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UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA

14 TS-OPTICS CORPORATION,
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16 Plaintiff,
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18 vs.
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20 MICROSOFT CORPORATION,
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22 Defendant.

Case No. 8:24-cv-01974-DOC-DFM

**DEFENDANT'S DISCLOSURE OF
PRELIMINARY CLAIM
CONSTRUCTIONS AND
SUPPORTING EVIDENCE**

JURY TRIAL DEMANDED

Pursuant to the Court’s Special Master Order (Dkt. 37), Defendant Microsoft Corporation (“Microsoft” or “Defendant”) hereby proposes the following constructions and identifies the following intrinsic/extrinsic evidence regarding the asserted claims of U.S. Patent Nos. 7,266,055 (“the ’055 Patent”) and 9,612,709 (“the ’709 Patent”) (collectively the “Asserted Patents”).

These constructions are based upon information known and reasonably available to Defendant at this time. Defendant reserves the right to amend, add, modify, remove terms or constructions or otherwise as may be appropriate, including to narrow the scope of any disputed issues, to better address the true focus of any dispute between the parties, to rebut any positions expressed by Plaintiff with respect to its proposed constructions or supporting evidence, as a result of ongoing discovery, and/or in response to the ongoing meet and confer process concerning construction of terms.

U.S. Patent No. 7,266,055

Term to be Construed	Claim(s)	Proposed Construction	Evidence
“facing each other”	1	“disposed opposite each other”	Specification: Figs. 4 and 8; 1:36-52; 3:59-61; 4:4-4:8; 4:15-28; 4:29-61; 6:23-38; 6:39-62; and 7:49-7:54; and Claims 5, 6, 7, 8, 10, 14, 15, 17, 21, 24, and 28. Prosecution History: - Applicant Arguments/Remarks Made in an Amendment (Apr. 5, 2007) at 2-3. Extrinsic Evidence: OXFORD ENGLISH DICTIONARY, https://doi.org/10.1093/OED/7343048389 (last visited July 14, 2025) (defining “facing”). MERRIAM-WEBSTER DICTIONARY, https://www.merriam-webster.com/dictionary/facing (last visited July 14, 2025) (defining “facing”).

Term to be Construed	Claim(s)	Proposed Construction	Evidence
			DICTIONARY.COM DICTIONARY, https://www.dictionary.com/browse/face-to-face (last visited July 14, 2025) (defining “face-to-face”). Microsoft identifies Dr. Ron Barrett as an expert witness who may provide testimony regarding the plain and ordinary meaning of this term to a person of ordinary skill in the art at the time of the invention. Dr. Barrett may also respond to any specific arguments made by Plaintiff or its expert.
“unipolar magnets”	40	indefiniteness based on 35 U.S.C. § 112	Specification: Figs. 4 and 5; 4:57-61; 6:24-38; and 10:17-31; and Claims 7, 8, 15, 21, and 28. Prosecution History: - Non-Final Office Action (Jan. 5, 2007) at 3. Extrinsic Evidence: PTAB-IPR2025-00767, Dkt. 1 (IPR Petition) at 13, 21-30, 40, 44, 52-55, 62-63, 76-77, and 81. PTAB-IPR2025-00767, Exhibit 1002 (Declaration of Masud Mansuripur) at ¶¶ 53, 66-82, 98103-105, 132, 133, 140, 165-169, 183-187, and 206-207. OXFORD ENGLISH DICTIONARY, https://doi.org/10.1093/OED/7328504311 (last visited July 14, 2025) (defining “unipolar”). Coleman, S. (1983). The Magnetic Monopole Fifty Years Later. In: Zichichi, A. (eds) The Unity of the Fundamental Interactions. Springer, Boston, MA. https://doi.org/10.1007/978-1-4613-3655-6_2. Rajantie, A. (2016). The search for magnetic monopoles. Physics Today 1

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Term to be Construed	Claim(s)	Proposed Construction	Evidence
			October 2016; 69 (10): 40–46. https://doi.org/10.1063/PT.3.3328 . Microsoft identifies Dr. Ron Barrett as an expert witness who may provide testimony regarding whether the term, read in light of the specification delineating the patent, and the prosecution history, inform with reasonable certainty those skilled in the art about the scope of the invention. Dr. Barrett may also respond to any specific arguments made by Plaintiff or its expert.

