UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

iROBOT CORPORATION, Plaintiff v. BOBSWEEP, INC., BOBSWEEP USA, and SHENZEN SILVER STAR INTELLIGENT TECHNOLOGY CO., LTD., Defendants.	Civil Action No. 1:17-cv-10651 **JURY TRIAL DEMANDED**

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff iRobot Corporation ("iRobot"), by and through its attorneys, brings this complaint for patent infringement and demand for jury trial against bObsweep, Inc. and bObsweep USA (together, "bObsweep") and Shenzhen Silver Star Intelligent Technology Co., Ltd. ("SSSIT") (collectively, the "Defendants") and alleges as follows:

NATURE OF THE ACTION

1. This action for patent infringement arises under the laws of the United States, Title 35 of the United States Code, 35 U.S.C. § 1 *et seq.*

PARTIES

2. Plaintiff iRobot Corporation is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business at 8 Crosby Drive, Bedford, Massachusetts 01730.

3. On information and belief, Bobsweep, Inc. is a Canadian corporation, having a principal place of business located at 1121 Bay St., Suite 709, Toronto, ON M5S3L9, Canada.

4. On information and belief, Bobsweep USA is a corporation organized under the laws of the State of Nevada, having a principal place of business located at 2360 Corporate Circle, Suite 400, Henderson, Nevada 89074.

5. On information and belief, Shenzhen Silver Star Intelligent Technology Co., Ltd. is a Chinese corporation, having a principal place of business located at Building D, Huiqing Technology Park, DAFU Industrial Area, Guanguang Road, Guanlan Town, Shenzhen, People's Republic of China.

JURISDICTION AND VENUE

6. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

7. This Court has personal jurisdiction over bObsweep because, *inter alia*, upon information and belief, bObsweep has purposefully availed itself of the privileges of conducting business in this judicial district and has regularly and systematically transacted business in this district, directly or through intermediaries; bObsweep has committed acts of patent infringement in this district; and bObsweep has substantial and continuous contacts within this judicial district, at least due to soliciting customers from this judicial district via its own website, bobsweep.com, as well as through third-party websites. Moreover, upon information and belief, bObsweep has purposefully shipped its products into this district through established distribution channels and has placed its products into the stream of commerce with the knowledge and expectation that they will be purchased by consumers in this district.

8. This Court has personal jurisdiction over SSSIT because, *inter alia*, upon information and belief, SSSIT manufactures and/or imports infringing devices that are marketed and sold to Massachusetts consumers through a nationwide channel of distribution in the United

States. Moreover, upon information and belief, SSSIT has purposefully and voluntarily placed infringing devices in the stream of commerce with the knowledge and expectation that the same will end up in, and be marketed, sold, and purchased in, Massachusetts. Upon information and belief, SSSIT has entered into a business relationship with bObsweep whereby SSSIT manufactures infringing devices and imports them into the United States so that bObsweep can sell these infringing devices throughout the United States, including in Massachusetts.

9. Venue is proper in this district pursuant to 28 U.S.C. §§ 1391(b), 1391(c), and 1400(b).

SINGLE ACTION

10. This suit is commenced against Defendants pursuant to 35 U.S.C. § 299 because, *inter alia*, upon information and belief, SSSIT manufactures and/or imports infringing robotic vacuums for and on behalf of bObsweep, who offers them for sale in the United States, and sells them in the United States, including in Massachusetts. Defendants are therefore part of the same manufacturing and distribution chain and share accused product lines and products involving iRobot's patented technologies.

11. Accordingly, Defendants are jointly and severally liable for patent infringement relating to the infringing robotic vacuums made, used, imported, offered for sale, sold, and/or used in the United States by one or more of them. iRobot's right to relief against each of these Defendants arises out of the same transaction, occurrence, or series of transactions or occurrences relating to the making, using, importing into the United States, offering for sale, and/or selling of the same accused robotic vacuums. Questions of fact common to both of these Defendants will arise in this action, including as to whether the accused products infringe the asserted patents. Thus, joinder of the Defendants is proper under 35 U.S.C. § 299.

THE PATENTS-IN-SUIT

The ’308 Patent

12. On December 26, 2006, United States Patent No. 7,155,308 (“the ’308 Patent”), entitled “Robot Obstacle Detection System,” was duly and legally issued by the United States Patent and Trademark Office from U.S. Patent Application Serial No. 10/453,202, filed on June 3, 2003. iRobot is the owner, by valid assignment, of the entire right, title and interest in and to the ’308 Patent, including the right to assert all causes of action arising under the patent and the right to any remedies for infringement of the patent.

13. The ’308 Patent relates to a robot obstacle detection system that includes a robot housing that navigates with respect to a surface, and a sensor subsystem. The sensor subsystem includes an optical emitter which emits a directed beam having a defined field of emission and a photon detector having a defined field of view which intersects the field of emission of the emitter at a region. A circuit in communication with a detector redirects the robot when the surface does not occupy the region to avoid obstacles. A similar system is employed to detect walls.

