UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

BRAIN CORPORATION, *Plaintiff and Counterclaim-Defendant*, v. AVIDBOTS CORP. AND AVIDBOTS USA CORP., *Defendants and Counterclaim-Plaintiffs*.	Case No. 1:24-cv-12569 Honorable Jeremy C. Daniel **TRIAL BY JURY REQUESTED**

AVIDBOTS'S FIRST AMENDED ANSWER AND COUNTERCLAIMS TO BRAIN'S COMPLAINT FOR PATENT INFRINGEMENT

[redacted]

Pursuant to paragraph 6.d.i of the Rule 26(f) Report of the Parties' Planning Meeting (Dkt. 34 at 7) (allowing this amendment of pleadings without a showing of good cause), Defendants Avidbots Corp. and Avidbots USA Corp. (together, "Avidbots"), by and through their counsel, respectfully submit this First Amended Answer and Counterclaims to the Complaint for Patent Infringement (Dkt. 1, "Complaint") filed by Plaintiff Brain Corporation ("Brain") and assert defenses as follows:

ANSWER

GENERAL DENIAL

Avidbots responds in numbered paragraphs corresponding to the numbered paragraphs of the Complaint. Unless specifically admitted below, Avidbots denies each and every allegation of the Complaint. To the extent the headings of the Complaint are construed as allegations, they are

each denied. Avidbots reproduces the headings from the Complaint solely as a guide for the reader. The responses below reflect Avidbots's current knowledge and belief regarding Brain's allegations and may be supplemented or amended in view of information discovered during the course of this proceeding. Avidbots specifically denies liability to Brain, or that Brain has suffered any legally cognizable damages for which Avidbots is responsible.

THE PARTIES

1. Avidbots is without knowledge or information sufficient to form a belief as to the truth of the allegations set forth in Paragraph 1 of the Complaint, and, therefore, denies all allegations of Paragraph 1 of the Complaint.

2. Avidbots is not aware of an entity called "Avidbots Corporation." Avidbots herein will understand "Avidbots Corporation" and "Avidbots Corp." in Brain's Complaint to refer to Avidbots Corp. Avidbots admits that Avidbots Corp. is a Canadian corporation having a principal place of business at 45 Washburn Drive, Kitchener, Ontario, N2R 1S1, Canada.

3. Avidbots is not aware of an entity called "Avidbots USA Corporation." Avidbots herein will understand "Avidbots USA Corporation" and "Avidbots USA" in Brain's Complaint to refer to Avidbots USA Corp. Avidbots admits that Avidbots USA Corp. is a Delaware corporation having a principal place of business at 5400 Newport Dr., Suite 7, Rolling Meadows, Illinois 60008.

JURISDICTION AND VENUE

4. The allegations of Paragraph 4 contain legal conclusions to which no response is required. To the extent a response is required, Avidbots admits that the Complaint purports to be a patent infringement action arising under the patent laws of the United States, 35 U.S.C. §§ 271 and 281, *et seq*. Avidbots denies that Brain Corporation has stated a legally sufficient claim for patent infringement, and further specifically denies any infringement.

5. The allegations of Paragraph 5 contain legal conclusions to which no response is required. To the extent a response is required, Avidbots admits this Court has subject matter jurisdiction over claims of patent infringement pursuant to 28 U.S.C. § 1331 and 1338(a).

6. Certain allegations of Paragraph 6 contain legal conclusions to which no response is required. Avidbots admits that Avidbots Corp. has a principal place of business in Kitchener, Ontario, Canada and that Avidbots Corp. has an office in Rolling Meadows, Illinois. Avidbots admits that Avidbots USA Corp. is a wholly owned subsidiary of Avidbots Corp. Avidbots otherwise denies the allegations of Paragraph 6 of the Complaint.

7. Certain allegations of Paragraph 7 contain legal conclusions to which no response is required. Avidbots admits that Avidbots USA Corp. is a wholly owned subsidiary of Avidbots Corp. Avidbots admits that Avidbots USA Corp. is incorporated in Delaware and maintains its principal place of business in Rolling Meadows, Illinois. Avidbots otherwise denies the allegations of Paragraph 7 of the Complaint.

8. Avidbots Corp. admits that it offers products for sale in Illinois. Avidbots otherwise denies the allegations of Paragraph 8 of the Complaint, including any allegation that Avidbots has committed acts of patent infringement or that any Avidbots accused product infringes a Brain asserted patent.

9. Avidbots USA Corp. denies the allegations of Paragraph 9 of the Complaint.

10. Certain allegations of Paragraph 10 contain legal conclusions to which no response is required. Avidbots admits that Avidbots Corp. and Avidbots USA Corp. maintain an office in Rolling Meadows, Illinois. Avidbots Corp. and Avidbots USA Corp. do not contest venue in this lawsuit. Avidbots otherwise denies the remaining allegations of Paragraph 10 of the Complaint, including any allegation that Avidbots has committed acts of patent infringement.

STATEMENT OF THE CASE

11. The allegations of Paragraph 11 contain legal conclusions to which no response is required. To the extent a response is required, Avidbots admits that Brain's Complaint purports to allege claims of patent infringement. Avidbots denies that Brain has stated a legally sufficient claim for patent infringement, and further specifically denies any infringement.

12. Avidbots is without knowledge or information sufficient to form a belief as to the truth of the allegations set forth in Paragraph 12 of the Complaint and, therefore, denies all allegations of Paragraph 12 of the Complaint.

13. Avidbots is without knowledge or information sufficient to form a belief as to the truth of the allegations set forth in Paragraph 13 of the Complaint and, therefore, denies all allegations of Paragraph 13 of the Complaint.

14. Avidbots is without knowledge or information sufficient to form a belief as to the truth of the allegations set forth in Paragraph 14 of the Complaint and, therefore, denies all allegations of Paragraph 14 of the Complaint.

15. Avidbots is without knowledge or information sufficient to form a belief as to the truth of the allegations set forth in Paragraph 15 of the Complaint and, therefore, denies all allegations of Paragraph 15 of the Complaint.

16. Avidbots is without knowledge or information sufficient to form a belief as to the truth of the allegations set forth in Paragraph 16 of the Complaint and, therefore, denies all allegations of Paragraph 16 of the Complaint.

17. Avidbots is without knowledge or information sufficient to form a belief as to the truth of the allegations set forth in Paragraph 17 of the Complaint and, therefore, denies all allegations of Paragraph 17 of the Complaint.

18. Avidbots admits that the five patents asserted in Brain's Complaint identify on their face Brain Corporation as their original assignee. Avidbots denies that those patents "disclose and claim innovations for improving robotic autonomous navigation and object detection." Avidbots is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations set forth in Paragraph 18 of the Complaint and, therefore, denies those allegations.

19. Avidbots denies that it has "unfairly benefitted from Brain's technologies by using these innovations." Avidbots also denies any allegation that Avidbots has committed acts of patent infringement. Avidbots is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations set forth in Paragraph 19 of the Complaint and, therefore, denies those allegations.

20. Avidbots denies that it "first launched a floor-scrubbing robot, Neo in 2017," as the Avidbots Neo was on sale, in public use, and/or sold at least by October of 2016. Avidbots admits that it issued a press release announcing the launch of the Avidbots Neo 2 in September 2020, it issued a press release announcing the launch of the Avidbots Neo 2W in April 2023, and it issued a press release announcing the launch of the Avidbots Kas in April 2024. Avidbots admits that each of these robots includes certain functionality that relies on a map of its environment and certain functionality that accounts for an object encountered in an area. Avidbots denies the remaining allegations of Paragraph 20 of the Complaint, including any allegation that Avidbots has committed acts of patent infringement or that any Avidbots accused product infringes a Brain asserted patent.

21. Avidbots admits that the Avidbots Neo, Neo 2, Neo 2W, and Kas execute a version of certain software that is currently marketed under the name Avidbots Autonomy but Avidbots Autonomy does not refer to a single version of software so the version used on any of Neo, Neo 2,

Neo 2W, and Kas may vary. Avidbots admits that the photo and caption under Paragraph 21 appear to be taken from Avidbots marketing materials. Avidbots denies the remaining allegations of Paragraph 21 of the Complaint.

22. Avidbots admits that at least one page on the Avidbots.com website as of the date of this Answer and Counterclaims states, in part: "A leading-edge combination of machine-learning powered obstacle detection and sophisticated autonomous path planning algorithms, our industry-tailored feature sets maximize productivity within your space." Avidbots denies the remaining allegations of Paragraph 22 of the Complaint.

23. Avidbots admits that the Avidbots Neo, Neo 2, Neo 2W, and Kas operate based on the instructions in the executable software installed on those products. Avidbots denies the remaining allegations of Paragraph 23 of the Complaint.

THE PATENTS-IN-SUIT

24. Avidbots admits that Brain's Complaint purports to attach as Appendix 1 a copy of U.S. Patent No. 10,001,780 (the "'780 patent"). Avidbots admits that the '780 patent on its face is titled "Systems and Methods for Dynamic Route Planning in Autonomous Navigation." Avidbots admits that the '780 patent on its face identifies Brain Corporation as its original assignee and June 19, 2018, as its date of issuance. Avidbots is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations set forth in Paragraph 24 of the Complaint and, therefore, denies those allegations.

25. Avidbots admits that Brain's Complaint purports to attach as Appendix 2 a copy of U.S. Patent No. 10,379,539 (the "'539 patent"). Avidbots admits that the '539 patent on its face is titled "Systems and Methods for Dynamic Route Planning in Autonomous Navigation." Avidbots admits that the '539 patent on its face identifies Brain Corporation as its original assignee and

August 13, 2019 as its date of issuance. Avidbots is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations set forth in Paragraph 25 of the Complaint and, therefore, denies those allegations.

26. Avidbots admits that Brain's Complaint purports to attach as Appendix 3 a copy of U.S. Patent No. 10,274,325 (the "'325 patent"). Avidbots admits that the '325 patent on its face is titled "Systems and Methods for Robotic Mapping." Avidbots admits that the '325 patent on its face identifies Brain Corporation as its original assignee and April 30, 2019 as its date of issuance. Avidbots is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations set forth in Paragraph 26 of the Complaint and, therefore, denies those allegations.

27. Avidbots admits that Brain's Complaint purports to attach as Appendix 4 a copy of U.S. Patent No. 10,823,576 (the "'576 patent). Avidbots admits that the '576 patent on its face is titled "Systems and Methods for Robotic Mapping." Avidbots admits that the '576 patent on its face identifies Brain Corporation as its original assignee and November 3, 2020 as its date of issuance. Avidbots is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations set forth in Paragraph 27 of the Complaint and, therefore, denies those allegations.

28. Avidbots admits that Brain's Complaint purports to attach as Appendix 5 a copy of U.S. Patent No. 10,728,436 (the "'436 patent"). Avidbots admits that the '436 patent on its face is titled "Optical Detection Apparatus and Methods." Avidbots admits that the '436 patent on its face identifies Brain Corporation as its original assignee and July 28, 2020 as its date of issuance. Avidbots is without knowledge or information sufficient to form a belief as to the truth of the

remaining allegations set forth in Paragraph 28 of the Complaint and, therefore, denies those allegations.

