from which Motiva emerged, but also in the video-game market. Nintendo, for its part, has consistently marketed the Wii as a consumer fitness product – trumpeting the idea that motion-control gaming can be a form of exercise – and it has even found purchase in clinical rehabilitation, physical therapy, and hospital settings. And Motiva's business plans and prototypes show that it conceived its invention, from the beginning, as a video-game-based motion-tracking system. Meanwhile, the massive success of the Wii – driven overwhelmingly by the consumer appeal of its infringing motion-tracking feature – demonstrates tremendous market demand for Motiva's patented technology in both markets.

> In sum, the trial of this matter has confirmed that Motiva's domestic investments both before and after the launch of the Wii – including its district court litigation – comprise one continuous and substantial commercialization effort, extending from October 2003 onward to the filing of Motiva's Complaint in the ITC. And the tangible steps toward commercialization that Motiva has taken portend a high likelihood of additional substantial economic activity, going forward, in the event that Motiva can obtain relief against Nintendo's infringement.

(CIB at 114-115.)

Nintendo's Position: Nintendo contends that Motiva has failed to satisfy the economic prong of the domestic industry requirement.

Nintendo argues that Motiva's engineering and research and development efforts are both insubstantial and too remote in time to constitute a domestic industry. With regard to the time issue, Nintendo claims that the inventors worked on the invention between 2003 and 2007. According to Nintendo, the inventors completely ceased all engineering and R&D work as of January 2007, more than three and one-half years prior to Motiva's filing of its ITC Complaint. Nintendo also asserts that the inventors' allegations regarding how much time they spent working on the invention are unsubstantiated and questionable.

With regard to the amount of money invested, Nintendo questions Motiva's claim that it invested { } toward building prototypes and { } in an engineering stipend paid to Mr. Ferguson by Mr. Smith. Nintendo claims that the documentary evidence only supports a finding that { } was spent on the prototypes and { } was paid to Mr. Ferguson. In addition, Nintendo claims that Motiva's expert used flawed methodology when determining that Mr. Gronachan and Mr. Ferguson invested { } worth of sweat equity in working on the invention. Nintendo argues that, even accepting Motiva's claimed out-of-pocket expenses as true, Motiva's investment was still insubstantial when compared to other fitness companies.

Nintendo argues that Motiva was unable to attract or maintain interest from investors. Nintendo claims that Motiva's sole investor was Mr. Smith, who invested approximately { }, but eventually walked away from the project and voluntarily gave up any ownership interest when he realized that he did not have the amount of money needed to fully fund the project. Nintendo claims that all of the remaining evidence regarding potential investors demonstrates that no individual or company displayed any interest in investing in Motiva's prototype device.

Nintendo argues that Motiva's litigation is unrelated to the domestic industry. Nintendo claims that Motiva is not pursuing litigation against Nintendo to allow Motiva to enter the market; instead, Nintendo believes that Motiva is pursuing litigation to obtain money through either a court judgment or settlement. Nintendo asserts that the only evidence that Motiva sued Nintendo to clear Nintendo from the market comes in the form of self-serving testimony from the inventors.

Nintendo asserts that Motiva has not licensed the patents-in-suit. Nintendo claims that Motiva has never made nor received a formal offer to license the patents-in-suit. Nintendo argues that the { } that Motiva allegedly spent on licensing efforts were really marketing and sales efforts that had nothing to do with licensing. In addition, even if Motiva's alleged licensing activities are relevant, Nintendo asserts that any claimed licensing efforts by Motiva were abandoned nearly four years before the investigation was commenced.

Nintendo argues that Motiva's prosecution activities should be disregarded. According to Nintendo, Motiva has failed to demonstrate that its prosecution activities relate to "exploitation" of the asserted patents as defined, in Section 337. Instead, Nintendo claims that the prosecution activities were steps towards mere ownership of the patents. Nintendo also argues that Motiva

has failed to prove that its litigation activities are tied to the "exploitation" of the asserted patents, as defined in Section 337.

Staff's Position: Staff contends that Motiva has satisfied the economic prong of the domestic industry requirement.

Staff asserts that a domestic industry does not exist under Section 337(a)(3). According to Staff, Motiva does not have an existing domestic industry today, or at the time the Complaint was filed. Staff states that Motiva's investments in engineering, research and development, and marketing effectively ceased in 2007. Staff does not believe that Motiva's litigation activities from 2007 to the present represent "exploitation" of the patents according to Section 337. Staff argues that Motiva's litigation is not related to research and development, engineering, or licensing. Staff does not believe that Nintendo's alleged infringing activities destroyed an existing industry, because Motiva never established an industry in the fitness or gaming markets.

Staff believes that Motiva has demonstrated that a domestic industry is in the process of being established. Staff states that while the issue is close, it believes that Motiva has met the Commission's two-part test for determining whether or not an industry is in the process of being established.

Discussion and Conclusions: Based on the evidence in the record, I find that Motiva has failed to satisfy the economic prong of the domestic industry requirement.

In Order No. 12, I granted Nintendo's motion for summary determination of no economic prong. The Commission vacated my Initial Determination and remanded the investigation back to me. The Commission's opinion found that a genuine dispute of material fact existed that precluded summary determination. In remanding the investigation, the Commission directed me to address four questions that are relevant to the issues of whether or not a domestic industry

exists or is in the process of being established. Pursuant to the Commission's directive, I will first address those questions.

Question 1: What was the level of interest from potential manufacturers, investors, and licensees in Motiva's technology prior to release of the Wii? Did Nintendo's release of the Wii cause this interest to decrease? To what extent would the product(s) being developed by Motiva compete with Nintendo's Wii?

The Commission's first question is a multi-part question regarding the interest in Motiva's technology, and the effects (if any) of Nintendo's release of the Wii. The first issue to consider is the level of interest from potential manufacturers, investors, and licensees in Motiva's technology prior November 2006, which is when the Wii was released. (RX-57C at Q. 81.)

Mr. Ferguson and Mr. Gronachan began working together in October 2003 to develop "exciting movement technologies" for the fitness and rehabilitation market. (CX-5065C at Q. 32, 47.) Motiva was formed in October 2003 as an "informal partnership." (CX-5066C at Q. 22.) The partnership wasn't formalized until October 2008, when Mr. Ferguson and Mr. Gronachan filed papers to form an LLC. (CX-5065C at Q. 69, 72.) The "core idea" developed by the inventors[15] was a human movement measurement system consisting of a screen, a base station, and a hand-held controller providing a user with intuitive, interactive, movement-based experience. (*Id.* at Q. 48.) On July 29, 2004, they filed a provisional patent application for the invention. (CX-5065C at Q. 90.)

Motiva had a single investor named David Smith. Mr. Smith met the inventors while all three were involved in a company named Trazer. (Tr. at 504:9-505:8.) After the inventors left Trazer and formed Motiva, Mr. Smith became an investor based upon a presentation made to him by Motiva. (Tr. at 507:17-23, 510:7-511:21; CX-2401.) Before investing, Mr. Smith also reviewed a spreadsheet of projected financial expenditures needed by Motiva. (Tr. at 517:22-17;

[15] For ease of reference, I will refer to Mr. Ferguson and Mr. Gronachan as "the inventors."

JX-9C.) Mr. Smith paid a { } "stipend" to Mr. Ferguson twice a month so that Mr. Ferguson could work on the invention. (Tr. at 518:18-519:8.) Mr. Smith chose that amount of money based on what Mr. Ferguson had been making as a salary at Trazer before he left. (Tr. at 519:16-23.) Mr. Smith also invested money for patent attorney fees and the hardware and software needed for the production of a prototype. (Tr. at 523:12-24.) Mr. Smith testified that he invested "right around { } in Motiva. (Tr. at 523:25-524:3.)

In late 2004, Mr. Smith decided to end his investment in Motiva. (Tr. at 545:3-547:14; CX-3527.) Mr. Smith stopped investing in Motiva because he realized that Motiva needed "vast amounts of money" to bring the technology to market. (Tr. at 525:1-7.) As Motiva states, Mr. Smith stopped his investment when "he realized that the contemplated business plan would require more money than he could afford to invest[.]" (CIB at 120.) After making an attempt to recoup his investment, Mr. Smith decided to cut his losses in 2005, walking away from Motiva without any repayment or ownership rights in the inventors' work. (JX-28; JX-56; Tr. at 532:1-7, 909:14-19.)

Mr. Smith was the only investor in Motiva. Motiva offered evidence of other potential investors with whom it spoke regarding the invention. Motiva approached James Reiss, the president of Biodex Medical Systems. (CX-5071 at Q. 2.) Biodex manufactures devices that are used for physical therapy. (*Id.* at Q. 6.) Mr. Gronachan has been a Biodex employee since 2002. (*Id.* at Q. 17.) Mr. Reiss went to Mr. Ferguson's house in Ohio to view the Motiva prototype in January 2005. (*Id.* at Q. 19.) After viewing the prototype, Mr. Reiss was interested in the Motiva technology and told Mr. Ferguson that he would have a Biodex employee send Mr. Ferguson some product specifications to see if it would be possible to integrate the Motiva technology into Biodex products. (*Id.* at Q. 35.) Mr. Ferguson reviewed the specifications and,

on February 7, 2005, informed Biodex that their technology was not advanced enough at that time to accommodate the Motiva invention. (*Id.* at Q. 39-40.)

Mr. Reiss testified that he was willing to make an investment to make his products compatible with the Motiva technology, but he couldn't do so until Motiva had received a patent on their invention. (CX-5071 at Q. 40-41.) Mr. Reiss' present position is that even though Motiva now has multiple patents covering its technology, he would only be interested in investing in Motiva's technology if Motiva is able to exclude the Nintendo Wii from the market. (*Id.* at Q. 48-51.) Mr. Reiss did not offer any evidence to show that he informed Motiva of these facts at any time prior to trial. (*See generally id.*)

Mr. Reiss' testimony regarding his interest in the Motiva technology does not convince me that his interest waned as a result of the Nintendo Wii product's appearance. Neither Mr. Reiss nor Motiva has offered any evidence to support the assertion that Biodex would license the Motiva patents, but for the presence of the Wii. (Tr. at 606:12-608:16; CX-5071 at Q. 17.) Moreover, Mr. Reiss and his company examined the Motiva technology more than one year prior to the release of the Wii, yet failed to incorporate the technology into Biodex's products or secure a license after being told that Biodex's technology was not compatible with the Motiva technology.