The ’233 Patent

14. On May 26, 2015, United States Patent No. 9,038,233 (“the ’233 Patent”), entitled “Autonomous Floor-Cleaning Robot,” was duly and legally issued by the United States Patent and Trademark Office from U.S. Patent Application Serial No. 13/714,546, filed on December 14, 2012. iRobot is the owner, by valid assignment, of the entire right, title and interest in and to the ’233 Patent, including the right to assert all causes of action arising under the patent and the right to any remedies for infringement of the patent.

15. The ’233 Patent relates to an autonomous floor-cleaning robot that includes a cleaning head subsystem with a dual-stage brush assembly having counter-rotating, asymmetric

brushes. The autonomous floor-cleaning robot further includes a side brush assembly for directing particulates outside the envelope of the robot into the cleaning head subsystem.

The ’090 Patent

16. On July 2, 2013, United States Patent No.8,474,090 (“the ’090 Patent”), entitled “Autonomous Floor-Cleaning Robot,” was duly and legally issued by the United States Patent and Trademark Office from U.S. Patent Application Serial No. 12/201,554, filed on August 29, 2008. iRobot is the owner, by valid assignment, of the entire right, title and interest in and to the ’090 Patent, including the right to assert all causes of action arising under the patent and the right to any remedies for infringement of the patent.

17. The ’090 Patent relates to a floor cleaning robot that includes a housing, wheels, and a motor driving the wheels to move the robot across a floor, a control module disposed within the housing and directing movement of the robot across the floor, a sensor for detecting and communicating obstacle information to the control module so that the control module can cause the robot to react to the obstacle, a removable bin disposed at least partially within the housing and receiving particulates, a first rotating member directing particulates toward the bin, and a second rotating member cooperating with the first rotating member to direct particulates toward the bin.

The ’490 Patent

18. On October 26, 2004, United States Patent No. 6,809,490 (“the ’490 Patent”), entitled “Method and System for Multi-Mode Coverage for an Autonomous Robot,” was duly and legally issued by the United States Patent and Trademark Office from U.S. Patent Application Serial No. 10/167,851, filed on June 12, 2002. iRobot is the owner, by valid assignment, of the entire right, title, and interest in and to the ’490 Patent, including the right to assert all causes of action arising under the patent and the right to any remedies for infringement of the patent.

19. The ’490 Patent relates to a control system for a mobile robot to effectively cover a given area by operating in a plurality of modes. In an exemplary embodiment, an autonomous mobile robot can operate in an obstacle following mode, a random bounce mode, or in a spot coverage mode. Additionally, the ’490 Patent describes a behavior based architecture for the control system to ensure full coverage.

BACKGROUND

20. iRobot (formerly IS Robotics, Inc.) was founded in 1990 by Massachusetts Institute of Technology roboticists with the vision of making practical robots a reality. The company has developed some of the world’s most important robots, and has a rich history steeped in innovation.

21. iRobot is the leader in home robotic cleaning devices, with products delivering convenient, customized, powerful cleaning assistance. Among other product offerings, iRobot develops, manufactures, and sells the well-known Roomba® line of products, which have been recognized as a market leader in robotic vacuum cleaning as well as highly preferred Braava® branded products.

22. iRobot has extensive involvement in the U.S. market, including the Massachusetts market, with its innovative robotic vacuum cleaning devices. iRobot employs hundreds of persons in the United States who are dedicated to the design, research, development, testing, quality control, and customer care of its robotic vacuum cleaning devices, and related accessories for U.S. customers.

23. Defendants compete directly with iRobot.

24. On information and belief, SSSIT manufactures robotic vacuum cleaning devices for bObsweep, including, but not limited to, bObsweep’s Bob PetHair Plus, bObi Pet, bObi

Classic, Bob PetHair, Bob Standard, and Junior robot vacuum cleaners,[1] which, as explained below, infringe one or more claims of each of iRobot's '308 Patent, '233 Patent, '090 Patent, and '490 Patent (the "Asserted Patents").

25. To the extent facts learned in discovery show that one or both Defendants' infringement of a claim of an Asserted Patent is or has been willful, including following the filing of this Complaint, iRobot reserves the right to request such a finding at the time of trial, or as may otherwise be allowed by the Court.

COUNT I: INFRINGEMENT OF THE '308 PATENT BY BOBSWEEP

26. iRobot hereby incorporates by reference its allegations contained in paragraphs 1 through 25 of this Complaint as though fully set forth herein.

27. Upon information and belief, bObsweep has infringed and continues to infringe, either literally or under the doctrine of equivalents, at least claim 1 of the '308 Patent pursuant to 35 U.S.C. § 271(a) by making, using, offering to sell, and/or selling in the United States, and/or importing into the United States, at least the Accused Products.

28. For example, on information and belief, bObsweep's bObi Classic robotic vacuum, used by bObsweep and/or sold and offered for sale by bObsweep, including at its website, infringes claim 1 of the '308 Patent; this claim recites:

> A sensor subsystem for an autonomous robot which rides on a surface, the sensor subsystem comprising: an optical emitter which emits a directed optical beam having a defined field of emission; a photon detector having a defined field of view which intersects the field of emission of the emitter at a region; and a circuit in communication with the detector providing an output when an object is not present in the region thereby re-directing the autonomous robot.