FIRST CAUSE OF ACTION

(INFRINGEMENT OF U.S. PATENT NO. 10,001,780)

29. Paragraphs 1–28 of Avidbots's Answer, above, are incorporated by reference as if set forth herein.

30. Avidbots denies the allegations of Paragraph 30 of the Complaint.

31. Avidbots admits that certain autonomous robots may include certain functionality to account for obstacles in the robot's path. Avidbots is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations set forth in Paragraph 31 of the Complaint and, therefore, denies those allegations.

32. Avidbots denies the allegations of Paragraph 32 of the Complaint.

33. Avidbots denies the allegations of Paragraph 33 of the Complaint.

34. Avidbots denies the allegations of Paragraph 34 of the Complaint.

35. Avidbots is without knowledge or information sufficient to form a belief as to the truth of the allegations set forth in Paragraph 35 of the Complaint and, therefore, denies all allegations of Paragraph 35 of the Complaint.

36. Avidbots denies the allegations of Paragraph 36 of the Complaint.

37. Avidbots denies the allegations of Paragraph 37 of the Complaint.

38. Avidbots denies the allegations of Paragraph 38 of the Complaint.

39. Avidbots denies the allegations of Paragraph 39 of the Complaint.

40. Avidbots denies the allegations of Paragraph 40 of the Complaint.

41. Avidbots denies the allegations of Paragraph 41 of the Complaint.

42. Avidbots denies the allegations of Paragraph 42 of the Complaint.

43. Avidbots denies the allegations of Paragraph 43 of the Complaint.

44. Avidbots denies the allegations of Paragraph 44 of the Complaint.

45. Avidbots denies the allegations of Paragraph 45 of the Complaint.

SECOND CAUSE OF ACTION

(INFRINGEMENT OF U.S. PATENT. NO. 10,379,539)

46. Paragraphs 1–45 of Avidbots's Answer, above, are incorporated by reference as if set forth herein.

47. Avidbots admits that the '539 patent is a continuation of the '780 patent. Avidbots otherwise denies the allegations of Paragraph 47 of the Complaint.

48. Avidbots denies the allegations of Paragraph 48 of the Complaint.

49. Avidbots denies the allegations of Paragraph 49 of the Complaint.

50. Avidbots denies the allegations of Paragraph 50 of the Complaint.

51. Avidbots denies the allegations of Paragraph 51 of the Complaint.

52. Avidbots denies the allegations of Paragraph 52 of the Complaint.

53. Avidbots denies the allegations of Paragraph 53 of the Complaint.

54. Avidbots denies the allegations of Paragraph 54 of the Complaint.

55. Avidbots denies the allegations of Paragraph 55 of the Complaint.

56. Avidbots denies the allegations of Paragraph 56 of the Complaint.

57. Avidbots denies the allegations of Paragraph 57 of the Complaint.

58. Avidbots denies the allegations of Paragraph 58 of the Complaint.

59. Avidbots denies the allegations of Paragraph 59 of the Complaint.

60. Avidbots denies the allegations of Paragraph 60 of the Complaint.

61. Avidbots denies the allegations of Paragraph 61 of the Complaint.

THIRD CAUSE OF ACTION

(INFRINGEMENT OF U.S. PATENT. NO. 10,274,325)

62. Paragraphs 1–61 of Avidbots's Answer, above, are incorporated by reference as if set forth herein.

63. Avidbots denies the allegations of Paragraph 63 of the Complaint.

64. Avidbots admits that certain autonomous robots may include certain functionality to map their environment. Avidbots is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations set forth in Paragraph 64 of the Complaint and, therefore, denies those allegations.

65. Avidbots denies the allegations of Paragraph 65 of the Complaint.

66. Avidbots denies the allegations of Paragraph 66 of the Complaint.

67. Avidbots denies the allegations of Paragraph 67 of the Complaint.

68. Avidbots denies the allegations of Paragraph 68 of the Complaint.

69. Avidbots denies the allegations of Paragraph 69 of the Complaint.

70. Avidbots denies the allegations of Paragraph 70 of the Complaint.

71. Avidbots denies the allegations of Paragraph 71 of the Complaint.

72. Avidbots denies the allegations of Paragraph 72 of the Complaint.

73. Avidbots denies the allegations of Paragraph 73 of the Complaint.

74. Avidbots denies the allegations of Paragraph 74 of the Complaint.

75. Avidbots denies the allegations of Paragraph 75 of the Complaint.

76. Avidbots denies the allegations of Paragraph 76 of the Complaint.

77. Avidbots denies the allegations of Paragraph 77 of the Complaint.

FOURTH CAUSE OF ACTION

(INFRINGEMENT OF U.S. PATENT. NO. 10,823,576)

78. Paragraphs 1–77 of Avidbots's Answer, above, are incorporated by reference as if set forth herein.

79. Avidbots admits that the '576 patent is a continuation of the '325 patent. Avidbots otherwise denies the allegations of Paragraph 79 of the Complaint.

80. Avidbots admits that certain autonomous robots may include certain functionality to map their environment. Avidbots is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations set forth in Paragraph 80 of the Complaint and, therefore, denies those allegations.

81. Avidbots denies the allegations of Paragraph 81 of the Complaint.

82. Avidbots denies the allegations of Paragraph 82 of the Complaint.

83. Avidbots denies the allegations of Paragraph 83 of the Complaint.

84. Avidbots denies the allegations of Paragraph 84 of the Complaint.

85. Avidbots denies the allegations of Paragraph 85 of the Complaint.

86. Avidbots denies the allegations of Paragraph 86 of the Complaint.

87. Avidbots denies the allegations of Paragraph 87 of the Complaint.

88. Avidbots denies the allegations of Paragraph 88 of the Complaint.

89. Avidbots denies the allegations of Paragraph 89 of the Complaint.

90. Avidbots denies the allegations of Paragraph 90 of the Complaint.

91. Avidbots denies the allegations of Paragraph 91 of the Complaint.

FIFTH CAUSE OF ACTION

(INFRINGEMENT OF U.S. PATENT. NO. 10,728,436)

92. Paragraphs 1–91 of Avidbots's Answer, above, are incorporated by reference as if set forth herein.

93. Avidbots denies the allegations of Paragraph 93 of the Complaint.

94. Avidbots admits that certain autonomous robots may include certain functionality to account for objects in their environment. Avidbots is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations set forth in Paragraph 94 of the Complaint and, therefore, denies those allegations.

95. Avidbots denies the allegations of Paragraph 95 of the Complaint.

96. Avidbots denies the allegations of Paragraph 96 of the Complaint.

97. Avidbots denies the allegations of Paragraph 97 of the Complaint.

98. Avidbots denies the allegations of Paragraph 98 of the Complaint.

99. Avidbots denies the allegations of Paragraph 99 of the Complaint.

100. Avidbots denies the allegations of Paragraph 100 of the Complaint.

101. Avidbots denies the allegations of Paragraph 101 of the Complaint.

102. Avidbots denies the allegations of Paragraph 102 of the Complaint.

103. Avidbots denies the allegations of Paragraph 103 of the Complaint.

104. Avidbots denies the allegations of Paragraph 104 of the Complaint.

105. Avidbots denies the allegations of Paragraph 105 of the Complaint.

RESPONSE TO BRAIN'S PRAYER FOR RELIEF

A response is not required to Brain's prayer for relief. To the extent that a response is deemed required, Avidbots denies that Brain is entitled to the relief it seeks or to any relief at all for the allegations made in the Complaint. Avidbots has not infringed any valid and enforceable claim of any asserted Brain patent, and Brain is not entitled to any remedy or recovery. Brain's prayer should therefore be denied in its entirety and with prejudice, and Brain should not be entitled to anything.

RESPONSE TO BRAIN'S JURY DEMAND

A response is not required to Brain's demand for a jury trial, but Avidbots also requests trial by jury of all issues in Brain's Complaint to which it is entitled.

AFFIRMATIVE AND OTHER DEFENSES

Pursuant to Federal Rule of Civil Procedure 8(c), Avidbots asserts the following affirmative and other defenses. Assertion of a defense is not a concession that Avidbots has the burden of proving the matter asserted. In addition to the defenses described below, Avidbots expressly reserves the right to allege additional defenses as they become known.

FIRST DEFENSE

(Failure to State a Claim)

1. Brain fails to state a claim upon which relief can be granted.

SECOND DEFENSE

(Non-Infringement)

2. Avidbots has not infringed and currently does not infringe, either directly, jointly, or indirectly, any valid and enforceable claim of any patent that Brain asserts, or will properly

assert, that Avidbots has infringed, literally, under the doctrine of equivalents, or in any other manner.

THIRD DEFENSE

(Invalidity and Patent Ineligibility)

3. One or more claims of Brain's asserted patents are invalid, patent ineligible, void and/or unenforceable for failure to meet one or more of the conditions of patentability and/or patent eligibility specified in Title 35 of the United States Code, including, without limitation, Sections 101, 102, 103, 112, 115, and/or 116, and for improper inventorship, derivation and/or the doctrine of non-statutory double-patenting.

FOURTH DEFENSE

(Prosecution History Estoppel / Prosecution Disclaimer / Ensnarement)

4. Brain is barred by the doctrine of prosecution history estoppel, prosecution disclaimer, and/or ensnarement from contending that any claim of the asserted patents covers any product, service, or method practiced, manufactured, used, sold, or offered for sale by Avidbots, in any manner inconsistent with arguments made by the patent applicant or assignees in prosecuting the patent, with respect to any subject matter surrendered during prosecution of the patent, or in such a manner that would ensnare the prior art.

FIFTH DEFENSE

(Equitable Defenses and Unenforceability) [HC-AEO]

5. Brain's claims for relief against Avidbots are barred in whole or in part by the equitable doctrines of estoppel, unclean hands, patent misuse, waiver, implied waiver, implied license, and/or acquiescence or one or more of the asserted patents is otherwise unenforceable against Avidbots. In particular, each of the Asserted Patents is unenforceable on account of Brain's

inequitable conduct during and after prosecution of the Asserted Patents, including deliberately withholding material art from the Examiner during prosecution, and deliberately and falsely claiming Small Entity status and thus withholding the full fee required for prosecution, issuance, and maintenance of each of the Asserted Patents.

6. "To prevail on a claim of inequitable conduct, the accused infringer must prove that the patentee acted with the specific intent to deceive the PTO." *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276, 1290 (Fed. Cir. 2011). To do so, a patent challenger must show that the patentee acted with specific intent to deceive, and that their acts were material to the Examiner's decision to issue the patent. *Id.* "Because direct evidence of deceptive intent is rare, a district court may infer intent from indirect and circumstantial evidence. . . . [T]he specific intent to deceive must be 'the single most reasonable inference able to be drawn from the evidence.'" *Id.* (*quoting Star Sci., Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d 1357, 1366 (Fed. Cir. 2008)).

7. "[T]he materiality required to establish inequitable conduct is but-for materiality. When an applicant fails to disclose prior art to the PTO, that prior art is but-for material if the PTO would not have allowed a claim had it been aware of the undisclosed prior art." *Therasense*, 649 F.3d, at 1921. Further, "statements critical to the 'survival of the patent'—even though they do not, strictly speaking, bear on patentability—also can be material within the meaning of *Therasense*." *In re Rembrandt Techs. LP Pat. Litig.*, 899 F.3d 1254, 1273 n.** (Fed. Cir. 2018). Such statements include a "false declaration of small entity status." *Id.* (*citing Ulead Sys., Inc. v. Lex Computer & Mgmt. Corp.*, 351 F.3d 1139, 1146 (Fed. Cir. 2003)).