Significantly, Mr. Reiss's testimony on cross examination shows that his real interest lies in excluding Nintendo from the market, not utilizing Motiva's patented technology. Mr. Reiss testified that Biodex sells a physical therapy device focusing on balance called the Balance System SD for around $10,000. (Tr. at 627:7-20.) Mr. Reiss testified that he is aware Nintendo sells a Wii Fit game with a balance board for a much smaller price. (*Id.* at 627:21 -25.) Mr. Reiss acknowledged that Biodex would prefer if the Wii Fit game with the balance board was not

available in the United States. (*Id.* at 630:4-7.) And then Mr. Reiss acknowledged that he is more interested in keeping Nintendo out of the U.S. market than investing in Motiva's technology:

> Q. Okay. So you don't really want to invest in their technology, do you? What you want to invest in is excluding Nintendo from the market; is that right?
>
> A. Yes.
>
> Q. Because you don't like the competition between this balance board and your Balance System SD, right?
>
> A. That's fair to say.
>
> Q. Thank you.

(Tr. at 633:22-634:6.)

Mr. Gronachan spoke with Gregory Highsmith beginning in March 2006. (CX-5066C at Q. 131-134.) At the time, Mr. Highsmith was employed by Life Fitness, a manufacturer of fitness equipment. (*Id.*; Tr. at 654:20-657:4.) Mr. Gronachan and Mr. Highsmith knew each other because they were former co-workers at a company named Cybex. (Tr. at 656:19-21.) Mr. Highsmith testified that they had a number conversations about the general functionality and capabilities of the technology. (Tr. at 656:25-657:20.) Mr. Highsmith was a member of the innovations committee at Life Fitness. (Tr. at 658:7-12.) The innovations committee evaluated internal and external inventions to determine inventions that Life Fitness should pursue. (*Id.*) Mr. Highsmith could not recall if he ever presented the Motiva invention to the innovations committee at Life Fitness. (Tr. at 660:17-19.) Motiva did not offer any further evidence of interest from Life Fitness.

On cross examination, Mr. Highsmith stated that he and Mr. Gronachan are long-time friends. (Tr. at 667:23-668:9.) He acknowledged that he engaged in conversations about Mr.

Gronachan's invention that he would not have otherwise had with an inventor with whom he did not have a personal relationship. (Tr. at 668:10-15.) Mr. Highsmith never held a meeting at Life Fitness' offices with Mr. Gronachan about the Motiva invention. (Tr. at 669:15-20.) Mr. Highsmith never saw the Motiva prototype or reviewed Motiva's patents. (Tr. at 671:15-23.)

In 2006, Mr. Gronachan spoke with Steve Williams regarding Motiva. (CX-5066C at Q. 136-137.) Mr. Gronachan said that Mr. Williams was very well-connected in the fitness and wellness products market. (*Id.*)[16]

In response to the first part of Question 1, I find that there was little interest from potential manufacturers, investors, and licensees in Motiva's technology prior to release of the Wii. While Mr. Smith invested { } in Motiva, he stopped his investment in late 2004, well before the release of the Wii, because he determined that he was not able to fully fund the project. Mr. Smith then walked away from Motiva in 2005 without seeking any promises of repayment or ownership of the eventual business, which is not consistent with someone who has a high interest in the technology.

Beyond Mr. Smith, there were no other investors in Motiva. Motiva offers evidence to show that the inventors spoke with people from other companies regarding Motiva; but nothing ever came of those meetings. Furthermore, it is clear that the meetings with Mr. Reiss and Mr. Highsmith came about at least in part due to Mr. Gronachan's personal connections. While Mr. Reiss at least viewed the prototype and the Motiva patent application, Mr. Highsmith did neither. As a member of his company's innovation committee, Mr. Highsmith was in a perfect position to introduce the Motiva technology to Life Fitness, but he did not do so. This failure to act signifies the lack of interest that Life Fitness had in the Motiva technology.

[16] Mr. Williams did not testify in this investigation because he is deceased. Motiva attempted to offer his deposition from a district court litigation, but I excluded that exhibit. (Tr. at 59:22-64:9.) Motiva requests that I reconsider this ruling, but I decline to do so.

The next part of Question 1 from the Commission asks whether or not the Wii's release caused the interest in the Motiva technology to decrease. I have already concluded *supra* that there was little interest in the Motiva technology before the release of the Wii. I now find that Motiva has failed to demonstrate that there was any decline in interest caused by the release of the Wii.

Motiva relies on the testimony of Mr. Highsmith, Mr. Reiss, and Michael Lannon from Koko Fitness in an attempt to show that the release of the Wii caused interest to decline. (CIB at 138.) Mr. Highsmith testified that when the Wii was released, it created a barrier for Motiva because they couldn't present the technology to Life Fitness without having an answer for how their product was different than the Wii. (Tr. at 662:4-17.) This testimony does not establish that there was any real decline in interest for the Wii, as Mr. Highsmith and Life Fitness never showed any significant interest in Motiva prior to the release of the Wii. As noted *supra*, even though Mr. Highsmith was aware of Motiva's technology prior to the Wii's release, he never showed enough interest to view the prototype, view Motiva's patents or patent applications, hold a meeting with the inventors in Life Fitness's offices, or present the invention to Life Fitness's innovation committee. (Tr. at 660:17-661:3, 669:7-672:5.) Further, Mr. Highsmith's testimony only demonstrates that the inventors would need to differentiate their invention from the Wii to move forward; it does not show that a potential customer would lose all interest because of the Wii. Certainly the inventors could find a way to differentiate their product from the Wii, especially because the Motiva product was targeted for the fitness/rehabilitation market, while the Wii was targeted for the home consumer market.

As demonstrated *supra*, I have concluded that Mr. Reiss' testimony regarding the effect of the Wii's release on Biodex's interest in the Motiva technology shows that his real interest is to exclude Nintendo from the market, rather than utilizing Motiva's patented technology.

Motiva cites to the testimony of Michael Lannon, CEO of Koko Fitness. The inventors met with Mr. Lannon in January 2007, after the release of the Wii. (CX-5065C at Q. 314-315.) Mr. Ferguson testified that Mr. Lannon expressed concerns regarding the Motiva technology due to the fact that the Wii was already on the market. (*Id.* at Q. 319-321.) Mr. Lannon testified similarly, asking how Motiva "was going to bring this product to market in light of the fact that Nintendo had just introduced or recently introduced what I would consider a conceptually similar product. Similar technology might be a better way to put it." (CX-5772C at 40:17-21.) Koko Fitness did not choose to invest in Motiva, and did not explain its reasoning for not investing. (CX-5065C at Q. 322-323.)

Mr. Lannon's deposition testimony contradicts any claim by Motiva that Koko Fitness's interest in Motiva declined due to the presence of the Wii. The meeting was held on a Saturday. When asked why that was the case, Mr. Lannon testified that the meeting "wasn't important enough to take time out of our actual workweek." (CX-5772C at 39:13-21.) And when asked if Koko Fitness was interested in Motiva's technology, Mr. Lannon stated:

> Not at the time. We're a small company and we have limited development resources. So after looking at it, I was able to give him, I think, some advice on his business. So that was again half of the reason for the meeting. My opinion, I guess. And it was information enough that we could evaluate if I was something that we would want to look into, investigate further. That's really as much as came out of the meeting.

Id. at 20:4-16. Based upon the testimony, Koko Fitness's lack of interest had nothing to do with the presence of the Wii on the market, and there is no evidence that Koko Fitness would have been more interested in Motiva had the Wii not existed. And, like Mr. Highsmith, Mr. Lannon

did not state that Motiva's product was doomed due to the presence of the Wii; he merely gave advice to the inventors that they were going to need to differentiate their product from the Wii in order to find success in the market.

Finally, Motiva cites to the inventors' own testimony that the Wii has served as Motiva's roadblock to entering the market, and that once Nintendo is excluded from importing the Wii, Motiva will find success. (CX-5065C at Q. 501-502; CX-5066C at Q. 207-208.) I give no weight to this wholly unsupported testimony from clearly interested witnesses.

The last part of Question 1 asks to what extent that products being developed by Motiva would compete with the Nintendo Wii. I find that the product developed by Motiva would not compete with the Nintendo Wii.

According to Motiva, its product was intended for general exercise, athletic performance training, and physical therapy and research. (RX-513C.) The intended markets were hospitals, private clinics, and universities for physical therapy and research; colleges and universities, professional sports teams, and personal training centers for athletic training; and the YMCA and Jewish Community Center for youth fitness. (*Id.*) The Motiva product was intended to provide, *inter alia*, "[a]ccurate, millimeter resolution and low-latency measurement in three (3) dimensions;" "[m]ultiple body worn sensors communicating through radio telemetry to host;" and "[a]dvanced, interactive software with biofeedback and comprehensive data analysis." (JX-16C; *see also* JX-41.)

Mr. Ferguson described the intended user of the Motiva product as "a male or female adult having an active lifestyle and belonging to a health club." (RX-392C.) Mr. Ferguson also made clear that Motiva has "further interests in the medical and physical medicine markets that we'll pursue at a later time." (*Id.*) Motiva identified its competitors as other companies in the

physical fitness and physical rehabilitation fields. (JX-11C; JX-40; JX-41.) Motiva never identified any video game companies, such as Sony, Nintendo, or Microsoft, as potential competitors; nor did it show any intention of marketing its product for use by home consumers. (*Id.*; RX-513C.) Motiva intended to sell its product, with an LCD or flat TV display, for { }. (JX-11C.)

In contrast, the Nintendo Wii is a mass market video game system designed for the home user. (RX-489; RX-534C; RX-477; RX-57C at Q. 97.) It sells for less than $250. (RX-57C at Q. 105; CX-652C.53.) The Wii is marketed to appeal to a broad range of people beyond the core video game target audience, such as seniors, teen girls, and moms. (RX-534C; RX-489.)