29. On information and belief, bObsweep's bObi Classic robotic vacuum is an autonomous robot that rides on a surface such as a floor. It includes sensor subsystems that

[1] These exemplary infringing products are hereinafter referred to as the "Accused Products."

comprise at least an optical emitter that emits an optical beam with a defined field of emission and a photon detector whose field of view intersects with this field of emission. On information and belief, the sensor subsystem also includes a circuit in communication with the detector that provides a signal when an object (such as the floor) is not present in this region of intersection such that the robot is re-directed. This behavior and its relation to the bObi Classic's "floor sensors" is depicted in a video provided on bObsweep's website.[2] Indeed, the "floor sensor" subsystem components are depicted in the image of the bObi Classic robotic vacuum below:[3]

30. Furthermore, upon information and belief, bObsweep has induced and continues to induce infringement of at least claim 1 of the '308 Patent pursuant to 35 U.S.C. § 271(b), by actively and knowingly inducing, directing, causing, and encouraging others, including, but not

[2] *See*, *e.g.*, bObsweep Robotic Vacuum | Baseboards and Corners Video (http://www.bobsweep.com/owners-bobsweeproboticvacuumcleaer/how-to-use-bobsweep-videos.html) linked from the bObsweep web page, http://www.bobsweep.com/owners-bobsweeproboticvacuumcleaer/how-to-use-bobsweep-videos.html (last visited April 13, 2017). Hereinafter, the "Baseboards and Corners Video."

[3] *See*, *e.g.*, bObi by bObsweep Owner's Manual, https://cdn.shopify.com/s/files/1/0569/6685/files/OwnersManual-bObi-August2015_7f859b74-a02d-4ae2-8ad5-aafcfa328021.pdf?15425220448488587649 (last visited April 12, 2017), linked from https://owners.bobsweep.com/pages/how-to-video-bobi-robot-vacuum. Hereinafter, the "bObi Classic Owner's Manual."

limited to, its customers and/or end users, to make, use, sell, and/or offer to sell in the United States the Accused Products, such as the bObi Classic.

31. Upon information and belief, bObsweep's customers and/or end users have directly infringed and are directly infringing claim 1 of the '308 Patent. bObsweep has actual knowledge of the '308 Patent at least as of service of this Complaint. bObsweep is knowingly inducing its customers and/or end users to directly infringe the '308 Patent through, for example, their use of the bObi Classic, with the specific intent to encourage such infringement, and knowing that the induced acts constitute patent infringement. bObsweep's inducement includes, for example, providing technical guides, product data sheets, demonstrations, specifications, installation guides, and other forms of support that induce its customers and/or end users to directly infringe the '308 Patent.[4]

32. Upon information and belief, bObsweep has committed the foregoing infringing activities without license from iRobot.

33. As a result of bObsweep's infringement of the '308 Patent iRobot has suffered and will continue to suffer damage.

34. bObsweep's continued infringement of iRobot's patent rights under the '308 Patent will irreparably harm iRobot.

35. The acts of infringement by bObsweep will continue unless enjoined by this Court.

[4] *See, e.g.*, bObi classic product web page and linked resources, http://www.bobsweep.com/bobi-classic (last visited April 12, 2017). Hereinafter, the "bObi Classic Product Web Page." *See also* How-To Videos: bObi Classic, https://owners.bobsweep.com/pages/how-to-video-bobi-robot-vacuum (last visited April 13, 2017), hereinafter, "bObi Classic How-To Videos"; *see also* How to Use My Robot Vacuum, http://www.bobsweep.com/owners-bobsweeproboticvacuumcleaer/how-to-use-bobsweep-videos.html (last visited April 13, 2017), hereinafter "How to Use My Robot Vacuum."

COUNT II: INFRINGEMENT OF THE '308 PATENT BY SSSIT

36. iRobot hereby incorporates by reference its allegations contained in paragraphs 1 through 35 of this Complaint as though fully set forth herein.

37. Upon information and belief, SSSIT has directly infringed, and continues to directly infringe, the '308 Patent by importing into the United States the Accused Products that it manufactures for and on behalf of bObsweep, including, for example, the bObi Classic. These Accused Products infringe at least claim 1 of the '308 Patent as explained above in paragraphs 27 – 29 with respect to bObsweep's direct infringement, which are incorporated herein by reference.

38. Upon information and belief, SSSIT has committed the foregoing infringing activities without license from iRobot.

39. As a result of SSSIT's infringement of the '308 Patent iRobot has suffered and will continue to suffer damage.

40. SSSIT's continued infringement of iRobot's patent rights under the '308 Patent will irreparably harm iRobot.

41. The acts of infringement by SSSIT will continue unless enjoined by this Court.

COUNT III: INFRINGEMENT OF THE '233 PATENT BY BOBSWEEP

42. iRobot hereby incorporates by reference its allegations contained in paragraphs 1 through 41 of this Complaint as though fully set forth herein.