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Avidbots Ex1018
Avidbots Corp. v. Brain Corp.
IPR2025-01601
Page 22 of 67

[redacted]

[redacted]

SIXTH DEFENSE

(Release, License, and Exhaustion)

24. Brain's claims for relief against Avidbots are barred, in whole or in part, by release, license, or exhaustion, express or implied, and/or restrictions on double recovery.

SEVENTH DEFENSE

(No Exceptional Case)

25. Brain cannot prove that this is an exceptional case justifying an award of attorneys' fees against Avidbots under 35 U.S.C. § 285.

EIGHTH DEFENSE

(Statutory Limitation on Damages and Costs)

26. Brain's right to seek damages or costs is limited, including without limitation by 35 U.S.C. §§ 286, 287, and 288. To the extent that Brain, its alleged predecessor(s)-in-interest to any of the asserted patents, or any licensee of any of the asserted patents failed to properly mark any of its relevant products as required by 35 U.S.C. § 287 or otherwise give proper notice that Avidbots's actions allegedly infringed any claim of any of the asserted patents, Avidbots is not liable to Brain for the acts alleged to have been performed by Avidbots before it received actual notice of alleged infringement. Under 35 U.S.C. § 288, Brain is precluded from recovering costs associated with this action.

NINTH DEFENSE

(No Willful or Egregious Conduct)

27. Brain is not entitled to enhanced damages under 35 U.S.C. § 284, at least because Brain has failed to show, and cannot show, that any infringement has been willful, wanton, malicious, bad-faith, deliberate, consciously wrongful, flagrant, and/or characteristic of a pirate.

TENTH DEFENSE

(Lack of Standing)

28. To the extent that Brain did not, or does not, hold all substantial rights, title, and interest in one or more of the asserted patents, Brain lacks standing to bring, or maintain, this lawsuit in connection with such patent.

ELEVENTH DEFENSE

(Territoriality)

29. To the extent Brain's claims are directed to acts occurring outside of the United States, those claims are barred or limited by the doctrine of territoriality set forth by 35 U.S.C. § 271 *et seq*., including but not limited to § 271(a) and (c).

TWELFTH DEFENSE

(Government Sales)

30. Brain's claims for relief and recovery, if any, are limited by 28 U.S.C. § 1498.

THIRTEENTH DEFENSE

(Prior Use)

31. To the extent that the priority date of any of the asserted patents is found to post-date by more than one year the activity of Avidbots that is accused of infringement, then Brain cannot recover from Avidbots for claims that such activity infringes in view of 35 U.S.C. §§ 273, 282(b). For avoidance of doubt, Avidbots does not concede that any accused conduct constitutes patent infringement.

FOURTEENTH DEFENSE

(Reservation of Defenses)

32. Avidbots reserves all affirmative defenses under Rule 8(c) of the Federal Rules of Civil Procedure, the patent laws of the United States, and any other defenses at law or in equity that may exist now or that may be available in the future, including (but not limited to) those related to the unenforceability of any claim of the asserted patents based on inequitable conduct, based on discovery and further factual investigation in this action.

COUNTERCLAIMS

Counterclaim-Plaintiffs Avidbots Corp. and Avidbots USA Corp. (together, "Counterclaim-Plaintiffs" or "Avidbots") by and through their attorneys, hereby file counterclaims ("the Counterclaims") against Counterclaim-Defendant Brain Corporation ("Counterclaim-Defendant" or "Brain"). Counterclaims 1 through 5 are brought by Avidbots Corp. only. Counterclaims 6 through 15 are brought by both Avidbots Corp. and Avidbots USA Corp.

NATURE OF THE ACTION

1. This action arises from Brain's allegations of infringement of United States Patent Nos. 10,001,780 (the "'780 patent"), 10,379,539 (the "'539 patent"), 10,274,325 (the "'325 patent"), 10,823,576 (the "'576 patent"), and 10,728,436 (the "'436 patent") (collectively, "Brain's Patents-in-Suit").

2. This is also an action for infringement of United States Patent Nos. 10,667,664 (the "'664 Patent"), 10,206,550 (the "'550 Patent"), 11,510,545 (the "'545 Patent"), 11,844,474 (the "'474 Patent"), and 11,531,347 (the "'347 Patent") (collectively, "Avidbots Corp.'s Asserted Patents"), which are directed to novel and innovative autonomous cleaning robot technologies, under the patent laws of the United States, 35 U.S.C. § 1 *et seq*.

3. Avidbots Corp. seeks judgment that Brain has infringed, and continues to infringe, Avidbots Corp.'s Asserted Patents.

4. Avidbots Corp. and Avidbots USA Corp. seek declaratory judgment that Avidbots has not infringed Brain's Patents-in-Suit and that Brain's Patents-in-Suit are invalid.

THE PARTIES

5. Counterclaim-Plaintiff Avidbots Corp. is a Canadian corporation having its principal place of business at 45 Washburn Drive, Kitchener, Ontario, N2R 1S1, Canada. Since

2014, Avidbots Corp. has been designing, manufacturing, and selling groundbreaking and innovative autonomous cleaning robots.

6. Counterclaim-Plaintiff Avidbots USA Corp. ("Avidbots USA") is a Delaware corporation with its principal place of business at 5400 Newport Dr., Suite 7, Rolling Meadows, Illinois 60008.

7. According to the Complaint (¶ 1), Counterclaim-Defendant Brain is a California corporation having its principal place of business at 10182 Telesis Court, Suite 100, San Diego, California 92121.

JURISDICTION AND VENUE

8. The Court has jurisdiction over the subject matter of these Counterclaims pursuant to 28 U.S.C. §§ 1331, 1338(a), 1367, 2201, and/or 2202.

9. This Court has jurisdiction over Brain because Brain commenced and continues to maintain this action against Avidbots in this District and, by filing the Complaint in this action, Brain subjected itself to the jurisdiction of this Court for purposes of these Counterclaims.

10. Venue is proper in this District for these Counterclaims under 28 U.S.C. § 1391 because Brain has consented to venue in this District by filing this action.

STATEMENT OF THE CASE

11. Avidbots Corp. is a global leader in autonomous commercial cleaning robots. Since its founding in 2014, Avidbots Corp. has been designing, manufacturing, selling, servicing, and supporting autonomous cleaning robots that expand human potential. Avidbots Corp. develops, tests, and deploys state-of-the-art automation technology tailored to address the challenges of cleaning commercial spaces. As a true pioneer, Avidbots Corp. has always offered the most advanced automation features in the industry, resulting in more consistent cleans, less downtime,

and less need for operator intervention. Today, Avidbots Corp.'s groundbreaking fully autonomous floor scrubbing robots are widely deployed by the world's leading facilities, including airports, warehouses, manufacturing sites, malls, universities, and other commercial spaces worldwide.

12. Avidbots Corp. protects its technology in the United States. It filed its first United States Provisional Patent Application related to autonomous cleaning robots in 2014. At present, it has been granted eight patents related to autonomous cleaning in the United States, and it has eleven published pending applications. Among the patents granted are Avidbots Corp.'s Asserted Patents, the '664 Patent, the '550 Patent, the '545 Patent, the '474 Patent, and the '347 Patent.

13. Avidbots Corp. has received widespread industry recognition. For example, it was recognized as one of the Fastest Growing Companies in North America in 2021[1] and one of Canada's top 20 AI companies in 2023.[2] Avidbots Corp.'s Neo 2W was also the recipient of a 2023 Top Software & Tech Award,[3] and its Kas robot was the recipient of a Good Design 2024 award.[4] Numerous industry articles have also detailed the benefits of Avidbots Corp.'s products. For example, Avidbots Corp. was featured in an Aviation Pros article regarding the positive effects the Neo has had on international airports, with an Airport Chief Innovation Officer explaining that the Neo enabled the airport to clean large areas of flooring without shutting down sections of the

---

[1] "Avidbots named one of Deloitte's 2021 Technology Fast 500 as one of North America's fastest growing companies," (Nov. 17, 2021), https://avidbots.com/news/avidbots-awarded-deloittes-2021-technology-fast-500/, last accessed May 1, 2025.

[2] "Avidbots named one of Canada's top 20 AI companies by the Vector Institute," (Dec. 16, 2022), https://avidbots.com/news/avidbots-named-one-of-canadas-top-20-ai-companies-by-the-vector-institute/, last accessed May 6, 2025.

[3] "Avidbots recipient of 2023 Top Software & Tech Award by Food Logistics and Supply & Demand Chain Executive," (Dec. 8, 2023), https://avidbots.com/news/avidbots-recipient-of-2023-top-software-and-tech-award-by-food-logistics-and-supply-and-demand-chain-executive/, last accessed May 6, 2025.

[4] "As the world's premier awards program marks its 75th anniversary, thousands of designers and manufacturers win Good Design 2024 for the 'Best of the Best' in new global design for consumer goods, environments, graphics, and packaging," (Jan. 2, 2025), https://globaldesignnews.com/as-the-worlds-premier-awards-program-marks-its-75th-anniversary-thousands-of-designers-and-manufacturers-win-good-design-2024-for-the-best-of-the-best-in-new-global-design-for-consumer-goods-e/, last accessed May 1, 2025.

airport.[5] And Avidbots Corp. was featured in an Inclean Magazine article explaining how Avidbots Corp. is driving innovation with leading service providers.[6] Moreover, Avidbots Corp.'s customers have won awards based on contributions from Avidbots Corp.'s robots. For example, according to the 2023 World Airport Awards, six of the top ten cleanest airports used Avidbots Corp.'s robots.[7]

14. Avidbots Corp. has been developing, designing, and testing autonomous commercial cleaning robots since 2014. Avidbots Corp. developed a number of prototypes throughout 2014 and 2015. Eventually, Avidbots made a commercial release, the ARS-2, which Avidbots Corp. publicly displayed at the ISSA/Interclean 2015 showcase in Las Vegas for three days, from October 21 to October 23, 2015.[8] Avidbots negotiated and executed its first sale of the ARS-2 on the third day of that event, on October 23, 2015. The ARS-2 was also publicly demonstrated at Mohawk College of Applied Arts and Technology in Hamilton, Ontario, Canada and deployed at the college for two weeks, from December 8 to December 21, 2015.

15. Brain admits in the Complaint that it "started collaborating" with retailers to "provide autonomous floor scrubbers" by "2018." Complaint, ¶ 14. Avidbots Corp.'s October 23, 2015 sale of its autonomous cleaning robot predates Brain's alleged entry into the market by at least two years.

---

[5] "Airports Turn to Autonomous Cleaning Robots to Maintain Cleanliness," AviationPros, (Apr. 18, 2023), https://www.aviationpros.com/airports/airport-technology/operations/article/53029139/how-to-use-autonomous-cleaning-robots-in-an-airport-environment, last accessed May 6, 2025.

[6] "Collaborate to Innovate: How Avidbots is Driving Innovation with Leading Service Providers," Inclean Magazine, at 10–13, (Nov. 10, 2021), https://issuu.com/theintermediagroup/docs/inclean_november-december_2021/1?fr=sZjJlZTQzODE4Mjg, last accessed May 6, 2025.

