TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

ETAS ID: TM379651

NATURE OF CONVEYANCE: SECURITY INTEREST

CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
iRobot Defense Holdings, Inc.		04/04/2016	Corporation: DELAWARE
Endeavor Robotic Intermediate Holdings, Inc.		04/04/2016	Corporation: DELAWARE

RECEIVING PARTY DATA

Name:	PNC Bank, National Association
Street Address:	Commercial Loan Service Center/DCC
Internal Address:	500 First Avenue
City:	Pittsburgh
State/Country:	PENNSYLVANIA
Postal Code:	15219
Entity Type:	National Banking Association: UNITED STATES

PROPERTY NUMBERS Total: 8

Property Type	Number	Word Mark
Registration Number:	3747768	EXPLORER
Registration Number:	3824893	FASTAC
Registration Number:	4183719	FIRSTLOOK
Registration Number:	3717521	NEGOTIATOR
Registration Number:	2865183	PACKBOT
Registration Number:	3726780	WARRIOR
Serial Number:	86169012	KOBRA
Serial Number:	86418229	UPOINT

CORRESPONDENCE DATA

Fax Number: 2158325619

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 215-569-5619

Email: pecsenye@blankrome.com

Correspondent Name: Timothy D. Pecsenye Address Line 1: One Logan Square

Address Line 4: Philadelphia, PENNSYLVANIA 19103

ATTORNEY DOCKET NUMBER:	074658-16002
NAME OF SUBMITTER:	Timothy D. Pecsenye
SIGNATURE:	/Timothy D. Pecsenye/
DATE SIGNED:	04/06/2016

Total Attachments: 29

source=Intellectual Property Security Agreement (Discovery) [Executed]#page1.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page2.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page3.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page4.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page5.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page6.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page7.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page8.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page9.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page10.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page11.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page12.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page13.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page14.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page15.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page16.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page17.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page18.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page19.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page20.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page21.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page22.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page23.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page24.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page25.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page26.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page27.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page28.tif source=Intellectual Property Security Agreement (Discovery) [Executed]#page29.tif

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This INTELLECTUAL PROPERTY SECURITY AGREEMENT (this "Agreement"), dated as of April 4, 2016, is made by IROBOT DEFENSE HOLDINGS, INC., a corporation organized under the laws of the State of Delaware ("IROBOT") and ENDEAVOR ROBOTIC INTERMEDIATE HOLDINGS, INC., a corporation organized under the laws of the State of Delaware ("Holdings", together with iRobot, collectively, the "Grantors", and each a "Grantor"), in favor of PNC BANK, NATIONAL ASSOCIATION, as agent for lenders under that certain Credit Agreement (as defined below) ("PNC").

WITNESETH:

WHEREAS, pursuant to that certain Revolving Credit, Term Loan and Security Agreement, dated as of even date herewith (the "Credit Agreement"), among Grantors, as borrowers (Grantors, together with each other Person joined thereto as a borrower from time to time, collectively, the "Borrowers" and each a "Borrower"), the financial institutions party thereto as lenders (collectively, the "Lenders" and each a "Lender") and PNC, as agent for the Lenders (in such capacity, the "Agent"), Agent and Lenders have made and/or will in the future make certain extensions of credit to the Borrowers upon the terms and subject to the conditions set forth therein. Capitalized terms used herein and not otherwise defined herein shall have the meanings given to such terms in the Credit Agreement.

WHEREAS, pursuant to the Credit Agreement, each Grantor has granted to Agent, for its own benefit and for the ratable benefit of each Secured Party, security interests in and to and Liens on substantially all of such Grantor's assets, including without limitation all of such Grantor's Intellectual Property and specifically including all of each Grantor's registered patents, trademarks and copyrights and all of such Grantor's filed patent applications, trademark applications and copyright applications, all whether now owned or hereafter created, arising and/or acquired (collectively, the "Registered Intellectual Property"); and

WHEREAS, Grantors have agreed to execute and deliver this Agreement and to have a copy of this Agreement filed with the United States Patent and Trademark Office and/or the United States Copyright Office (as applicable) in order to perfect and/or protect all of Agent's Liens in the Registered Intellectual Property.

NOW, THEREFORE, in consideration of the premises and mutual covenants and agreements provided for herein and in the Credit Agreement, and for other good and valuable considerations, the receipt and sufficiency of which are hereby acknowledged by each party hereto, and intending to be legally bound, the parties hereto agree as follows:

Section 1. Grant of Security Interest in Intellectual Property Collateral. Without limiting any other grant of Lien by any Grantor in any Collateral under the Credit Agreement or any Other Document, to secure the prompt payment and performance of all Obligations to each Secured Party, each Grantor hereby grants to Agent, for its benefit and for the ratable benefit of each Secured Party, a continuing security interest in and to and Lien on all of such Grantor's right, title and interest in, to and under the following Collateral of Grantor, all whether now

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owned and/or existing or hereafter created, arising and/or acquired (the "Intellectual Property Collateral"):

