## IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

IMMERSION CORPORATION,

Plaintiff,

v.

Civil Action No. 12-259-RGA

HTC CORPORATION, and HTC AMERICA INC.

Defendants.

# **MEMORANDUM OPINION**

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February **[]**, 2015

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Presently before the Court is the issue of claim construction of multiple terms in U.S. Patent Nos. 6,429,846; 7,969,288; 7,982,720; 8,031,181; and 8,059,105. The Court has considered the Parties' Joint Claim Construction Brief. (D.I. 231). The Court heard oral argument on some of the terms on November 25, 2014. (D.I. 324). The remaining terms were submitted on the papers. (*Id.* at pp. 119-20).

#### I. BACKGROUND

Plaintiff Immersion Corporation filed a complaint on March 2, 2012 alleging that HTC Corporation, HTC (B.V.I.) Corporation, HTC America Holdings, Inc., HTC America, Inc., and Exedea, Inc. infringed U.S. Patent Nos. 6,429,846 ("the '846 patent"), 7,592,999 ("the '999 patent"), 7,969,288 ("the '288 patent"), 7,982,720 ("the '720 patent"), 8,031,181 ("the '181 patent"), and 8,059,105 ("the '105 patent"). (D.I. 1). The case was stayed on April 12, 2012 pending an International Trade Commission investigation. (D.I. 7). The case was reopened on May 1, 2013 and an amended complaint was filed against HTC Corporation and HTC America, Inc. (D.I. 11). The other defendants were terminated as parties. A second amended complaint was filed on June 10, 2013, which dropped the infringement allegations with respect to the '999 patent. (D.I. 28). Defendants responded to the second amended complaint on June 28, 2013. (D.I. 33). There are no counterclaims or cross-claims.

#### II. LEGAL STANDARD

"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." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (internal quotation marks omitted). ""[T]here is no magic formula or catechism for conducting claim construction.' Instead, the court is free to attach the appropriate

weight to appropriate sources 'in light of the statutes and policies that inform patent law."" SoftView LLC v. Apple Inc., 2013 WL 4758195, at \*1 (D. Del. Sept. 4, 2013) (quoting Phillips, 415 F.3d at 1324). When construing patent claims, a court considers the literal language of the claim, the patent specification, and the prosecution history. Markman v. Westview Instruments, Inc., 52 F.3d 967, 977–80 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996). Of these sources, "the 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." Phillips, 415 F.3d at 1315 (internal quotation marks and citations omitted).

"[T]he words of a claim are generally given their ordinary and customary meaning. . . . [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, i.e., as of the effective filing date of the patent application." *Phillips*, 415 F.3d at 1312–13 (internal quotation marks and citations omitted). "[T]he ordinary meaning of a claim term is its meaning to [an] ordinary artisan after reading the entire patent." *Id.* at 1321 (internal quotation marks omitted). "In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words." *Id.* at 1314 (internal citations omitted).

When a court relies solely upon the intrinsic evidence—the patent claims, the specification, and the prosecution history—the court's construction is a determination of law. *See Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015). The court may also make factual findings based upon consideration of extrinsic evidence, which "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Phillips*, 415 F.3d at 1317–19 (internal quotation marks and

citations omitted). Extrinsic evidence may assist the court in understanding the underlying technology, the meaning of terms to one skilled in the art, and how the invention works. *Id.* Extrinsic evidence, however, is less reliable and less useful in claim construction than the patent and its prosecution history. *Id.* 

"A claim construction is persuasive, not because it follows a certain rule, but because it defines terms in the context of the whole patent." *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998). It follows that "a claim interpretation that would exclude the inventor's device is rarely the correct interpretation." *Osram GmbH v. Int'l Trade Comm'n*, 505 F.3d 1351, 1358 (Fed. Cir. 2007) (internal quotation marks and citation omitted).

### III. CONSTRUCTION OF DISPUTED TERMS

1. "touch input device"

- a. *Plaintiff's proposed construction*: No construction is necessary. If construed, the term should be given its plain and ordinary meaning, within the context of the claim and consistent with the intrinsic evidence, which is a "device that allows a user to provide input by touching an area on the device." A touch input device may include a touch surface, a display, a touch sensor, and a controller.
- b. Defendants' proposed construction: the touch surface and the touch sensor
- c. *Court's construction*: device that allows a user to provide input by touching an area on the device, and may include a touch surface, a display, and a touch sensor
- 2. "touch screen"
  - a. *Plaintiff's proposed construction*: No construction is necessary. If construed, the term should be given its plain and ordinary meaning, within the context of the claim and consistent with the intrinsic evidence, which is a "display device that

allows a user to provide input by touching an area on the device." A touch screen may include a touch surface, a display, a touch sensor, and a controller.