[7] "Avidbots Neo Cleaning Robot Used by Many of the Newly Named Top Cleanest Global Airports," (Mar. 28, 2003), https://www.businesswire.com/news/home/20230328005171/en/Avidbots-Neo-Cleaning-Robot-Used-by-Many-of-the-Newly-Named-Top-Cleanest-Global-Airports, last accessed May 1, 2025.

[8] ISSA/Interclean Exhibitor List & Floor Plan, https://www.cleanlink.com/sm/graphics/15/09/sm0915.pdf at pg. 69, last accessed May 15, 2025.

16. Avidbots Corp. continued to develop scrubbing robot prototypes in 2016. Avidbots Corp. publicly demonstrated a product called the Neo at its headquarters in Ontario, Canada, on August 24, 2016, in Rochester, New York in or around October 4, 2016, and in Indianapolis, Indiana from October 17 to October 20, 2016. These demonstrations showcased the mapping, route-planning, object detection and avoidance, and cleaning functions of the Neo. Avidbots Corp. offered to sell and/or sold its robots at each of these demonstrations.

17. From October 25 to October 28, 2016, before Brain entered the autonomous cleaning robot industry, Avidbots Corp. also displayed the Neo 1 at the ISSA/Interclean 2016 industry showcase in Chicago, Illinois. During the tradeshow, Brain personnel approached Avidbots Corp.'s booth and carefully examined the Neo 1. The personnel asked detailed questions about the Neo's sensor placement, including about LIDAR and 3-D camera placement.

18. In 2020, Avidbots Corp. learned that Brain was developing mapping and path planning in an attempt to catch up to Avidbots Corp.'s innovative technology.

19. Brain admits in its Complaint that it provides software, BrainOS, to "major floor equipment manufacturers to integrate the BrainOS system into manual cleaning equipment." Complaint, ¶ 14. The resulting equipment uses the Brain software, including BrainOS, to implement mapping, route planning, obstacle detection, and obstacle avoidance technology first invented and patented by Avidbots Corp.

20. According to Brain's webpage,[9] Brain's software systems are integrated into at least the following products: ICE RS26 (Model BE-Mk2-RS26); ICE RS26 (Model BE-Mk1-RS26); Minuteman International RoboScrub 20 (Model BE-Mk2 MR20); Tennant Company T7AMR, T380AMR, T16AMR, and X4ROVR; Nilfisk A/S SC60; SoftBank Robotics Whiz; Dane

[9] Brain Corp Patents, https://www.braincorp.com/legal/brain-corp-patents (last accessed May 2, 2025).

Technologies Inc. Dane Air, and ADT (Autonomous Delivery Tug); and BrainOS® Inventory AI. Together with the Brain software, these devices constitute the Accused Products.

21. To the extent that any other Brain product or product integrated with Brain software performs the same or substantially the same functions, in the same or substantially the same ways, as the Accused Products, then those devices also constitute the Accused Products.

22. On information and belief, Brain collaborates closely with Tennant Company ("Tennant"), a manufacturer for cleaning equipment for industrial, commercial, and outdoor environments, co-developing the infringing devices with Tennant. Brain first announced that it was "team[ing] up" with Tennant in 2018 by integrating Brain software into Tennant's cleaning machines.[10] The Tennant/Brain products combined the Brain software "platform and autonomous navigation system" with Tennant's "after-sales service and support."[11] These cleaning robots are offered for sale by Brain and advertised directly on Brain's website. On information and belief, the Tennant/Brain products are sold by Brain as well.[12] To date, there are more than 6,500 cleaning robots as a result of the collaboration between Brain and Tennant.[13] In a further expansion of Brain's partnership with Tennant, Tennant and Brain entered into an Exclusive Technology Agreement ("Agreement") in February 2024.[14] The Agreement "expand[s]" the "existing partnership" between Tennant and Brain, with Brain's "next-generation navigation software and

---

[10] "Brain Corp and Tennant Company Team Up to Introduce Autonomous Cleaning Machines," (Apr. 4, 2018), https://www.braincorp.com/resources/brain-corp-and-tennant-company-team-up-to-introduce-autonomous-cleaning-machines-ca8e3, last accessed May 18, 2025.
[11] *Id.*
[12] https://www.braincorp.com/floor-care (last accessed May 18, 2025).
[13] "Tennant Company and Brain Corp Sign Exclusive Technology Agreement to Accelerate Robotic Floor Cleaning Innovation and Adoption," (Feb. 22, 2024), https://www.braincorp.com/resources/tennant-company-and-brain-corp-sign-exclusive-technology-agreement-to-accelerate-robotic-floor-cleaning-innovation-and-adoption, last accessed May 18, 2025.
[14] *Id.*

hardware suite" available "exclusively on Tennant machines for floor care applications."[15] The X4 ROVR, an autonomous mobile robot designed for operation in smaller spaces, was the first Tennant/Brain robot launched under this Agreement.[16] However, the X4 ROVR is only "the first of many future planned AMR cleaning products" powered by Brain's technology that will be "exclusively available on Tennant equipment," with Brain and Tennant "accelerat[ing] the build-out of" their joint "portfolio of robotic floor cleaning solutions."[17]

23. On information and belief, Brain is also involved in using the Tennant/Brain products and other Accused Products in the United States, for example, in testing that equipment and installing and operating that equipment for customers in the United States.

24. Brain makes, uses, offers to sell, sells, and/or imports into the United States the Accused Products.

FIRST COUNTERCLAIM - Brought by Avidbots Corp. Only

(INFRINGEMENT OF THE '664 PATENT)

25. Avidbots Corp. hereby realleges and incorporates by reference the allegations set forth in paragraphs 1 – 24.

26. Avidbots Corp. is the owner by assignment of U.S. Patent No. 10,667,664 (the "'664 Patent"), entitled "Apparatus and Methods for Semi-Autonomous Cleaning of Surfaces." The United States Patent and Trademark Office lawfully and duly issued the '664 Patent on June 2, 2020. The '664 Patent is attached to this Answer and Counterclaims as **Appendix 1**.

---

[15] *Id.*
[16] *Id.*
[17] *Id.*

27. The ’664 Patent claims priority to U.S. Provisional Application 62/152,303. Therefore, the ’664 Patent was effectively filed on the filing date of that Provisional Application, April 24, 2015.

28. The ’664 Patent describes an inventive apparatus and methods for semi-autonomous cleaning of floors and surfaces.

29. As explained in the ’664 Patent, semi-autonomous robots may face certain challenges related to the use of pre-determined paths. For example, such robots must avoid collisions with unexpected objects on that path, and object-sensing methods can be limited, inaccurate, and/or difficult to program. As another example, robots configured to travel along a predetermined path may be forced to deviate from that path in a manner that may be unrecoverable without user intervention. As another example, defining a predetermined path can be time consuming and may not result in the most efficient path along which the robot should travel.

30. The technology described and claimed in the ’664 Patent provides innovative technological solutions to these problems. As the specification explains, this technology can define and redefine a path along which the drive system travels based on sensor input. For example, it can: (a) initialize the robot to map the cleaning environment using data from onboard sensors; (b) generate a graph or chart of positions on the map and determine an efficient path that passes through those positions; (c) decompose a cleaning environment into sectors and subsequently determine an efficient path for cleaning each sector independently; (d) further determine an efficient path for combining the sectors; (e) use sensor data during a cleaning operation to determine the presence of an obstacle and/or a change in the environment; and (f) remap a portion of the surface to define an updated path to efficiently avoid the obstacle.

31. The Accused Products infringe one or more claims of the ’664 Patent under at least 35 U.S.C. § 271(a), (b), and (c).

32. Brain has directly infringed one or more claims of the ’664 Patent through the manufacture, use, sale, offer for sale, and/or importation into the United States of the Accused Products in violation of 35 U.S.C. § 271(a), including by testing, installing, and using the Accused Products in the United States. Brain also jointly infringes through its relationship with Tennant. Brain continues to directly infringe the ’664 Patent.

33. For example, upon information and belief, in operation, the Accused Products meet all of the limitations of Claim 40 of the ’664 Patent, as illustrated in the exemplary claim chart shown in **Exhibit 1**, which was attached to Avidbots’s Original Answer and Counterclaims and is incorporated herein by reference. Dkt. 37. The infringement by the Accused Products is shown through at least Brain’s website and those of its partners, including in videos Brain publishes on its YouTube channel and the videos of Brain technology shown on the YouTube channels of Brain’s partners.[18]

34. Brain was aware of or was willfully blind to the ’664 Patent prior to the filing of this lawsuit. For example, Avidbots Corp. is a well-known competitor to Brain and sold autonomous cleaning robots for years before Brain entered the market. Additionally, before Brain released its first autonomous cleaning robot, Brain’s engineers examined an Avidbots Corp. robot including the Neo 1 at the ISSA/Interclean 2016 industry showcase in Chicago, Illinois. In fact, in recent years, potential Avidbots Corp. customers informed Avidbots Corp. personnel that Brain

---

[18] *See, e.g.,* Brain Corp, Area Fill Feature - - Brain OS Learnings, YOUTUBE (Jul. 5, 2022), https://www.youtube.com/watch?v=bo44_B5v86Q; Brain Corp, Webinar – BrainOS 101: Powering the Most Intelligent Tools, YOUTUBE (Jul. 28, 2022), https://www.youtube.com/watch?v=ADZ-fRIU5OQ; Tennant Equipment Insights, Robotic Floor Scrubbers in Education Facilities | X4 ROVR Autonomous Floor Cleaner | Tennant Company, YOUTUBE (Mar. 21, 2024), https://www.youtube.com/watch?v=RJ6c6j0Klkg.

was developing mapping and path planning capabilities to catch up to Avidbots Corp.'s innovative technology. Additionally, Brain's Complaint and Exhibits purport to rely upon the disclosures in Avidbots Corp.'s patent filings, including four of Avidbots Corp.'s patent publications, U.S. Patent Publication Nos. 2021/0365029, 2021/0080964, 2022/0265110, and 2023/0113331, Avidbots Corp.'s U.S. Provisional Application No. 63/602,426, and Avidbots Corp.'s '347 Patent, as allegedly describing the design and/or operation of Avidbots Corp.'s products that Brain accuses of infringement in its Complaint. Complaint ¶¶ 39, 55, 71, 85, 99. Brain, therefore, undertook a pre-suit analysis of not only these cited Avidbots Corp. patent disclosures but also of Avidbots Corp.'s patent portfolio generally, including the '664 Patent, in order to locate this sort of cited information. On information and belief, Brain therefore was aware of and analyzed Avidbots Corp.'s patent portfolio, which includes the '664 Patent, prior to the filing of Brain's Complaint. In the alternative, Brain will know of Avidbots Corp.'s '664 Patent at least as of the date of the filing of these Counterclaims.

35. Brain actively induces users to directly infringe the asserted claims of the '664 patent in violation of 35 U.S.C. § 271(b). For example, Brain actively induces infringement of the '664 Patent by providing software and instructions to equipment manufacturers to make, use, offer to sell, sell within the United States, and/or import into the United States, the Accused Products. As a further example, Brain actively induces infringement of the '664 Patent by providing directions, demonstrations, guides, manuals, training for use, product support, and/or other materials necessary for the use of the Accused Products, including through its BrainOS Mobile App. Brain knew or was willfully blind to the likelihood that its acts would cause direct infringement.

