

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

IMMERSION CORPORATION,
Patent Owner.

Case IPR2016-01884
Patent No. 7,336,260

**IMMERSION CORPORATION'S
PATENT OWNER PRELIMINARY RESPONSE**

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Patent Trial and Appeal Board
U.S. Patent and Trademark Office
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EXHIBIT LIST

Immersion Ex. 2001	Declaration of Dr. Sigurd Meldal in Support of Immersion Corporation's Patent Owner Preliminary Response
Immersion Ex. 2002	<i>Curriculum Vitae</i> of Sigurd Meldal, Ph.D.
Immersion Ex. 2003	Notice of Allowability, File History of the '260 Patent

STATEMENT OF MATERIAL FACTS IN DISPUTE

Petitioner Apple, Inc. did not submit a statement of material facts in this Petition. Accordingly, no response is due pursuant to 37 C.F.R. § 42.23(a), and no facts are admitted.

I. INTRODUCTION

The Patent Trial and Appeal Board (“Board”) should decline to institute trial because the petition fails to establish a reasonable likelihood that Apple Inc. (“Petitioner”) would carry its burden to show that any claim of U.S. Patent No. 7,336,260 (Ex. 1001, the “‘260 patent”) is not patentable.

The Petition asserts four separate grounds: Ground 1, alleging that claims 1 and 2 are obvious under 35 U.S.C. § 103(a) in view of Komata (Ex. 1007); Ground 2, alleging that claims 1 and 2 are obvious under 35 U.S.C. § 103(a) over Tang (Ex. 1012); Ground 3, alleging that claim 2 is obvious under 35 U.S.C. § 103(a) over Tang in view of Synaptics (Ex. 1011); and Ground 4, alleging that claims 1 and 2 are obvious under 35 U.S.C. § 103(a) over JP725 (Ex. 1009).

The ‘260 patent provides for an improved pressure-sensitive touch input device. One example described in the ‘260 patent specification is a mobile telephone with mechanical buttons or a touchscreen having softkeys (e.g., “9” softkey 36i in Figure 5) corresponding to letters, such as W, X, Y, and Z. For example, a user may apply different pressure levels on the “9” button or softkey on a mobile telephone in order to input the letters W, X, Y or Z. The letter W may be associated with a first pressure level, the letter X with a second pressure level, the letter Y with a higher, third pressure level, and Z with a fourth pressure level. Generating tactile sensations for each pressure level provides tactile feedback on

which letter is being entered by the user. By way of example, if the user's intent is to enter the letter Z, the user will be provided with four tactile sensations as the user increases the pressure to the fourth pressure level. The four tactile sensations signals the user that they have entered the letter Z. Generating tactile sensations at different pressure levels during an interaction with the input device provides informative feedback for the user and improves the functionality of the device.

Claim 1 of the '260 patent recites "[a] computer-readable medium having instructions" that cause a processor to detect a first, second, and third pressure on an input device and provide respective first, second, and third tactile sensations to the input device based at least in part on the detected pressures. None of the prior art cited in the four grounds in the Petition discloses an apparatus that provides a set of tactile sensations based on detected pressure levels as the pressure applied to the input device is varied by the user. In other words, none of the prior art discloses providing at least three sensations in the course of detecting three pressures on an input device. By way of example, if a user presses on an input device to the second pressure level, the processor may provide not only the second tactile sensation to the input device but also provide the first tactile sensation as the processor detects the first pressure level. Likewise, if the user presses the input device to the third pressure, the processor may provide the first, second, and third tactile sensations to the input device as the processor detects the first, second, and

third pressure levels. If the pressure is then reduced to the second pressure, the processor may then provide a second tactile sensation.

In contrast, Komata, Tang, and JP725 do not disclose or suggest this system of providing first, second, and third tactile sensations as the user varies the pressure on an input device through different pressure levels. To the contrary, each of these references merely discloses reading a single pressure value and then providing a tactile sensation based on that value. None of the grounds renders obvious claims 1 and 2 of the '260 patent. The Board should decline institution of an *inter partes* review based on the Petitioner's petition.