43. Upon information and belief, bObsweep has infringed and continues to infringe, either literally or under the doctrine of equivalents, at least claim 1 of the '233 Patent pursuant to 35 U.S.C. § 271(a) by making, using, offering to sell and/or selling in the United States, and/or importing into the United States, at least the Accused Products.

44. For example, on information and belief, bObsweep's bObi Classic robotic vacuum, used by bObsweep and/or sold and offered for sale by bObsweep, including at its website, infringes claim 1 of the '233 Patent; this claim recites:

> A self-propelled floor-cleaning robot comprising a housing defining a housing perimeter; a powered primary brush assembly disposed within the housing perimeter and positioned to engage a floor surface, the primary brush assembly being configured to rotate about an axis generally parallel to the floor surface; a cliff detector carried by the housing and configured to direct a beam toward the floor surface and to respond to a falling edge of the floor surface; and a powered side brush extending beyond the housing perimeter and positioned to brush floor surface debris from beyond the housing perimeter, the side brush being configured to rotate about an axis generally perpendicular to the floor surface and to rotate in a direction to direct debris toward the robot along a projected direction of movement of the powered primary brush assembly, the side brush having bundles of bristles and being positioned such that the bundles of bristles pass between the cliff detector and the floor surface during a rotation of the side brush around the axis, the bundles of bristles being separated by a gap, the gap being configured to prevent occlusion of the cliff detector beam during at least part of the rotation of the side brush around the axis; a particulate receptacle positioned to receive and collect particulates brushed from the floor surface by the primary brush assembly and the powered side brush; an obstacle detector responsive to obstacles encountered by the robot; and a control circuit in electrical communication with a motor drive and configured to control the motor drive to maneuver the robot about detected obstacles across the floor surface during a floor-cleaning operation.

45. On information and belief, the bObsweep bObi Classic robotic vacuum is a self-propelled floor-cleaning robot comprising a housing which defines a housing perimeter. On information and belief, it includes a powered primary brush assembly within this housing in a position such that it engages a floor surface, and the brush is configured to rotate about an axis that is generally parallel to the floor. On information and belief, it also includes a cliff detector which emits a beam toward the floor surface in order to respond to a falling edge of the floor surface. On information and belief, it also includes a side brush which extends beyond the housing perimeter, which rotates about an axis generally perpendicular to the floor surface to direct debris toward the robot along a projected direction of movement of the powered primary brush assembly. The aforementioned primary brush, cliff detector, and side brush are all visible in the image of a

bObsweep bObi Classic robotic vacuum below, labelled as the "main brush," "floor sensors," and "side brush," respectively:[5]

46. As can be seen in the image above, the side brush has bundles of bristles. On information and belief, these bundles of bristles are positioned such that the bundles pass between the cliff detector and floor surface during rotation, and the bundles are separated by a gap configured to prevent occlusion of the cliff detector beam.

47. On information and belief, the bObsweep bObi Classic also includes a particulate receptacle that is positioned to receive the particulates brushed from the floor surface by the aforementioned brushes, as shown in the following image from the bObi Classic owner's manual, labelled as a "Dustbin":[6]

[5] *See*, *e.g.*, bObi Classic Owner's Manual.
[6] *Id.*

48. On information and belief, the bObsweep bObi Classic also includes an obstacle detector which is responsive to obstacles encountered, and a control circuit in electrical communication with a motor drive configured to maneuver the robot about detected obstacles during a floor-cleaning operation. Examples of such an obstacle detector are visible in the image from the bObsweep bObi Classic manual below, labelled as "wall sensors" and "touch sensors."[7] Additionally, the bObi Classic web page explains that the robot contains "A network of over 80 sensors help bObi navigate around stairs and furniture, and eliminate the need for a clunky bumper."[8] Moreover, on information and belief, this obstacle detection behavior is shown in videos on bObsweep's website, including, for example, the "Cleaning Behavior" video.[9]

[7] *See, e.g.*, bObi Classic Owner's Manual.
[8] *See, e.g.*, bObi Classic Product Web Page.
[9] *See*, *e.g.*, Cleaning Behavior | bObi Classic by bObsweep, https://www.youtube.com/watch?v=wMHoXDpeU2g (last visited April 13, 2017), hereinafter the "bObi Classic Cleaning Behavior Video."

49. Upon information and belief, bObsweep has induced and continues to induce infringement of at least claim 1 of the ’233 Patent pursuant to 35 U.S.C. § 271(b), by actively and knowingly inducing, directing, causing, and encouraging others, including, but not limited to, its customers and/or end users, to make, use, sell, and/or offer to sell in the United States the Accused Products, such as the bObsweep bObi Classic.