36. Brain's acts constitute contributory infringement of the '664 Patent in violation of 35 U.S.C. § 271(c). Brain contributorily infringes by offering to sell and/or selling within the United States and importing into the United States components of the Accused Products that constitute material parts of the invention of the asserted claims of the '664 Patent, are not staple articles or commodities of commerce suitable for substantial non-infringing use, and are known by Brain to be especially made or especially adapted for use in an infringement of the '664 Patent. As a non-limiting example, devices using the Brain software, like the Accused Products, are incapable of non-infringing uses at least because the Brain software's obstacle avoidance algorithm, which infringes the '664 Patent, cannot be disabled.

37. Brain's infringement of the '664 Patent is willful, deliberate, and intentional by continuing its acts of infringement after becoming aware of the '664 Patent and its infringement thereof, thus acting in reckless disregard of Avidbots Corp.'s patent rights.

38. Because of Brain's infringement of the '664 Patent, Avidbots Corp. has suffered and will continue to suffer injury, including monetary damages in an amount to be determined at trial.

39. Further, Avidbots Corp. has suffered and will continue to suffer irreparable damage for which there is no adequate remedy at law. Unless enjoined, Brain will continue its infringing acts and in so doing will inflict additional irreparable injury upon Avidbots Corp.

SECOND COUNTERCLAIM – Brought by Avidbots Corp. Only

(INFRINGEMENT OF THE '550 PATENT)

40. Avidbots Corp. hereby realleges and incorporates by reference the allegations set forth in paragraphs 1 – 39.

41. Avidbots Corp. is the owner by assignment of U.S. Patent No. 10,206,550 (the "'550 Patent"), entitled "Apparatus and Methods for Semi-Autonomous Cleaning of Surfaces."

The United States Patent and Trademark Office lawfully and duly issued the ’550 Patent on February 19, 2019. The ’550 Patent is attached to this Answer and Counterclaims as **Appendix 2**.

42. The ’550 Patent is a division of Patent Application No. 15/137,510, now the ’664 Patent, which claims priority to U.S. Provisional Application 62/152,303. Therefore, the ’550 Patent was effectively filed on the filing date of that Provisional Application, April 24, 2015.

43. The ’550 Patent describes an inventive apparatus and methods for semi-autonomous cleaning of floors and surfaces.

44. As explained in the ’550 Patent, semi-autonomous robots may face certain challenges related to the use of pre-determined paths. For example, such robots must avoid collisions with unexpected objects on that path, and object-sensing methods can be limited, inaccurate, and/or difficult to program. As another example, robots configured to travel along a predetermined path may be forced to deviate from that path in a manner that may be unrecoverable without user intervention. As another example, defining a predetermined path can be time consuming and may not result in the most efficient path along which the robot should travel.

45. The technology described and claimed in the ’550 Patent provides innovative technological solutions to these problems. As the specification explains, this technology can define and redefine a path along which the drive system travels based on sensor input. For example, it can: (a) initialize the robot to map the cleaning environment using data from onboard sensors; (b) generate a graph or chart of positions on the map and determine an efficient path that passes through those positions; (c) decompose a cleaning environment into sectors and subsequently determine an efficient path for cleaning each sector independently; (d) further determine an efficient path for combining the sectors; (e) use sensor data during a cleaning operation to

determine the presence of an obstacle and/or a change in the environment; and (f) remap a portion of the surface to define an updated path to efficiently avoid the obstacle.

46. The Accused Products infringe one or more claims of the ’550 Patent under at least 35 U.S.C. § 271(a), (b), and (c).

47. Brain has directly infringed one or more claims of the ’550 Patent through manufacture, use, sale, offer for sale, and/or importation into the United States of the Accused Products in violation of 35 U.S.C. § 271(a), including by testing the operation of the Accused Products and installing the systems for customers.[19] Brain also jointly infringes through its relationship with Tennant. Brain continues to directly infringe the ’550 Patent.

48. For example, upon information and belief, in operation, the Accused Products practice all of the limitations of Claim 1 of the ’550 Patent, as illustrated in the exemplary claim chart shown in **Exhibit 2**, which was attached to Avidbots’s Original Answer and Counterclaims and is incorporated herein by reference. Dkt. 37. The infringement by the Accused Products is shown through at least Brain’s website and those of its partners, including in videos Brain publishes on its YouTube channel and the videos of Brain technology shown on the YouTube channels of Brain’s partners.

49. Brain was aware of or was willfully blind to the ’550 Patent prior to the filing of this lawsuit. For example, Avidbots Corp. is a well-known competitor to Brain and sold autonomous cleaning robots for years before Brain entered the market. Additionally, before Brain released its first autonomous cleaning robot, Brain’s engineers examined an Avidbots Corp. robot including the Neo 1 at the ISSA/Interclean 2016 industry showcase in Chicago, Illinois. In fact,

[19] *See* https://www.braincorp.com/clean-suite, last accessed May 17, 2025 (“All robots that use the BrainOS Robotics Platform undergo rigorous testing to ensure that all functional safety performance requirements per safety standards are met.”).

in recent years, potential Avidbots Corp. customers informed Avidbots Corp. personnel that Brain was developing mapping and path planning capabilities to catch up to Avidbots Corp.'s innovative technology. Additionally, Brain's Complaint and Exhibits purport to rely upon the disclosures in Avidbots Corp.'s patent filings, including four of Avidbots Corp.'s patent publications, U.S. Patent Publication Nos. 2021/0365029, 2021/0080964, 2022/0265110, and 2023/0113331, Avidbots Corp.'s U.S. Provisional Application No. 63/602,426, and Avidbots Corp.'s '347 Patent, as allegedly describing the design and/or operation of Avidbots Corp.'s products that Brain accuses of infringement in its Complaint. Complaint ¶¶ 39, 55, 71, 85, 99. Brain, therefore, undertook a pre-suit analysis of not only these cited Avidbots Corp. patent disclosures but also of Avidbots Corp.'s patent portfolio generally, including the '550 Patent, in order to locate this sort of cited information. On information and belief, Brain therefore was aware of and analyzed Avidbots Corp.'s patent portfolio, which includes the '550 Patent, prior to the filing of Brain's Complaint. In the alternative, Brain will know of Avidbots Corp.'s '550 Patent at least as of the date of the filing of these Counterclaims.

50. Brain actively induces users to directly infringe the asserted claims of the '550 patent in violation of 35 U.S.C. § 271(b). For example, Brain actively induces infringement of the '550 Patent by providing directions, demonstrations, guides, manuals, training for use, product support, and/or other materials necessary for the use of the Accused Products, including through its BrainOS Mobile App. Brain knew or was willfully blind to the likelihood that its acts would cause direct infringement.

51. Brain's acts constitute contributory infringement of the '550 Patent in violation of 35 U.S.C. § 271(c). Brain contributorily infringes by offering to sell and/or selling within the United States and importing into the United States components of the Accused Products that

constitute material parts of the invention of the asserted claims of the ’550 Patent, are not staple articles or commodities of commerce suitable for substantial non-infringing use, and are known by Brain to be especially made or especially adapted for use in an infringement of the ’550 Patent. As a non-limiting example, devices using BrainOS, like the Accused Products, are incapable of non-infringing uses at least because its obstacle avoidance algorithm, which infringes the ’550 Patent, cannot be disabled.

52. Brain’s infringement of the ’550 Patent is willful, deliberate, and intentional by continuing its acts of infringement after becoming aware of the ’550 Patent and its infringement thereof, thus acting in reckless disregard of Avidbots Corp.’s patent rights.

53. Because of Brain’s infringement of the ’550 Patent, Avidbots Corp. has suffered and will continue to suffer injury, including monetary damages in an amount to be determined at trial.

54. Further, Avidbots Corp. has suffered and will continue to suffer irreparable damage for which there is no adequate remedy at law. Unless enjoined, Brain will continue its infringing acts and in so doing will inflict additional irreparable injury upon Avidbots.

THIRD COUNTERCLAIM – Brought by Avidbots Corp. Only

(INFRINGEMENT OF THE ’545 PATENT)

55. Avidbots Corp. hereby realleges and incorporates by reference the allegations set forth in paragraphs 1 – 54.

56. Avidbots Corp. is the owner by assignment of U.S. Patent No. 11,510,545 (the “’545 Patent”), entitled “Apparatus and Methods for Semi-Autonomous Cleaning of Surfaces.” The United States Patent and Trademark Office lawfully and duly issued the ’545 Patent on

November 29, 2022. The ’545 Patent is attached to this Answer and Counterclaims as **Appendix 3**.

57. The ’545 Patent is a continuation of Patent Application No. 15/137,510, now the ’664 Patent, which claims priority to U.S. Provisional Application 62/152,303. Therefore, the ’545 Patent was effectively filed on the filing date of that Provisional Application, April 24, 2015.

58. The ’545 Patent describes an inventive apparatus and methods for semi-autonomous cleaning of floors and surfaces.

59. As explained in the ’545 Patent, semi-autonomous robots may face certain challenges related to the use of pre-determined paths. For example, such robots must avoid collisions with unexpected objects on that path, and object-sensing methods can be limited, inaccurate, and/or difficult to program. As another example, robots configured to travel along a predetermined path may be forced to deviate from that path in a manner that may be unrecoverable without user intervention. As another example, defining a predetermined path can be time consuming and may not result in the most efficient path along which the robot should travel.

60. The technology described and claimed in the ’545 Patent provides innovative technological solutions to these problems. As the specification explains, this technology can define and redefine a path along which the drive system travels based on sensor input. For example, it can: (a) initialize the robot to map the cleaning environment using data from onboard sensors; (b) generate a graph or chart of positions on the map and determine an efficient path that passes through those positions; (c) decompose a cleaning environment into sectors and subsequently determine an efficient path for cleaning each sector independently; (d) further determine an efficient path for combining the sectors; (e) use sensor data during a cleaning operation to

determine the presence of an obstacle and/or a change in the environment; and (f) remap a portion of the surface to define an updated path to efficiently avoid the obstacle.

61. The Accused Products infringe one or more claims of the ’545 Patent under at least 35 U.S.C. § 271(a), (b), and (c).

62. Brain has directly infringed one or more of Claims 9–20 of the ’545 Patent through manufacture, use, sale, offer for sale, and/or importation into the United States of the Accused Products in violation of 35 U.S.C. § 271(a), including by testing the operation of the Accused Products and installing the systems for customers.[20] Brain also jointly infringes through its relationship with Tennant. Brain continues to directly infringe the ’545 Patent.

63. For example, upon information and belief, in operation, the Accused Products practice all of the limitations of Claim 9 of the ’545 Patent, as illustrated in the exemplary claim chart shown in **Exhibit 3**, which was attached to Avidbots Original Answer and Counterclaims and is incorporated herein by reference. The infringement by the Accused Products is shown through at least Brain’s website and those of its partners, including in videos Brain publishes on its YouTube channel and the videos of Brain technology shown on the YouTube channels of Brain’s partners.

