

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

ENDEAVOR ROBOTICS, INC.,)	
)	
Plaintiff,)	
)	C.A. No.
v.)	
)	JURY TRIAL DEMANDED
QINETIQ NORTH AMERICA, INC. and)	
FOSTER-MILLER INC.,)	
)	
Defendants.)	

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Endeavor Robotics, Inc. (“Endeavor Robotics”), by and through its undersigned counsel, for its Complaint against Defendants QinetiQ North America, Inc. and Foster-Miller Inc. (collectively, “QNA”), states and alleges on knowledge and information and belief as follows:

NATURE OF THE CASE

1. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1 et seq., arising from Defendants’ infringement of one or more claims of U.S. Patent Nos. 6,431,296 (“the ’296 Patent”) and 8,074,752 (“the ’752 Patent”) through the manufacture, use, and sale, among other things, of certain unmanned ground robots.

PARTIES

2. Plaintiff Endeavor Robotics, Inc. is a corporation organized and existing under the laws of Delaware, with its principal place of business at 19 Alpha Road, Suite 101, Chelmsford, MA 01824-4237.

3. On information and belief, Defendant QinetiQ North America, Inc. is a corporation organized and existing under the laws of Delaware, with a principal place of business at 350 Second Avenue, Waltham, MA 02451.

4. On information and belief, Foster-Miller Inc. is a corporation organized and existing under the laws of Massachusetts, with a principal place of business at 350 Second Avenue, Waltham, MA 02451. On information and belief, Foster-Miller Inc. is a wholly-owned subsidiary of QinetiQ North America, Inc. and does business under the name “QinetiQ North America.”

JURISDICTION AND VENUE

5. Endeavor Robotics’ claim for patent infringement against QNA arises under the patent laws of the United States including 35 U.S.C. §§ 271 and 281. Consequently, this Court has original and exclusive subject matter jurisdiction over this Complaint pursuant to 28 U.S.C. §§ 1331 and 1338(a).

6. On information and belief, this Court has personal jurisdiction over QNA because Defendant has committed, and continues to commit, acts of infringement in this District, has conducted business in this District, and/or has engaged in continuous and systematic activities in this District. Further, Defendant is a Delaware corporation.

7. Venue is proper in this District pursuant to 28 U.S.C. § 1400(b) because QNA is deemed to be a resident of this District because it is a Delaware corporation.

BACKGROUND

8. Endeavor Robotics is the world’s leading provider of battle-tested Unmanned Ground Vehicles (UGVs). Endeavor Robotics partners with U.S. and international defense

forces, law enforcement, energy and industrial users to design and build innovative robotic solutions that support a wide range of missions.

9. Endeavor Robotics provides UGVs, such as its SUGV, PACKBOT, KOBRA, and SCORPION products, which are capable of—among many other things—traversing obstacles and climbing sets of stairs thanks to its patented “flipper” design. The Endeavor Robotics flipper design and method of operating a UGV having flippers to climb stairs are covered by at least the ’296 and ’752 Patents (collectively, “Patents-in-Suit”).

10. Endeavor Robotics is the owner by assignment of the ’296 and ’752 Patents, including all rights to enforce and prosecute actions for infringement and to collect damages for all relevant times against infringers of the Patents-in-Suit. Accordingly, Endeavor Robotics possesses the exclusive right and standing to prosecute the present action for infringement of the Patents-in-Suit by QNA.

11. On information and belief, QNA has developed, tested, offered for sale, and sold a UGV product which implements Endeavor Robotics’ flipper technology, including the techniques for climbing stairs and traversing obstacles covered by the Patents-in-Suit.

12. On information and belief, QNA submitted a bid for the United States Army’s Common Robotic System—Individual (“CRS(I)”) contract based on this UGV design (“the QNA CRS(I) Product”). In March 2018, the U.S. Army awarded Endeavor Robotics and QNA contracts for the engineering and manufacturing development phase of the CRS(I) program.

COUNT I: INFRINGEMENT OF THE ’296 PATENT

13. Endeavor Robotics incorporates Paragraphs 1–12 as if set forth fully herein.

14. The ’296 Patent, entitled “Robotic platform,” issued on August 13, 2002. The ’296 Patent is directed to a method for operating an articulated tracked vehicle having one or

more arms pivotally coupled to the main frame, sometimes referred to as a “flipper,” which can be used to climb a series of stairs. The ’296 Patent is valid and enforceable. A true and correct copy of the ’296 Patent is attached hereto as Exhibit A.

15. On information and belief, QNA has infringed and continues to infringe one or more claims of the ’296 Patent by making, using (at least during testing and demonstrations in the United States), importing, selling, and/or offering for sale devices which are covered by at least Claim 1 of the ’296 Patent.

