UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

META PLATFORMS, INC.,
Petitioner,

v.

IMMERSION CORPORATION,
Patent Owner.

Case IPR2023-00942
Patent 8,469,806

PATENT OWNER'S PRELIMINARY RESPONSE
UNDER 35 U.S.C. §§ 311-19 AND 37 C.F.R. § 41.100, ET SEQ.

TABLE OF CONTENTS

I. INTRODUCTION 1

II. THE BOARD SHOULD EXERCISE ITS DISCRETION TO DENY INSTUTION UNDER 35 U.S.C. §§ 314(A) OR 325(D) 4

A. The Board Should Deny Institution Pursuant to 35 U.S.C. 325(d) 4

B. Institution Should be Denied Under 35 U.S.C. § 314(a) 7

1. Whether the Court Granted a Stay or Evidence Exists That One May Be Granted if a Proceeding Is Instituted 9

2. Proximity of the Court's Trial Date to the Board's Projected Deadline for a Final Written Decision 9

3. Investment in the Parallel Proceeding by the Court and the Parties 11

4. Overlap Between the Issues Raised in the Petition and the Parallel Proceeding 12

5. Whether the Petitioner and the Defendant in the Parallel Proceeding are the Same Party 13

6. Other Circumstances That Impact the Board's Exercise of Discretion, Including the Merits 13

III. BACKGROUND 13

A. Immersion Corporation's Pioneering Haptics Technology 13

B. The 806 Patent 16

C. Prosecution History 19

IV. PERSON OF ORDINARY SKILL IN THE ART (POSA) 20

V. CLAIM CONSTRUCTION 20

VI. THE ASSERTED REFERENCES 21

A. Poupyrev (EX1003) 21

B. Grant (EX1004) 23

VII. POUPYREV DOES NOT TEACH, SUGGEST, DISCLOSE, OR RENDER OBVIOUS THE CHALLENGED CLAIMS 11, 12 AND 15 OF THE 806 PATENT 25

VIII. GRANT 499 DOES NOT TEACH, SUGGEST, DISCLOSE, OR RENDER OBVIOUS THE CHALLENGED CLAIMS 11, 12 AND 15 OF THE 806 PATENT 28

IX. CONCLUSION 31

TABLE OF AUTHORITIES

CASES

Apple Inc. v. Fintiv, Inc.,
IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) ..... passim

Cisco Sys., Inc. v. Estech Sys., Inc.,
IPR2021-00329, Paper 13 (July 6, 2021) 9

Cisco Sys., Inc. v. Oyster Optics, LLC,
IPR2021-00238, Paper 10 (Jun. 1, 2021)..... 9, 10, 15

Commscope Technologies LLC, v. Dali Wireless, Inc.,
IPR2022-01242, Paper 23 (PTAB Feb. 27, 2023).....8

Google LLC, v. Valtrus Innovations Limited,
IPR2022-01197, Paper 18 (PTAB June 13, 2023) 6

In re Sand Revolution LLC,
823 F. App'x 983 (Fed. Cir. 2020) 10, 11

In re Vulcan Indus. Holdings, LLC,
830 F. App'x 318 (Fed. Cir. 2020) 11

Keysight Techs, Inc. v. Centripetal Networks. Inc.
IPR2022-01421, Paper 9 (PTAB March 22, 2023) 5

Microsoft v. Almondnet,
IPR2022-01319, Paper 9 (PTAB Jan 30, 2023).....7

OTHER AUTHORITIES

Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation, PTO Director's Memorandum (June 21, 2022).....7, 11

REGULATIONS

77 Fed. Reg. 48680-01 (Aug. 14, 2012) 14

EXHIBIT LIST

Exhibit No.	Exhibit Description
2001	Declaration of Dr. Gregory Abowd, Ph.D.
2002	*Immersion Corp. v. Meta Platforms, Inc.,* 6:22-CV-00541-ADA, Scheduling Order, Dkt# 28
2003	*Immersion Corp. v. Meta Platforms, Inc.,* 6:22-CV-00541-ADA, Defendant Meta Platforms, Inc.'s Motion to Transfer Venue, Dkt# 27
2004	*Immersion Corp. v. Meta Platforms, Inc.,* 1-23-CV-00623-ADA, Claim Construction Order, Dkt# 91.
2005	*Immersion Corp. v. Meta Platforms, Inc.,* 1-23-CV-00623-ADA, Final Invalidity Contentions
2006	*Immersion Corp. v. Meta Platforms, Inc.,* 1-23-CV-00623-ADA, Amended Scheduling Order, Dkt# 97

I. INTRODUCTION

Petitioner challenges claims 11, 12 and 15 (the "Challenged Claims) of U.S. Pat. No. 8,469,806 (the "806 Patent"). The Board should use its discretion to deny institution under 35 U.S.C. § 325(d) because the only reference asserted in Ground 1 was considered by the examiner during prosecution, and the only reference asserted in Ground 2 presents the same argument and is therefore cumulative. Additionally, given that a district court trial will have disposed of these issues long before a Final Written Decision is rendered, and that Petitioners only offer a conditional surrender of their litigation defenses based on the same art used herein, the Board should deny institution pursuant to its discretion under 35 U.S.C. § 314(a). Additionally, the 806 Patent is directed to a different problem and teaches different solutions that either of the base references uses in the Grounds of the Petition. As a result, the claims of the 806 Patent are patentable over all Grounds.