II. THE '260 PATENT

The '260 patent is directed to an apparatus that provides tactile sensations to an input device (such as a touchpad or touchscreen) in response to detecting different levels of pressure applied to the input device by a user. Ex. 1001, Abstract; *id.*, 5:39-58. Each of the pressure levels may be associated with a distinct input signal. *Id.*, 6:10-11. The input signals may cause the generation of corresponding tactile sensations on the device. *Id.*, 8:1-23. The input signals can be generated as the user applies varying amounts of pressure on the input device. The '260 patent states in pertinent part:

When the button 10i is in its first state, then the button 10i does not transmit an input signal. When pressure is applied to the

button 10i by the user that exceeds the first magnitude, the button 10i transmits a first signal to the controller 9. When greater pressure is applied to the button 10i that exceeds the second magnitude of pressure, the button 10i transmits a second signal to the controller. When still greater pressure is applied to the button 10i that exceeds a third magnitude of pressure, the button 10i transmits a third signal to the controller. When even greater pressure is applied to the button 10i that exceeds the fourth magnitude of pressure, the button transmits a fourth signal to the controller. *Id.*, 6:11-25.

The ‘260 patent is directed in part to addressing a problem with prior art devices, which is that users cannot always rely on visual feedback when using electronic devices (*e.g.*, when they need to be watching the road while driving, in a distracting environment, or the user interface screen is not visible). The human hand cannot reliably or consistently sense the degree of pressure it is applying to an input device such as a touchpad or touchscreen or how the pressure is increasing or decreasing during an interaction. Thus, a user may not be able to consistently and reliably apply pressure at some specific level on the input device to achieve a particular result in systems where distinct levels of pressure being applied yield distinct results. Ex. 2001, Declaration of Sigurd Meldal, Ph.D. (“Meldal Decl.”) ¶¶ 21; Ex. 1001 at 1:60-2:12.

Accordingly, the provision of tactile feedback as the pressure that a user

applies varies during an interaction provides an important means for communicating information between a pressure-sensitive electronic apparatus and the user to enhance efficiency and reduce errors. For example, the apparatus can provide confirmation that the user has or has not pressed hard enough on a graphical object to trigger a desired event, or has released pressure such that it is no longer active. Meldal Decl. ¶ 22. The '260 patent provides an example of an input device as a touchscreen with softkeys 36b-j that each can represent multiple inputs. *Id.*, 12:9-11. For example, a user can press on softkey 36i to input the letters W, X, Y or Z. *Id.*, 12:50-53. A controller can detect a distinct amount of pressure applied by the user. *Id.*, 12:11-19. When a first level of pressure is applied to move a softkey from a first position (such as a rest position) to a second position, a first tactile sensation is produced. *Id.*, 12:33-45. Increasing the applied pressure to move the softkey to a third position will cause the generation of a second tactile sensation. *Id.*, 12:45-50. The softkey 36i has positions associated with four distinct applied pressures that correspond to inputs for the letters W, X, Y or Z. *Id.*, 12:50-55. The user can continuously push on the softkey to obtain the desired input. *Id.* Providing tactile sensations for each of the letters as the user pushes through the different pressure levels allows the user to identify the selected input. *Id.*, 12:56-66.

The claims are directed to this system which detects at least three levels of

pressure applied during an interaction with an input device, and provides corresponding tactile sensations to the input device based thereon as the user varies the pressure. Claims 1 and 2 recite:

1. A computer-readable medium having instruction, the instructions including instructions that cause a processor to:

- detect a first pressure on a first input device;
- provide a first tactile sensation to the first input device, the first tactile sensation based at least in part on the first pressure;
- detect a second pressure on the first input device, the second pressure greater than the first pressure; and
- provide a second tactile sensation to the first input device, the second tactile sensation based at least in part on the second pressure;
- detect a third pressure on the first input device, the third pressure greater than the second pressure; and
- provide a third tactile sensation to the first input device.

2. The computer-readable medium of claim 1 further comprising stored instructions, the stored instructions including instructions which, when executed by a processor, cause the processor to:

- detect a fourth pressure on the first input device, the fourth pressure greater than the third pressure; and
- provide a fourth tactile sensation to the first input device.

In allowing the claims, the examiner highlighted the invention's use of the

three detected pressure levels of varying magnitude and corresponding tactile sensations. The examiner's statement of reasons for allowance are as follows:

1. Claims 2, 3, 5-9, 14, and 15 are allowed.

The following is an examiner's statement of reasons for allowance: Claims 2, 3, 5-9, 14, and 15 are allowable since certain key features of the claimed invention are not taught or fairly suggested by the prior art. In claim 2, "detect a third pressure on the first input device, the third pressure greater than the second pressure". The closest prior art Yasutake (6,597,347) teaches of detecting first pressure and second pressure, and of providing first and second tactile sensations however singularly or in combination fails to anticipate or render the above underlined limitations obvious.