16. Claim 1 of the ’296 Patent recites as follows:

A method for operating an articulated tracked vehicle having a main tracked chassis and a pivoting forward arm to climb a series of stairs having a rise in elevation at a first stair and at each subsequent stair, comprising:

pivoting the arm to raise the arm higher than the rise of the first stair;

approaching the first stair until the arm contacts the first stair;

driving the main tracks to propel the vehicle until the main tracks contacts the first stair;

pivoting the arm to extend the tracked base of the vehicle; and

driving the main tracks to ascend the series of stairs.

17. Regarding Claim 1, QNA sells, offers to sell, and/or uses UGV products, including without limitation the QNA CRS(I) Product, which practices the method of claim 1. A photograph of the QNA CRS(I) Product, taken in November 2018 at a public event entitled “EOD Day on the Hill 2018” in Washington, D.C., illustrates that the QNA CRS(I) Product is an articulated tracked vehicle having a main tracked chassis and a pivoting forward arm to climb a series of stairs having a rise in elevation at a first stair and at each subsequent stair.



18. On information and belief, the QNA CRS(I) Product must be capable of traversing obstacles, including climbing a series of stairs as covered by Claim 1 of the '296 Patent. For example, prototypes for the CRS(I) contract, including the QNA CRS(I) Product, were required to have this capability in order to be selected. QNA implemented the method of Claim 1 during internal design and testing in the United States. Moreover, devices selected for the CRS(I) contract, including the QNA CRS(I) Product, were subjected to months of testing to ensure compliance with the contract requirements, including demonstrating the product's ability to climb a set of stairs.

19. On information and belief, the QNA CRS(I) Product climbs stairs by practicing the claimed method of pivoting the arm to raise the arm higher than the rise of the first stair, approaching the first stair until the arm contacts the first stair, driving the main tracks to propel the vehicle until the main tracks contacts the first stair, pivoting the arm to extend the tracked base of the vehicle; and driving the main tracks to ascend the series of stairs.

20. Accordingly, QNA directly infringes at least Claim 1 of the '296 Patent through its use of the claimed method, and contributorily infringes Claim 1 of the '296 Patent under 35 U.S.C. through the sale or offer for sale within the United States of the QNA CRS(I) Product.

21. On information and belief, QNA has also actively induced, and continues to induce, the infringement of at least Claim 1 of the '296 Patent by actively inducing its customers to use the QNA CRS(I) Products in an infringing manner as described above. Upon information and belief, QNA has specifically intended that its customers use its system in a manner that infringes at least Claim 1 of the '296 Patent by, at minimum, providing support, training, and instruction for its QNA CRS(I) Product to enable the customers to implement the method of at least Claim 1. QNA is aware of its infringement of the '296 Patent at least as of the filing of this Complaint.

22. Endeavor Robotics is entitled to recover damages adequate to compensate it for such infringement in an amount no less than lost profits or a reasonable royalty under 35 U.S.C. § 284. 22.

COUNT II: INFRINGEMENT OF THE '752 PATENT

23. Endeavor Robotics incorporates Paragraphs 1–22 as if set forth fully herein.

24. The '752 Patent, entitled “Mobile robotic vehicle,” issued on December 13, 2011. The '752 Patent is directed to a method performed by a mobile robotic vehicle for climbing a stair using articulated arm(s) rotatable about an axis located rearward of the center of gravity of the robot chassis.

25. The '752 Patent is valid and enforceable. A true and correct copy of the '752 Patent is attached hereto as Exhibit B.

26. On information and belief, QNA has infringed and continues to infringe one or more claims of the '752 Patent by making, using (at least during testing and demonstrations in the United States), importing, selling, and/or offering for sale devices which are covered by at least Claim 1 of the '752 Patent.

27. Claim 1 of the '752 Patent recites as follows:

A method performed by a mobile robotic vehicle for climbing a stair, the method comprising:

driving a support surface of the vehicle over an underlying surface towards the stair;

pivoting a trailing arm downward against the underlying surface and causing a forward end of the vehicle to raise up off the underlying surface, the trailing arm having a distal end that contacts the underlying surface forward of a center of gravity of the vehicle;

further driving the support surface to cause the forward end of the vehicle to ascend a riser of the stair, the support surface generating sufficient traction against the riser to climb the riser as the support surface is driven; and

pivoting the trailing arm so that the distal end contacts the underlying surface at a point behind the vehicle while the vehicle ascends the stair.