The 806 Patent is directed to providing more robust and complex tactile feedback, also known as haptics, relating to command inputs to computing systems. "Haptic stimulation provides a physical sensation to users. Haptic stimulation is used in the context of games, and virtual worlds, and in real world control systems." EX1001, 1:25-28. But as explained by the 806 Patent, state of the art haptic feedback systems suffered from being too rudimentary and coarse to simulate real-world effects. "In conventional systems, the parameters of such stimulation [are] typically

static . . . tends to be limited, and to not correlate strongly with real world control and or feedback of corresponding real-world equipment." *Id.*, 1:34-43. In contrast, the 806 Patent teaches techniques for providing richer and more complex haptic feedback for each command input and breaking the user command input into multiple parts and providing different haptic responses for each part. *Id.*, 2:2-7. "[H]aptic stimulation may be used to enhance the performance of complex control gestures by users, enhance user experience, teach users to perform control gestures, and/or provide other enhancement over conventional real world control systems." *Id.*, 4:43-47. None of the prior art of record is directed to the type of complex haptic feedback claimed by the 806 Patent.

The Poupyrev reference (Ex. 1003) asserted in Ground 1 discloses the same state of the art feedback techniques that the 806 Patent describes as "static and provid[ing only] a simple mechanism for instructing a user that a corresponding phenomenon has occurred" as compared with the more rich and complex haptic feedback claimed in the 806 Patent Ex. 1001, 1:35-37. Poupyrev is directed to determining when a user takes an action consistent with making a command input and proposes different techniques for distinguishing between the user's intended command input and a casual brush of a GUI element. Ex. 1003, ¶ 0068. Poupyrev provides different tactile feedbacks for different events, but only teaches a single feedback when the user intends a command input. *Id.,* ¶ 0081. For example, when

the user does not intend a command input yet places a finger on the GUI without actuating anything, the system provides one tactile feedback; when the user actuates a GUI element by applying the requisite pressure to the GUI, the system provides different tactile feedback. *Id.*; ¶¶ 82, 86. In an attempt to demonstrate multiple and complex haptic responses for actions, the Petition strings together several user actions that are separate and distinct command inputs, including selecting a GUI object and separately activating the object, and calls the combination a "control gesture" meeting the claim limitations. This is not the same as providing multiple haptic stimulations for a gesture associated with a single command input – rather, Poupyrev only teaches a single tactile feedback for the "activation" or command input and combining that with other, separate and distinct commands such as "selecting" does not meet the challenged claims.

The Grant reference (Ex. 1004) in Ground 2 is an Immersion Corporation patent with overlapping inventors with the 806 Patent. Similar to Poupyrev, Grant represents another piece of background art as described in the 806 Patent and does not provide the kind of rich, complex haptic feedback claimed therein. Grant is directed to adding haptic simulations to casino games. Ex. 1004, Abst. The Ground 2 challenge similarly relies on stringing together a sequence of individual user inputs to a card game as purporting to provide a "control gesture" having multiple portions. However, as the inventors explained in the instant 806 Patent, a control gesture "is

a single and discrete control input having separate portions . . . a 'control gesture' is not merely a combination of other gestures, each associated with its own control input." Ex. 1001, 5:7-16. Grant does not contain any control gestures that have multiple portions or haptic stimulations. Rather, Petitioner has identified a "combination of other gestures" that is not part of a single and discrete command input, and therefore, does not meet the "control gesture" limitation in the challenged claims.

II. THE BOARD SHOULD EXERCISE ITS DISCRETION TO DENY INSTUTION UNDER 35 U.S.C. §§ 314(A) OR 325(D)

A. The Board Should Deny Institution Pursuant to 35 U.S.C. 325(d)

In evaluating whether to use its discretion to deny institution under 35 U.S.C. § 325(d), the Patent Trial and Appeal Board uses the *Advanced Bionics* framework: (1) whether the same or substantially the same art was previously presented to the Office, and whether the same or substantially similar arguments were presented to the Office, and if so, (2) whether Petitioner has demonstrated that the examiner erred in a manner material to patentability of the challenged claims. *See* IPR2019-01469, Paper 6 (P.T.A.B. Feb. 13, 2020). Both of these parts of the framework are present here, and the Board should exercise its discretion to deny institution.

Regarding part (1), the same Poupyrev reference was expressly cited and acknowledged as considered by the Patent Office prior to allowance of the 806

Patent. Following the procedures provided by the Manual of Patent Examining Practice Section 609.04(B), Applicants filed an IDS including both the Poupyrev reference and an International Search Report including the same arguments included in the instant Petition. EX1007, 153, 156 (International Search Report identifying Poupyrev), 166-67 (argument regarding Poupyrev), Pet., 6 ("The EPO's analysis is based on many of the same teachings from Poupyrev cited in Ground 1 below."). In its transmission letter, Applicants "requested that the information be expressly considered during the prosecution of this applications and the reference be made of record" and that "the Examiner return an initialed copy of the enclosed Form PTO-1449 to Applicants . . . ." *Id.,* 152. Before issuing a notice of allowance for the 802 Patent, the Examiner filed a PTO-1449 with initials indicating the Examiner considered the Poupyrev reference and the International Search report. *Id.,* 236. As such, the Patent Office has acknowledged consideration of the same prior art reference and search report including the same argument presented in the Petition.