- b. *Defendants' proposed construction*: a touch surface, through which computergenerated graphical objects can be viewed, and a touch sensor
- c. *Court's construction*: a display device that allows a user to provide input by touching an area on the device, and may include a touch surface, a display, and a touch sensor

Because the claim construction issues with respect to these terms are the same, and the parties argued them together, the Court will address them together. Plaintiff argues that Defendants' construction improperly limits the scope of the terms by excluding components identified in the specification as part of the touch screen/touch input device. (D.I. 231 at p. 4). For example, Plaintiff notes that the specification<sup>1</sup> requires the touch screen to be "operative to output a first signal" and "operative to display a graphical image." (*Id.*). In arguing its motions for summary judgment, Plaintiff maintained that the touch screen included the touch surface, touch sensor, display, and bezel.<sup>2</sup> (D.I. 273 at pp. 10-11). Plaintiff argues that all of these components are necessary for the devices to function, and are therefore part of the touch screen. (*Id.* at p. 11; D.I. 231 at p. 12).

Defendants argue that the display, bezel, and other components of the touch devices are separate from the touch screen. (D.I. 231 at p. 6). Defendants note that the touch screen and housing are labeled separately in the specification's drawings. (*Id.* at p. 7). Defendants further

<sup>&</sup>lt;sup>1</sup> All of the patents in which these terms appear share an identical specification. (D.I. 231 at p. 3).

<sup>&</sup>lt;sup>2</sup> The "bezel" or "chassis" is a rigid body that binds some or all of the other layers of the device together. (D.I. 273 at p. 10; D.I. 246 at p. 7).

argue that, in a design guide, Plaintiff's own engineers differentiate the touch screen from the display, bezel, and controller. (*Id.* at p. 10).

The Court finds that the proper construction lies between the parties' proposed constructions. The Court agrees that the display is part of the touch screen/touch input device and therefore finds that Defendants' construction is too narrow. The specification discloses that the touch screen must be "operative to display a graphical image," and it therefore must include a display. However, the Court also finds that Plaintiff's construction is too broad. The Court does not find that the bezel and controller are components of the touch screen/touch input device. While it is true that the bezel is necessary to bind the touch screen to the other components of the device, it does not follow that the bezel is part of the touch screen. Presumably, all components of the touch screen, which is but one part of the device. The controller, or printed circuit board, is separated from the display by the bezel (D.I. 273 at p. 10), and is therefore similarly not part of the touch screen.

- 3. "cursor"
  - a. *Plaintiff's proposed construction*: a visual indicator of position
  - b. *Defendants' proposed construction*: graphical pointer that moves in unison with a pointing device
  - c. *Court's construction*: movable, visible mark used to indicate a position of interest on a display device

Plaintiff argues that the claim language emphasizes the importance of the cursor's position, and that Defendants' construction reads in limitations. (D.I. 231 at p. 18). Plaintiff maintains that while a cursor can be movable, it does not necessarily have to be. (*Id.* at p. 19).

Plaintiff supports its construction with several definitions from technical dictionaries. (*Id.* at p. 19, Exs. 34, 35, 38). In addition, Plaintiff argues that a graphical pointer is just one type of cursor and the construction should not be limited to a single example. (*Id.* at p. 18). Moreover, Plaintiff argues that the specification discloses a cursor that does not move "in unison with a pointing device." (*Id.* at p. 19).

Defendants respond that because the cursor interacts with graphical objects and icons, it must be distinct from such objects and able to select and manipulate them. (*Id.* at p. 20). Defendants further argue that in order to position a cursor, the user must be able to move it. (*Id.* at 21). Defendants note that Plaintiff's own dictionary definitions require a cursor to be movable. (*Id.*). Defendants also note that the inventor explained that a cursor is a "targeting means" that indicates where something is about to happen. (*Id.* at p. 22).