Motiva asserts that the Nintendo Wii Fit product is a fitness product that would compete with the Motiva product. The Wii Fit is software that requires the Wii Fit balance board, which is not an accused product. (RPX-24.) Wii Fit has been described as "an exer-game for the Wii that focuses on strength training, aerobics, yoga and balance games performed using a small white balance board that looks similar to a household body-weight scale." (RX-642.) It is true that Nintendo markets the Wii Fit product as a product that combines "fitness and fun;" but that does not mean that the Wii Fit would compete with the expensive and sophisticated fitness product envisioned by Motiva. (CX-5669; JX-11C; JX-16C; JX-40; JX-41.) In fact, Nintendo offers evidence of a study performed by researchers that determined that the Wii Fit provides a "very, very mild workout," and that "using the Wii Fit alone may not produce results that meet recommended physical activity guidelines." (RX-642.) Even though the Wii Fit may be viewed by some as a fitness product, it is not a serious fitness product like the one described in the Motiva documentation. Therefore, I find that the Wii Fit would not compete with the Motiva product.

Based on the foregoing, I find that the Motiva product was intended to be an expensive tool used by people in the physical rehabilitation and fitness industries, while the Nintendo Wii is a relatively inexpensive video game system for home consumers that is intended to appeal to a mass market. I do not find that the Motiva product would compete with the Wii in the video game market; nor do I find that the Wii would compete with the Motiva product in the fitness/rehabilitation market. (RX-57C at Q. 100-105.)

Question 2: How close was Motiva's technology to being commercialized and/or production-ready?

Motiva answers this question by stating that Motiva's "product" was its invention – the technology embodied in the prototype devices and claimed in the asserted patents. Thus, Motiva states that by virtue of meeting with prospective partners such as Biodex and Life Fitness, Motiva was already on the market with its product, showing it off to actual customers. (CIB at 141-142.) Motiva further claims that its fully-functional prototype was "ready for commercialization." (*Id.* at 141.)

In my view, Motiva's position misses the point. The Commission is asking how close was Motiva's technology to being incorporated in a commercial or production-ready product, regardless of whether that product was made by Motiva or another company. I find that Motiva's technology was not close to being incorporated in a commercial or production-ready product.

Motiva built two prototypes – a "proof-of-concept" prototype and a "demonstration" prototype. (CX-5069C at Q. 228; Tr. at 717:6-7.) The proof-of-concept prototype, which was the less polished of the two, no longer exists. (Tr. at 717:6-24.) What remains is the demonstration prototype, which has exposed circuit boards, wiring, and sensors. (CPX-5; CPX-6.) The demonstration prototype cannot be described as anything close to production-ready.

(*Id.*) This conclusion is supported by Mr. Bakewell's testimony, as Mr. Bakewell testified that the prototype lacks industrial design, fine-tooling, functional engineering, and test phase manufacturing. (RX-57C at Q. 114-115.)

During discovery, Nintendo served an interrogatory asking Motiva to "[d]escribe in detail all steps that remained to be completed before the alleged inventions described and/or claimed in the Asserted Patents could be commercialized and/or product-ready." (RX-290C.35.) Motiva responded that additional steps could include obtaining contracts, final product design, beta testing, safety and compliance testing, and packaging design. (RX-290C.35-36.) In response to another Nintendo interrogatory, Motiva admitted that it "did not perform field testing or safety testing" on the prototypes. (RX-290C.36.) These interrogatory responses further support the conclusion that the Motiva prototype was not close to being production-ready.

There is no evidence of any other companies incorporating Motiva's technology in their products. As described in detail with regard to Question 1, Motiva received little interest in its technology, and no company ever chose to use Motiva technology in a commercial product.

There is also evidence that the Motiva technology has not been updated or improved since at least December 2007. Mr. Ferguson testified that his last work on the patented technology consisted of making firmware and software updates to the demonstration prototype through December 2007. (CX-5065C at Q. 183.) Such evidence is inconsistent with Motiva's claim that the technology is currently ready to be commercialized.

Question 3: To what extent was Motiva's shift in product-oriented activities to litigation-oriented activities a strategic business decision not caused by Nintendo's activities? Could Motiva have continued its commercialization efforts without resorting to litigation? Was Motiva taking the "necessary tangible steps to establish" a domestic industry? *See Stringed Instruments*, at 13 (quoting S. Rep. 100-71 at 130).

Motiva claims that its shift in product-oriented activities to litigation-oriented activities was a direct result of Nintendo's release of the Wii. According to Motiva, "the impetus for Motiva's litigation was having been turned down by important potential licensing partners precisely because Nintendo already had an unauthorized product on the market embodying Motiva's technology." (CIB at 141.) Motiva claims that the point of its litigation activities, first and foremost, is to exclude Nintendo from the market so that Motiva can fairly exploit its patent. (*Id.* at 141-143; *see also* CX-5065C at Q. 224; CX-5066C at Q. 175.) I find that the evidence does not support Motiva's claim.

Motiva asserts that the inventors were turned down by potential investors and partners because of the presence of the Wii. As described *supra*, all but one of the meetings between Motiva and potential partners took place before the Wii was released. Even though the Wii was not yet released, none of the potential partners decided to invest in Motiva or incorporate Motiva technology in their products. And the one person who did invest in Motiva, David Smith, ended his investment approximately two years before the Wii was released.

Motiva met with one potential partner after the release of the Wii – Koko Fitness. The evidence shows that Koko Fitness's decision to not invest in Motiva was unrelated to the Wii. As Mr. Lannon testified, he didn't believe the meeting with Motiva was very important, and his company was not interested in Motiva because Koko Fitness is a small company with limited development resources. (CX-5772C at 20:4-16, 39:13-21.) Motiva does not offer any evidence to support the finding that but for the Wii, Koko Fitness would have been interested in investing

in Motiva. Therefore, I find no evidence to support Motiva's claim that the turn to litigation was the result of being rejected by potential investors due to the presence of the Wii.

In addition, Motiva's conduct throughout the litigation is inconsistent with the claim that the purpose of the litigation was to exclude Nintendo so that Motiva could bring its technology to market. Emails between the inventors before the start of any litigation show that they were interested in their potential "winnings" from a lawsuit against Nintendo. (JX-124; RX-409C.) Motiva first brought its litigation against Nintendo in November 2008 in the United States District Court for the Eastern District of Texas. (CX-5065C at Q. 340; CX-525.) While Motiva's district court action sought both injunctive and monetary relief, Motiva did not immediately seek a preliminary injunction or temporary restraining order against Nintendo. (CX-525; CX-5065C at Q. 352-354.) When asked why Motiva did not seek immediate injunctive relief against Nintendo, Mr. Ferguson could not provide an answer, claiming that it was a strategic decision of counsel. (CX-5065C at Q. 354-355.) Motiva did not file a contemporaneous complaint at the ITC.

The district court litigation was eventually transferred from the Eastern District of Texas to the Western District of Washington, pursuant to a writ of mandamus issued by the Federal Circuit on December 17, 2009. *In re Nintendo Co.*, 589 F.3d 1194 (Fed. Cir. 2009). After the case was transferred, Nintendo filed a request at the Patent Office for *inter partes* reexamination of the '151 patent. (CX-1.16.) On June 4, 2010, the Patent Office ordered *inter partes* reexamination of the '151 patent, and on June 11, 2010, the district court in Washington stayed the case pending the reexamination. (CX-1.17.) Only after the district court case was stayed did Motiva file a complaint at the ITC. (CX-1.)

According to Motiva, the litigation against Nintendo was intended to clear the market for Motiva to be able to exploit its patents. Yet, Motiva's actions in litigation do not support such an assertion. Motiva's decision not to file a complaint at the ITC from the outset or seek a preliminary injunction against Nintendo shows that Motiva was not concerned with taking swift actions to remove Nintendo from the market. Instead, Motiva's litigation tactics strongly suggest that the purpose behind the litigation was to extract a monetary award either through damages or a financial settlement.

Next, the Commission wants to know whether or not Motiva could have continued its commercialization efforts without resorting to litigation. It was possible that Motiva could have continued its commercialization efforts without resorting to litigation, but it would have taken a new source of money to do so.

As described *supra*, Mr. Smith, Motiva's only investor, stopped investing at the end of 2004. Around the same time, there was a sharp decline in the amount of time spent by Mr. Ferguson on the technology. Mr. Ferguson claims that from October 2003 to April 2005, he worked approximately 60 hours per week on engineering, research, design, and development of the claimed invention. (CX-5065C at Q. 104.) From April 2005 to April 2006, Mr. Ferguson claims that he worked approximately seven hours per week on engineering, research, design, and development. (*Id.* at Q. 148.) Mr. Ferguson had begun consulting for a company named Aerotek at the end of February 2005. (CX-5069C at Q. 228.) From April 2006 to January 2007, Mr. Ferguson claims that he worked approximately ten hours per week on engineering, research, design, and development. (CX-5065C at Q. 183.) Mr. Ferguson claims that the last technical work that he performed on the Motiva invention was in December 2007. (*Id.*) Motiva's efforts

to find a partner for the technology ended after the January 2007 meeting with Koko Fitness. (CX-5065C at Q. 324-326.)[17]

According to the inventors, after the Koko Fitness meeting, they felt that their only recourse was to pursue litigation, because they could not successfully market their product with the Wii already on the market. (CX-5065C at Q. 326-327.) As stated *supra*, I do not find that the evidence supports Motiva's assertion that the inventors were turned down at the various fitness companies because of the presence of the Wii. It follows that I do not concur with the inventors' assertion that because of the Wii, they had no other recourse but to sue Nintendo. While it is clear that the inventors needed money from an outside source to continue their work, that does not mean that litigation was their only option. The inventors could have continued to seek investors, licensees, or partners instead of, or in conjunction with, suing Nintendo. I do not find that suing Nintendo was Motiva's first and only option after Mr. Smith stopped investing and Motiva's attempts to market the technology failed.

Finally, the Commission asks in Question 3 whether or not Motiva was taking the "necessary tangible steps to establish" a domestic industry. This question relates to the analysis of whether or not an industry is in the process of being established, pursuant to Section 337(a)(2). *Certain Stringed Musical Instruments & Components Thereof*, Inv. No. 337-TA-586, Comm'n Op. (May 16, 2008). This will be addressed *infra*.

[17] Mr. Ferguson offers documentation that allegedly corroborates his testimony regarding his time spent on the Motiva invention. (CX-5065C at Q. 97-99.) Contrary to Motiva's assertion, this documentation does not account for every claimed hour of time spent by Mr. Ferguson. (*Id.*) In fact, Mr. Ferguson's journal contains only 102 dated entries related to the Motiva prototype. (JX-14C.)