Petitioner incorrectly argues that because Poupyrev was not the basis of any Office action or substantively discussed that this somehow implies the Examiner materially erred by allowing the 806 Patent. To be clear, a reference submitted on an IDS that is acknowledged by the Examiner is sufficient to satisfy the first step of the *Advanced Bionics*. For example, in *Keysight Techs, Inc. v. Centripetal Networks. Inc.,* the Petitioner argued that because the reference in question was one of hundreds

submitted, the reference could not have been considered by the examiner. IPR2022-01421, Paper 9 at 8. However, the Board denied institution finding that submitting the reference to the Examiner and obtaining the Examiner's acknowledgement was sufficient to show the same art was considered by the Examiner. *Id.,* 9; *see also*, *Google LLC, v. Valtrus Innovations Limited*, IPR2022-01197, Paper 18 at 15 (PTAB June 13, 2023) ("Our precedent holds that providing a document to the Office Information Disclosure Statement is sufficient to satisfy prong 1 of the *Advanced Bionics* analysis as long as that 'previously presented' art is 'the same or substantially the same' as that presented in the Petition.").

Regarding the second step in the *Advanced Bionics* analysis, Petitioner has not demonstrated that the Examiner made a material error beyond asserting that the application should not have been allowed. Pet., 6-7. However, as discussed above the Examiner considered both the Poupyrev reference and the Search Report applying Poupyrev to the claims, and the Examiner ultimately allowed the application. On such facts, precedent shows that discretionary denial is warranted. "As cautioned by *Advanced Bionics*, '[i]f reasonable minds can disagree regarding the purported treatment of the art or arguments, it cannot be said that the Office erred in a manner material to patentability.'" *Microsoft v. Almondnet*, IPR2022-01319, Paper 9 at 11 (PTAB Jan 30, 2023). Although Petitioner disagrees with the Examiner allowing the claim, without providing further details regarding the

material error, there is nothing in the record showing the Examiner's actions, and like *Microsoft*, there is no basis to claim the Office materially erred.

B. Institution Should be Denied Under 35 U.S.C. § 314(a)

As explained above, Petitioner fails to set forth evidence establishing even a reasonable likelihood that it will prevail, much less that such evidence is "compelling" under the Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation, PTO Director's Memorandum (June 21, 2022) ("Interim Guidance"). As Director Vidal recently clarified, "the compelling merits standard is a higher standard than the standard for institution set by statute," and is met only "if it is highly likely that the petitioner would prevail with respect to at least one challenged claim." *Commscope Technologies LLC, v. Dali Wireless, Inc.*, IPR2022-01242, Paper 23, 3-4 (PTAB Feb. 27, 2023). Moreover, a compelling merits inquiry is not a substitute for a full *Fintiv* analysis. *Id*., 4. Here, the merits of the Petition are not compelling. As discussed below in §§ VII and VIII, Grounds 1 and 2 suffer from several deficiencies fatal to the merits of Petitioner arguments, including, for example, both base reference's failure to disclose or teach a "control gesture associated with a control input to the system, and includes an initial portion, a first intermediate portion, and an ending portion . . . ." Moreover, the examiner fully considered the reference in Ground 1 during prosecution and issued the 806 Patent over that reference. Ground

2 is the same argument as presented for Ground 1, and similarly relies on Petitioner stringing together multiple separate control gestures and presenting them as one.

Patent Owner acknowledges that the recent Interim Guidance notes that a petition should not ordinarily be denied in accordance with the *Fintiv* factors where (as here) Petitioner has offered a *Sotera* stipulation "that if the IPR is instituted, the Petitioner will not pursue in the District Court Litigation any ground raised or that could have been reasonably raised in an IPR for the challenged patent." Pet., 4. But this Petition otherwise merits denial under a holistic analysis of the *Fintiv* factors due to the advanced stage of the parallel District Court proceedings and the duplication of the invalidity grounds asserted therein. *See Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential) at 2-3; *see also Cisco Sys., Inc. v. Oyster Optics, LLC*, IPR2021-00238, Paper 10 (Jun. 1, 2021) (Panel exercising discretion to deny institution after holistic analysis of *Fintiv* factors). Indeed, prior to the Interim Guidance, the Board did not find a *Sotera* stipulation proffered under similar circumstances to overcome trial dates scheduled significantly before the due date of the Final Written Decision. *Cisco Sys., Inc. v. Estech Sys., Inc.*, IPR2021-00329, Paper 13 (July 6, 2021) at 13 (*Sotera* stipulation insufficient to overcome a time gap of 11 months between the Eastern District of Texas trial date and the Final Written Decision, a 7 month gap between the Western District of Texas trial date and the Final Written Decision, and where claim

construction and fact and expert discovery had already completed prior to the Instution Decision date). Additionally, in this case because Petitioner's *Sotera* declaration is conditional, and the district court case is so far along, the declaration will not result in significant savings of resources because expert discovery will be over by the time an institution decision is rendered, meaning Patent Owner will be required to fully rebut in the district court case the same art Petitioner raises here.

1. Whether the Court Granted a Stay or Evidence Exists That One May Be Granted if a Proceeding Is Instituted

The first *Fintiv* factor addresses the likelihood of a stay if this proceeding is instituted. Here, the District Court in the Western District of Texas has not considered a motion to stay, and therefore, this factor is neutral at best. *Cisco Sys., Inc. v. Oyster Optics, LLC*, IPR2021-00238, Paper 10 at 11. It should, however, be noted that the Federal Circuit has denied multiple petitions for *mandamus* relief on the grounds that the District Court had not abused its discretion in denying motions to stay pending *inter partes* review or post-grant review. *See In re Sand Revolution LLC*, 823 F. App'x 983, 984 (Fed. Cir. 2020); *In re Vulcan Indus. Holdings, LLC*, 830 F. App'x 318 (Fed. Cir. 2020).