50. Upon information and belief, bObsweep’s customers and/or end users have directly infringed and are directly infringing claim 1 of the ’233 Patent. bObsweep has actual knowledge of the ’233 Patent at least as of service of this Complaint. bObsweep is knowingly inducing its customers and/or end users to directly infringe the ’233 Patent through, for example, their use of the bObi Classic, with the specific intent to encourage such infringement, and knowing that the induced acts constitute patent infringement. bObsweep’s inducement includes, for example, providing technical guides, product data sheets, demonstrations, specifications, installation guides, and other forms of support that induce its customers and/or end users to directly infringe the ’233 Patent.[10]

[10] *See, e.g.*, bObi Classic Product Web Page and linked resources, including bObi Classic Owner’s Manual, bObi Classic How-To Videos, and How to Use My Robot Vacuum.

51. Upon information and belief, bObsweep has committed the foregoing infringing activities without license from iRobot.

52. As a result of bObsweep's infringement of the '233 Patent iRobot has suffered and will continue to suffer damage.

53. bObsweep's continued infringement of iRobot's patent rights under the '233 Patent will irreparably harm iRobot.

54. The acts of infringement by bObsweep will continue unless enjoined by this Court.

COUNT IV: INFRINGEMENT OF THE '233 PATENT BY SSSIT

55. iRobot hereby incorporates by reference its allegations contained in paragraphs 1 through 54 of this Complaint as though fully set forth herein.

56. Upon information and belief, SSSIT has directly infringed, and continues to directly infringe, the '233 Patent by importing into the United States the Accused Products that it manufactures for and on behalf of bObsweep, including, for example, the bObi Classic. These Accused Products infringe at least claim 1 of the '233 Patent as explained above in paragraphs 43 – 48 with respect to bObsweep's infringement, which are incorporated herein by reference.

57. Upon information and belief, SSSIT has committed the foregoing infringing activities without license from iRobot.

58. As a result of SSSIT's infringement of the '233 Patent iRobot has suffered and will continue to suffer damage.

59. SSSIT's continued infringement of iRobot's patent rights under the '233 Patent will irreparably harm iRobot.

60. The acts of infringement by SSSIT will continue unless enjoined by this Court.

COUNT V: INFRINGEMENT OF THE ’090 PATENT BY BOBSWEEP

61. iRobot hereby incorporates by reference its allegations contained in paragraphs 1 through 60 of this Complaint as though fully set forth herein.

62. Upon information and belief, bObsweep has infringed and continues to infringe, either literally or under the doctrine of equivalents, at least claim 1 of the ’090 Patent pursuant to 35 U.S.C. § 271(a) by making, using, offering to sell and/or selling in the United States, and/or importing into the United States, at least the Accused Products.

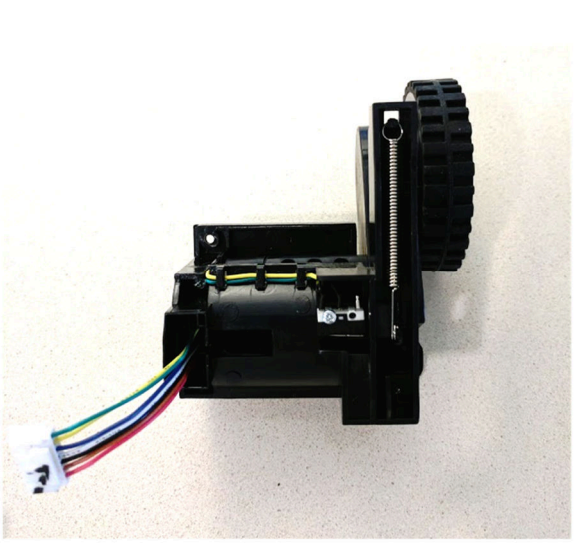
63. For example, on information and belief, bObsweep’s bObi Classic robotic vacuum, used by bObsweep and/or sold and offered for sale by bObsweep at its website, infringes claim 1 of the ’090 Patent; this claim recites:

> A floor cleaning robot comprising: a housing and a chassis; wheels and at least one motor to drive the wheels disposed at least partially within the housing and configured to move the floor cleaning robot across a floor, each of the wheels being attached to the chassis via a respective arm having a distal end and a proximal end; a control module disposed within the housing and directing movement of the floor cleaning robot across the floor; at least one sensor for detecting an obstacle and communicating obstacle information to the control module so that the control module can cause the floor cleaning robot to react to the obstacle; a removable bin disposed at least partially within the housing and configured to receive particulates; and a first rotating member configured to direct particulates toward the bin, wherein one of the wheels is rotatably attached to the distal end of each arm, and the proximal end of each arm is pivotably attached to the chassis, wherein each wheel is biased to an extended position away from the robot chassis by a spring extending between the arm and the robot chassis, and wherein, during cleaning, the weight of the floor cleaning robot overcomes a force from the spring biasing the wheels to an extended position.