Ex. 2003, at 2 (Notice of Allowability). Thus, the PTO rejected prior art that merely disclosed providing tactile sensations at different pressure levels. The prosecution history (like the claims and specification) therefore further confirms that that the '260 patent claims require that at least a first, second, and third tactile sensation are provided as the user progresses through the multiple different pressure levels during the interaction.

III. PERSON HAVING ORDINARY SKILL IN THE ART (POSITA)

A person of ordinary skill in the art for the field of the '260 patent would have at least: (1) a Bachelor's of Science degree in an engineering discipline such as Mechanical Engineering or Computer Science, or (2) at least two years of experience working with, for example, human machine interface systems, graphical user interfaces, haptic feedback systems, robotics, biomechanics, or mobile devices, or equivalent embedded systems. Meldal Decl. ¶ 27. The conclusions regarding claim construction and validity contained herein would be

the same regardless of whether Immersion's or Petitioner's proposed level of skill is adopted by the Board. *Id.* at ¶ 28.

IV. CLAIMS 1 AND 2 ARE NOT OBVIOUS IN VIEW OF KOMATA

Komata does not disclose or suggest a processor that detects three or more levels of pressure applied to an input device during an interaction and provides first, second, and third tactile sensations to the input device as the user varies the pressure, as required by the claims of the '260 patent.

The claims of the '260 patent recite a processor that provides a first tactile sensation to an input device upon detection of a first pressure on the input device, a second tactile sensation to the input device in response to detection of a second pressure on the input device, and a third tactile sensation to the input device in response to detection of a third pressure on the input device during an interaction. The second pressure is greater than the first pressure and the third pressure is greater than the second pressure. As a user applies pressure to an input device to the second pressure level, the processor may first detect a first pressure. Meldal Decl. ¶ 24. Detection of the first pressure may cause a first tactile sensation. When the processor detects the second pressure, the processor provides a second tactile sensation. When the processor detects the third pressure, the processor provides a third tactile sensation. As a result, first, second and third tactile sensations are provided as the user progresses through the multiple different

pressure levels during a single touch interaction. This teaching of providing intermediate tactile sensations as the user progresses through pressure levels is described in the specification of the '260 patent for all three embodiments of the invention.¹ A description of the multiple level detection as the user increases pressure for the embodiment shown in Fig. 2 includes the following relevant passage:

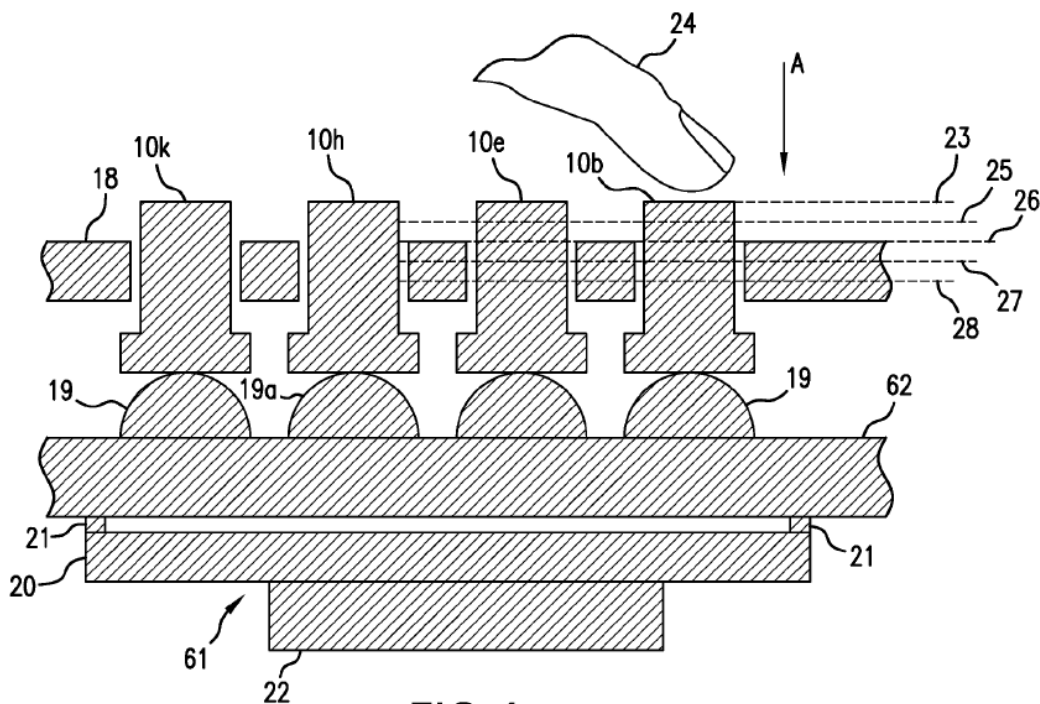
When the button 10i is in its first state, then the button 10i does not transmit an input signal. When pressure is applied to the button 10i by the user that exceeds the first magnitude, the button 10i transmits a first signal to the controller 9. When greater pressure is applied to the button 10i that exceeds the second magnitude of pressure, the button 10i transmits a second signal to the controller. When still greater pressure is applied to the button 10i that exceeds a third magnitude of pressure, the button 10i transmits a third signal to the controller. When even greater pressure is applied to the button 10i that exceeds the fourth magnitude of pressure, the button transmits a fourth signal to the controller. Ex. 1001, 6:11-25.