64. Brain was aware of or was willfully blind to the ’545 Patent prior to the filing of this lawsuit. For example, Avidbots Corp. is a well-known competitor to Brain and sold autonomous cleaning robots for years before Brain entered the market. Additionally, before Brain released its first autonomous cleaning robot, Brain’s engineers examined an Avidbots Corp. robot including the Neo 1 at the ISSA/Interclean 2016 industry showcase in Chicago, Illinois. In fact,

[20] *See* https://www.braincorp.com/clean-suite, last accessed May 17, 2025 (“All robots that use the BrainOS Robotics Platform undergo rigorous testing to ensure that all functional safety performance requirements per safety standards are met.”).

in recent years, potential Avidbots Corp. customers informed Avidbots Corp. personnel that Brain was developing mapping and path planning capabilities to catch up to Avidbots Corp.'s innovative technology. Additionally, Brain's Complaint and Exhibits purport to rely upon the disclosures in Avidbots Corp.'s patent filings, including four of Avidbots Corp.'s patent publications, U.S. Patent Publication Nos. 2021/0365029, 2021/0080964, 2022/0265110, and 2023/0113331, Avidbots Corp.'s U.S. Provisional Application No. 63/602,426, and Avidbots Corp.'s '347 Patent, as allegedly describing the design and/or operation of Avidbots Corp.'s products that Brain accuses of infringement in its Complaint. Complaint ¶¶ 39, 55, 71, 85, 99. Brain, therefore, undertook a pre-suit analysis of not only these cited Avidbots Corp. patent disclosures but also of Avidbots Corp.'s patent portfolio generally, including the '545 Patent, in order to locate this sort of cited information. On information and belief, Brain therefore was aware of and analyzed Avidbots Corp.'s patent portfolio, which includes the '545 Patent, prior to the filing of Brain's Complaint. In the alternative, Brain will know of Avidbots Corp.'s '545 Patent at least as of the date of the filing of these Counterclaims.

65. Brain actively induces users to directly infringe the asserted claims of the '545 patent in violation of 35 U.S.C. § 271(b). For example, Brain actively induces infringement of the '545 Patent by providing directions, demonstrations, guides, manuals, training for use, product support, and/or other materials necessary for the use of the Accused Products, including through its BrainOS Mobile App. Brain knew or was willfully blind to the likelihood that its acts would cause direct infringement.

66. Brain's acts constitute contributory infringement of the '545 Patent in violation of 35 U.S.C. § 271(c). Brain contributorily infringes by offering to sell and/or selling within the United States and importing into the United States components of the Accused Products that

constitute material parts of the invention of the asserted claims of the ’545 Patent, are not staple articles or commodities of commerce suitable for substantial non-infringing use, and are known by Brain to be especially made or especially adapted for use in an infringement of the ’545 Patent. As a non-limiting example, devices using BrainOS, like the Accused Products, are incapable of non-infringing uses at least because its obstacle avoidance algorithm, which infringes the ’545 Patent, cannot be disabled.

67. Brain’s infringement of the ’545 Patent is willful, deliberate, and intentional by continuing its acts of infringement after becoming aware of the ’545 Patent and its infringement thereof, thus acting in reckless disregard of Avidbots Corp.’s patent rights.

68. Because of Brain’s infringement of the ’545 Patent, Avidbots Corp. has suffered and will continue to suffer injury, including monetary damages in an amount to be determined at trial.

69. Further, Avidbots Corp. has suffered and will continue to suffer irreparable damage for which there is no adequate remedy at law. Unless enjoined, Brain will continue its infringing acts and in so doing will inflict additional irreparable injury upon Avidbots Corp.

FOURTH COUNTERCLAIM – Brought by Avidbots Corp. Only

(INFRINGEMENT OF THE ’474 PATENT)

70. Avidbots Corp. hereby realleges and incorporates by reference the allegations set forth in paragraphs 1 – 69.

71. Avidbots Corp. is the owner by assignment of U.S. Patent No. 11,844,474 (the “’474 Patent”), entitled “Apparatus and Methods for Semi-Autonomous Cleaning of Surfaces.” The United States Patent and Trademark Office lawfully and duly issued the ’474 Patent on December 19, 2023. The ’474 Patent is attached to this Answer and Counterclaims as **Appendix 4**.

72. The ’474 Patent is a continuation of Patent Application No. 16/859,476, now the ’545 Patent, which claims priority to U.S. Provisional Application 62/152,303. Therefore, the ’474 Patent was effectively filed on the filing date of that Provisional Application, April 24, 2015.

73. The ’474 Patent describes an inventive apparatus and methods for semi-autonomous cleaning of floors and surfaces.

74. As explained in the ’474 Patent, semi-autonomous robots may face certain challenges related to the use of pre-determined paths. For example, such robots must avoid collisions with unexpected objects on that path, and object-sensing methods can be limited, inaccurate, and/or difficult to program. As another example, robots configured to travel along a predetermined path may be forced to deviate from that path in a manner that may be unrecoverable without user intervention. As another example, defining a predetermined path can be time consuming and may not result in the most efficient path along which the robot should travel.

75. The technology described and claimed in the ’474 Patent provides innovative technological solutions to these problems. As the specification explains, this technology can define and redefine a path along which the drive system travels based on sensor input. For example, it can: (a) initialize the robot to map the cleaning environment using data from onboard sensors; (b) generate a graph or chart of positions on the map and determine an efficient path that passes through those positions; (c) decompose a cleaning environment into sectors and subsequently determine an efficient path for cleaning each sector independently; (d) further determine an efficient path for combining the sectors; (e) use sensor data during a cleaning operation to determine the presence of an obstacle and/or a change in the environment; and (f) remap a portion of the surface to define an updated path to efficiently avoid the obstacle.

76. The Accused Products infringe one or more claims of the ’474 Patent under at least 35 U.S.C. § 271(a), (b), and (c).

77. Brain has directly infringed one or more claims of the ’474 Patent through manufacture, use, sale, offer for sale, and/or importation into the United States of the Accused Products in violation of 35 U.S.C. § 271(a), including by testing the operation of the Accused Products and installing the systems for customers.[21] Brain also jointly infringes through its relationship with Tennant. Brain continues to directly infringe the ’474 Patent.

78. For example, upon information and belief, in operation, the Accused Products practice all of the limitations of Claim 1 of the ’474 Patent, as illustrated in the exemplary claim chart shown in **Exhibit 4**, which was attached to Avidbots’s Original Answer and Counterclaims and is incorporated herein by reference. Dkt. 37. The infringement by the Accused Products is shown through at least Brain’s website and those of its partners, including in videos Brain publishes on its YouTube channel and the videos of Brain technology shown on the YouTube channels of Brain’s partners.

79. Brain was aware of or was willfully blind to the ’474 Patent prior to the filing of this lawsuit. For example, Avidbots Corp. is a well-known competitor to Brain and sold autonomous cleaning robots for years before Brain entered the market. Additionally, before Brain released its first autonomous cleaning robot, Brain’s engineers examined an Avidbots Corp. robot including the Neo 1 at the ISSA/Interclean 2016 industry showcase in Chicago, Illinois. In fact, in recent years, potential Avidbots Corp. customers informed Avidbots Corp. personnel that Brain was developing mapping and path planning capabilities to catch up to Avidbots Corp.’s innovative

[21] *See* https://www.braincorp.com/clean-suite, last accessed May 17, 2025 (“All robots that use the BrainOS Robotics Platform undergo rigorous testing to ensure that all functional safety performance requirements per safety standards are met.”).

technology. Additionally, Brain's Complaint and Exhibits purport to rely upon the disclosures in Avidbots Corp.'s patent filings, including four of Avidbots Corp.'s patent publications, U.S. Patent Publication Nos. 2021/0365029, 2021/0080964, 2022/0265110, and 2023/0113331, Avidbots Corp.'s U.S. Provisional Application No. 63/602,426, and Avidbots Corp.'s '347 Patent, as allegedly describing the design and/or operation of Avidbots Corp.'s products that Brain accuses of infringement in its Complaint. Complaint ¶¶ 39, 55, 71, 85, 99. Brain, therefore, undertook a pre-suit analysis of not only these cited Avidbots Corp. patent disclosures but also of Avidbots Corp.'s patent portfolio generally, including the '474 Patent, in order to locate this sort of cited information. On information and belief, Brain therefore was aware of and analyzed Avidbots Corp.'s patent portfolio, which includes the '474 Patent, prior to the filing of Brain's Complaint. In the alternative, Brain will know of Avidbots Corp.'s '474 Patent at least as of the date of the filing of these Counterclaims.

80. Brain actively induces users to directly infringe the asserted claims of the '474 patent in violation of 35 U.S.C. § 271(b). For example, Brain actively induces infringement of the '474 Patent by providing directions, demonstrations, guides, manuals, training for use, product support, and/or other materials necessary for the use of the Accused Products, including through its BrainOS Mobile App. Brain knew or was willfully blind to the likelihood that its acts would cause direct infringement.

81. Brain's acts constitute contributory infringement of the '474 Patent in violation of 35 U.S.C. § 271(c). Brain contributorily infringes by offering to sell and/or selling within the United States and importing into the United States components of the Accused Products that constitute material parts of the invention of the asserted claims of the '474 Patent, are not staple articles or commodities of commerce suitable for substantial non-infringing use, and are known

by Brain to be especially made or especially adapted for use in an infringement of the ’474 Patent. As a non-limiting example, devices using BrainOS, like the Accused Products, are incapable of non-infringing uses at least because its obstacle avoidance algorithm, which infringes the ’474 Patent, cannot be disabled.

82. Brain’s infringement of the ’474 Patent is willful, deliberate, and intentional by continuing its acts of infringement after becoming aware of the ’474 Patent and its infringement thereof, thus acting in reckless disregard of Avidbots Corp.’s patent rights.

83. Because of Brain’s infringement of the ’474 Patent, Avidbots Corp. has suffered and will continue to suffer injury, including monetary damages in an amount to be determined at trial.

84. Further, Avidbots Corp. has suffered and will continue to suffer irreparable damage for which there is no adequate remedy at law. Unless enjoined, Brain will continue its infringing acts and in so doing will inflict additional irreparable injury upon Avidbots Corp.

FIFTH COUNTERCLAIM – Brought by Avidbots Corp. Only

(INFRINGEMENT OF THE ’347 PATENT)

85. Avidbots Corp. hereby realleges and incorporates by reference the allegations set forth in paragraphs 1 – 84.

86. Avidbots Corp. is the owner by assignment of U.S. Patent No. 11,531,347 (the “’347 Patent”), entitled “System and Method to Virtually Teach a Semi-Autonomous Device.” The United States Patent and Trademark Office lawfully and duly issued the ’347 Patent on December 20, 2022. The ’347 Patent is attached to this Answer and Counterclaims as **Appendix 5**.

87. The ’347 Patent claims priority to U.S. Provisional Application 62/901,280. Therefore, the ’347 Patent was effectively filed on the filing date of that Provisional Application, September 17, 2019.

88. The ’347 Patent describes an inventive system and method to virtually teach a semi-autonomous device.

89. As explained in the ’347 Patent, a semi-autonomous device may be first taught to navigate an environment by a skilled human operator who physically pilots the device so that the device can record its path. After the device records the path, it is capable of repeating that path. But this approach to teaching can be time-consuming and labor intensive. And if the device exhibits an error or undesirable behavior during operation, the recorded path must be rerecorded, thus duplicating the skilled labor expended during initial training.