Question 4: Do the steps "taken [by Motiva] indicate a significant likelihood that the industry requirement will be satisfied in the future?" *See Stringed Instruments*, at 13 (quoting H. Rep. 100-40 at 157). How likely is it that Motiva will have a domestic industry in the future (1) if no relief is issued against Nintendo or, alternatively, (2) if relief is issued against Nintendo?

This question relates to the analysis of whether or not an industry is in the process of being established, pursuant to Section 337(a)(2). *Certain Stringed Musical Instruments & Components Thereof*, Inv. No. 337-TA-586, Comm'n Op. (May 16, 2008). This will be addressed *infra*.

First I consider the question of whether or not an "industry in the United States, relating to the articles protected by the [asserted patents] exists or is in the process of being established." 19 U.S.C. § 1337(a)(2). I will address each part of this section separately.

Whether or Not An Industry Exists

"The domestic industry requirement is written in the present tense and, therefore, requires that a domestic industry either currently exist or be in the process of being established. The date for determining whether an industry exists is the filing date of the complaint." *Certain CD-ROM Controllers & Products Containing the Same – II*, Inv. No. 337-TA-409, Comm'n Op. (Oct. 18, 1999). I find that at the time of the complaint, a domestic industry did not exist.

Motiva claims that a domestic industry exists under 19 U.S.C. § 1337(a)(3)(C), which requires "substantial investment in...exploitation [of the patent], including engineering, research and development, or licensing." Motiva first relies on the investments in engineering, research and development, and "licensing/commercialization efforts" surrounding the claimed invention. Motiva claims that these investments were made during the period of time between October 2003 and January 2007. (CIB at 124.) Specifically, Motiva claims that it invested { } of sweat equity, valued at about { } This breaks down to: (1) { } of work by Mr.

Ferguson and { } of work by Mr. Gronachan devoted to research and development and engineering, which Motiva values at { }; (2) { } of work by Mr. Ferguson and Mr. Gronachan to commercialize the patented technology, which Motiva values at{ }; and (3) { } of work by Mr. Ferguson and Mr. Gronachan to develop, draft, revise, and prosecute applications for the asserted patents in 2004 and 2005, which Motiva values at { }.[18] (*Id.* at 125-126.) Motiva claims that it invested over { } in out-of-pocket expenses, which are all detailed in Motiva's brief. (*Id.* at 126.) Motiva claims that its total investment from October 2003 to January 2007 amounts to { }. (*Id.*)

Even if I accepted the accuracy of all of Motiva's investments,[19] Motiva acknowledges that these investments were made in the time period between October 2003 and January 2007. Moreover, as Nintendo's expert notes, the vast majority of the inventors' alleged "sweat equity" took place between October 2003 and April 2005. (RX-57C at Q. 73.) These activities occurred well before the October 1, 2010 filing of the complaint by Motiva. Thus, on October 1, 2010, the relevant date for determining a domestic industry, it had been at least 3.5 years since the end of the Motiva's engineering, research and development, and commercialization activities. I find that Motiva's activities that took place between 2003 and 2007 are far too remote to be considered for purposes of demonstrating that a domestic industry exists.

Motiva argues that a domestic industry can be found based on a complainant's past activities in exploiting the patent. The Commission cases that hold as such are distinguishable,

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[18] While the issue is immaterial to my decision regarding domestic industry, I believe that Motiva's investments related to prosecution activities should not be considered as part of the domestic industry analysis. Mr. Ferguson's and Mr. Gronachan's time and the associated legal costs, expenses, and fees for prosecuting the asserted patents were steps towards mere ownership. Motiva has not demonstrated why such investments are relevant and material to the domestic industry analysis.

[19] I have addressed Motiva's alleged corroborating documents regarding the amount of time invested by the inventors in fn 17, *supra*. Still, it is unnecessary to reach the parties' dispute related to the accuracy of Motiva's assertions regarding the number of hours worked by the inventors and the value of that time. Even assuming Motiva's claims are true, I still find that no domestic industry exists.

as the Commission relied on both the past activities and some current activity to find a domestic industry exists.

Motiva cites *Certain Variable Speed Wind Turbines and Components Thereof*, Inv. No. 337-TA-376, USITC Pub. No. 3003, 1996 ITC LEXIS 556, Comm'n Op. at 22 (Nov. 1996), to support its argument that a domestic industry can be found based on a complainant's past activities in exploiting the patent. That case is inapposite. In *Wind Turbines*, the ALJ found in the Initial Determination that a domestic industry existed. The complainant filed for bankruptcy after the ALJ issued the initial determination. The evidence showed that the complainant had ceased manufacturing the patented products, but that it continued to provide "operation and maintenance services" for the products that were already sold. The complainant continued to devote significant resources to manufacture of components of the patented products. The Commission endorsed the ALJ's opinion that "the domestic industry determination is not made by application of a rigid formula and is no longer confined under those portions of the domestic production facilities that manufacture under the patent in controversy." *Id.* at 24. The Commission went on to say:

> ... a domestic industry can be found based on complainant's past activities in exploiting the '039 patent. While there have been circumstances where not practicing the patent claim in issue for a significant time has defeated a section 337 investigation,[20] we note that in this case it has only been a matter of several months, at most, since the ALJ found that complainant was, in fact, exploiting the '039 patent. Because it has only been a matter of months since complainant ceased its manufacturing activities with respect to the KVS-33, and because of complainant's substantial investment in plant and equipment, significant employment of labor and capital, and substantial investment in engineering, research and development related to the patented technology, as well as evidence that it continues to exploit the patent (albeit in a more limited fashion), we reaffirm our determination that there is a domestic industry in this investigation.

[20] The Commission noted that in *Certain Grain Oriented Silicon Steel* (Docket No. 1479, complaint filed in December, 1988) they refused to institute a patent-based 337 investigation where the complainants most recent activities devoted to exploitation of the technology covered by the patent in question had occurred more than 8 years prior to filing the complaint. *Wind Turbines* at 25, fn. 71.

Id. at 25-26.

Likewise, in *Certain Battery-Powered Ride-On Toy Vehicles & Components Thereof*, Inv. No. 337-TA-314, Order No. 6 (Dec. 5, 1990) (initial determination unreviewed in relevant part), the ALJ concluded that a domestic industry exists even though the complainant no longer manufactured the product at issue. The ALJ found that the complainant was still selling replacement parts for the products. Combining the past domestic activities with the current activity of providing replacement parts was sufficient to constitute a domestic industry:

> Kransco still has an inventory of the dual control power pedal unit that is the subject of the patent, and some of these units are still sold as replacement parts to stores or individual purchasers when the warranties on their toys have expired. The dual control unit is a safety feature on the toy. Furnishing replacement parts would be significant to the complainant even if it did not bring in substantial income. Making replacement parts available generates good will for the company. The toys are expensive, and parents who spend this much for a toy would expect a U.S. company to make replacement parts available for repairs. Section 337 should protect small industries as well as large ones. The current sales of the unit may be few, and the costs of replacing these parts free may not be large, but they meet the criteria of the statute.
>
> As long as Kransco is still replacing any of these units, all of the prior costs relating to the development and exploitation of the patent should be considered along with the current expenditures relating to replacement parts when determining whether there is a domestic industry.

Id.

In *Certain Video Graphics Display Controllers & Products Containing Same*, Inv. No. 337-TA-412, Initial Determination (unreviewed) (Apr. 30, 1999), the ALJ found that a domestic industry exists even though the complainant was not currently manufacturing the domestic industry product. The ALJ concluded that a domestic industry existed based on the complainant's past activities in conjunction with its current activities of, *inter alia*, selling existing inventory of the domestic industry product:

> That Cirrus is not currently manufacturing the 5465 product is not dispositive, as the evidence shows that Cirrus has invested substantial capital in developing and manufacturing the 5465 product, and uncontradicted testimony establishes that Cirrus is currently offering for sale and intends to continue offering for sale an existing inventory of the product. Additionally, the evidence is undisputed that, in exchange for a significant monetary payment, Cirrus has licensed the '525 Patent to at least one third party. Credible evidence of record also shows that Cirrus is paying ISD Corporation for research and development activities, including continuation of software development and maintenance for the 5465 product. The sum total of Cirrus' past as well as present investment associated with the 5465 product, coupled with Cirrus' activity related to licensing the '525 Patent support a finding of domestic industry at any point from the time of the filing of the complaint through the date of the hearing.

Id.

In each of these cases, there is a common theme: while the primary domestic industry activities were no longer taking place, a domestic industry was found to exist based on a combination of the prior activities and some type of current activities related to the domestic industry. In the case before me, the engineering, research and development, and commercialization activities ended in January 2007, at the latest. The invention was never produced and was never close to being "production-ready." Motiva relies on its litigation with Nintendo as the continuing activity that demonstrates a domestic industry.

I do not find that the Motiva litigation constitutes a continuing domestic industry activity. The Commission has made clear that "patent infringement litigation activities alone, *i.e.* patent litigation activities that are not related to engineering, research and development, or licensing, do not satisfy the requirements of section 337(a)(3)(C)." *Certain Coaxial Cable Connectors & Components Thereof & Products Containing Same*, Inv. No. 337-TA-650, Comm'n Op. at 43-44 (Apr. 14, 2010).[21] For litigation costs to be considered relevant to the domestic industry

[21] The Commission's decision was recently affirmed by the Federal Circuit. *See John Mezzalingua Assocs., Inc. v. Int'l Trade Comm'n*, --- F.3d ----, 2011 WL 4552462, at *5 (Oct. 4, 2011) ("We agree with the Commission 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.")

analysis, a complainant must tie such costs to the exploitation of the patent pursuant to Section 337(a)(3)(C). *Id.*

Motiva attempts to tie the litigation against Nintendo to the exploitation of its patents by claiming that the litigation is an attempt "to halt Nintendo's infringement and to open up the marketplace for Motiva's inventions." (CIB at 137.) According to Motiva, the litigation was "a necessary step to preserve and hasten Motiva's licensing opportunities, which would otherwise remain completely curtailed by the Wii's infringing presence on the market." (*Id.* at 136-137.) As evidence of this, Motiva relies on the unsupported testimony of two clearly interested witnesses – Mr. Ferguson and Mr. Gronachan. (*See, e.g.,* CX-5065C at Q. 327; CX-5066C at Q. 186; CX-5069C at Q. 260; Tr. at 855:9-856:18.)