U.S. Patent No. 9,612,709

Term to be Construed	Claim(s)	Proposed Construction	Evidence
“Virtual controller client”	1; 2; 3; 4	Means plus function <u>Function:</u> “configured to remotely communicate with a virtual controller server running on a computer for remote key input to an application running on the computer” <u>Structure:</u> No corresponding structure disclosed. Therefore, the limitation is indefinite.	Specification: Abstract; Figs. 1, 3; 1:58-64; 2:23-28; 2:34-41; 2:46-50; 3:1-24; 3:27-62; 4:5-13; 4:58-67; 5:14-29; 5:38-6:6; 6:13-22; 6:29-40; 8:24-28; 8:43-47; 8:65-9:42. Prosecution History: - Non-Final Office Action (Jan. 13, 2016) at 2. - Amendment/Request for Reconsideration-After Non-Final Rejection (Apr. 12, 2016). Extrinsic Evidence: MICROSOFT COMPUTER DICTIONARY (102) (5th ed. 2002) (defining “client”). OXFORD ENGLISH DICTIONARY, https://doi.org/10.1093/OED/1178715870 (last visited July 14, 2025) (defining “client”). Microsoft identifies Dr. Ron Barrett as an expert witness who may provide testimony regarding whether sufficiently definite structure is recited in this limitation and whether sufficient structure for performing the recited function is disclosed to a person of ordinary skill in the art at the time of the claimed invention. Dr. Barrett may also respond to any specific arguments made by Plaintiff or its expert.
“Button setting adjusting unit”	1	Means plus function <u>Function:</u> “configured to receive first button setting information ... and to specify	Specification: Fig. 1; 1:65-2:4; 5:62-66; 6:61-7:2; 7:8-30. Prosecution History:

Term to be Construed	Claim(s)	Proposed Construction	Evidence
		an arrangement and attributes of virtual buttons based on the received first button setting information ... [and] configured to receive second button setting information.” <u>Structure</u>: No corresponding structure disclosed. Therefore, the limitation is indefinite.	- Non-Final Office Action (Jan. 13, 2016) at 5. - Final Office Action (Jun. 22, 2016) at 6. - Applicant Arguments/Remarks Made in an Amendment (Sep. 19, 2016). - Advisory Action (Oct. 26, 2016). - Amended Claims (Nov. 23, 2016). - Applicant Arguments/Remarks Made in an Amendment (Nov. 23, 2016) at 8-9. Extrinsic Evidence: OXFORD ENGLISH DICTIONARY, https://doi.org/10.1093/OED/5611052669 (last visited July 14, 2025) (defining “unit”). Microsoft identifies Dr. Ron Barrett as an expert witness who may provide testimony regarding whether sufficiently definite structure is recited in this limitation and whether sufficient structure for performing the recited function is disclosed to a person of ordinary skill in the art at the time of the claimed invention. Dr. Barrett may also respond to any specific arguments made by Plaintiff or its expert.
“User virtual button interface”	1; 2	Means plus function <u>Function</u>: “configured to generate a first virtual button screen based on the first button setting information ... and to display the first virtual button screen on a touch screen display device of the mobile terminal ... [and] in response to an occurrence of the	Specification: Fig. 1; 2:4-8; 2:20-22; 5:62-67; 7:31-36. Prosecution History: - Non-Final Office Action (Jan. 13, 2016) at 2. - Amendment/Request for Reconsideration-After Non-Final Rejection (Apr. 12, 2016). Extrinsic Evidence: MICROSOFT COMPUTER DICTIONARY (279-80) (5th ed. 2002) (defining “interface”).

Term to be Construed	Claim(s)	Proposed Construction	Evidence
		event in the application, ... configured to generate and display, on the touch screen display device of the mobile terminal, a second virtual button screen based on the second button information.” Additionally, the recited function may include “activat[ing] an acceleration sensor of the mobile terminal to enable a detection of movements of the mobile terminal.” <u>Structure:</u> No corresponding structure disclosed. Therefore, the limitation is indefinite.	OXFORD ENGLISH DICTIONARY, https://doi.org/10.1093/OED/6534811477 (last visited July 14, 2025) (defining “interface”). Microsoft identifies Dr. Ron Barrett as an expert witness who may provide testimony regarding whether sufficiently definite structure is recited in this limitation and whether sufficient structure for performing the recited function is disclosed to a person of ordinary skill in the art at the time of the claimed invention. Dr. Barrett may also respond to any specific arguments made by Plaintiff or its expert.
“Touch event filter”	1	Means plus function <u>Function:</u> “configured to generate touch input messages recognized as key input by the application, based on touch event objects that are generated from touch signals, of the touch regions corresponding to the virtual buttons, among touch signals input by the touch screen.”	Specification: Fig. 1; 2:9-14; 5:62-67; 7:59-8:3. Prosecution History: - Non-Final Office Action (Jan. 13, 2016) at 2. - Amendment/Request for Reconsideration-After Non-Final Rejection (Apr. 12, 2016). Extrinsic Evidence: MICROSOFT COMPUTER DICTIONARY (213-14) (5th ed. 2002) (defining “filter”). OXFORD ENGLISH DICTIONARY, https://doi.org/10.1093/OED/3472255355