90. The technology described and claimed in the ’347 Patent provides innovative technological solutions to these problems. As the specification explains, this technology can enable an operator to virtually teach a semi-autonomous device to perform an action sequence in a target environment. For example, it can: (a) utilize environmental mapping data recorded by sensors to construct a virtual representation of the target environment; (b) enable a human operator to teach a virtual representation of the semi-autonomous device to perform an action sequence in that virtual environment; (c) enable a human operator to record, rerecord, and edit any portion of the action sequence; (d) use heuristic data, such as safety margins, to augment the teaching process; and (e) transfer the recorded action sequence to the semi-autonomous device for use in the target environment.

91. The Accused Products infringe one or more claims of the ’347 Patent under at least 35 U.S.C. § 271(a), (b), and (c).

92. Brain has directly infringed one or more of Claims 7–18 of the ’347 Patent through manufacture, use, sale, offer for sale, and/or importation into the United States of the Accused Products in violation of 35 U.S.C. § 271(a), including by testing the operation of the Accused Products and installing the systems for customers.[22] Brain also jointly infringes through its relationship with Tennant. Brain continues to directly infringe the ’347 Patent.

93. For example, upon information and belief, in operation, the Accused Products practice all of the limitations of Claim 7 of the ’347 Patent, as illustrated in the exemplary claim chart shown in **Exhibit 5**, which was attached to Avidbots’s Original Answer and Counterclaims and is incorporated herein by reference. Dkt. 37. The infringement by the Accused Products is shown through at least Brain’s website and those of its partners, including in videos Brain publishes on its YouTube channel and the videos of Brain technology shown on the YouTube channels of Brain’s partners.

94. Brain was aware of or was willfully blind to the ’347 Patent prior to the filing of this lawsuit. For example, Avidbots Corp. is a well-known competitor to Brain and sold autonomous cleaning robots for years before Brain entered the market. Additionally, before Brain released its first autonomous cleaning robot, Brain’s engineers examined an Avidbots Corp. robot including the Neo 1 at the ISSA/Interclean 2016 industry showcase in Chicago, Illinois. In fact, in recent years, potential Avidbots Corp. customers informed Avidbots Corp. personnel that Brain was developing mapping and path planning capabilities to catch up to Avidbots Corp.’s innovative technology. Additionally, Brain’s Complaint and Exhibits purport to rely upon the disclosures in Avidbots Corp.’s patent filings, including four of Avidbots Corp.’s patent publications, U.S. Patent

[22] *See* https://www.braincorp.com/clean-suite, last accessed May 17, 2025 (“All robots that use the BrainOS Robotics Platform undergo rigorous testing to ensure that all functional safety performance requirements per safety standards are met.”).

Publication Nos. 2021/0365029, 2021/0080964, 2022/0265110, and 2023/0113331, Avidbots Corp.'s U.S. Provisional Application No. 63/602,426, and Avidbots Corp.'s '347 Patent, as allegedly describing the design and/or operation of Avidbots Corp.'s products that Brain accuses of infringement in its Complaint. Complaint ¶¶ 39, 55, 71, 85, 99. Brain, therefore, undertook a pre-suit analysis of not only these cited Avidbots Corp. patent disclosures but also of Avidbots Corp.'s patent portfolio generally, including the '347 Patent, in order to locate this sort of cited information. On information and belief, Brain therefore was aware of and analyzed Avidbots Corp.'s patent portfolio, which includes the '347 Patent, prior to the filing of Brain's Complaint. In the alternative, Brain will know of Avidbots Corp.'s '347 Patent at least as of the date of the filing of these Counterclaims.

95. Brain actively induces users to directly infringe the asserted claims of the '347 patent in violation of 35 U.S.C. § 271(b). For example, Brain actively induces infringement of the '347 Patent by providing directions, demonstrations, guides, manuals, training for use, product support, and/or other materials necessary for the use of the Accused Products, including through its BrainOS Mobile App. Brain knew or was willfully blind to the likelihood that its acts would cause direct infringement.

96. Brain's acts constitute contributory infringement of the '347 Patent in violation of 35 U.S.C. § 271(c). Brain contributorily infringes by offering to sell and/or selling within the United States and importing into the United States components of the Accused Products that constitute material parts of the invention of the asserted claims of the '347 Patent, are not staple articles or commodities of commerce suitable for substantial non-infringing use, and are known by Brain to be especially made or especially adapted for use in an infringement of the '347 Patent. As a non-limiting example, each of the Accused Products includes BrainOS Mobile, which is

especially designed to enable operators to remotely control the Accused Products in a manner that infringes the ’347 Patent.

97. Brain’s infringement of the ’347 Patent is willful, deliberate, and intentional by continuing its acts of infringement after becoming aware of the ’347 Patent and its infringement thereof, thus acting in reckless disregard of Avidbots Corp.’s patent rights.

98. Because of Brain’s infringement of the ’347 Patent, Avidbots Corp. has suffered and will continue to suffer injury, including monetary damages in an amount to be determined at trial.

99. Further, Avidbots Corp. has suffered and will continue to suffer irreparable damage for which there is no adequate remedy at law. Unless enjoined, Brain will continue its infringing acts and in so doing will inflict additional irreparable injury upon Avidbots Corp.

SIXTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF INVALIDITY OF THE ’780 PATENT)

100. Avidbots repeats, realleges, and incorporates Paragraphs 1–99 herein by reference.

101. Each asserted claim of the ’780 patent is invalid for failure to comply with one or more of the statutory requirements for patentability specified by Title 35 of the United States Code, 35 U.S.C. §§ 101, 102, 103, 112, 115, and/or 116, including in light of the prior art of record from prosecution of the ’780 patent.

102. A definite and concrete, real and substantial, justiciable, and continuing case or controversy exists between Avidbots and Brain regarding the validity of the ’780 patent.

103. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 et seq., Avidbots requests the Court’s declaration that the claims of the ’780 patent are invalid.

104. This is an exceptional case entitling Avidbots to an award of its attorneys' fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

SEVENTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '780 PATENT)

105. Avidbots repeats, realleges, and incorporates Paragraphs 1–104 herein by reference.

106. Avidbots denies infringement of any valid and enforceable claim of the '780 patent and alleges that the manufacture, use, sale, offer for sale, or importation of the products and/or services accused in the Complaint has not infringed and does not infringe, either directly, jointly or indirectly, any valid and enforceable claim of the '780 patent.

107. A definite and concrete, real and substantial, justiciable, and continuing case or controversy exists between Avidbots and Brain regarding the alleged infringement of the '780 patent.

108. A judicial declaration is necessary and appropriate so that Avidbots may ascertain its rights regarding the '780 patent.

109. Avidbots is entitled to a judicial declaration that the manufacture, use, sale, offer for sale, or importation of the products and/or services accused in the Complaint has not infringed and does not infringe, either directly or indirectly, any valid and enforceable claim of the '780 patent.

110. This is an exceptional case entitling Avidbots to an award of its attorneys' fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

EIGHTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF INVALIDITY OF THE ’539 PATENT)

111. Avidbots repeats, realleges, and incorporates Paragraphs 1–110 herein by reference.

112. Each asserted claim of the ’539 patent is invalid for failure to comply with one or more of the statutory requirements for patentability specified by Title 35 of the United States Code, 35 U.S.C. §§ 101, 102, 103, 112, 115, and/or 116, including in light of the prior art of record from prosecution of the ’539 patent.

113. A definite and concrete, real and substantial, justiciable, and continuing case or controversy exists between Avidbots and Brain regarding the validity of the ’539 patent.

114. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 et seq., Avidbots requests the Court’s declaration that the claims of the ’539 patent are invalid.

115. This is an exceptional case entitling Avidbots to an award of its attorneys’ fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

NINTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE ’539 PATENT)

116. Avidbots repeats, realleges, and incorporates Paragraphs 1–115 herein by reference.

117. Avidbots denies infringement of any valid and enforceable claim of the ’539 patent and alleges that the manufacture, use, sale, offer for sale, or importation of the products and/or services accused in the Complaint has not infringed and does not infringe, either directly, jointly or indirectly, any valid and enforceable claim of the ’539 patent.

118. A definite and concrete, real and substantial, justiciable, and continuing case or controversy exists between Avidbots and Brain regarding the alleged infringement of the ’539 patent.

119. A judicial declaration is necessary and appropriate so that Avidbots may ascertain its rights regarding the ’539 patent.

120. Avidbots is entitled to a judicial declaration that the manufacture, use, sale, offer for sale, or importation of the products and/or services accused in the Complaint has not infringed and does not infringe, either directly or indirectly, any valid and enforceable claim of the ’539 patent.

121. This is an exceptional case entitling Avidbots to an award of its attorneys’ fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

TENTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF INVALIDITY OF THE ’325 PATENT)

122. Avidbots repeats, realleges, and incorporates Paragraphs 1–121 herein by reference.

123. Each asserted claim of the ’325 patent is invalid for failure to comply with one or more of the statutory requirements for patentability specified by Title 35 of the United States Code, 35 U.S.C. §§ 101, 102, 103, 112, 115, and/or 116, including in light of the prior art of record from prosecution of the ’325 patent.

124. A definite and concrete, real and substantial, justiciable, and continuing case or controversy exists between Avidbots and Brain regarding the validity of the ’325 patent.

125. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 et seq., Avidbots requests the Court’s declaration that the claims of the ’325 patent are invalid.

126. This is an exceptional case entitling Avidbots to an award of its attorneys' fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

ELEVENTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '325 PATENT)

127. Avidbots repeats, realleges, and incorporates Paragraphs 1–126 herein by reference.

128. Avidbots denies infringement of any valid and enforceable claim of the '325 patent and alleges that the manufacture, use, sale, offer for sale, or importation of the products and/or services accused in the Complaint has not infringed and does not infringe, either directly, jointly or indirectly, any valid and enforceable claim of the '325 patent.

129. A definite and concrete, real and substantial, justiciable, and continuing case or controversy exists between Avidbots and Brain regarding the alleged infringement of the '325 patent.

130. A judicial declaration is necessary and appropriate so that Avidbots may ascertain its rights regarding the '325 patent.

131. Avidbots is entitled to a judicial declaration that the manufacture, use, sale, offer for sale, or importation of the products and/or services accused in the Complaint has not infringed and does not infringe, either directly or indirectly, any valid and enforceable claim of the '325 patent.

132. This is an exceptional case entitling Avidbots to an award of its attorneys' fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

TWELFTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF INVALIDITY OF THE ’576 PATENT)

133. Avidbots repeats, realleges, and incorporates Paragraphs 1–132 herein by reference.

134. Each asserted claim of the ’576 patent is invalid for failure to comply with one or more of the statutory requirements for patentability specified by Title 35 of the United States Code, 35 U.S.C. §§ 101, 102, 103, 112, 115, and/or 116, including in light of the prior art of record from prosecution of the ’576 patent.

135. A definite and concrete, real and substantial, justiciable, and continuing case or controversy exists between Avidbots and Brain regarding the validity of the ’576 patent.

136. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 et seq., Avidbots requests the Court’s declaration that the claims of the ’576 patent are invalid.