The Court finds Plaintiff's technical dictionary evidence to be very probative of how a person having ordinary skill in the art would have interpreted "cursor" at the time the patent was filed. However, neither of the proposed constructions reflect those definitions or the specification's requirements. The Court agrees with Defendants that a cursor must be movable in order to interact with graphical objects and icons. It therefore finds that Plaintiff's construction is too broad. However, the Court also finds that Defendants' construction is too narrow. There is no evidence that a cursor must move "in unison with a pointing device." In addition, limiting cursors to pointers would improperly read in a limitation. Finally, the technical dictionaries and inventor state that a cursor indicates where an action is about to occur. Neither proposed construction incorporates that requirement. The Court therefore adopts a construction based on the dictionary definitions Plaintiff provided: "movable, visible mark used to indicate a position of interest on a display device."

- 4. "haptic sensation"
  - a. *Plaintiff's proposed construction*: No construction is necessary. If construed, the term should be given its plain and ordinary meaning, within the context of the claim and consistent with the intrinsic evidence, which is "force sensation or tactile sensation."
  - b. *Defendants' proposed construction*: type of tactile feedback or force feedback, such as a pulse, vibration, or texture
  - c. *Court's construction*: force sensation or tactile sensation
- 5. "haptic effect"
  - a. *Plaintiff's proposed construction*: No construction is necessary. If construed, the term should be given its plain and ordinary meaning, within the context of the claim and consistent with the intrinsic evidence, which is "force effect or tactile effect."
  - b. *Defendants' proposed construction*: type of tactile feedback or force feedback, such as a pulse, vibration, or texture
  - c. *Court's construction*: force effect or tactile effect

Because the claim construction issues with respect to these terms are the same, and the parties argued them together, the Court will address them together. The parties appear to agree that "haptic" in this context means force or tactile. The dispute with respect to these terms is what makes one haptic sensation or effect different from another. (D.I. 231 at pp. 32, 34). Claim construction is not the proper stage to address what appears to be an infringement issue. Both proposed constructions define "haptic" as force or tactile, and the Court therefore adopts that definition.

The Court further finds that the haptic sensations and effects disclosed in the specification are not limited to feedback. For example, the specification states, "User-independent events can also be relayed to the user using haptic sensations on the touchpad." (*Id.* at p. 32 (quoting ''846 patent, col. 13, ll. 22-23)). Moreover, Defendants' use of "feedback" makes no distinction between "sensation" and "effect." Different words are presumed to have different meanings, and Defendants offer no explanation for why these different terms should be given the same definition.

- 6. "force information"
  - a. *Plaintiff's proposed construction*: No construction is necessary. If construed, the term should be given its plain and ordinary meaning, within the context of the claim and consistent with the intrinsic evidence, which is "signal indicating a force to be output by the actuator."
  - b. *Defendants' proposed construction*: commands/parameters or streamed data describing the output force
  - c. *Court's construction*: No construction is necessary

Defendants support their construction with the following language from the specification: "The term 'force information' can include both commands/parameters and streamed data." (D.I. 231 at p. 37 (quoting '846 patent, col. 6, ll. 39-41)). Defendants note that without commands/parameters and streamed data, it is impossible to indicate what force to produce. (*Id.* at p. 38). Plaintiff argues that the language "can include" is not limiting, and therefore adopting Defendants' construction would import limitations from the specification. (*Id.* at p. 37).

The Court agrees with Plaintiff that limiting the term to the examples following "can include" would impermissibly read in a limitation. "Can include" does not signal a restrictive

definition. In addition, the fact that commands/parameters and streamed data are necessary to communicate what force to output does not justify limiting "force information" to those examples.

The Court further finds that Plaintiff's proposed construction would not be helpful to the jury. Plugging the proposed construction into the claim language, it reads as follows: "wherein said actuator outputs said force based on [a signal indicating a force to be output by the actuator] output by said processor, said actuator outputting a force directly on said touch input device." Such a construction muddles, rather than clarifies, the claim language. The Court finds that no construction is necessary to aid the jury in understanding the meaning of "force information."

7. "outputting a force directly on said touch input device"

- a. *Plaintiff's proposed construction*: No construction is necessary. If construed, the term should be given its plain and ordinary meaning, within the context of the claim and consistent with the intrinsic evidence, which is "outputting a force on the touch input device either through connected rigid bodies or without intervening structure."
- b. *Defendants' proposed construction*: imparting a force on the touch input device without intervening structure
- c. *Court's construction*: outputting a force on the touch input device without intervening structure
- 8. "impart a first force directly to the touch screen"
  - a. *Plaintiff's proposed construction*: No construction is necessary. If construed, the term should be given its plain and ordinary meaning, within the context of the

claim and consistent with the intrinsic evidence, which is "impart a first force to the touch screen through connected rigid bodies or without intervening structure."