Term to be Construed	Claim(s)	Proposed Construction	Evidence
		<u>Structure:</u> No corresponding structure disclosed. Therefore, the limitation is indefinite.	(last visited July 14, 2025) (defining “filter”). Microsoft identifies Dr. Ron Barrett as an expert witness who may provide testimony regarding whether sufficiently definite structure is recited in this limitation and whether sufficient structure for performing the recited function is disclosed to a person of ordinary skill in the art at the time of the claimed invention. Dr. Barrett may also respond to any specific arguments made by Plaintiff or its expert.
“Client message interfacing unit”	1; 2	Means plus function <u>Function:</u> “configured to convert the touch input message into a virtual input message in a form recognized by the virtual controller server, and to output, to the virtual controller server, the converted touch input message as the virtual input message.” Additionally, the recited function may include “convert[ing] the touch input message or the movement input message into a virtual input message in a form recognized by the virtual controller server.” <u>Structure:</u> No corresponding structure disclosed.	Specification: Fig. 1; 2:15-19; 2:29-33; 5:62-67; 8:14-19. Prosecution History: - Non-Final Office Action (Jan. 13, 2016) at 2. - Amendment/Request for Reconsideration-After Non-Final Rejection (Apr. 12, 2016). Extrinsic Evidence: OXFORD ENGLISH DICTIONARY, https://doi.org/10.1093/OED/5611052669 (last visited July 14, 2025) (defining “unit”). Microsoft identifies Dr. Ron Barrett as an expert witness who may provide testimony regarding whether sufficiently definite structure is recited in this limitation and whether sufficient structure for performing the recited function is disclosed to a person of ordinary skill in the art at the time of the claimed invention. Dr. Barrett may also respond to any specific arguments made by Plaintiff or its expert.

Term to be Construed	Claim(s)	Proposed Construction	Evidence
		Therefore, the limitation is indefinite.	
“Virtual controller server”	1; 2; 4; 8	Means plus function <u>Function:</u> “configured to remotely communicate with a virtual controller client running on a remote mobile terminal” <u>Structure:</u> No corresponding structure disclosed. Therefore, the limitation is indefinite.	Specification: Abstract; Figs. 1, 3; 1:58-2:3; 2:15-19; 2:29-53; 2:66-3:37; 3:46-51; 3:63-67; 4:10-22; 4:30-33; 4:38-42; 4:58-5:7; 5:14-37; 6:1-6; 6:13-22; 6:29-40; 6:65-7:2; 7:11-16; 8:14-19; 8:65-9:16; 9:33-47. Prosecution History: - Non-Final Office Action (Jan. 13, 2016) at 2. - Amendment/Request for Reconsideration-After Non-Final Rejection (Apr. 12, 2016). - Final Office Action (Jun. 22, 2016) at 9. - Applicant Arguments/Remarks Made in an Amendment (Sep. 19, 2016). - Advisory Action (Oct. 26, 2016). - Applicant Arguments/Remarks Made in an Amendment (Nov. 23, 2016) at 8-9. Extrinsic Evidence: MICROSOFT COMPUTER DICTIONARY (474) (5th ed. 2002) (defining “server”). OXFORD ENGLISH DICTIONARY, https://doi.org/10.1093/OED/2299470617 (last visited July 14, 2025) (defining “server”). Microsoft identifies Dr. Ron Barrett as an expert witness who may provide testimony regarding whether sufficiently definite structure is recited in this limitation and whether sufficient structure for performing the recited function is disclosed to a person of ordinary skill in the art at the time of the claimed invention. Dr. Barrett may also

Term to be Construed	Claim(s)	Proposed Construction	Evidence
			respond to any specific arguments made by Plaintiff or its expert.
“Acceleration data filter”	2	Means plus function <u>Function:</u> “configured to generate a movement input message that is mapped to a key input of the application, based on acceleration data that is generated based on an acceleration signal generated by the acceleration sensor.” <u>Structure:</u> No corresponding structure disclosed. Therefore, the limitation is indefinite.	Specification: Figs. 1, 3; 5:62-67; 8:4-12; 9:28-32. Prosecution History: - Non-Final Office Action (Jan. 13, 2016) at 9. - Amendment/Request for Reconsideration-After Non-Final Rejection (Apr. 12, 2016). - Applicant Arguments/Remarks Made in an Amendment (Apr. 12, 2016). - Final Office Action (Jun. 22, 2016) at 9. Extrinsic Evidence: MICROSOFT COMPUTER DICTIONARY (213-14) (5th ed. 2002) (defining “filter”). OXFORD ENGLISH DICTIONARY, https://doi.org/10.1093/OED/3472255355 (last visited July 14, 2025) (defining “filter”). Microsoft identifies Dr. Ron Barrett as an expert witness who may provide testimony regarding whether sufficiently definite structure is recited in this limitation and whether sufficient structure for performing the recited function is disclosed to a person of ordinary skill in the art at the time of the claimed invention. Dr. Barrett may also respond to any specific arguments made by Plaintiff or its expert.
“Button setting generating unit”	4	Means plus function <u>Function:</u> “configured to generate and transmit, to the virtual controller	Specification: Fig. 1; 2:42-45; 5:30-37; 6:29-35; 7:3-7; 8:24-28.