As detailed *supra*, I have found that (1) well before the release of the Wii, Motiva was facing a lack of funding due to the departure of David Smith; (2) prior to the Wii being released, Motiva met with potential partners, but they showed little to no interest in investing in the Motiva technology; (3) the one company that Motiva met with after the release of the Wii – Koko Fitness – was not interested in investing in the technology for reasons other than the fact that the Wii was already on the market; (4) Motiva has offered no evidence that any potential investor, partner, or licensee was dissuaded in investing in the Motiva technology due to the Wii; (5) the Wii was not in the same market as the Motiva product, and the two products would not have competed; (6) Motiva's actions in litigation are not consistent with a company whose main purpose is to remove Nintendo from the market so that it can enter the market; and (7) Motiva has not demonstrated that litigation was its only recourse to salvage its business in the face of Nintendo's release of the Wii. In view of these findings, and the above-cited supporting

evidence, I do not concur with Motiva that the litigation against Nintendo is in any way related to the exploitation of the patents as proscribed by Section 337(a)(3)(C).

Even if Motiva's alleged investment in the litigation is considered relevant to the domestic industry analysis, such investment is not significant. Motiva's lawyers are working under a contingent fee agreement. (CX-631C.) At this time, Motiva has not paid any attorneys' fees or expenses related to Motiva's litigation against Nintendo. (*Id.*; *see also* Tr. at 784:10-12.) { } (*Id.* at ¶¶ 2.01, 4.01.)

At this time, the only actual investment made by Motiva related to the litigation is the time spent by the inventors working on the litigation. Mr. Ferguson and Mr. Gronachan testified that as of January 2011, they had spent { } and { }, respectively, working on the litigation. (CX-5065C at Q. 358; CX-5066C at Q. 187.) Mr. Hoeberlein values this time at approximately { }. (CX-5069C at Q. 260.) Even assuming Mr. Hoeberlein's calculation is accurate and reliable, I find that such an investment is insubstantial.

Motiva's expert Mr. Hoeberlein offers a calculation of Motiva's alleged investment in the litigation. (CX-5069C at Q. 261-297.) Assuming *arguendo* that Motiva's litigation activities are

relevant to the domestic industry analysis, I find that this alleged investment is far too speculative to be considered. (*Id.*) Motiva's "investment" is simply a conditional promise to pay its attorneys' fees and expenses, with the condition being that Motiva must first obtain a recovery as a result of the litigation. (CX-631C.) At this time, it is not known whether or not Motiva will ever obtain anything of value as a result of the litigation. I will not accept estimates offered by Mr. Hoeberlein based on the likelihood that Motiva prevails in the litigation or the value of a settlement in an unrelated ITC litigation involving Nintendo. (CX-5069C at Q. 261-297.) I find such testimony to be speculative and unreliable.

In addition, Motiva neglects to consider the fact that the '268 patent, one of the two asserted patents in this investigation, has not been asserted by Motiva in the district court litigation against Nintendo. (*See* CX-1.16-17.) Thus, even if I considered the district court litigation costs to be relevant to this investigation, this would still not provide a domestic industry for the '268 patent.

In view of my conclusion that the litigation against Nintendo does not relate to exploitation of the asserted patents, Motiva's last relevant activities with regard to exploitation of the patents occurred in 2007, at the latest. Because a domestic industry must exist at the time of the complaint, I find that Motiva has failed to prove that a domestic industry "exists" pursuant to Section 337(a)(2).

Whether or Not an Industry is in the Process of Being Established

Section 337 also protects a domestic industry that "is in the process of being established." 19 U.S.C. § 1337(a)(2). The Commission has articulated a two-part test to determine if an industry is in the process of being established. *Certain Stringed Musical Instruments & Components Thereof*, Inv. No. 337-TA-586, Comm'n Op. at 13 (May 16, 2008). First, the

complainant must "demonstrate that he is taking the necessary tangible steps to establish such an industry in the United States." *Id.* Second, the complainant must show that there is a "significant likelihood that the industry requirement will be satisfied in the future." *Id.* As explained *supra*, the Commission expressly asked about these two prongs when vacating my initial determination of no domestic industry and remanding the case to me.

Regarding the first prong, Motiva offers the testimony of Dr. Paul Wazzan to demonstrate that Motiva is taking the necessary tangible steps to establish an industry in the U.S. Dr. Wazzan opined that between October 2003 and the present, Motiva has taken the necessary tangible steps to establish a domestic industry. (CX-5068C at Q. 98-99.) This opinion is based on a nine-step framework developed by Dr. Wazzan. (*Id.* at Q. 99-102.) Dr. Wazzan acknowledged that this nine-step analysis was created by him, and not taken from any peer-reviewed sources or prior case law: "I devised [the nine-step analysis] based on my professional training and experience, including my experience as a seed investor in various technology start-ups." (*Id.* at Q. 103; *see also id.* at Q. 104-105.)

Not surprisingly, Dr. Wazzan opines that Motiva meets each of the nine steps found in his self-made test. (CX-5068C at Q. 108-158.) I do not find that Dr. Wazzan's self-made test is particularly helpful in analyzing this issue. Moreover, I would be remiss not to question the credibility and reliability of a test, devised by Motiva's expert for this litigation, where Motiva meets each and every element. Instead, I will look at the relevant facts to determine whether or not Motiva is taking the necessary tangible steps to establish an industry in the United States.

From 2003 to 2007, Motiva was taking tangible steps to establish an industry in the United States. As described *supra*, Mr. Ferguson and Mr. Gronachan conceived of the invention, and Mr. Ferguson spent time, mostly between 2003 and 2005, building two prototype devices.

Mr. Ferguson and Mr. Gronachan also made efforts to market the technology to others in the fitness and rehabilitation field. All of those activities ended in 2007. Motiva lost its primary source of funding when David Smith ended his investment in late 2004, and Motiva has never found a suitable investor to replace him. Since the end of 2007, Motiva has focused on nothing except suing Nintendo. Therefore, I find that after 2007, Motiva abandoned its efforts to establish an industry in the United States. Mr. Bakewell's credible testimony supports this conclusion. (RX-57C at Q. 68-73.)

Motiva also alleges that its litigation activities demonstrate that it is taking the necessary tangible steps to establish an industry because the litigation is a way to clear Nintendo from the market so that Motiva can move forward with its business. For all of the reasons previously stated, I do not find that the litigation against Nintendo is evidence of Motiva taking the necessary tangible steps to establish an industry.

Next, I examine whether or not there is a significant likelihood that the industry requirement will be satisfied in the future. In addition, the Commission seeks to know how the likelihood of the industry requirement being satisfied in the future will be affected by whether or not the Commission grants an exclusion order in this investigation. I conclude that Motiva has not demonstrated that there is a significant likelihood that the industry requirement will be satisfied in the future, and this determination is not dependent on the Commission's actions in this investigation.

Motiva argues that if an exclusion order is granted against Nintendo, its business will succeed. Motiva bases this argument primarily on the self-interested testimony of the inventors. (CX-5065C at Q. 499, 502; CX-5066C at Q. 205, 208.) The inventors assert that after an exclusion order issues, Motiva will possess valuable patent rights that have been shown to be

enforceable. (*Id.*) The inventors assert that they already have a working prototype and demonstrated interest in the fitness and rehabilitation industry. (*Id.*) According to the inventors, all of these facts put together show that once the Commission issues an exclusion order, Motiva will be able to find a partner to license the patents and incorporate the Motiva technology into a commercial product. (*Id.*)

I do not find this testimony to be persuasive. The inventors have not produced any credible evidence that supports a conclusion that if Nintendo is excluded from the market, Motiva's business will thrive. Motiva could not demonstrate that there was any significant interest in its technology prior to the Wii's existence, and I find that there is no reason to believe that manufacturers of fitness and rehabilitation equipment will suddenly become interested in the technology because Nintendo has been excluded from the market.[22] Motiva further relies on the testimony of Mr. Reiss and Mr. Highsmith, but I have already concluded that such testimony does not demonstrate that there was, is, or will be significant interest in the Motiva technology.

Motiva also relies on the success of the Wii to show that there is a great demand for Motiva's technology, and that there will be a great demand in the future for such technology. This argument is premised on the assumption that the Wii infringes the patents, a point noted by Dr. Wazzan in his testimony. (CX-5068C at Q. 241.) Because I have concluded in Section VII *supra*, that the Wii does not infringe either of the asserted patents, it does not follow that Motiva can use the success of the Wii as evidence that there is a current and ongoing demand for Motiva's technology.

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[22] Moreover, I find that Motiva has not shown that it has ever attracted interest from the video game industry. I note that besides Nintendo, the two other major video game system designer operating in the United States already employ some form of motion sensing technology in their current game systems. (RX-57C at Q. 135; RX-481; RX-482.)

{

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In addition to the evidence described *supra*, I find that there is further evidence that supports a conclusion that there is not a significant likelihood that the industry requirement will be satisfied in the future. {

} Nintendo served an interrogatory focusing on the level of interest in the patented technology expressed by potential manufacturers, investors, licensees, or any other type of potential business partner. (RX-290C.18.) One of the subparts to the interrogatory asked Motiva to describe "the present status of such interest." For each of David Smith, James Reiss, Greg Highsmith, and Koko Fitness, Motiva responded that { }

Staff asserts that Motiva has proven that it is in the process of establishing a domestic industry, yet Staff fails to apply the correct standard. As explained *supra*, Motiva must demonstrate that there is a significant likelihood that the industry requirement will be satisfied in the future. Staff instead claims that Motiva has shown that "there is at least a possibility, and potentially a significant likelihood, of a domestic industry being established in the future." (SIB

[23] Motiva's interrogatory response also mentions a company named Burton Industries, but Motiva failed to mention Burton Industries in its initial post-hearing brief as a company that had expressed interest in Motiva's technology. Nevertheless, {
}

at 97.) Staff further states that "if relief is granted in this investigation, there is some likelihood of a domestic industry being established in the future, although whether there is a 'significant likelihood' is, of necessity, somewhat speculative." (*Id.*) Staff's inability to assert that there is a significant likelihood, without any qualifiers, shows that Staff's argument does not support a conclusion that Motiva's domestic industry is in the process of being established.

Based on the foregoing, I find that Motiva has failed to demonstrate that a domestic industry "is in the process of being established," pursuant to Section 337(a)(2).