137. This is an exceptional case entitling Avidbots to an award of its attorneys’ fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

THIRTEENTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE ’576 PATENT)

138. Avidbots repeats, realleges, and incorporates Paragraphs 1–137 herein by reference.

139. Avidbots denies infringement of any valid and enforceable claim of the ’576 patent and alleges that the manufacture, use, sale, offer for sale, or importation of the products and/or services accused in the Complaint has not infringed and does not infringe, either directly, jointly or indirectly, any valid and enforceable claim of the ’576 patent.

140. A definite and concrete, real and substantial, justiciable, and continuing case or controversy exists between Avidbots and Brain regarding the alleged infringement of the ’576 patent.

141. A judicial declaration is necessary and appropriate so that Avidbots may ascertain its rights regarding the ’576 patent.

142. Avidbots is entitled to a judicial declaration that the manufacture, use, sale, offer for sale, or importation of the products and/or services accused in the Complaint has not infringed and does not infringe, either directly or indirectly, any valid and enforceable claim of the ’576 patent.

143. This is an exceptional case entitling Avidbots to an award of its attorneys’ fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

FOURTEENTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF INVALIDITY OF THE ’436 PATENT)

144. Avidbots repeats, realleges, and incorporates Paragraphs 1–143 herein by reference.

145. Each asserted claim of the ’436 patent is invalid for failure to comply with one or more of the statutory requirements for patentability specified by Title 35 of the United States Code, 35 U.S.C. §§ 101, 102, 103, 112, 115, and/or 116, including in light of the prior art of record from prosecution of the ’436 patent.

146. A definite and concrete, real and substantial, justiciable, and continuing case or controversy exists between Avidbots and Brain regarding the validity of the ’436 patent.

147. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 et seq., Avidbots requests the Court’s declaration that the claims of the ’436 patent are invalid.

148. This is an exceptional case entitling Avidbots to an award of its attorneys' fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

FIFTEENTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '436 PATENT)

149. Avidbots repeats, realleges, and incorporates Paragraphs 1–148 herein by reference.

150. Avidbots denies infringement of any valid and enforceable claim of the '436 patent and alleges that the manufacture, use, sale, offer for sale, or importation of the products and/or services accused in the Complaint has not infringed and does not infringe, either directly, jointly or indirectly, any valid and enforceable claim of the '436 patent.

151. A definite and concrete, real and substantial, justiciable, and continuing case or controversy exists between Avidbots and Brain regarding the alleged infringement of the '436 patent.

152. A judicial declaration is necessary and appropriate so that Avidbots may ascertain its rights regarding the '436 patent.

153. Avidbots is entitled to a judicial declaration that the manufacture, use, sale, offer for sale, or importation of the products and/or services accused in the Complaint has not infringed and does not infringe, either directly or indirectly, any valid and enforceable claim of the '436 patent.

154. This is an exceptional case entitling Avidbots to an award of its attorneys' fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

SIXTEENTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF UNENFORCEABILITY OF THE ’780 PATENT)

155. Avidbots repeats, realleges, and incorporates Paragraphs 1–154 herein by reference.

156. Each asserted claim of the ’780 patent is unenforceable due to the inequitable conduct of the Inventors of the ’780 patent, Brain, and/or other persons involved in the prosecution and/or maintenance of the ’780 patent.

157. Avidbots incorporates by reference herein the allegations set forth above in its First Amended Answer and Counterclaims, under the heading Fifth Defense, "Equitable Defenses and Unenforceability,” [redacted]

158. A definite and concrete, real and substantial, justiciable, and continuing case or controversy exists between Avidbots and Brain regarding the enforceability of the ’780 patent.

159. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 et seq., Avidbots requests the Court’s declaration that the claims of the ’780 patent are unenforceable.

160. This is an exceptional case entitling Avidbots to an award of its attorneys’ fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

SEVENTEENTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF UNENFORCEABILITY OF THE ’539 PATENT)

161. Avidbots repeats, realleges, and incorporates Paragraphs 1–160 herein by reference.

162. Each asserted claim of the ’539 patent is unenforceable due to the inequitable conduct of the Inventors of the ’539 patent, Brain, and/or other persons involved in the prosecution and/or maintenance of the ’539 patent.

163. Avidbots incorporates by reference herein the allegations set forth above in its First Amended Answer and Counterclaims, under the heading Fifth Defense, "Equitable Defenses and Unenforceability," [redacted]

164. A definite and concrete, real and substantial, justiciable, and continuing case or controversy exists between Avidbots and Brain regarding the enforceability of the ’539 patent.

165. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 et seq., Avidbots requests the Court’s declaration that the claims of the ’539 patent are unenforceable.

166. This is an exceptional case entitling Avidbots to an award of its attorneys’ fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

EIGHTEENTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF UNENFORCEABILITY OF THE ’325 PATENT)

167. Avidbots repeats, realleges, and incorporates Paragraphs 1–166 herein by reference.

168. Each asserted claim of the ’325 patent is unenforceable due to the inequitable conduct of the Inventors of the ’325 patent, Brain, and/or other persons involved in the prosecution and/or maintenance of the ’325 patent.

169. Avidbots incorporates by reference herein the allegations set forth above in its First Amended Answer and Counterclaims, under the heading Fifth Defense, "Equitable Defenses and Unenforceability," [redacted]

170. A definite and concrete, real and substantial, justiciable, and continuing case or controversy exists between Avidbots and Brain regarding the enforceability of the ’325 patent.

171. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 et seq., Avidbots requests the Court’s declaration that the claims of the ’325 patent are unenforceable.

172. This is an exceptional case entitling Avidbots to an award of its attorneys' fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

NINETEENTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF UNENFORCEABILITY OF THE '576 PATENT)

173. Avidbots repeats, realleges, and incorporates Paragraphs 1–172 herein by reference.

174. Each asserted claim of the '576 patent is unenforceable due to the inequitable conduct of the Inventors of the '576 patent, Brain, and/or other persons involved in the prosecution and/or maintenance of the '576 patent.

175. Avidbots incorporates by reference herein the allegations set forth above in its First Amended Answer and Counterclaims, under the heading Fifth Defense, "Equitable Defenses and Unenforceability," [redacted]

176. A definite and concrete, real and substantial, justiciable, and continuing case or controversy exists between Avidbots and Brain regarding the enforceability of the '576 patent.

177. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 et seq., Avidbots requests the Court's declaration that the claims of the '576 patent are unenforceable.

178. This is an exceptional case entitling Avidbots to an award of its attorneys' fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

TWENTIETH COUNTERCLAIM

(DECLARATORY JUDGMENT OF UNENFORCEABILITY OF THE '436 PATENT)

179. Avidbots repeats, realleges, and incorporates Paragraphs 1–178 herein by reference.

180. Each asserted claim of the ’436 patent is unenforceable due to the inequitable conduct of the Inventors of the ’436 patent, Brain, and/or other persons involved in the prosecution and/or maintenance of the ’436 patent.

181. Avidbots incorporates by reference herein the allegations set forth above in its First Amended Answer and Counterclaims, under the heading Fifth Defense, "Equitable Defenses and Unenforceability,” [redacted]

182. A definite and concrete, real and substantial, justiciable, and continuing case or controversy exists between Avidbots and Brain regarding the enforceability of the ’436 patent.

183. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 et seq., Avidbots requests the Court’s declaration that the claims of the ’436 patent are unenforceable.

184. This is an exceptional case entitling Avidbots to an award of its attorneys’ fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

PRAYER FOR RELIEF

WHEREFORE, Avidbots Corp. and/or Avidbots USA Corp., as applicable, respectfully requests that this Court enter judgment in its favor as follows:

a) Declaratory judgment that Avidbots and its officers, agents, servants, employees, attorneys and all others identified in Brain’s Complaint have not infringed and do not infringe any of the ’780, ’539, ’325, ’576, or ’436 patents, directly, indirectly, or contributorily, either literally or under the doctrine of equivalents;

b) Declaratory judgment that all claims of each of Brain’s ’780, ’539, ’325, ’576, and ’436 patents are invalid and/or unenforceable;

c) Pursuant to 35 U.S.C. § 271, a determination for Avidbots Corp. that Brain and its officers, agents, servants, employees, attorneys and all others in active concert and/or participation

with them have infringed each of the ’664, ’550, ’545, ’474, and ’347 Patents through the manufacture, use, importation, offer for sale, and/or sale of infringing products and/or any of the other acts prohibited by 35 U.S.C. § 271;

d) Pursuant to 35 U.S.C. § 283, an injunction enjoining Brain and its officers, agents, servants, employees, attorneys and all others in active concert and/or participation with them from infringing Avidbots Corp.’s ’664, ’550, ’545, ’474, and ’347 Patents through the manufacture, use, importation, offer for sale, and/or sale of infringing products and/or any of the other acts prohibited by 35 U.S.C. § 271, including preliminary and permanent injunctive relief;

e) Pursuant to 35 U.S.C. § 284, an award compensating Avidbots Corp. for Brain’s infringement of the ’664, ’550, ’545, ’474, and ’347 Patents through payment of damages but not less than a reasonable royalty on Brain’s sales of infringing products;

f) Pursuant to 35 U.S.C. § 284, an award increasing damages up to three times the amount found or assessed by the jury for Brain’s infringement of Avidbot Corp.’s ’664, ’550, ’545, ’474, and ’347 Patents in view of the willful and deliberate nature of the infringement;

g) Pursuant to 35 U.S.C. § 285, a finding that this is an exceptional case, and an award of reasonable attorneys’ fees and non-taxable costs;

h) An assessment of prejudgment and post-judgment interest and costs against Brain, together with an award of such interest and costs, pursuant to 35 U.S.C. § 284;

i) A dismissal, with prejudice, of Brain’s claims against Avidbots; and

j) Such other and further relief as this Court may deem just and proper.

JURY DEMAND

Avidbots requests a trial by jury on all issues so triable.

Dated: January 21, 2026

Respectfully Submitted,

AVIDBOTS CORP., a Canadian Corporation; and AVIDBOTS USA CORP., a Delaware Corporation,

By: */s/ Kieran Kieckhefer*
By Its Attorneys

L. Kieran Kieckhefer
Neema Jalali
GIBSON, DUNN & CRUTCHER LLP
One Embarcadero Center, Suite 2600
San Francisco, CA 94111
Telephone: (415) 393-8200
kkieckhefer@gibsondunn.com
njalali@gibsondunn.com

Ahmed E. ElDessouki
GIBSON, DUNN & CRUTCHER LLP
200 Park Avenue
New York, NY 10166
Telephone: (212) 351-4000
aeldessouki@gibsondunn.com

Lillian J. Mao
GIBSON, DUNN & CRUTCHER LLP
310 University Avenue
Palo Alto, CA 94301
Telephone: (650) 849-5300
lmao@gibsondunn.com

Brian Buroker
GIBSON, DUNN & CRUTCHER, LLP
1050 Connecticut Avenue, N.W., Suite 200
Washington, DC 20036
T: (202) 955-8541
E: bburoker@gibsondunn.com

Daniel I. Konieczny (#6275293)
TABET DIVITO & ROTHSTEIN LLC
209 S. LaSalle St., 7th Floor
Chicago, IL 60604
Telephone: (312) 762-9450
Facsimile: (312) 762-9451
dkonieczny@tdrlaw.com