28. Regarding Claim 1 of the '752 Patent, QNA sells, offers to sell, and/or uses UGV products, including without limitation the QNA CRS(I) Product, which practices the method of Claim 1. A photograph of the QNA CRS(I) Product, taken in November 2018 at a public event

entitled “EOD Day on the Hill 2018” in Washington, D.C., illustrates that the QNA CRS(I) Product is a mobile robotic vehicle having a pivoting arm to climb a series of stairs.



29. On information and belief, the QNA CRS(I) Product must be capable of traversing obstacles, including climbing a series of stairs as covered by Claim 1 of the '752 Patent. For example, prototypes for the CRS(I) contract, including the QNA CRS(I) Product, were required to have this capability in order to be selected. QNA implemented the method of Claim 1 during internal design and testing in the United States. Moreover, devices selected for the CRS(I) contract, including the QNA CRS(I) Product, were subjected to months of testing to ensure compliance with the contract requirements, including demonstrating the product's ability to climb a set of stairs.

30. On information and belief, the QNA CRS(I) Product climbs stairs by practicing the claimed method of driving a support surface of the vehicle over an underlying surface towards the stair, pivoting a trailing arm downward against the underlying surface and causing a

forward end of the vehicle to raise up off the underlying surface, the trailing arm having a distal end that contacts the underlying surface forward of a center of gravity of the vehicle, further driving the support surface to cause the forward end of the vehicle to ascend a riser of the stair, the support surface generating sufficient traction against the riser to climb the riser as the support surface is driven, and pivoting the trailing arm so that the distal end contacts the underlying surface at a point behind the vehicle while the vehicle ascends the stair.

31. Accordingly, QNA directly infringes at least Claim 1 of the '752 Patent through its use of the claimed method, and contributorily infringes Claim 1 of the '752 Patent under 35 U.S.C. through the sale or offer for sale within the United States of the QNA CRS(I) Product.

32. On information and belief, QNA has also actively induced, and continues to induce, the infringement of at least Claim 1 of the '752 Patent by actively inducing its customers to use the QNA CRS(I) Products in an infringing manner as described above. Upon information and belief, QNA has specifically intended that its customers use its system in a manner that infringes at least Claim 1 of the '752 Patent by, at minimum, providing support, training, and instruction for its QNA CRS(I) Product to enable them to implement the method of at least Claim 1. QNA is aware of its infringement of the '752 Patent at least as of the filing of this Complaint.

33. Endeavor Robotics is entitled to recover damages adequate to compensate it for such infringement in an amount no less than lost profits or a reasonable royalty under 35 U.S.C. § 284.

34. Endeavor Robotics will continue to be injured, and thereby caused irreparable harm, unless and until this Court enters an injunction prohibiting further infringement.

JURY DEMAND

35. Under Rule 38(b) of the Federal Rules of Civil Procedure, Endeavor Robotics respectfully requests a trial by jury on all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Endeavor Robotics requests that this Court enter a judgment in its favor and award it relief including, but not limited to, the following:

- A. A judgment that QNA has directly and/or indirectly infringed one or more claims of the '296 and '752 Patents;
- B. Enter an Order enjoining QNA, their agents, officers, servants, employees, attorneys, and all persons in active concert or participation with Defendants who receive notice of the order from further infringement of the '752 Patent;
- C. An award of lost profits or reasonable royalty damages sufficient to compensate Endeavor Robotics for QNA's infringement of the '296 and '752 Patents;
- D. An award of damages, including trebling of all damages, sufficient to remedy QNA's willful infringement of the Patents-in-Suit under 35 U.S.C. § 284;
- E. A declaration that this case is exceptional, and an award to Endeavor Robotics of reasonable attorneys' fees, expenses and costs under 35 U.S.C. § 285;
- F. An award of prejudgment and post-judgment interest; and
- G. Such other relief as this Court or jury may deem proper and just.

POTTER ANDERSON & CORROON LLP

OF COUNSEL:

James G. Gatto
SHEPPARD, MULLIN, RICHTER &
HAMPTON LLP
2099 Pennsylvania Avenue, NW, Suite 100
Washington, D.C. 200006
(202) 747-1900

Martin R. Bader
Ryan P. Cunningham
SHEPPARD, MULLIN, RICHTER &
HAMPTON LLP
12275 El Camino Real, Suite 200
San Diego, CA 92130
(858) 720-8900

Dated: December 28, 2018
6036971

By: /s/ Philip A. Rovner
Philip A. Rovner (#3215)
Jonathan A. Choa (#5319)
Alan R. Silverstein (#5066)
Hercules Plaza
P.O. Box 951
Wilmington, DE 19899
(302) 984-6000
provner@potteranderson.com
jchoa@potteranderson.com
asilverstein@potteranderson.com

*Attorneys for Plaintiff
Endeavor Robotics, Inc.*