The Relevance of The *Bally/Midway* Decision

The parties address an early Federal Circuit decision concerning domestic industry, and its applicability to this investigation. *Bally/Midway Mfg. Co. v. U.S. Int'l Trade Comm'n*, 714 F.2d 1117 (Fed. Cir. 1983). The *Bally/Midway* case involved claims of copyright and trademark infringement brought at the ITC. The products at issue were the Pac-Man and Rally-X arcade video games. The infringing imports were arcade video games that used the Pac-Man and Rally-X trademarks and copyrights. With respect to the Rally-X product, the Commission found no domestic industry existed because the complainant's inventory of Rally-X games was low; the popularity of the Rally-X game is in decline; the complainant was no longer actively engaged in distribution or sale of the Rally-X games; and there was nothing to indicate that the complainant would resume the manufacture and marketing of the Rally-X games if the Commission issued an exclusion order. *Id.* at 1120.

The Federal Circuit reversed the Commission's determination of no domestic industry. The court first found that the Commission erred when choosing the relevant date to consider for determining the existence of a domestic industry:

> The Commission based its determination that there was no Rally-X industry on the market conditions that existed when it decided the case. We conclude,

> however, that in the circumstances of this case the proper date for determining whether Bally's Rally-X game constituted an "industry" entitled to protection under section 337 was the date on which the complaint was filed rather than the date on which the Commission rendered its decision.

Bally/Midway, 714 F.2d at 1121.

The court then explained that the Commission's interpretation of Section 337 produced "anomalous results" because the Commission's decision would protect an industry that was partially hurt by unfair practices, but would not protect an industry that was completely destroyed by the unfair practices:

> If the effect of the unfair practices has been to injure seriously the affected business during the administrative proceeding-for example, if the infringing imports captured half of the complainant's business-the importation would violate section 337(a). If, however, the infringers were so effective that they succeeded in capturing all of complainant's business and therefore destroyed the relevant "industry," then there would be no violation under the Commission's theory. The result would be that the infringing importers whose unfair practices were most effective, i.e., those who succeeded in destroying their American competition, would be treated more favorably than those whose unfair practices were less successful.

Id.

The court noted that the above-described hypothetical fit the facts of the *Bally/Midway* case:

> In this very case, for example, the unfair practices directed against Rally-X were identical to those directed against Pac-Man. The reason the Commission protected Pac-Man from further injury by an exclusion order was that the Pac-Man infringing imports had not been as successful in injuring Bally's Pac-Man business as the infringing Rally-X games had been in injuring Bally's Rally-X game. Bally's Rally-X game, however, is just as entitled to protection under the statute as the more successful and apparently economically stronger Pac-Man game.

Id. at 1122. The court reasoned that Congress must have "intend[ed] to prohibit unfair practices that were so effective that they destroyed an existing industry before an administrative proceeding under section 337 could be completed." *Id.* Therefore, the court concluded that "if

there was an existing domestic Rally-X 'video game industry' when the complaint was filed, section 337(a) was satisfied." *Id.*

I find that *Bally/Midway* has no application to the current investigation. *Bally/Midway* relates to a complainant's domestic industry that existed at the time the complaint was filed, but was destroyed during the investigation. As I have already concluded, Motiva did not have an existing domestic industry at the time the complaint was filed.

Furthermore, there was no dispute in *Bally/Midway* that the infringing products – identical Rally-X video games – had destroyed the complainant's domestic market for Rally-X video games. Here, I have concluded that Motiva failed to demonstrate that the Nintendo Wii destroyed the market for the Motiva technology or precluded Motiva from continuing its efforts to bring its technology to market.

Based on these two very important factual differences, I find that the *Bally/Midway* decision is not applicable to the current investigation.

C. Technical Prong

1. The '151 Patent

Motiva's Position: Motiva contends that its prototype device practices claims 50, 63, and 81 of the '151 patent.

Motiva asserts that the prototype tracks the movement of a user through the controller in different directions and can translate the movement into changes in the images shown on the console's video display. (Citing CX-5067C at Q. 451-452, 466-467.) Motiva states that the controller of the prototype includes a transmitter for transmitting signals because it includes an ultrasonic transmitter, and a radio modem and antenna for wirelessly transmitting and receiving

radio signals. (Citing CPX-5; CPX-6; CX-5065C at Q. 238-244, 246, 256, 263, 264; CX-5067C at Q. 468-469.)

Motiva claims that the controller includes a receiver for receiving signals wirelessly from a remote processing system. (Citing CPX-5; CPX-6; CX-5065C at Q. 236-237, 241, 244, 246, 256, 262, 264; CX-5067C at Q. 470-471.) Motiva claims that the prototype console is a processing system. (Citing CX-5067C at Q. 471.) Motiva states that the prototype controller is hand-held because it has a handle for holding it in the hand, and the user is able to hold the controller in one hand. (Citing CPX-5; CPX-6; CX-5065C at Q. 225-237; CX-0546C; CX-5067C at Q. 451-452, 472-473.)

Motiva asserts that that receiver in the prototype controller is adapted to receive feedback or control data signals from the processing system because the radio modem in the Motiva controller receives radio signals from the Motiva console and, based on the data transmitted through those signals, activates the feedback devices in the controller including the array of white LEDs on the controller or the rumble motor in the controller. (Citing CPX-5; CPX-6; CX-5065C at Q. 241-244, 246, 256, 258-260, 262, 264-265; CX-5067C at Q. 474-475.) Motiva asserts that the feedback or control data signals are derived from processed information including movement information of the controller. (Citing CPX-5; CPX-6; CX-5065C at Q. 246, 258-260, 264-265; CX-5067C at Q. 451-452, 476, 477.) Finally, Motiva states that the controller receives the data signals from the processing system in the Motiva console instructing the controller to activate one or more of the feedback devices in the controller, such as the LEDs or the rumble motor, and it provides feedback information to the user through those devices. (Citing CPX-5; CPX-6; CX-5065C at Q. 241-244, 246, 256, 258-260, 262, 264-265; CX-5046C; CX-5067C at Q. 451-452, 480-481.)

Motiva contends that the prototype practices claim 63, which depends from claim 50. Claim 63 adds the requirement of a user input device and display, wherein the apparatus is configured with multiple training applications, each of which is selectively activated within the user input device. Motiva asserts that the prototype satisfies this requirement. (Citing CPX-5; CPX-6; CX-5065C at Q. 227-228, 232, 246, 254-256; CX-5067 at Q. 452, 484-485.)

Motiva contends that the prototype practices claim 81, which depends from claim 50. Motiva explains how the prototype includes the claimed output device of claim 81. (Citing CPX-5; CPX-6; CX-5065C at Q. 241-244, 246, 256, 258-260, 264-265; CX-5067 at Q. 451-452, 489-493.)

Nintendo's Position: Nintendo contends that Motiva failed to prove that the prototype practices any of the claims of the '151 patent.

Nintendo argues that under its proposed construction of "tracking movement of a user," the prototype does not track the movement of a user because it cannot determine orientation. (Citing RX-275C at Q. 159; Tr. at 194:16-21, 195:2-196:7.) Nintendo argues that the Motiva controller does not receive "feedback or control data signals" as required by claim 50 because the Motiva system doesn't provide feedback or guidance information for all three displacements in 3D space. (Citing RX-275C at Q. 176.) Further, Nintendo argues that the alleged "feedback or control data" does not come from the "processing system" in the prototype, as required by claim 50. (Citing RX-275C at Q. 177.) Nintendo claims that the Motiva prototype does not practice claim 63 because the Motiva games do not reside on the hand-held controller. (Citing RX-275C at Q. 179.)

Staff's Position: Staff contends that the Motiva prototype practices claims 50, 63, and 81 of the '151 patent.

With regard to claim 50, Staff asserts that Nintendo's arguments are all based on Nintendo's proposed claim constructions for terms and phrases found in claim 50. Because Staff does not agree with Nintendo's constructions for these terms and phrases, Staff asserts that Nintendo's arguments lack merit.

With regard to claim 63, Staff agrees with Motiva that the prototype's transponder, through its interactive touchscreen control device, is "configured with multiple training applications" within the meaning of claim 63. (Citing CPHB at 156-157; CX-5067C at Q. 485.) Staff therefore believes that the prototype practices claim 63.

Staff notes that Nintendo does not raise any independent arguments with respect to claim 81, instead relying on the arguments that the prototype does not practice claim 50. Staff believes that the prototype meets the limitations of claim 81.

Discussion and Conclusions: Based on the evidence in the record, I find that Motiva has satisfied the technical prong of the domestic industry requirement for the '151 patent.

Nintendo offers three arguments regarding why the Motiva prototype does not practice claim 50 of the '151 patent, each of which has no merit. Nintendo first claims that the prototype does not meet the "tracking movement of a user" limitation because it does not determine the orientation of the handheld unit. (RX-275C at Q. 168.) Nintendo's argument is based on its proposed construction of "tracking movement of a user," which I have not adopted. The adopted construction of "tracking movement of a user" requires "tracking changes of position and/or orientation of a user." Under this construction, the prototype can satisfy the limitation if it tracks changes of the position of a user. I find that Motiva offered sufficient evidence to demonstrate that the Motiva prototype tracks changes of the position of a user, and thus satisfies the "tracking

movement of a user" limitation. (CX-5067C at Q. 466-467; CX-5065C at Q. 238-244; CX-715C.)

Nintendo argues that the prototype does not meet the "feedback or control data signals" claim language of claim 50 because there appears to be no "guid[ing] the user to specified locations in 3D space." (RX-275C at Q. 176.) The construction asserted by Dr. Colgate in his witness statement differs from the construction asserted by Nintendo in its post-hearing brief. (*Id.*; RIB at 40.) Nintendo's argument is based on Dr. Colgate's construction, which has not been adopted. (RX-275C at Q. 176.) I have construed "feedback or control data signals" to mean "signals providing feedback or guidance information." I find that Motiva has offered sufficient evidence that the Motiva prototype meets this claim language under the adopted construction. (CX-5067C at Q. 474-475.)

Nintendo next argues that the prototype does not meet the requirement that the "feedback or control data signals" are generated in the "processing system." (RX-275C at Q. 177.) Claim 50 requires that "the receiver is adapted to receive feedback or control data signals from the processing system." Nintendo claims that all of the tilt information in the Motiva prototype does not come from the "processing system" because it is generated in the handheld device and not the console. (*Id.*) Nintendo's argument focuses only on the tilt information, and ignores the remainder of the "feedback or control data signals" received by the handheld controller. I find that this claim limitation is met by the evidence that the radio modem in the Motiva controller receives radio signals from the console and, based on that transmitted data, activates the feedback devices in the controller. (CX-5067C at Q. 474-475, 478-479; CX-5065C at Q. 264-265.)