Likewise, the '260 patent provides the following relevant discussion for the embodiment of Figs. 3 and 4:

An object 24, for example the user's finger or a stylus, is used

¹ Although Fig. 8 shows a single pass flowchart, the specification states that the process of Fig. 8 can be performed in a continuous loop. Ex. 1001, 13:65-67.

to select one or more of the keys 10 by applying pressure in the direction of the arrow A. This pressure causes the selected key to progress through a plurality of positions. As illustrated, after leaving the rest position 23, the keys pass sequentially through a second position 25, a third position 26, a fourth position 27, and a fifth position 28 as greater and greater pressure is applied to the button 10. *Id.*, 8:65-9:5.



The embodiment associated with Figs. 5 and 6 also discloses multilevel pressure detection as the user increases the pressure on the input device. *Id.*, 12:31-55 (“The functionality of the softkeys shown in FIG. 5 is similar to the mechanical key counter parts describe in relation to FIGS. 2 and 3.”).

Komata discloses a game played by two players wherein one of the players may press a switch on that player's controller that causes a vibration in the other player's controller. *Id.*, [0034]. The other player may then press their switch in response to the vibration. *Id.*, [0035]. Points are given depending on the response time. *Id.* As Komata points out:

The objects of the present invention are also attained by a method of using computer having two or more controllers which have pressure-sensitive means and vibration means, wherein, based on an output value from the pressure-sensitive means of one of said controllers, vibration is caused in the vibration means of the other of said controllers, and based on the output value from the pressure-sensitive means of the other of said controllers, vibration is caused in the vibration means of said first one of said controllers. *Id.*, [0007].

Komata does not disclose providing first, second, and third tactile sensations as a user continuously varies pressure on an input device. Instead, Komata discloses two video game controllers that include pressure-sensitive units and vibration units. Ex. 1007, Abstract. The entertainment system 500 includes a pressure-sensed value-drive signal conversion table that includes 256 different vibration drive signals associated with 256 pressure levels. *Id.*, Fig. 2 and [0036]. In the video game system disclosed in Komata, the system determines the pressure value from a button pressed on one controller, and provides a vibration, derived

from the table, to the other controller. *Id.*, [0034], [0036]; Abstract (“Based on the output value from the pressure sensitive unit of one of the controllers, vibration is caused in the vibration unit of the other controller, and based on the output value from the pressure-sensitive unit of the other controller, vibration is caused in the vibration unit of the first one of the controllers.”).

Komata does not disclose or suggest the concept of providing a set of tactile sensations to the input device as the user applies varying levels of pressure or providing intermediate sensations as the user progresses through pressure levels. Komata lacks any intermediate tactile sensations provided based on the user varying pressure throughout the interaction. To the contrary, it describes determining a single pressure value when the user presses on the switch and providing a single vibration for that value. Komata reads an applied pressure value and then uses a table to determine an appropriate tactile response in the other player’s controller. Ex. 1007, [0036]. In other words, Komata provides a single vibration on an input device that corresponds to a pressure applied by an opposing player. Meldal Decl. ¶ 31. In contrast to the present invention, there is no disclosure in Komata to continuously monitor and detect three or more different pressure levels as the user varies pressure on the switch, and provide a tactile sensation that corresponds to each pressure level. *See* Ex. 1001, 13:65-67 (“Although illustrated as a single pass function, monitoring of the input devices is

preferably handled as a continuous loop function.”). Komata provides an entirely different teaching than the ‘260 patent, which is set out in claim 1 of the ‘260 patent requires providing first, second, and third tactile sensations as the processor detects pressures at the corresponding first, second, and third pressure levels.