2. Proximity of the Court's Trial Date to the Board's Projected Deadline for a Final Written Decision

In the parallel Western District of Texas litigation, the Court has already ordered a trial date of February 20, 2024 (EX2002, 4; EX2006, 2), approximately 10

months before the expected Final Written Decision date in December 2024. This gap is significant given that by the time a Final Written Decision is likely to issue in this proceeding, the District Court trial will have concluded almost a year earlier, addressing both infringement and validity of the 806 patent. Notably, the Board's institution decision will come only two months prior to the scheduled trial date.

Also, the Interim Guidance notes "the PTAB will consider the median time from filing to disposition of the civil trial for the district in which the parallel litigation resides." Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation, PTO Director's Memorandum (June 21, 2022) at 3. The parallel litigation in the Western District of Texas was filed on May 26, 2022, and the median time to trial in that district is 28.2 months[1]; therefore, under the median time-to-trial statistics, the putative trial date is in October 2024, which is still two months before the Final Written Decision in this proceeding. This factor should weigh in favor of denial.

Further, Petitioner's tacit agreement for the parallel litigation to proceed in the Western District of Texas cannot be overlooked. (EX2003, 1, fn1, 15). Although Petitioner unsuccessfully moved for transfer of venue to the Northern District of

[1]https://www.uscourts.gov/sites/default/files/data_tables/fcms_na_distprofile0331.2023.pdf

California, it also moved in the alternative for transfer to the Austin Division in the Western District of Texas. *Id*. Now that the case is in the Austin Division due in part to its own admission, Petitioner has knowingly committed to a District Court for which the trial date is considerably earlier than the Final Written Decision date. Thus, Petitioner should be held to its admissions and resulting time gap between the District Court trial date and the Final Written Decision date.

3. Investment in the Parallel Proceeding by the Court and the Parties

The third *Fintiv* factor addresses the District Court's and parties' investments into the parallel proceeding. Here, the parties have already invested in a great deal of time and effort in the District Court such that Institution would be very inefficient. The parties have already served final invalidity and infringement contentions over five months ago (EX2002, 3) and completed claim construction two months ago (EX2004). Fact discovery in the parallel litigation also completed on October 6, 2023—approximately two months before the Institution Decision in this proceeding. EX2006, 1.

In fact, Petitioner has already served thousands of pages of invalidity contentions including the same references that are asserted in this IPR, as well as similar references with cumulative subject matter. EX2005. And by December 1, 2023—before the expected date for the Institution Decision, the parties will have

served expert invalidity and rebuttal reports and conducted expert depositions concerning prior art, including the references used herein. EX2006, 1). Therefore, given the impending deadlines in the parallel litigation and the progress that has already accrued and will continue to accrue in that litigation before the date of the Institution Decision, this factor also weighs in favor of denial.

4. Overlap Between the Issues Raised in the Petition and the Parallel Proceeding

The fourth *Fintiv* factor, which addresses the overlap between the issues raised in the Petition and the parallel proceeding, should also weigh in favor of denial. In the parallel litigation, Petitioner has attacked the validity of the challenged claims in view of the same prior art addressed in the Petition. *See, e.g.*, EX2005, 13-14 (Final Invalidity Contentions asserting Poupyrev and Grant against the asserted claims of the '806 patent).

Petitioner's offer to reduce its invalidity assertions based on the outcome of the Board's institution decision rings hollow, because Petitioner has sought two bites at the invalidity apple and is offering to discard one of its attempts only where the other shows promise. This violates the fundamental tenet of *inter partes* reviews, which is that a litigant cannot simply hedge its bets on the forum in which to pursue invalidity until it can better weigh its chances, but instead should make a concerted decision regarding where it wishes to litigate its invalidity challenges, and then

honor that decision. *See* 77 Fed. Reg. 48680-01 (Aug. 14, 2012) (IPRs are intended "to create a timely, cost-effective **alternative** to litigation") (emphasis added). And as explained above, by the time an institution decision is rendered in this *inter partes* review, expert discovery will be complete and Patent Owner's expert will have rebutted Petitioner's invalidity arguments based on the same references used here. This factor weighs in favor of denial.

5. Whether the Petitioner and the Defendant in the Parallel Proceeding are the Same Party

The fifth *Fintiv* factors addresses whether the Petitioner and the defendant in the parallel proceeding are the same party. Petitioner admits that it is the defendant in the parallel litigation. Pet., 1. As a result, this factor weighs in favor of denial. *Cisco Sys., Inc. v. Oyster Optics, LLC*, IPR2021-00238, Paper 10 at 16-17.

6. Other Circumstances That Impact the Board's Exercise of Discretion, Including the Merits

Finally, the sixth *Fintiv* factor addresses other circumstances that impact the Board's exercise of discretion. As explained above, Patent Owner raises procedural and substantive reasons why the Petition should be denied on the merits and has demonstrated those merits are far from "compelling." These reasons also serve as factors relevant to discretionary denial under this sixth *Fintiv* factor.