Motiva has offered sufficient evidence in the form of expert testimony and testimony from Mr. Ferguson that the prototype meets the additional limitations of claim 50 that are not contested by Nintendo. (CX-5067C at Q. 465-481; CX-5065C at Q. 238-265; CX-715C; CPX-5; CPX-6.) Based on the foregoing, I find that Motiva has proven by a preponderance of the evidence that the Motiva prototype practices claim 50 of the '151 patent.

In addition, I find that Motiva has proven by a preponderance of the evidence that the Motiva prototype practices claim 81 of the '151 patent. Claim 81 depends from claim 50, and adds the requirement of "an output device and wherein said apparatus processes said feedback data from the processing system and provides stimulus from said output device to cue the user to move in a predetermined direction to assess the user's ability to balance." Motiva offers unrebutted evidence that the claim limitation of claim 81 is satisfied by the Motiva prototype. (CX-5067C at Q. 486-493.)

2. The '268 Patent

Motiva's Position: Motiva contends that its prototype device practices claims 1, 3, and 4 of the '268 patent.

For claim 1, Motiva relies on the arguments disclosed *supra* made in connection with technical prong analysis for the '151 patent. For claim 3, Motiva asserts that the touchscreen in the Motiva controller constitutes a "user input device adapted for communication with the processing system through the transmitter." (Citing CPX-5; CPX-6; CX-5065C at Q. 227-228, 232, 241-244, 246, 254-256, 264; CX-5067C at Q. 451-452, 484-485, 520-521.) For claim 4, Motiva claims that the controller's touchscreen "is adapted for calibrating the first communication device to establish a reference position." (Citing CX-5065C at Q. 264-265; CX-5067C at Q. 451-452, 525.)

Nintendo's Position: Nintendo contends that the Motiva prototype does not practice claims 1, 3, or 4. Nintendo contends that the prototype does not "send[] data signals to the receiver to provide feedback or control data to the user" as required by claim 1 because the "feedback or control data" does not "guide the user to specified locations in 3D space." Nintendo relies on the evidence cited *supra* with respect to the technical prong analysis for the '151 patent.

Staff's Position: Staff contends that the Motiva prototype practices claims 1, 3, and 4 of the '268 patent. Staff asserts that Nintendo's only argument is that the prototype does not meet the "feedback or control data" requirement under Nintendo's proposed construction. Staff asserts that under its proposed construction, the limitation is met. Staff believes that Nintendo's expect has conceded this point. (Citing RX-275C at Q. 164.) Staff states that Motiva's unrebutted evidence demonstrates that the prototype practices claims 3 and 4 as well. (Citing CX-5067C at Q. 518-525.)

Discussion and Conclusions: Based on the evidence in the record, I find that Motiva has satisfied the technical prong of the domestic industry requirement for the '268 patent. Nintendo's only argument in opposition is that the prototype does not meet the claim limitation "sending data signals to the receiver to provide feedback or control data to the user" because the prototype does not send signals to "guide the user to specified locations in 3D space." (RIB at 109.) Nintendo's argument is based on a claim construction different from the one adopted above, and different from the one argued by Nintendo in its claim construction section. (*Compare* RIB at 40 *with* RIB at 109.)

I construed "feedback or control data signals" to mean "signals providing feedback or guidance information." I find that "data signals…to provide feedback or control data" has the

same meaning. Under the adopted construction, I find that Motiva has offered sufficient evidence that this limitation is met by the evidence that the radio modem in the Motiva controller receives radio signals from the console and, based on that transmitted data, activates the feedback devices in the controller. (CX-5067C at Q. 474-475, 478-479; CX-5065C at Q. 264-265.)

Nintendo does not dispute any other claim limitations, and I find that the unrebutted evidence offered by Motiva demonstrates by a preponderance of the evidence that the Motiva prototype practices claims 1, 3, and 4 of the '268 patent. (CX-5067C at Q. 494-525; CX-5065C at Q. 238-265; CX-715C CPX-5; CPX-6.)

IX. REMEDY & BONDING

A. Limited Exclusion Order

Motiva's Position: Motiva seeks a permanent limited exclusion order covering all of Nintendo's infringing video game systems and controllers, including, but not limited to, Nintendo's Wii Remote, Wii Remote Plus, Wii MotionPlus, Wii Nunchuk, and Wii Console. Motiva asserts that the limited exclusion order should not contain a certification provision permitting Nintendo to certify in that future imports are beyond the scope of the limited exclusion order.

Nintendo's Position: Nintendo contends that if a violation of Section 337 is found, the appropriate remedy would be a limited exclusion order covering the accused video game systems and controllers found to infringe. Nintendo argues that video games and peripheral accessories, including those that may be packaged with the Wii system, that are outside of the scope of the investigation should be specifically exempted from the exclusion order.

Staff's Position: Staff contends that if a violation of Section 337 is found, the appropriate remedy will include a limited exclusion order directed at the infringing products of Nintendo.

Staff notes that Motiva requests that any exclusion order not include a certification provision, and that Nintendo requests that any exclusion order specifically exempt products that "cannot possibly be found to infringe the asserted claims of the patents in suit." (Citing CPHB at 306; RPHB at 245.) Staff does not believe that either of these requests have merit.

Discussion and Conclusions: I have found no violation of Section 337. Should the Commission find a violation of Section 337, however, I recommend that the Commission issue a limited exclusion order that applies to Nintendo, as well as all of its affiliated companies, parents, subsidiaries, or other related business entities, or its successors or assigns, and covers the video game systems and controllers found to infringe the asserted patents.

I recommend that any exclusion order include a certification provision to allow Nintendo to certify products that it may import notwithstanding a limited exclusion order. The Commission has explained that "[c]ertification provisions are generally included in exclusion orders where Customs is unable to easily determine by inspection whether an imported product violates a particular exclusion order." *Certain Semiconductor Chips With Minimized Chip Package Size & Products Containing Same*, Inv. No. 337-TA-605, Commission Opinion (July 29, 2009) (including a certification provision in an exclusion order because of the difficulty of determining whether imported products contain the infringing chipsets); *see also Certain Ground Fault Circuit Interrupters & Products Containing Same*, Inv. No. 337-TA-615, Commission Opinion (Mar. 26, 2009) (noting that a certification provision "gives U.S. Customs & Border Protection the authority to accept a certification from the parties that goods being imported are

not covered by the exclusion order.") Here, because Customs would not be able to easily determine by inspection whether or not an imported product violates an exclusion order, I find that a certification provision is appropriate.

Nintendo also seeks to explicitly exempt products that are outside of the scope of the investigation. I find that, by limiting any exclusion order to the scope of the investigation, such a provision is unnecessary.

B. Cease & Desist Order

Motiva's Position: Motiva seeks a cease and desist order prohibiting Nintendo of America Inc. and any of its affiliates from importing, selling, offering for sale, marketing, advertising, promoting, demonstrating, shipping, distributing, warehousing, otherwise transferring (except for exportation), using, or testing within the United States any infringing video game systems or controllers, including, but not limited to, Nintendo's Wii Remote, Wii Remote Plus, Wii MotionPlus, Wii Nunchuk, and Wii Console. Motiva contends that Nintendo does not contest that it maintains a commercially significant inventory in the United States of the above-listed products. (Citing JX-173C at ¶ 2.)

Nintendo's Position: Nintendo contends that if a violation of Section 337 is found, a cease and desist order covering products within the scope of the investigation would be appropriate.[24]

Staff's Position: Staff contends that if a violation of Section 337 is found, a cease and desist order should be issued to Nintendo of America Inc. Staff states that the evidence shows that Nintendo maintains a commercially significant inventory of accused products in the United States.

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[24] Nintendo takes a contrary position in its reply brief, arguing that Motiva failed to offer any evidence into the record that shows that Nintendo maintains a commercially significant domestic inventory of products. (*See* RRB at 73.)

Discussion and Conclusions: I have found no violation of Section 337. Should the Commission find a violation of Section 337, however, I recommend the issuance of a cease and desist order.

Section 337 provides that in addition to, or in lieu of, the issuance of an exclusion order, the Commission may issue a cease and desist order as a remedy for violation of section 337. *See* 19 U.S.C. § 1337(f)(1). The Commission generally issues a cease and desist order directed to a domestic respondent when there is a "commercially significant" amount of infringing, imported product in the United States that could be sold so as to undercut the remedy provided by an exclusion order. *See Certain Crystalline Cefadroxil Monohydrate*, Inv. No. 337-TA-293, USITC Pub. 2391, Comm'n Op. on Remedy, the Public Interest and Bonding at 37-42 (June 1991); *Certain Condensers, Parts Thereof and Products Containing Same, Including Air Conditioners for Automobiles*, Inv. No. 337-TA-334, Comm'n Op. at 26-28 (Aug. 27, 1997). The complainant bears the burden of proving that a respondent has a commercially significant inventory in the United States. *Certain Integrated Repeaters, Switches, Transceivers & Products Containing Same*, Inv. No. 337-TA-435, Comm'n Op., 2002 WL 31359028 (Aug. 16, 2002).

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} Nintendo's initial post-hearing brief states that "[i]f a violation were found, a cease and desist order covering products

within the scope of the investigation would be appropriate." (RIB at 147.) Based on the foregoing, I find that Nintendo maintains a commercially significant inventory of the accused products in the United States. I therefore recommend the issuance of a cease and desist order in the event that the Commission finds a violation of Section 337.

Nintendo's reply post-hearing brief attempts to backtrack from its earlier position by claiming that there is no evidence in the record regarding inventory because Motiva did not introduce the June 21, 2011 stipulation into evidence. (RRB at 73.) I find Nintendo's argument lacks merit. Nintendo entered into a stipulation where it expressly agreed that it would not contest the assertion that it maintains a commercially significant domestic inventory. I will not permit Nintendo to contradict that stipulation by now claiming that there is no evidence in the record concerning Nintendo's domestic inventory.