64. On information and belief, bObsweep’s bObi Classic robotic vacuum is a floor cleaning robot that comprises a housing, chassis, and wheels with at least one motor, disposed at least partially within the housing, to drive the wheels to move the Accused Products across a floor. The motorized driving of the wheels can be seen, *e.g.*, in the bObi Classic Cleaning Behavior

Video. Further, for example, the housing and chassis are shown in videos on the bObsweep web site, including the "Replace the Mainboard | bObi Classic by bObsweep" video.[11]

65. On information and belief, each of the aforementioned wheels is attached to the chassis via an arm with distal and proximal ends. On information and belief, the wheels are rotatably attached to the distal end of each arm, the proximal end of each arm is pivotably attached to the chassis, and the wheels are biased to an extended position away from the robot by a spring extending between the arm and the robot chassis. On information and belief, during cleaning, the weight of the bObsweep bObi Classic overcomes this biasing force from the spring. The recited wheel arrangement and biasing spring is visible, *e.g.*, from the images below,[12] and from the "Change the Left or Right Wheel | bObi Classic by bObsweep" video on the bObsweep web site.[13]



[11] *See*, *e.g.*, Replace the Mainboard | bObi Classic by bObsweep, https://www.youtube.com/watch?v=LSThsjtvccw (last visited April 13, 2017), hereinafter the "Repair 101: Circuit Board Video," linked from https://owners.bobsweep.com/pages/bobi-repair-guides.

[12] Photograph of disassembled bObi Classic.

[13] *See*, *e.g.*, Change the Left or Right Wheel | bObi Classic by bObsweep, https://www.youtube.com/watch?v=RMJkSlGk44A (last visited April 13, 2017), hereinafter the "Repair 101: Wheel Video," linked from https://owners.bobsweep.com/pages/bobi-repair-guides.

66. On information and belief, the bObsweep bObi Classic also comprises a control module disposed within the housing which directs movement of the robot. On information and belief, it also comprises at least one sensor for detecting an obstacle information and communicating obstacle information to the control module so that the control module can cause the Accused Product to react.[14] Indeed, the bObi Classic web page explains that the robot contains "A network of over 80 sensors help bObi navigate around stairs and furniture, and eliminate the need for a clunky bumper."[15] Additionally, for example, sensors are depicted in the owner's manual for the bObi Classic, labelled as "floor sensors," "wall sensors," and "touch sensors" in the images below.[16]

[14] *See, e.g.*, bObi Classic Cleaning Behavior Video.
[15] *See, e.g.*, bObi Classic Product Web Page.
[16] *See, e.g.*, bObi Classic Owner's Manual.

67. On information and belief, the bObi Classic also comprises a removable bin disposed at least partially within the housing and configured to receive particles, and a rotating member configured to direct particulates toward the bin, as shown in the following image from the bObi Classic owner's manual, labelled as a "Dustbin."[17] The bObi Classic Owner's Manual also explains that the dustbin can be "remove[d]."

[17] *See*, *e.g.*, bObi Classic Owner's Manual.

68. Upon information and belief, bObsweep has induced and continues to induce infringement of at least claim 1 of the ’090 Patent pursuant to 35 U.S.C. § 271(b), by actively and knowingly inducing, directing, causing, and encouraging others, including, but not limited to, its customers and/or end users, to make, use, sell, and/or offer to sell in the United States the Accused Products, such as the bObi Classic.

69. Upon information and belief, bObsweep’s customers and/or end users have directly infringed and are directly infringing claim 1 of the ’090 Patent. bObsweep has actual knowledge of the ’090 Patent at least as of service of this Complaint. bObsweep is knowingly inducing its customers and/or end users to directly infringe the ’090 Patent through, for example, their use of the bObi Classic, with the specific intent to encourage such infringement, and knowing that the induced acts constitute patent infringement. bObsweep’s inducement includes, for example, providing technical guides, product data sheets, demonstrations, specifications, installation guides, and other forms of support that induce its customers and/or end users to directly infringe the ’090 Patent.[18]

70. Upon information and belief, bObsweep has committed the foregoing infringing activities without license from iRobot.

71. As a result of bObsweep’s infringement of the ’090 Patent iRobot has suffered and will continue to suffer damage.

72. bObsweep’s continued infringement of iRobot’s patent rights under the ’090 Patent will irreparably harm iRobot.

73. The acts of infringement by bObsweep will continue unless enjoined by this Court.

[18] *See, e.g.*, bObi Classic Product Web Page and linked resources, including bObi Classic Owner’s Manual, bObi Classic How-To Videos, and How to Use My Robot Vacuum.

COUNT VI: INFRINGEMENT OF THE ’090 PATENT BY SSSIT

74. iRobot hereby incorporates by reference its allegations contained in paragraphs 1 through 73 of this Complaint as though fully set forth herein.

75. Upon information and belief, SSSIT has directly infringed, and continues to directly infringe, the ’090 Patent by importing into the United States the Accused Products that it manufactures for and on behalf of bObsweep, including, for example, the bObi Classic. These Accused Products infringe at least claim 1 of the ’090 Patent as explained above in paragraphs 62 – 67 with respect to bObsweep’s direct infringement, which are incorporated herein by reference.