III. BACKGROUND

A. Immersion Corporation's Pioneering Haptics Technology

Since its founding 30 years ago, Immersion Corporation has been a market leader in tactile feedback technology for a multitude of markets including wearable devices, mobile ads and video, mobile devices, medical applications, automotive interfaces, gaming and virtual reality. Started in 1993 by Louis Rosenberg, a pioneer in sensing interfaces and feedback technology, Immersion developed and commercialized haptic innovations beginning with its force feedback technology, allowing devices to provide tactile sensations and resistance to user interactions, such as force feedback in devices like joysticks. Immersion was one of the first companies to release haptic joysticks, computer mice and steering wheels for video games. This technology has been widely used in gaming controllers, medical simulators, and other applications to enhance realism and user engagement.

Throughout the mid- to late- 1990s Immersion continued to develop its haptic technologies, eventually developing VR interfaces for specific medical procedures. Using Immersion's technology to provide realistic feedback, these systems are used in medical schools around the world to train physicians in surgical procedures in a realistic and safe virtual environment.

Immersion also partners with manufacturers and systems integrators of actuator hardware. Through these partnerships, Immersion provides designs and guidance for the development or actuators that are required to implement advanced haptic features.

Immersion, over its 30-year history, has developed and licensed haptic products and IP across diverse applications, including gaming systems, medical devices, automobiles, touchscreens, and mobile devices. Recently a primary focus has been developing and implementing advanced haptic effects, including effects optimized for use in virtual and augmented reality ("AR/VR") systems. Immersion also has a long history of developing advanced software. For example, Immersion's TouchSense® 3000 software includes a driver package designed to operate an actuator, a haptic API that programmers can use to create, launch, and modulate haptic effects, a library containing more than 100 pre-defined effects, and user interface support. Video game industry leaders, including Nintendo, have recognized the value of Immersion's technology and partnered with Immersion. Immersion's industry-defining technology is used in over three billion devices worldwide.

Immersion's technology is used in more than 3 billion devices, including tablets, smartphones, wearables, gaming controllers, and automotive interfaces. The Institute of Electrical and Electronics Engineers ("IEEE") has recognized Immersion in its annual IEEE Spectrum Patent Power scorecards, which evaluate the technology world's most valuable patent portfolios by quantitative benchmarks. Immersion's established and growing leadership in haptic technology is reflected by its consistent ranking in the top 20 in its industry segment.

Immersion's technological advances in area of haptic has generated over 3500 issued patents world-wide. Immersion's patents have been proven novel through multiple challenges over the years. Immersion's patents have been proven novel through multiple challenges over the years. Immersion patents have been challenged in 37 IPRs[2] of which only 2 cases have resulted in determinations of unpatentability.

B. The 806 Patent

As mentioned above, the 806 Patent discloses techniques that advance the relatively simple and "limited" state of the art haptic feedback to provide rich and complex haptic stimulations "to enhance the performance of complex control gestures by users, enhance the user experience, teach users to perform control gestures, and/or provide other enhancements over conventional real-world systems." EX1001, 2:42-47; *id.*, 1:34-43. A key aspect of advanced systems is that control inputs have become more complicated than the push-button or toggle switch found in state-of-the-art systems, and now can involve complex control gestures where movements in multiple dimensions are analyzed to provide a single control input. EX1001, 1:58-65 (the control gesture is a gesture associated with a command input

[2] 10 of these IPRs were denied institution, 14 of them were terminated prior to an institution decision in light of settlements, while 13 of them were instituted with 11 of those terminated prior to a final written decision in light of settlements.

to the game, and includes an initial portion, a first intermediate portion and an ending portion); 2:13-15 ("the control gesture is a gesture associated with a command input to the game").

> a 'control gesture' refers to a gesture made by a user that is a single and discrete control input having separate portions. The separate portions must be performed in specific order and/or with specific timing to effectively achieve the control input associated with the 'control gesture'. Performance of the separate portions, on their own, will not result in the control input associated with the 'control gesture' as a whole (e.g., a 'control gesture' is not merely a combination of other gestures, each associated with its own control input).

EX1001, 5:7-16. In response to a control gesture, the system claimed in the 806 Patent provides haptic stimulation to the user. *E.g. id.,* 25:58-60.

The 806 Patent teaches richer and more complex haptic responses to provide more useful and realistic feedback to users.

> "The haptic stimulation[3] determined by the stimulation module is complex and rich beyond the haptic stimulation typically associated

[3]"'haptic stimulus' refers to tactile feedback that is applied to users. For example, such feedback may include one or more vibrations, forces, and/or motions that are

> with control gestures. For example, in conventional systems, haptic stimulation associated with control gestures tends to include a single stimulation that is provided during and/or after a control gesture. This haptic stimulation provides confirmation of the control gesture. The haptic stimulation determined by the stimulation module 25, by contrast, tracks more closely with the performance of the control gesture to increase the immersive experience provided by the haptic stimulation."

EX1001, 9:25-35.

These distinctions over the prior art are expressly included in the Challenged Claims. For example, claim 11 monitors the system for the "performance of a control gesture," where the "control gesture is . . . associated with a command input to the system, and includes and initial portion, a first intermediate portion, and an ending portion . . . ." EX1001, 25:52-60. Additionally, claim 11 recites a complex haptic response to the control input: "determining . . . haptic stimulation associated with the performance of the control gesture . . . wherein the haptic stimulation includes a first stimulation determined responsive to a first portion of the control gesture, and a second stimulation that is different from the first stimulation and is

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applied physically to the user by actuators 16 and/or objects with which both actuators 16 and the users are in contact." EX1001, 6:3-8.

determined responsive to the performance of the intermediate portion of the control gesture . . . ." *Id.,* 25:61-67. Thus, the 806 Patent teaches and claims systems and methods to provide a more rich, complex and realistic haptic feedback to control gestures than any of those contemplated by the asserted prior art.

