

**THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

MC ROBOTICS LLC,

Plaintiff,

v.

DYSON, INC.,

Defendant.

Case No. 1:17-cv-5341

JURY TRIAL DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT

This is an action for patent infringement in which MC Robotics LLC (“Plaintiff”) makes the following allegations against Dyson, Inc. (“Defendant”):

PARTIES

1. Plaintiff is a Texas limited liability company, having a principal place of business located at 5068 W. Plano Parkway, Ste. 300, Plano, Texas 75093.
2. Upon information and belief, Defendant Dyson, Inc. is a corporation organized and existing under the laws of the State of Illinois, with its principal place of business located at 600 W. Chicago Avenue, Ste. 275, Chicago, IL 60654. Defendant may be served via its registered agent for service of process: Corporate Creations Network In, 350 S. Northwest Highway, #300, Park Ridge, IL 60068.

JURISDICTION AND VENUE

3. This action arises under the patent laws of the United States, Title 35 of the United States Code. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).
4. Venue is proper in this district under 28 U.S.C. § 1400(b). Upon information and belief, Defendant has transacted business in this district, and has committed and/or induced acts of

patent infringement in this district. Furthermore, Defendant maintains its principal place of business in this district.

5. On information and belief, Defendant is subject to this Court's specific and general personal jurisdiction pursuant to due process, due at least to its substantial business in this forum, including: (i) at least a portion of the infringements alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct, and/or deriving substantial revenue from goods and services provided to individuals in Illinois and in this Judicial District.

COUNT I
INFRINGEMENT OF U.S. PATENT NO. 6,650,975

6. Plaintiff is the owner by assignment of United States Patent No. 6,650,975 ("the '975 Patent") entitled "Multifunctional Mobile Appliance." The '975 Patent issued on November 18, 2003. A true and correct copy of the '975 Patent is attached as Exhibit A.

7. Bryan John Ruffner is listed as listed as the inventor of the '975 Patent.

8. The '975 Patent is valid and enforceable.

9. Defendant directly or through intermediaries, makes, uses, sells, and/or offers for sale the Dyson 360 Eye, shown in Exhibit B which infringe the '975 Patent.

10. Defendant has been and is now infringing at least claims 3, 4, 6, and 8 of the '975 Patent in the State of Illinois, in this Judicial District, and elsewhere in the United States, by, among other things, directly or through intermediaries, making, using, selling, and/or offering for sale robotic vacuum cleaners, *i.e.*, Dyson 360 Eye (the "Accused Instrumentality"), covered by one or more claims of the '975 Patent to the injury of Plaintiff. Defendant is directly infringing, literally infringing, and/or infringing at least claims 3, 4, 6, and 8 of the '975 Patent under the doctrine of equivalents. Defendant is thus liable for infringement of the '975 Patent pursuant to 35 U.S.C. § 271(a).

11. The Accused Instrumentality infringes claim 3 of the '975 Patent. It performs the method of automating the control of a mobile appliance comprising the steps of establishing a wireless communications link between a communications node and the mobile appliance (*i.e.*, Wi-Fi connection), connecting said communications node to a public communications utility (*e.g.*, the Internet), moving the mobile appliance over an area (*i.e.*, a room or section of a room), performing a task during said movement (*i.e.*, vacuuming), and modifying absent direct user involvement one of the execution of the task, and the type of task performed by the mobile appliance in response to information exchanged between the mobile appliance and one of a database, expert software, and an expert system connected to said public communications utility (*i.e.*, the task can be scheduled to take place at a predetermined time, including subdividing the room and or starting and resuming the task without user intervention.) *See* Ex. B Figs. 1-6.

12. The Accused Instrumentality infringes claim 4 of the '975 Patent. It performs the method defined in claim 3 further comprising the step of controlling the mobile appliance from the public utility via the communications node (*i.e.*, the Internet). *See* Ex. B Fig. 2.

13. The Accused Instrumentality infringes claim 6 of the '975 Patent. It performs the method defined in claim 3 wherein the database includes one of work schedule, security, and multi mobile appliance coordination data (*i.e.*, the database includes at least a work schedule). *See* Ex. B Figs. 1-6.

14. The Accused Instrumentality infringes claim 8 of the '975 Patent. It performs the method defined in claim 3 wherein the public communications utility is one of a cable service, a cellular phone service, a telephone line, and the World Wide Web (*i.e.*, the Internet); and the database includes one of work schedule, security, and multi mobile appliance coordination data (*i.e.*, the data base includes at least a work schedule). *See* Ex. B Figs. 1-6.

15. As a result of Defendant's infringement of the '975 Patent, Plaintiff has suffered monetary damages and is entitled to a money judgment in an amount adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the Court, and Plaintiff will continue to suffer damages in the future unless Defendant's infringing activities are enjoined by this Court.

16. Unless a permanent injunction is issued enjoining Defendant and its agents, servants, employees, representatives, affiliates, and all others acting on in active concert therewith from infringing the '975 Patent, Plaintiff will be greatly and irreparably harmed.