- b. *Defendants' proposed construction*: impart a force on the touch screen without intervening structure
- c. *Court's construction*: impart a force on the touch screen without intervening structure

Because the claim construction issues with respect to these terms are the same, and the parties argued them together, the Court will address them together. Plaintiff argues that in the field of haptics, forces can be imparted "directly" if they are imparted through "connected rigid bodies." (D.I. 231 at p. 41). Plaintiff maintains that if "directly" is construed to mean "without intervening structure," the actuator would need to be "directly coupled" to the touch screen, but the claims require only that the actuator be "coupled" to the touch screen. (*Id.* at p. 42). Plaintiff argues that the applicants used "coupled" and "directly coupled" differently in the specification, and thus understood the differences, and intentionally claimed a "coupled" actuator imparting forces "directly." (*Id.* at pp. 42-43).

Defendants argue that the actuator must be directly coupled to the touch screen in order to impart forces directly. (*Id.* at p. 45). They note that the specification says, "Since the touchpad 16 is directly coupled to the actuator 42, any produced forces are directly applied to touchpad 16." (*Id.* (quoting '846 patent, col. 8, ll. 46-48)). Defendants further argue that during the prosecution history of the parent patent, the examiner found that the "directly" limitation was not taught by a piece of prior art where there was a rigid intervening structure between the touch screen and the actuator. (*Id.* at p. 49).

The Court agrees with Defendants that, in order for the actuator to impart forces directly, there must be no intervening structure between the touch screen and the actuator. Though Plaintiff repeatedly states that "directly" has a unique meaning in the field of haptics, it offers no supporting evidence. The Court finds that the specification language and prosecution history identified by Plaintiff both support construing "directly" to require no intervening structure.

- "at least one other region provides a signal that is used by said computer to control a different function"
  - a. *Plaintiff's proposed construction*: No construction is necessary. The phrase has the meaning that its constituent words impart to it.
  - b. *Defendants' proposed construction*: at least one other control area not related to the position signal
  - c. *Court's construction*: No construction is necessary

Plaintiff argues that no construction is necessary, and that Defendants are attempting to rewrite the claim to add a negative limitation. (D.I. 231 at pp. 59-60). Defendants support their construction by identifying an embodiment in the specification which illustrates the "other region" providing "separate input from the main cursor control regions." (*Id.* at p. 61 (quoting '846 patent, col. 14, ll. 20-22)). Plaintiff notes that there are several embodiments of claim 16 identified in the specification, and only one supports Defendants' construction. (*Id.* at p. 63).

The Court finds that no construction is necessary. Defendants' construction inserts a limitation where there was no clear disavowal or other evidence to suggest that the applicants intended to surrender the full scope of the claim language. Moreover, Defendants' proposed construction is incomplete: It explains only the first half of the disputed term ("at least one other region") with no mention or explanation of the second half ("provides a signal that is used by

said computer to control a different function"). The Court therefore finds that it would not be helpful to the jury, even if it did not improperly import a limitation.

10. "at least one other non-overlapping control region not related to cursor positioning"

- a. *Plaintiff's proposed construction*: No construction is necessary. The phrase has the meaning that its constituent words impart to it.
- b. *Defendants' proposed construction*: Plain and ordinary meaning
- c. *Court's construction*: No construction is necessary

Both parties argue that the term should have its plain and ordinary meaning. (D.I. 231 at p. 64). Defendants contend that Plaintiff is "secretly construing" the phrase, but no construction other than the plain and ordinary meaning has been proposed. (*Id.* at p. 65). Because no arguments have been made to the contrary, the Court finds that no construction is necessary.