C. Prosecution History

The 806 Patent was filed as a utility application on July 21, 2010, first having been filed as provisional application U.S. Pat. App. No. 61/227,645 files on July 22, 2009. On June 18, 2012, the examiner issued a first non-final office action, allowing claims 1-10 and 21-30 and rejecting the rest pursuant to 35 U.S.C. § 101. On September 7, 2012, applicants amended claims 11 and 31 in response to the § 101 rejection among other minor amendments. On December 11, 2012, the examiner issued a notice of allowance for all claims, 1-40.

Before the issue fees were due, applicants submitted a request for continued examination along with an information disclosure statement (IDS) listing the Poupyrev reference used in Ground 1 of the instant Petition for *Inter Partes* Review. EX1007, 153. In its transmittal letter, applicants expressly requested that the Examiner consider the references identified on the IDS and initial the PTO-1449 form indicating such. EX1007, 152.

On February 26, 2013, the examiner issued a notice of allowance including the PTO-1449 form initialing the line containing the Poupyrev reference, indicating

that reference had been considered prior to issuing the notice of allowance. EX1007, 236. The 806 Patent subsequently issued on June 25, 2013.

IV. PERSON OF ORDINARY SKILL IN THE ART (POSA)

Petitioner proposes the following for the level of ordinary skill in the art:

> A person of ordinary skill in the art would have possessed a bachelor's degree in electrical engineering or computer science (or an equivalent degree), and two years of practical or industry experience in the field of human computer interaction, including implementation of computer-based systems and software for providing haptic feedback effects to a user. A person could also have qualified as an ordinarily skilled artisan with more formal education and less practical or industry experience, or vice versa.

Pet. at 8 (internal citations omitted). Patent Owner finds this defined level adequate for purposes of this *Inter Partes* Review proceeding.

V. CLAIM CONSTRUCTION

Patent Owner believes that for the purposes of this *Inter Partes* Review proceeding, all terms except for "control gesture" should be given their plain and ordinary meaning and require no further construction. The term "control gesture" was construed by the District Court for the Western District of Texas in co-pending litigation involving similar prior art. The Court construed "control gesture" as follows:

> a gesture made by a user that is a single and discrete control input having separate portions. The separate portions must be performed in specific order and/or with a specific timing to effectively achieve the control input associated with the 'control gesture.' Performance of the separate portions, on their own, will not result in the control input associated with the 'control gesture' as a whole (e.g., a 'control gesture' is not merely a combination of other gestures, each associated with its own control input).

EX2005. The text of the Court's order tracks the language from the specification quoted above. Although this language was proposed by the Petitioner in the District Court, Petitioner does not appear to ask the Board to adopt its proposal here. *See* Pet., 9. However, Petitioner maintains its Grounds under this construction (*id.,* 9-10), and therefore should have no reason to oppose this construction now that the District Court has adopted it. Patent Owner believes the Board should adopt this construction for the avoidance of conflicting results between this proceeding and the co-pending litigation.

VI. THE ASSERTED REFERENCES

A. Poupyrev (EX1003)

As discussed above, Poupyrev describes a system for determining when a user has made a gesture that is consistent with a command input and proposes different techniques for distinguishing between a user's intended command input and a casual brush of a GUI element. EX1003, ¶ 0068. Poupyrev identifies two goals, both of

which the reference describes as prior art: (1) "providing tactile notification when a user touches a user interface element on a touchscreen without executing functionality of the user interface element"; and (2) "providing tactile feedback notification to a user when the functionality of the user interface is executed." EX1003, ¶¶ 0005-0007. According to Poupyrev, systems must be able to distinguish between touches that intended by the user to actuate or execute a GUI element, e.g. press a button on a touch screen, or other casual touches not intending to execute a GUI element. Poupyrev describes this determination as based on "a) the current state of GUI object and b) the pressure value applied to the GUI object . . . For example, if the GUI object is a graphical button, the GUI controller 112 can calculate if there was enough pressure applied on the graphical button on the screen to change the state of the button from 'free' to 'pressed' or 'non-actuated' to 'actuated'." EX1003, ¶ 0068. Poupyrev teaches providing tactile feedback when the user has activated a GUI element indicating the desire to execute a system function. *Id.*, ¶ 82.

Poupyrev describes providing various pressure thresholds to distinguish between when a user is intending to actuate or active a GUI control, and when the touch is casual and not intended to actuate or active the control, such as dragging a finger across a touch screen. "The reason for providing this additional threshold or confirmation threshold is to avoid accidental activation of the GUI objects."

EX1003, ¶120. Notably, Poupyrev only considers the user to intend to provide a command input when the user presses the GUI hard enough to reach this confirmation threshold. EX2001, ¶¶35-36. If the pressure does not reach this confirmation threshold, then the system does not consider the user's action to be a command input. *Id.,* ¶ 81.

Poupyrev explains these various pressure thresholds with reference to Fig. 11. Fig. 11 shows two pressure curves representing user interactions with the touch screen and GUI elements. Curve (a) represents a slow increase of pressure on the GUI object whereas Curve (b) is a faster increase. Points 1 and 2 on Curve (a) do not result in a command input or activation, but rather a command input is only recognized when the pressure reaches the confirmation pressure threshold at Point 3, at which point a tactile feedback is presented to the user to confirm the activation. EX1003, ¶0119. Other tactile feedbacks are associated with Points 1 and 2, but those points are not command inputs, and in fact if the user ceases pressing on the GUI object, no command input occurs for those two points. EX2001, ¶¶35-36. Poupyrev recognized that when a user applies pressure quickly, having tactile feedback occurring at Points 1 and 2 would be "distracting or hamper the user interaction" and therefore the system only presents tactile feedback when the confirmation pressure threshold is exceeded, and a command input is signaled. *Id.*, ¶121.