COUNT II
INFRINGEMENT OF U.S. PATENT NO. 6,502,017

17. Plaintiff is the owner by assignment of United States Patent No. 6,502,017 ("the '017 Patent") entitled "Multifunctional Mobile Appliance." The '017 Patent issued on December 31, 2002. A true and correct copy of the '017 Patent is attached as Exhibit C.

18. Bryan John Ruffner is listed as listed as the inventor of the '017 Patent.

19. The '017 Patent is valid and enforceable.

20. Defendant directly or through intermediaries, makes, uses, sells, and/or offers for sale the Dyson 360 Eye, shown in Exhibit D which infringes the '017 Patent.

21. Defendant has been and is now infringing at least claims 1, 13, 14 of the '017 Patent in the State of Texas, in this Judicial District, and elsewhere in the United States, by, among other things, directly or through intermediaries, making, using, selling, and/or offering for sale robotic vacuum cleaners, *i.e.*, the Accused Instrumentality, covered by one or more claims of the '017 Patent to the injury of Plaintiff. Defendant is directly infringing, literally infringing, and/or

infringing at least claims 1, 13, 14 of the '017 Patent under the doctrine of equivalents. Defendant is thus liable for infringement of the '017 Patent pursuant to 35 U.S.C. § 271(a).

22. The Accused Instrumentality infringes claim 1 of the '017 Patent. It performs the method of programming the motion of a mobile appliance that is designed to perform a task over a designated work area using a routing algorithm comprising the steps of defining geographic perimeter data of an area within which work is adapted to be performed along a path of predetermined width (*i.e.*, it defines a geographic perimeter of a room to be vacuumed using the camera and triangulation), storing the geographic perimeter data, mapping the area into a plurality of substantially equally spaced grid points with the distance between adjacent grid points corresponding substantially to one of the predetermined path width and a fraction of the predetermined path width (*i.e.*, it subdivides the room into grid blocks, based on the width of the cleaning path), quantizing the direction of movement of the mobile appliance into a set of vectors connecting the grid point representing the present location of the mobile appliance with the grid points immediately adjacent to the present location grid point (*i.e.*, it calculates a cleaning pattern whereby it plans a path which travels from one grid point to the next adjacent grid point once it finishes), initiating the movement of the mobile appliance along the path from one grid point to an adjacent grid point (*i.e.*, once it finishes vacuuming one grid, it moves to the next adjacent grid), and recording the sequence of grid points crossed by the mobile appliance toward ensuring that work is performed substantially over the area represented by the grid points (*i.e.*, it tracks which grids it has performed the cleaning task in and moves from one grid to the next ensuring the same task is not performed repeatedly in the same grid points). *See* Ex. D Figs. 1-6.

23. The Accused Instrumentality infringes claim 13 of the '017 Patent. It performs the method defined in claim 1 further comprising the step of creating a mapping matrix of state

variables with values that are linked to said grid points (*i.e.*, it marks a grid point as either cleaned or not cleaned), and using the mapping matrix values to control said movement of the mobile appliance along the path from one grid point to an adjacent grid point (*i.e.*, once the state value for a grid is set to clean, it moves to the next adjacent grid). *See* Ex. D Figs. 5-6.

24. The Accused Instrumentality infringes claim 14 of the '975 Patent. It performs the method defined in claim 1 further comprising the step of creating a mapping matrix of state variables with values that are linked to said grid points (*i.e.*, it marks a grid point as either cleaned or not cleaned), modifying the mapping matrix values in response to one of tasks performed, environmental conditions sensed, and user directives (*i.e.*, once the task is performed it modifies the value associated with the grid to a clean value); and using the mapping matrix values to control said movement of the mobile appliance along the path from one grid point to an adjacent grid point (*i.e.*, once the state value for a grid is set to clean, it moves to the next adjacent grid). *See* Ex. D Figs. 5-6.

25. As a result of Defendant's infringement of the '017 Patent, Plaintiff has suffered monetary damages and is entitled to a money judgment in an amount adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the court, and Plaintiff will continue to suffer damages in the future unless Defendant's infringing activities are enjoined by this Court.

26. Unless a permanent injunction is issued enjoining Defendant and its agents, servants, employees, representatives, affiliates, and all others acting on in active concert therewith from infringing the '017 Patent, Plaintiff will be greatly and irreparably harmed.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that this Court enter:

1. A judgment in favor of Plaintiff that Defendant has infringed the '975 Patent and the '017 Patent;
2. A permanent injunction enjoining Defendant and its officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents, and all others acting in active concert therewith from infringement of the '975 Patent and the '017 Patent, or such other equitable relief the Court determines is warranted;
3. A judgment and order requiring Defendant pay to Plaintiff its damages, costs, expenses, and prejudgment and post-judgment interest for Defendant's infringement of the '975 Patent and the '017 Patent as provided under 35 U.S.C. § 284, and an accounting of ongoing post-judgment infringement; and
4. Any and all other relief, at law or equity, to which Plaintiff may show itself to be entitled.

DEMAND FOR JURY TRIAL

Plaintiff, under Rule 38 of the Federal Rules of Civil Procedure, requests a trial by jury of any issues so triable by right.

DATED July 20, 2017.

Respectfully submitted,

/s/ David R. Bennett
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