C. Bonding

Motiva's Position: Motiva requests that a bond be imposed on any imports of Nintendo's accused products in an amount equal to 100% of the entered value of those products. Motiva asserts that because it has never had a product on the market, there are no reliable price comparisons. Motiva further asserts that there is no established reasonable royalty rate for the asserted patents.

Nintendo's Position: Nintendo requests that no bond be set. Nintendo states that Motiva has not adduced any evidence that could be used as a basis for determining a bond amount. Nintendo claims that this absence of evidence is not due any fault of Nintendo. Nintendo argues that Motiva is not competing (nor has it ever competed) with Nintendo, so it does not require the protection a bond is designed to provide. Nintendo asserts that Motiva

cannot credibly claim that it needs the protection of the ITC from injury during the 60-day Presidential review period when it waited almost four years to file its Complaint.

Staff's Position: Staff contends that if a violation of Section 337 is found, the bond should be set at an amount that approximates a reasonable royalty. In this investigation, Staff believes an appropriate amount is 1% of the entered value of any products found to infringe the asserted patents.

Staff states that Motiva's expert Mr. Hoeberlein testified about what he refers to as a "reference royalty" of 1%, calculated by comparison to an analogous district court case. (Citing CX-2069C at Q. 55.) Staff asserts that in absence of any other evidence on bonding, the 1% reference royalty is a reasonable starting point.

Discussion and Conclusions: I have found no violation of Section 337. Should the Commission find a violation of Section 337, however, I recommend a bond in an amount equal to 100% of the entered value of Nintendo's infringing products

The administrative law judge and the Commission must determine the amount of bond to be required of a respondent, pursuant to section 337(j)(3), during the 60-day Presidential review period following the issuance of permanent relief, in the event that the Commission determines to order a remedy. The purpose of the bond is to protect the complainant from any injury. 19 CFR §§ 210.42(a)(1)(ii), 210.50(a)(3). The complainant has the burden of supporting any bond amount it proposes. *Certain Rubber Antidegradants, Components Thereof, and Products Containing Same*, Inv. No. 337-TA-533, Comm'n Op., 2006 ITC LEXIS 591 (Jul. 21, 2006). When reliable price information is available, the Commission has often set the bond by eliminating the differential between the domestic product and the imported, infringing product. *See Certain Microsphere Adhesives, Processes for Making Same, and Products Containing*

Same, Including Self-Stick Repositionable Notes, Inv. No. 337-TA-366, Comm'n Op. a 24 (1995). In other cases, the Commission has turned to alternative approaches, especially when the level of a reasonable royalty rate could be ascertained. *See, e.g., Certain Integrated Circuit Telecommunication Chips and Products Containing Same, Including Dialing Apparatus*, Inv. No. 337-TA-337, Comm'n Op. at 41 (1995).

The Commission has set a bond of 100% when the evidence supported a finding that it would be difficult or impossible to calculate a bond based on price differentials. *Certain Variable Speed Wind Turbines and Components Thereof*, Inv. No. 337-TA-376, Comm'n Op., 1996 WL 1056209 (Sept. 23, 1996) (finding that a bond of 100% was appropriate "because of the difficulty in quantifying the cost advantages of respondents' imported Enercon E-40 wind turbines and because of price fluctuations due to exchange rates and market conditions."); *Certain Systems For Detecting and Removing Viruses or Worms, Components Thereof, and Products Containing Same*, Inv. No. 337-TA-510, Comm'n Op., 2007 WL 4473083 (Aug. 2007) (imposing a bond of 100% based on a finding that the parties had numerous models and products lines, and that a price comparison would be difficult because respondent's products were a combination of hardware and software while the complainant's products were software only); *Certain Flash Memory Circuits and Products Containing Same*, Inv. No. 337-TA-382, USITC Pub. No. 3046, Comm'n Op. at 26-27 (July 1997) (a 100% bond imposed when price comparison was not practical because the parties sold products at different levels of commerce, and the proposed royalty rate appeared to be *de minimis* and without adequate support in the record).

Because there is no domestic Motiva product that incorporates the patented technology, it is impossible to calculate a bond based on price differentials. Because Motiva has not licensed

the asserted patents, there is no evidence of a reasonable royalty rate. Therefore, in the absence of evidence regarding price differentials or a reasonable royalty, I recommend a bond of 100%.

Staff argues that I should recommend a bond of 1% based on the testimony of Mr. Hoeberlein. Mr. Hoeberlein testified regarding his estimation of the value of the Motiva's patent infringement claim against Nintendo. (*See generally* CX-5069C.) As part of that analysis, Mr. Hoerberlein used a "reference royalty" amount of 1%. (*Id.* at Q. 294.) This "reference royalty" is based on a district court patent infringement case involving the Sony Playstation video game system where a jury set a reasonable royalty rate of 1.37%. (*Id.* at Q. 295.) Mr. Hoeberlein clearly states that he does not believe that the 1% "reference royalty" represents a reasonable royalty in this investigation. (*Id.* at Q. 294-295.)

Because this testimony was expressly not intended to represent a reasonable royalty rate, I find that it is not reliable evidence for the purpose of bonding. In addition, I find that the failure to include more detail regarding the Sony Playstation litigation makes it impossible to determine whether or not that case is sufficiently analogous to the current litigation such that it makes sense to use the 1% rate as a reasonable royalty rate.

X. MATTERS NOT DISCUSSED

This Initial Determination's failure to discuss any matter raised by the parties, or any portion of the record, does not indicate that it has not been considered. Rather, any such matter(s) or portion(s) of the record has/have been determined to be irrelevant, immaterial or meritless. Arguments made on brief which were otherwise unsupported by record evidence or legal precedent have been accorded no weight.

XI. CONCLUSIONS OF LAW

1. The Commission has subject matter jurisdiction, *in rem* jurisdiction, and *in personam*

jurisdiction.

2. There has been an importation into the United States, sale for importation, or sale within the United States after importation of the accused video game systems and controllers, which are the subject of the alleged unfair trade allegations.

3. An industry does not exist in the United States that exploits U.S. Pat. No. 7,292,151, as required by 19 U.S.C. § 1337(a)(2).

4. There is no domestic industry in the process of being established that exploits U.S. Pat. No. 7,292,151, as required by 19 U.S.C. § 1337(a)(2).

5. Claims 16, 27, 28, 29, 30, 31, 32, 44, 57, 68, and 84 of U.S. Pat. No. 7,292,151 are not invalid.

6. The accused Nintendo products do not directly infringe claims 16, 27, 28, 29, 30, 31, 32, 44, 57, 68, and 84 of U.S. Pat. No. 7,292,151.

7. Nintendo is not liable for indirect infringement of U.S. Pat. No. 7,292,151.

8. Mr. Barry French is not a co-inventor of U.S. Pat. No. 7,292,151.

9. Motiva has standing to assert U.S. Pat. No. 7,292,151.

10. U.S. Patent No. 7,292,151 is not unenforceable due to inequitable conduct.

11. There is no violation of 19 U.S.C. § 1337(a)(1) with respect to U.S. Pat. No. 7,292,151.

12. An industry does not exist in the United States that exploits U.S. Pat. No. 7,492,268, as required by 19 U.S.C. § 1337(a)(2).

13. There is no domestic industry in the process of being established that exploits U.S. Pat. No. 7,492,268, as required by 19 U.S.C. § 1337(a)(2).

14. Claims 2, 4, 11, and 14 of U.S. Pat. No. 7,492,268 are not invalid.

15. The accused Nintendo products do not directly infringe claims 2, 4, 11, and 14 of U.S. Pat. No. 7,492,268.

16. Nintendo is not liable for indirect infringement of U.S. Pat. No. 7,492,268.

17. Mr. Barry French is not a co-inventor of U.S. Pat. No. 7,492,268.

18. Motiva has standing to assert U.S. Pat. No. 7,492,268.

19. U.S. Patent No. 7,492,268 is not unenforceable due to inequitable conduct.

20. There is no violation of 19 U.S.C. § 1337(a)(1) with respect to U.S. Pat. No. 7,492,268.

XI. ORDER

Based on the foregoing, and the record as a whole, it is my Final Initial Determination that there is no violation of 19 U.S.C. § 1337(a)(1) in the importation into the United States, sale for importation, and the sale within the United States after importation of certain video game systems and controllers.

I hereby **CERTIFY** to the Commission my Final Initial and Recommended Determinations together with the record consisting of the exhibits admitted into evidence. The pleadings of the parties filed with the Secretary, and the transcript of the pre-hearing conference and the hearing, as well as other exhibits, are not certified, since they are already in the Commission's possession in accordance with Commission rules.

It is further **ORDERED** that:

In accordance with Commission Rule 210.39, all material heretofore marked *in camera* because of business, financial and marketing data found by the administrative law judge to be cognizable as confidential business information under Commission Rule 201.6(a), is to be given

in camera treatment continuing after the date this investigation is terminated.

The initial determination portion of the Final Initial and Recommended Determination, issued pursuant to Commission Rule 210.42(a)(1)(i), shall become the determination of the Commission sixty (60) days after the service thereof, unless the Commission, within that period shall have ordered its review of certain issues therein, or by order, has changed the effective date of the initial determination portion. If the Commission determines that there is a violation of 19 U.S.C. § 1337(a)(1), the recommended determination portion, issued pursuant to Commission Rule 210.42(a)(1)(ii), will be considered by the Commission in reaching a determination on remedy and bonding pursuant to Commission Rule 210.50(a).

Within ten days of the date of this document, each party shall submit to the Office of the Administrative Law Judge a statement as to whether or not it seeks to have any portion of this document deleted from the public version. The parties' submissions must be made by hard copy by the aforementioned date and must include a copy of this document with red brackets indicating any portion asserted to contain confidential business information to be deleted from the public version. The parties' submission concerning the public version of this document need not be filed with the Commission Secretary.

SO ORDERED.

Issued: 11/2/2011
DATE

Robert K. Rogers, Jr.
Administrative Law Judge

CERTAIN VIDEO GAME SYSTEMS AND CONTROLLERS

Inv. No. 337-TA-743

PUBLIC CERTIFICATE OF SERVICE

I, James R. Holbein, hereby certify that the attached **ORDER**was served upon **Matthew N. Bathon, Esq.,** Commission Investigative Attorney, and the following parties via first class mail delivery on December 8, 2011

James R. Holbein, Secretary
U.S. International Trade Commission
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PUBLIC CERTIFICATE OF SERVICE PAGE 2

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