B. Grant (EX1004)

Grant is directed to adding haptic stimulation to casino games being presented on touch-sensitive video devices. "While conventional casino gaming machines may provide feedback to a user in the form of visual displays on a screen, or with sounds, conventional casino gaming machines do not provide haptic feedback to a user. Such feedback may provide a more immersive or enjoyable experience, and may encourage the user to play a haptically-enabled game machine instead of a conventional machine." EX1004, ¶4. Grant receives user inputs from a touch sensitive device, determines the type of interaction between the input contact and the image shown on the touch-sensitive device, and provides a haptic feedback in response. *Id.,* ¶5. For example, "a user contacts a touchscreen at a location associated with a displayed playing card, the touchscreen senses the contact." *Id.,* ¶¶35, 51. Then, "the computer 310 compares the location of the contact with the location of an image of the playing card displayed on the display 340." *Id.,* ¶¶37, 53. "[T]he system may determine that the user has touched an image . . . has slid a finger across an image, tapped the image or flipped over the image." *Id*. "[T]he system 300 outputs a haptic effect based at least in part on the interaction." EX1004, ¶¶38, 54.

VII. POUPYREV DOES NOT TEACH, SUGGEST, DISCLOSE, OR RENDER OBVIOUS THE CHALLENGED CLAIMS 11, 12 AND 15 OF THE 806 PATENT

The Poupyrev reference fails to teach, suggest, or disclose the claim limitation "control gesture . . . associated with a command input to the system" that is required by all Challenged Claims. EX1001, 25:54-56. To meet this limitation, Petitioners identify multiple individual and distinct actions and treat them as a single "control gesture" contrary to the intrinsic evidence and the District Court's construction of that term – the construction Patent Owner proposes here. *See* Pet., 18-19. "[A] 'control gesture' is not merely a combination of other gestures, each associated with its own control input . . . ." EX1001, 5:14-16; Ex. 2005. As explained below, lumping a number of individual inputs together does not meet the "control gesture" limitation of the Challenged Claims. EX2001, ¶¶42-45.

Claim 11 requires a control gesture with multiple individual and distinct portions that generate multiple haptic stimulations:

> wherein the control gesture is a gesture associated with a command input to the system, and includes an initial portion, a first intermediate portion, and an ending portion . . . wherein the haptic stimulation includes a first stimulation determined responsive to performance of the initial portion of the control gesture, and a second stimulation that is different from the first stimulation and is determined responsive to performance of the first intermediate portion of the control gesture;

Ex. 1001 at 25:54-67. As discussed in the 806 Patent and in the District Court's claim construction, a control gesture is "a gesture made by a user that is a single and discrete control input having separate portions . . . Performance of the separate portions, on their own, will not result in a control input . . . a 'control gesture' is not merely a combination of other gestures, each associated with its own control input." EX1001, 5:7-17; Ex. 2005. Claims 12 and 15 both depend from Claim 11, and therefore contain the same limitation.

The Petition relies on Poupyrev's disclosure of user "selecting" a GUI object on a touch screen by placing a finger within or dragging across a GUI object boundary on the surface of the screen, such as the outline of a push button, then increasing pressure on the GUI object until a particular pressure threshold is reached, indicating to the system that the user is "actuating" the GUI object. Pet., 18-19. Both actions are accompanied by separate tactile feedbacks. *Id.*, 20. However, the combination of "selecting" and "actuating" the GUI object are each, on their own, separate and distinct control inputs. EX2001, ¶43. For example, Poupyrev describes "selecting" as "when the user 2 selects the GUI object by touching it" and may be accompanied by changes to the visual state of the GUI object and the system may play a sound or alarm. EX1003, 7:23-28, 8:37-42 ("even if a pressing event is not recognized, the tactile feedback generating unit 102 provides the user 2 with the haptic feedback 201 or 202 (step 214), as an indicator that the user 2 has touched or

selected the GUI object"). Thus, the act of selecting the GUI object is a separate and distinct control input to the system that may cause a change in the GUI object and is a different control gesture from the actuating of the GUI object. EX2001, ¶¶42-45.

Petitioner's identified combination of "selecting," "dragging," and "actuating" is not a "control gesture" because such combinations of actions are expressly excluded from "control gesture" as that term is described in the 806 Patent and as it was construed by the District Court. EX2001, ¶45. Each of these actions are separate and distinct control inputs, and therefore do not represent a single "control gesture" with multiple parts as required by the claims. EX2001, ¶¶42-45. Because Poupyrev does not teach such a "control gesture" as required by all challenged claims, the Board should deny institution based on Ground 1.