76. Upon information and belief, SSSIT has committed the foregoing infringing activities without license from iRobot.

77. As a result of SSSIT’s infringement of the ’090 Patent iRobot has suffered and will continue to suffer damage.

78. SSSIT’s continued infringement of iRobot’s patent rights under the ’090 Patent will irreparably harm iRobot.

79. The acts of infringement by SSSIT will continue unless enjoined by this Court.

COUNT IX: INFRINGEMENT OF THE ’490 PATENT BY BOBSWEEP

80. iRobot hereby incorporates by reference its allegations contained in paragraphs 1 through 79 of this Complaint as though fully set forth herein.

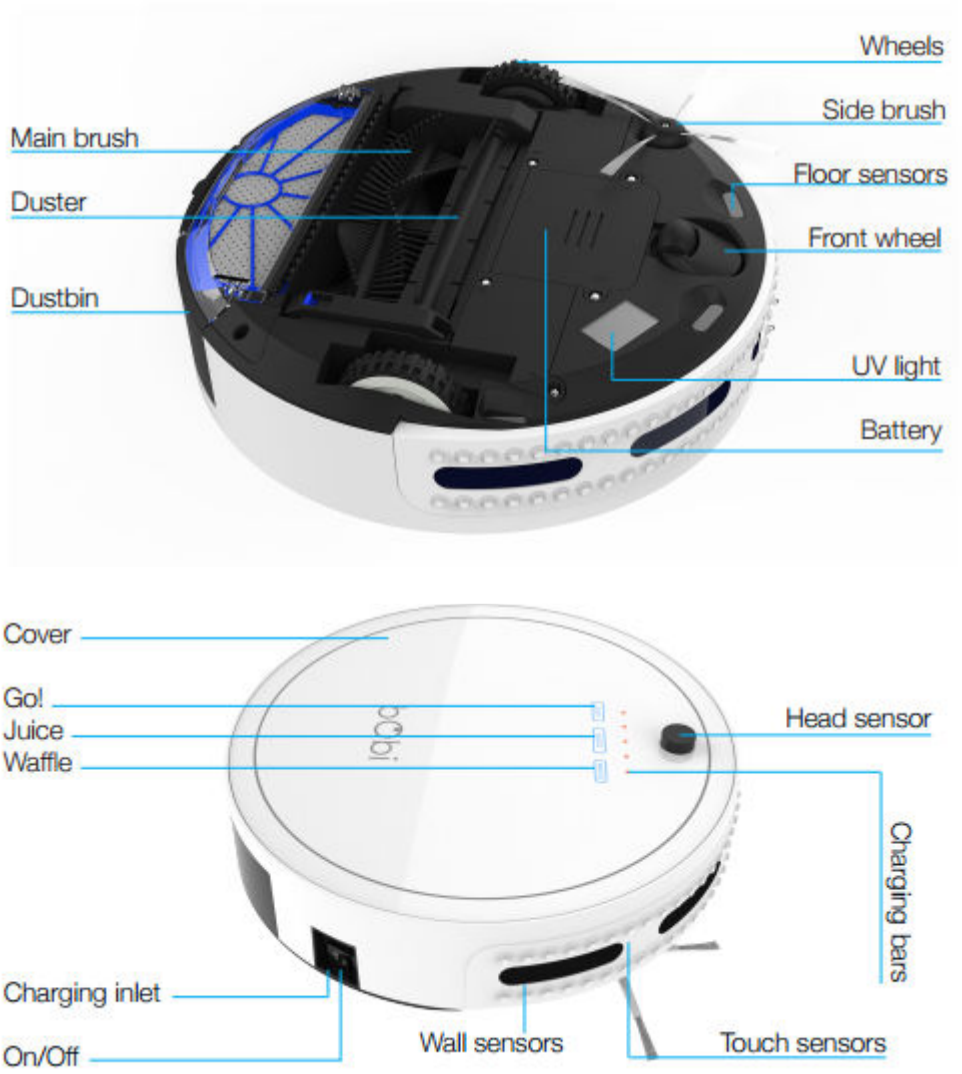
81. Upon information and belief, bObsweep has infringed and continues to infringe, either literally or under the doctrine of equivalents, at least claim 1 of the ’490 Patent pursuant to 35 U.S.C. § 271(a) by making, using, offering to sell and/or selling in the United States, and/or importing into the United States, at least the Accused Products.

82. For example, on information and belief, bObsweep's bObi Classic robotic vacuum, used by bObsweep and/or sold and offered for sale by bObsweep at its website, infringes claim 1 of the '490 Patent; this claim recites:

> A mobile robot comprising: (a) means for moving the robot over a surface; (b) an obstacle detection sensor; (c) and a control system operatively connected to said obstacle detection sensor and said means for moving; (d) said control system configured to operate the robot in a plurality of operational modes and to select from among the plurality of modes in real time in response to signals generated by the obstacle detection sensor, said plurality of operational modes comprising: a spot-coverage mode whereby the robot operates in an isolated area, an obstacle following mode whereby said robot travels adjacent to an obstacle, and a bounce mode whereby the robot travels substantially in a direction away from an obstacle after encountering the obstacle, and wherein, when in the obstacle following mode, the robot travels adjacent to an obstacle for a distance at least twice the work width of the robot.