- 11. "data set"
  - a. *Plaintiff's proposed construction*: No construction is necessary. If construed, the term should be given its plain and ordinary meaning, within the context of the claim and consistent with the intrinsic evidence, which is "a collection of data."
  - b. *Defendants' proposed construction*: group of effects and events that are associated with a particular application program
  - c. Court's construction: No construction is necessary

Plaintiff argues that no construction is necessary, and that Defendants' construction adds in limitations that are already present in the surrounding claim language. (D.I. 231 at pp. 67-68). Plaintiff argues that if the Court adopts Defendants' construction, the rest of the claim language would be rendered superfluous. (*Id.* at p. 70). Defendants argue that their construction reinforces the surrounding claim language. (*Id.* at p. 68). Defendants further argue that the

specification as a whole makes clear that a "data set" must be associated with a single application program, and their construction clarifies that requirement. (*Id.* at p. 69).

The Court agrees that Defendants' construction adds in limitations that are present in the surrounding claim language, and it is unnecessary to insert them into the disputed term as well.

Under Defendants' construction, the claim would read:

18. A software method in a multi-tasking environment comprising:

storing a plurality of [groups of effects and events that are associated with a particular application program] in memory, each [group of effects and events that are associated with a particular application program] comprising a representation of one or more force effects, wherein each one of the plurality of [groups of effects and events that are associated with a particular application program] is associated with one software application;

calling an application programming interface;

determining which one of a plurality of application programs is active in the multitasking environment; and

generating a signal representing the [group of effects and events that are associated with a particular application program] associated with the active application program.

(D.I. 231 at pp. 67-69). Rather than reinforce the surrounding claim language, this construction

makes much of it redundant. The Court finds that "data set" is not a term of art which the jury

requires assistance in understanding. No construction is necessary.

12. "one" (in the context of "associated with one software application")

- a. *Plaintiff's proposed construction*: No construction of "one" in the phrase
  "associated with one software application" is necessary. The phrase should be
  given its plain and ordinary meaning, within the context of the claim and
  consistent with the intrinsic evidence, which does not limit the association to just
  one software application.
- b. Defendants' proposed construction: one

#### c. *Court's construction*: one, and only one

Plaintiff argues that in the context of "wherein each one of the plurality of data sets is associated with one software application," each data set may be associated with more than one software application. (D.I. 231 at pp. 73, 75). Plaintiff further argues that defining "one" as "one" would not be helpful to the jury. (*Id.* at p. 75). Defendants respond that Plaintiff is attempting to rewrite "one" to mean "one or more." (*Id.* at p. 74). Defendants note that the purpose of the invention is to avoid conflicts between multiple application programs, and associating a data set with more than one application program would conflict with the patent's stated goal. (*Id.*).

The Court finds that "one" should be construed, but agrees with Plaintiff that Defendants' proposed construction would not be helpful to the jury. The surrounding language makes clear that the applicants knew the difference between "one" and "one or more": "each data set comprising a representation of one or more force effects, wherein each one of the plurality of data sets is associated with one software application . . . ." ('288 patent, claim 18). Had the applicants meant "one or more," they would have used that language. I therefore find that "one" in this context does not mean "one or more." However, construing "one" as "one" does not provide any clarification as to the meaning of the term. The Court will therefore construe "one" to mean "one, and only one."

13. "application program"

a. *Plaintiff's proposed construction*: No construction is necessary. If construed, the term should be given its plain and ordinary meaning, within the context of the claim and consistent with the intrinsic evidence, which is "a computer program that is used for a specific user task"

- b. *Defendants' proposed construction*: a computer program that is used for a specific application, which is distinguished from a software routine or sub-program called by other programs and sub-programs
- c. *Court's construction*: No construction is necessary

Plaintiff argues that the meaning of term "application program" is well known to any smartphone or computer user. (D.I. 231 at p. 76). Plaintiff also provides dictionary definitions consistent with the broad, general understanding of the term "application program." (*Id.* at p. 77). Plaintiff further argues that Defendants' construction is more confusing that the term itself and will require jurors to "construe the construction." (*Id.*). Defendant argues that Plaintiff expressly defined "application program" when prosecuting the parent patent, and specifically distinguished software routines or sub-programs called by other programs and sub-programs. (*Id.* at pp. 78-79).

The Court agrees that Plaintiff distinguished software routines or sub-programs called by other programs and sub-programs while prosecuting the parent patent, but Defendants fail to address why that distinction is relevant or helpful in this case. The term "application program" is well understood by laypeople, and a jury would be more likely to be confused by Defendants' proposed construction than by the term itself. The Court therefore finds that no construction is necessary.

#### IV. CONCLUSION

Within five days the parties shall submit a proposed order consistent with this Memorandum Opinion suitable for submission to the jury.