There is also no motivation to continuously monitor differing pressure levels during a single interaction and provide an intermediate tactile sensation as the pressure is applied by a player in Komata. The Komata game involves evaluating player response time to input from another player. *Id.*, [0034]-[0035]. Player A induces a vibration in player B’s controller by pushing a switch and Player B attempts to respond as quickly as possible by pushing on Player B’s own switch. Modifying Komata in accordance with the present invention to provide intermediate tactile sensations as the user progresses through pressure levels would serve no purpose and could render the game nonfunctional. Meldal Decl. ¶ 32. For example, in the hypothetical modified system, if player A pushes to a third pressure level, player B would also get a tactile sensation when player A pushes past the first pressure level and a second tactile sensation as player A pushes past the second pressure level. Player B may respond to the first or second tactile sensation, thereby resulting in an inaccurate response time. Further, given that the game contemplates that the players will push the switch quickly, outputting at least

three (claim 1) or four (claim 2) tactile sensations in the course of a single push of the switch would be impractical and of no benefit to the user.

The Petitioner points to the different pressure values and drive signals in the conversion table of Fig. 2 in Komata as meeting the first, second, and third pressures and corresponding tactile sensations recited in the claims of the ‘260 patent. Pet. at 28-36. The conversion table merely associates different drive signals with different pressures. The conversion table does not disclose or suggest providing first, second, and third tactile sensations as the user varies the pressure between respective first, second, and third pressure levels—and there is nothing in Komata suggesting that the table can or should be used in this manner.

Petitioner has not met its burden that there is a reasonable likelihood that claims 1 and 2 are obvious over Komata.

V. CLAIMS 1 AND 2 ARE NOT OBVIOUS IN VIEW OF TANG

Tang discloses an experimental system that includes three sensor pads on a block and three vibrators located on the opposite side of the block, as shown below. Ex. 1012, pg. 9. The user holds the block such that the user’s three fingers align with the three sensor pads and the user’s palm rests on the other side of the block where the three vibrators are located. “The subject grasps the block naturally with the first three fingers (index, middle and ring) aligning with the

sensor pads. The tactile feedback is applied to the palm of the same hand with bursts of 250 Hz vibrations from the vibratory stimulators.” *Id.*, pg. 8.

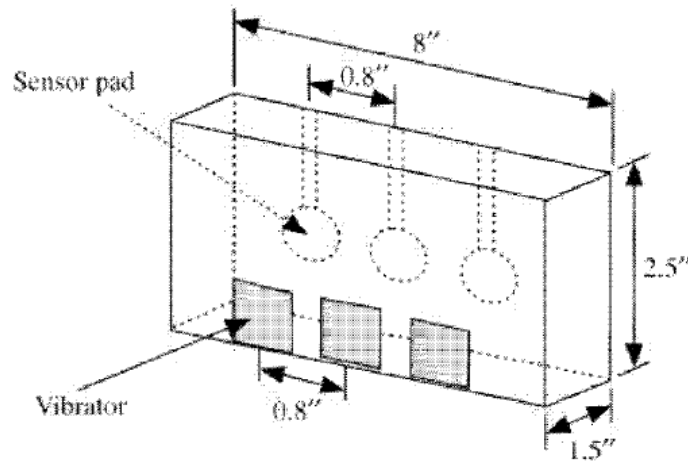


FIGURE 6. Vibrators mounted on the opposite side of the block.

The sensor pad can recognize three different types of input. *Id.*, pg. 4. Specifically, Tang defines three input levels—low, medium, and high, as shown in Fig. 3 below.