83. On information and belief, the bObsweep bObi Classic is a mobile robot that comprises a means for moving the robot over a surface, an obstacle detection sensor, and a control system operatively connected to the obstacle detection sensor and the means for moving.[19] The robot and exemplary obstacle detection sensors are depicted in the owner's manual for the bObi Classic, labelled as "floor sensors," "wall sensors," and "touch sensors" in the images below.[20]

[19] *See*, *e.g.*, bObi Classic Cleaning Behavior Video.
[20] *See, e.g.*, bObi Classic Owner's Manual.



84. On information and belief, the control system is configured to operate the robot in a plurality of modes, selecting among these modes in real time in response to signals generated by the obstacle sensor. On information and belief, these modes include a spot-coverage mode whereby the robot operates in an isolated area, an obstacle following mode whereby said robot travels adjacent to an obstacle, and a bounce mode whereby the robot travels substantially in a direction away from an obstacle after encountering the obstacle, and wherein, when in the obstacle following mode, the robot travels adjacent to an obstacle for a distance at least twice the work width of the robot. These modes are described in, for example, the bObi Classic Cleaning Behavior

Video, and also in the "Cleaning Modes: GO! and Waffle | bObi Classic by bObsweep" on the bObsweep web site.[21]

85. Upon information and belief, bObsweep has induced and continues to induce infringement of at least claim 1 of the '490 Patent pursuant to 35 U.S.C. § 271(b), by actively and knowingly inducing, directing, causing, and encouraging others, including, but not limited to, its customers and/or end users, to make, use, sell, and/or offer to sell in the United States, and/or import into the United States the Accused Products, such as the bObi Classic.

86. Upon information and belief, bObsweep's customers and/or end users have directly infringed and are directly infringing claim 1 of the '490 Patent. bObsweep has actual knowledge of the '490 Patent at least as of service of this Complaint. bObsweep is knowingly inducing its customers and/or end users to directly infringe the '490 Patent through, for example, their use of the bObi Classic, with the specific intent to encourage such infringement, and knowing that the induced acts constitute patent infringement. bObsweep's inducement includes, for example, providing technical guides, product data sheets, demonstrations, specifications, installation guides, and other forms of support that induce its customers and/or end users to directly infringe the '490 Patent.[22]

87. Upon information and belief, bObsweep has committed the foregoing infringing activities without license from iRobot.

88. As a result of bObsweep's infringement of the '490 Patent iRobot has suffered and will continue to suffer damage.

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[21] *See*, *e.g.*, Cleaning Modes: GO! and Waffle | bObi Classic by bObsweep, https://www.youtube.com/watch?v=KtHi6GEnT4w (last visited April 13, 2017), hereinafter the "bObi Classic Cleaning Modes Video."

[22] *See, e.g.*, bObi Classic Product Web Page and linked resources, including bObi Classic Owner's Manual, bObi Classic How-To Videos, and How to Use My Robot Vacuum.

89. bObsweep's continued infringement of iRobot's patent rights under the '490 Patent will irreparably harm iRobot.

90. The acts of infringement by bObsweep will continue unless enjoined by this Court.

COUNT X: INFRINGEMENT OF THE '490 PATENT BY SSSIT

91. iRobot hereby incorporates by reference its allegations contained in paragraphs 1 through 90 of this Complaint as though fully set forth herein.

92. Upon information and belief, SSSIT has directly infringed, and continues to directly infringe, the '490 Patent by importing into the United States the Accused Products that it manufactures for and on behalf of bObsweep, including, for example, the bObi Classic. These Accused Products infringe at least claim 1 of the '490 Patent as explained in paragraphs 81 – 84 above with respect to bObsweep's infringement, which are incorporated herein by reference.

93. Upon information and belief, SSSIT has committed the foregoing infringing activities without license from iRobot.

94. As a result of SSSIT's infringement of the '490 Patent iRobot has suffered and will continue to suffer damage.

95. SSSIT's continued infringement of iRobot's patent rights under the '490 Patent will irreparably harm iRobot.

96. The acts of infringement by SSSIT will continue unless enjoined by this Court.

PRAYER FOR RELIEF

WHEREFORE, iRobot prays for judgment in its favor against Defendants, and granting relief as follows:

A. For a judgment declaring that the Defendants have infringed the Asserted Patents;

B. For a grant of an injunction pursuant to 35 U.S.C. § 283, enjoining the Defendants together with their respective officers, directors, agents, servants, employees, and attorneys, and upon those persons in active concert or participation with them from further acts of infringement;

C. For an award to iRobot of compensatory damages as a result of the Defendants' infringement of the Asserted Patents, together with interest and costs, and in no event less than a reasonable royalty;

D. For a judgment declaring that this case is exceptional and awarding iRobot its expenses, costs, and attorneys' fees in accordance with 35 U.S.C. § 285 and Rule 54(d) of the Federal Rules of Civil Procedure;

E. For such other and further relief as the Court deems just and proper.

DEMAND FOR A JURY TRIAL

iRobot hereby demands a trial by jury in this action.

Respectfully submitted,

By: */s/ Stephen Marshall*

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Dated: April 17, 2017