As an alternative, Petitioner argues that the Poupyrev's pressure sensing curve as shown in Fig. 11 discloses a control gesture when referencing curve (a), but not curve (b). Pet., 22-24. Curve (a) shows pressure thresholds for determining various user actions, such as "selection" of a GUI object, and "activation" of the GUI object. As described above, these are two separate and distinct control inputs to the system, and therefore are not a single "control gesture." EX2001, ¶¶42-45. Moreover, Poupyrev explains that curve (b) illustrates a situation where a user presses the GUI object more quickly, in which case the pressure increase to the activation threshold is faster, and therefore other system inputs such as GUI object "selection" and its

associated haptic response are not presented to the user, rendering the situation demonstrated by curve "b" a single input with a single haptic response. EX1003, 12:41-53. Such as response does not meet the challenged claims which require at least "a first [haptic] stimulation . . a second [haptic] stimulation that is different from the first stimulation . . . ." EX1001, 25:61-67. As a result, nothing in Fig. 11 discloses the required "control gesture" or haptic responses required by the challenged claims, and the Board should deny institution based on Ground 1.

VIII. GRANT 499 DOES NOT TEACH, SUGGEST, DISCLOSE, OR RENDER OBVIOUS THE CHALLENGED CLAIMS 11, 12 AND 15 OF THE 806 PATENT

Grant 499 fails to teach, suggest, or disclose the claimed "control gesture . . . associated with a command input to the system, and includes an initial portion, a first intermediate portion, and an ending portion" as that term is described in the 806 Patent and has been construed by the District Court. *E.g.* EX1001, 5:7-16. Similar to its argument for Ground 1, here Petitioner combines multiple control inputs into what it calls a "discard gesture", although Grant 499 nowhere uses that term. Pet., 46. According to the Petition, the "control gesture" is comprised of three actions, selecting, dragging, and discarding: "(1) the user makes contact with a portion of the screen corresponding to a playing card in order to select a card . . . (2) the user initiates a sliding motion to drag the selected card on the screen . . . (3) the user continues dragging the card until it reaches the edge of the screen to discard the

selected card . . . ." Pet., 47, 49. Grant 499 teaches that each of these actions are accompanied by haptic stimulations. But as explained below, these are actually multiple separate and discrete control inputs, not a single gesture. EX2001, ¶¶46-50.

As the Petition admits, "selecting" a card may be done for multiple purposes, including for rearranging cards on the display and for discarding cards. Pet., 50; EX2001, ¶48. As such "selecting" is itself a separate and discrete control input:

> A user may touch a touch-sensitive input device, such as a touch screen 320, at a location to indicate that a card should be selected. The computer 310 receives an input signal from the touch screen 320. The input signal indicates that the user has touched the touch screen 320. In one embodiment of the present invention, the input signal comprises a coordinate describing the location of the contact. The computer 310 then determines an interaction between the contact and the image . . . whether the location of the contact falls withing the boundaries of an object displayed on the screen, such as a playing card.

EX1004, ¶0025; EX2001, ¶48. According to the 806 Patent, "[t]he control gesture is a gesture associated with a command input to the game." EX1001 at 1:62-65. Card selection in a poker game is a command input to the game. It is a "single and discrete control input." *Id.* at 5:7-9; EX2001, ¶48. Moreover, the Petition admits that dragging a card off the screen is a separate and distinct command input signifying

"discarding", as compared with dragging the card to another location on the screen. Pet., 50; EX1004, 1:62-65, 5:7-9. Because selecting a particular card is a control input on its own, and separate and distinct from dragging, these actions identified in the petition do not meet the "control gesture" requirement because they are "merely a combination of other gestures, each associated with its own control input." EX2001, ¶49; Ex. 1001, 5:7-17, EX2005. Thus, the Board should deny institution based on Ground 2 because Grant does not disclose a single control gesture associated with a command input.

Additionally, Petitioner's identification of "control gesture" artificially splits one natural movement into two to meet the claim language that requires a control gesture to have three portions: "wherein the control gesture . . . includes an initial portion, a first intermediate portion, and an ending portion." EX1001, 25:54-57; EX2001, ¶50. According to the Petition, the first intermediate portion and the ending portion and both represented by dragging a finger off the touch screen: "(2) the user initiates a sliding motion to drag the selected card on the screen ('a first intermediate portion'), and finally (3) the user continues dragging the card until it reaches the edge of the screen to discard the selected card ('an ending portion')." Pet., 47. However, as demonstrated by the Petitioner's own language, the identified 'ending portion' is merely a continuation of the very same movement from 'a first intermediate portion', namely dragging a finger off the edge of the touch screen. *Id.*

("the user ***continues*** dragging"); EX2001, ¶50. As such, the dragging motion is one continuous control gesture or portion of a control gesture, and not two different portions. EX2001, ¶50. Therefore, Petitioners have at best identified two separate actions, a selection and dragging, but does not meet the requirement of all challenged claims that the action have three portions. As such, the Board should deny institution based on Ground 2.

IX. CONCLUSION

Petitioner has not established a reasonable likelihood that it will prevail on Grounds 1 and 2 to establish unpatentability of the challenged claims of the '806 Patent, and therefore the Board should deny institution of *inter partes* review of the '806 Patent.

Respectfully Submitted,

Dated: September 8, 2023

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CERTIFICATION UNDER 37 C.F.R. § 42.24(d)

Under the provisions of 37 C.F.R. § 42.24(d), the undersigned hereby certifies that the word count for all portions of the foregoing Patent Owner's Preliminary Response totals 7,267 words per Microsoft Word, which complies with the requirement of 14,000 words allowed under 37 C.F.R. § 42.24(d).

Dated: September 8, 2023

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CERTIFICATE OF SERVICE

As authorized by Patent Owner's Mandatory Notice, I hereby certify that on September 8, 2023, a copy of this document has been served in its entirety by electronic mail on Petitioner's lead and backup counsel.

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