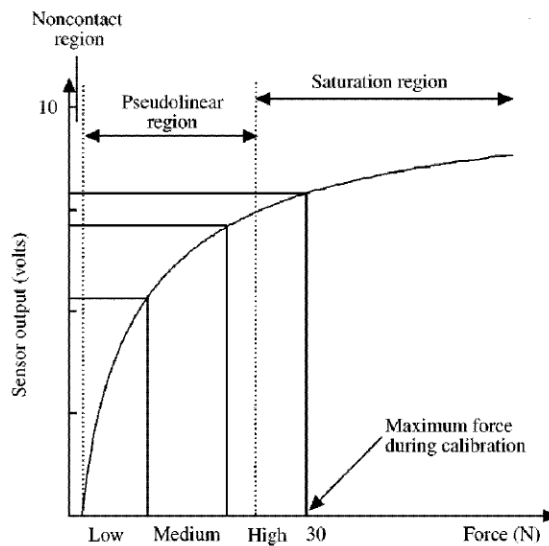


FIGURE 3. Voltage–force characteristic of conductive polymer sensors.

“Low” corresponds to any force up to a low level, “Medium” corresponds to any force between the low level and a medium level, and “High” corresponds to any force between the medium level and a maximum force. *Id.*, pgs. 5-6. The sensor pad produces a voltage pulse that is compared to the values shown in Fig. 3 to determine if the input is Low, Medium, or High. *Id.* Different vibrations can be provided for each type of input. *Id.*, pg. 8. For example, vibration burst at 1.5, 3 and 6 Hz can be provided for, respectively, the Low, Medium, and High inputs. *Id.*

Tang does not disclose the concept of providing intermediate tactile sensations associated with different pressure levels during an input. Tang provides a single voltage pulse that is determined to be Low, Medium, or High. Meldal Decl. ¶ 37. Tang does not disclose providing a set of tactile sensations as the user varies the input pressure. For example, if a user applies a pressure that the system determines is “High,” Tang simply discloses providing a tactile sensation corresponding to a High level of input. Tang does not disclose providing tactile sensations as the force progresses through the Low and the Medium levels before or after reaching the High level, as recited by the claims of the ‘260 patent.

Additionally, Tang teaches away from providing intermediate tactile sensations as the user varies input pressure. Tang conducted an experiment to determine whether 15 students could correctly apply the correct force to obtain desired chords (letter strings). Ex. 1012, pg. 9. For example, subjects were asked

to input combinations of chords using the letters L, M and H, wherein L corresponds to a low force, M to a medium force, and H to high force. *Id.*

Subjects were given the desired chord and then pressed the sensor pads to create the chord. *Id.*, pg. 10. After the subject finished, a report was displayed to show whether the input was correct and what sequence was actually entered. *Id.* Tang's experiment was to determine whether the user could apply the appropriate level of pressure to obtain the desired letter L, M or H. *Id.*, pg. 9. Tang provided only one tactile sensation for each push on the input device. Consequently, the user would have to learn how to apply the appropriate pressure to obtain the desired tactile feedback. Meldal Decl. ¶ 38. Tang's experiment resulted in an error rate of about 18%. *Id.*, pg. 11. This teaching is in contrast to the present invention. For example, with the present invention the user would receive multiple tactile sensations for the multiple detected levels of pressure during an interaction. The present invention is a significant advancement over the experimental system in Tang which requires the user to sense and guess whether the actual input has been entered. *Id.*

Furthermore, Tang fails to disclose or teach providing tactile sensations *to the input device*, as required by the claims of the '260 patent. Claim 1 of the '260 patent requires three tactile sensations to be provided to the input device:

“providing a first tactile sensation to the first input device,” “provide a second

tactile sensation to the first input device,” and “provide a third tactile sensation to the first input device.” This is not taught in Tang. In fact, Tang expressly teaches that the vibrations (located on the other side of the block from the sensor pads) are provided to the user’s palm resting on the separate vibrators, not to the sensor pads. Meldal Decl. ¶ 39. “The subject grasps the block naturally with the first three fingers (index, middle and ring) aligning with the sensor pads. The tactile feedback is applied to the palm of the same hand with bursts of 250 Hz vibrations from the vibratory stimulators.” *Id.*, pg. 8. The Petition has not established that any vibration output by the vibrators is provided to the sensor pads (which the Petition states is the claimed input device- Petition, at 44) located on the other side of the block, or that a POSITA would so modify Tang.

Tang’s experiment does not disclose or teach the concept of providing intermediate tactile sensations as the user varies the pressure on an input device, nor does Tang disclose or teach to provide tactile sensations to the sensor pads. Petitioner has not met its burden that there is a reasonable likelihood that claims 1 and 2 are obvious over Tang.