Term to be Construed	Claim(s)	Proposed Construction	Evidence
		client, first button setting information including a mapping relationship between key inputs to the application and associated virtual input messages ...[and] is further configured to, in response to an occurrence of the event in the application, generate and transmit, to the virtual controller client, second button setting information including the dynamically changed virtual input message associated with the given key input.” <u>Structure:</u> No corresponding structure disclosed. Therefore, the limitation is indefinite.	Prosecution History: - Non-Final Office Action (Jan. 13, 2016) at 5. - Final Office Action (Jun. 22, 2016) at 6. - Advisory Action (Oct. 26, 2016). - Amended Claims (Nov. 23, 2016). - Applicant Arguments/Remarks Made in an Amendment (Nov. 23, 2016) at 8-9. Extrinsic Evidence: OXFORD ENGLISH DICTIONARY, https://doi.org/10.1093/OED/5611052669 (last visited July 14, 2025) (defining “unit”). Microsoft identifies Dr. Ron Barrett as an expert witness who may provide testimony regarding whether sufficiently definite structure is recited in this limitation and whether sufficient structure for performing the recited function is disclosed to a person of ordinary skill in the art at the time of the claimed invention. Dr. Barrett may also respond to any specific arguments made by Plaintiff or its expert.
“Server message interfacing unit”	4; 5	Means plus function <u>Function:</u> “configured to transmit a setting message including the first button setting information to the virtual controller client, and to receive a virtual input message from the virtual controller client, the virtual input message	Specification: Fig. 1; 2:46-50; 2:54-58; 5:30-33; 7:3-7; 8:20-23. Prosecution History: - Non-Final Office Action (Jan. 13, 2016) at 5. - Final Office Action (Jun. 22, 2016) at 6. Extrinsic Evidence: OXFORD ENGLISH DICTIONARY, https://doi.org/10.1093/OED/5611052669

Term to be Construed	Claim(s)	Proposed Construction	Evidence
		being generated based on a touch on the touch screen display device of the mobile terminal ... [and] operable to receive a virtual input message generated based on a movement of the mobile terminal.” <u>Structure:</u> No corresponding structure disclosed. Therefore, the limitation is indefinite.	(last visited July 14, 2025) (defining “unit”). Microsoft identifies Dr. Ron Barrett as an expert witness who may provide testimony regarding whether sufficiently definite structure is recited in this limitation and whether sufficient structure for performing the recited function is disclosed to a person of ordinary skill in the art at the time of the claimed invention. Dr. Barrett may also respond to any specific arguments made by Plaintiff or its expert.
“Key mapping unit”	4; 6; 7	Means plus function <u>Function:</u> “configured to identify a key input value mapped to the received virtual input message based on the first button setting information ... [and] further configured to identify the key input value mapped to the dynamically changed virtual input message based on the second button setting information.” Additionally, the recited function may include “transfer[ing] a key input value to the application via a message transfer architecture of an	Specification: Fig. 1; 2:51-53; 2:59-65; 5:30-33; 8:20-28. Prosecution History: - Non-Final Office Action (Jan. 13, 2016) at 6. - Final Office Action (Jun. 22, 2016) at 6; 8. Extrinsic Evidence: OXFORD ENGLISH DICTIONARY, https://doi.org/10.1093/OED/5611052669 (last visited July 14, 2025) (defining “unit”). Microsoft identifies Dr. Ron Barrett as an expert witness who may provide testimony regarding whether sufficiently definite structure is recited in this limitation and whether sufficient structure for performing the recited function is disclosed to a person of ordinary skill in the art at the time of the claimed invention. Dr. Barrett may also respond to any specific arguments made by Plaintiff or its expert.

Term to be Construed	Claim(s)	Proposed Construction	Evidence
		operating system that runs the application on the computer” and/or ”transfer[ing] a key input value to the application via an input and output application programming interface (API) of an operating system that runs the application on the computer.” <u>Structure:</u> No corresponding structure disclosed. Therefore, the limitation is indefinite.	

Dated: July 14, 2025

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By /s/ Andrew V. Devkar

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on July 14, 2025, the undersigned caused a copy of the foregoing document to be served on all counsel of record, via email, pursuant to the Federal Rules of Civil Procedure.

/s/ Andrew V. Devkar
Andrew V. Devkar