VI. CLAIM 2 IS NOT OBVIOUS IN VIEW OF TANG AND SYNAPTICS

Claim 2 requires the detection of a fourth pressure and providing a fourth tactile sensation. The Petition cites Synaptics as allegedly disclosing a fourth tactile sensation upon detection of a fourth pressure, which the Petition

acknowledges is not disclosed by Tang. Pet. at 56. Synaptics does not supply this missing element. Synaptics merely discloses a touchpad that can detect a range of values denoted as “Z” values. Ex. 1011, p. 6. Synaptics utilizes the following table to interpret various ranges of Z parameters.

<i>Value</i>	<i>Interpretation</i>
Z = 0	No finger contact.
Z = 10	Finger hovering near the pad surface.
Z = 30	Very light finger contact.
Z = 80	Normal finger contact.
Z = 110	Very heavy finger contact.
Z = 200	Finger lying flat on pad surface.
Z = 255	Maximum reportable Z; whole palm flat on pad surface.

Figure 2-5. Typical Z values

Id., p. 8.

The Petition states that a POSITA would be inspired by Synaptics to segment Tang into four levels. Pet. at 57. This is incorrect. The experimental results from Tang inform a POSITA *not* to extend the experimental system of Tang into more than three levels. The experimental test in Tang in which subjects were asked to apply three levels of pressure resulted in an 18% error rate. *Id.*, pg. 11. Implementing a fourth level in Tang would not address this issue; to the contrary, it would necessary result in more fine gradations and substantially *increase* the error rate of the Tang system. Meldal Decl. ¶ 41. Synaptics does not provide any motivation to segment Tang into four levels given the higher error rate that would result.

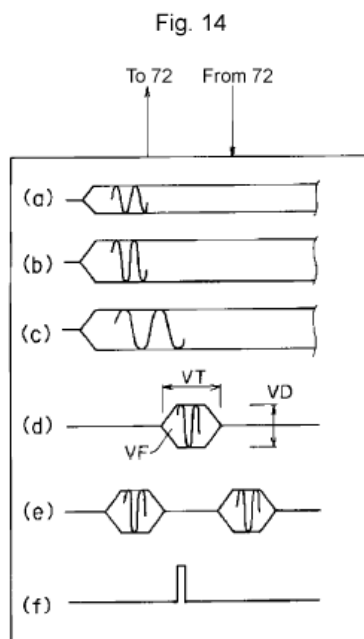
Moreover, Synaptics does not provide guidance on providing a fourth tactile sensation upon detection of a fourth pressure. Synaptics is devoid of any disclosure or mention of the use of *any* tactile response. Synaptics did not contemplate providing any tactile sensations based on user input—Synaptics has nothing to do with providing haptic feedback. There is no suggestion in Synaptics to associate a tactile sensation with the different contact interpretations listed in the table. Meldal at ¶ 42.

Even if Synaptics were combinable with Tang (and it is not), this modified Tang version would still not provide intermediate tactile sensations at different pressure levels as the user varies the pressure on an input device. As noted above, Tang does not disclose or suggest the claimed invention. Synaptics does not fill the void in Tang. Synaptics does not teach providing any tactile sensations. Petitioner has not met its burden that there is a reasonable likelihood that claims 1 and 2 are obvious over Tang in view of Synaptics.

VII. CLAIMS 1 AND 2 ARE NOT OBVIOUS IN VIEW OF JP725

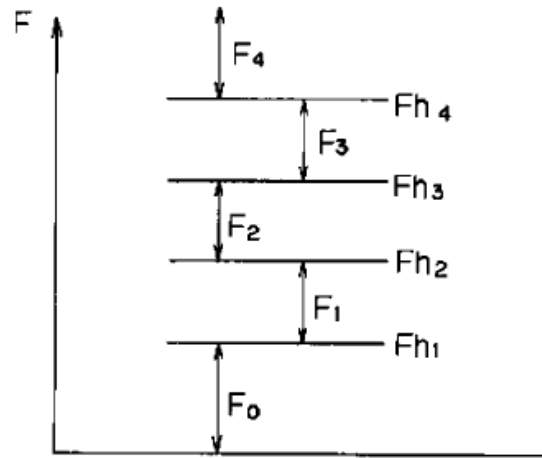
JP725 also does not disclose or suggest the concept of providing intermediate tactile sensations at different pressure levels as the user varies the pressure on an input device. JP725 discloses an information display device that can display menus for bank users. Ex. 1009, [0047]. The user can press on operating regions R1 to R7 on the display with a predetermined force to provide

input. *Id.* The display device includes piezoelectric elements that are used to measure the applied force and to provide a vibration to the user. *Id.*, [0050] and [0122]. The vibration feedback may vary depending on the applied force. *Id.*, [0108]-[0110]. Figure 14 shows the different types of vibrations that can be provided to the user.



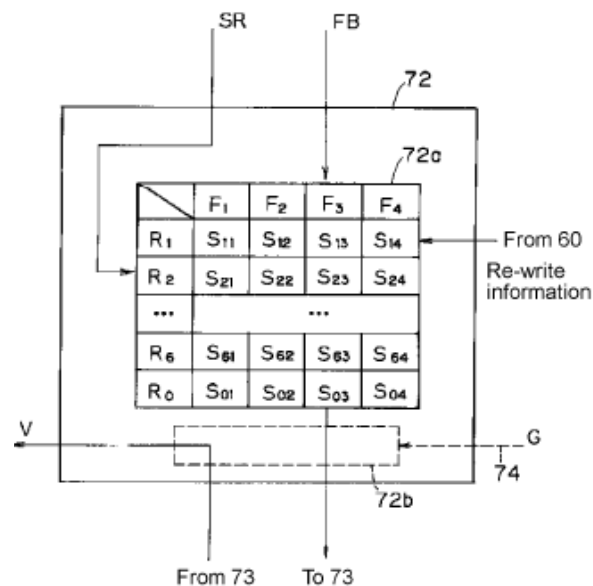
The values provided by the piezoelectric elements E1-E4 are processed to determine whether the operating force signal exceeds Fh1 through Fh4 shown in Fig. 11. *Id.*, [0092]-[0103].

Fig. 11



The location of the user input, in operating regions R1-R7, is also determined. *Id.*, [0104]-[0107]. Figure 13 of JP725 is used to determine the type of feedback S_{11} etc., to be used based on the calculated force determining signal FB and the region determining signal SR. *Id.*, [0108]-[0121].

Fig. 13



JP725 then generates a corresponding vibration. If the user input causes a change in the screen, then the vibration is stopped after a predetermined amount of time. *Id.*, [0125]. For vibration modes shown in Fig. 14(a) through (c), the vibration continues until the applied force is reduced or the user has removed their finger from the surface. *Id.*, [0125]-[00126].

JP725 does not generate intermediate vibrations at different pressure levels as the user varies the input pressure. JP725 provides a single vibration in response to a specific force measurement and region. The vibration is applied for a predetermined amount of time, or until the user has weakened the force or removed their finger. JP725 will continue to apply the same vibration even if the user varies the input pressure. Meldal Decl. ¶ 47. If the user varies the input pressure to another threshold there is no disclosure or suggestion in JP725 to provide yet another vibration.

In fact, JP725 teaches away from such an approach because JP725 specifically states that the same vibration is applied for a predetermined amount of time, or until the pressure drops. JP725 does not disclose or suggest the claimed invention of the '260 patent. The petition does not provide any reasoning on why a POSITA would modify JP725 to practice the claimed invention. Petitioner has not met its burden that there is a reasonable likelihood that claims 1 and 2 are obvious over JP725.

VIII. CONCLUSION

The Petition fails to show that there is a reasonable likelihood Petitioner will prevail with respect to at least one of the challenged claims under 35 U.S.C.

§ 314(a). As such, the Board should not deny the Petition and not institute an *inter partes* review.

Date: January 4, 2017

Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6, the undersigned certifies that on January 4, 2017, a copy of the foregoing document **IMMERSION CORPORATION'S PATENT OWNER PRELIMINARY RESPONSE and EXHIBITS 2001 to 2003** were served, by electronic mail, as agreed to by the parties, upon the following:

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Susan Langworthy

CERTIFICATE OF COMPLIANCE WITH 37 C.F.R. § 42.24

Pursuant to 37 C.F.R. § 42.24 (d), I certify that the present paper contains 4,985 words as counted by the word-processing program used to generate the brief. This total does not include the tables of contents and authorities, the caption page, table of exhibits, signature blocks, certificate of service, or this certificate of word count.

Dated: January 4, 2017

Respectfully submitted,

/s/ Babak Redjaian
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