- (a) all of its registered copyrights and filed copyright applications, including, without limitation, those referred to on <u>Schedule 1</u> hereto or on any schedule to any Supplement (as defined below) delivered hereafter, together with all renewals, reversions and extensions of the foregoing;
- (b) all of its registered trademarks and filed trademark applications, including, without limitation, those referred to on <u>Schedule 1</u> hereto or on any schedule to any Supplement delivered hereafter, together with all renewals, reversions and extensions of the foregoing;
- (c) all goodwill of the business connected with the use of, and symbolized by, each such trademark and trademark application covered by (b) above;
- (d) all of its registered/issued patents and filed patent applications, without limitation, those referred to on <u>Schedule 1</u> hereto or on any schedule to any Supplement delivered hereafter, together with all reissues, reexaminations, continuations, continuations-in-part, divisionals, renewals and extensions of the foregoing;
- (e) all applications, registrations, claims, awards, judgments, amendments, improvements and insurance claims related thereto now or hereafter owned or licensed by any Grantor, or any claims for damages by way of any past, present, or future infringement of any of the foregoing, together with all accessions and additions thereto and proceeds thereof (including, without limitation, any proceeds resulting under insurance policies); provided, further, that the Intellectual Property Collateral shall include, without limitation, all cash, royalty fees, other proceeds, Receivables, accounts and general intangibles that consist of rights of payment to or on behalf of any Grantor or proceeds from the sale, licensing or other disposition of all or any part of, or rights in, the Intellectual Property Collateral by or on behalf of any Grantor; and
- (f) all income, royalties, proceeds and liabilities at any time due or payable or asserted under and with respect to any of the foregoing, including, without limitation, all rights to sue and recover at law or in equity for any past, present and future infringement, misappropriation, dilution, violation or other impairment thereof which such continuing security interest in and Lien upon the Intellectual Property Collateral, and this Agreement, shall continue in full force and effect to secure each of the Obligations until such time as the Obligations are indefeasibly paid in full and the obligations of Agents and Lenders to make extensions of credit to Grantors under the Credit Agreement or any Other Document is terminated.
- Section 2. <u>Credit Agreement</u>. The security interest granted pursuant to this Agreement is granted in conjunction with, and in no way limits, the security interests granted to the Agent pursuant to the Credit Agreement, and Grantors hereby acknowledge and agree that the rights and remedies of the Agent with respect to the security interests and Liens in the Intellectual Property Collateral made and granted hereby are more fully set forth in the Credit Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein.

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- Section 3. <u>Registration/Filing</u>. This Agreement is intended by the parties to be filed, and Grantors hereby authorize Agent to file and record a copy of this Agreement, with the United States Patent and Trademark Office and United States Copyright Office, as applicable.
- Section 4. <u>Grantors Remain Liable</u>. Grantors hereby agree that, anything herein to the contrary notwithstanding, Grantors shall retain full and complete responsibility for the prosecution, defense, enforcement or any other necessary or desirable actions in connection with their Intellectual Property subject to a security interest hereunder.
- Section 5. Agreement to Deliver Supplements. Each Grantor hereby covenants and agrees that promptly upon the acquisition by such Grantor of any new Registered Intellectual Property Collateral (including any registration or issuance of any patent, trademark or copyright arising out of any filed patent application, trademark application or copyright application previously listed on Schedule 1 hereto or the schedule to any other Supplement delivered to Agent in accordance with this paragraph), Grantors shall, concurrently with the delivery of updated schedules required by Section 9.17 of the Credit Agreement, deliver to Agent a duly executed supplement to this Agreement in the form of Exhibit A hereto (a "Supplement"), listing all such newly acquired Registered Intellectual Property on Schedule I thereto, pursuant to which Grantors shall reconfirm the grant of a security interest in such newly acquired Registered Intellectual Property Collateral to Agent, for its benefit and for the ratable benefit of each other Secured Party, to secure the Obligations. Each such Supplement is intended by the parties to be filed, and Grantors hereby authorizes Agent to file and record a copy of each such Supplement, with the United States Patent and Trademark Office and/or United States Copyright Office, as Regardless of whether any Supplement is delivered by Grantors, and without limiting the generality of the provisions of Section 1 hereof, Grantors hereby confirm and agree that any and all such after-acquired Registered Intellectual Property Collateral, and all Intellectual Property Collateral relating thereto, shall immediately and automatically upon any Grantor's acquisition of any right, title and interest therein become part of the Intellectual Property Collateral hereunder. In the event that any Grantor acquires any such new Registered Intellectual Property but Grantors fail for whatever reason to promptly deliver a Supplement pursuant to this Section 5, Grantors hereby authorize Agent, acting under its power of attorney granted pursuant to Section 8 below, to at any time thereafter execute in the name of each Grantor an applicable Supplement with respect to such newly acquired Registered Intellectual Property, arising and/or acquired and to file the same with the United States Patent and Trademark Office and/or United States Copyright Office, as applicable.
- Section 6. <u>Representation and Warranties</u>. Each Grantor hereby represents and warrants to Agent and to the Lenders that Schedule 1 sets forth a full, complete and correct list of all Registered Intellectual Property Collateral owned by such Grantor as of the date hereof.
- Section 7. Events of Default and Remedies. The occurrence of any Event of Default under the Credit Agreement shall constitute an "Event of Default" under this Agreement. Upon the occurrence of and during the continuance of any such Event of Default, Agent, in addition to all other rights, options, and remedies granted to Agent under the Credit Agreement or any Other Document, or otherwise available to Agent at law or in equity, may exercise, either directly or through one or more assignees or designees, with respect to the Intellectual Property Collateral all rights and remedies granted to it as a secured creditor under the Uniform Commercial Code.

Section 8. Power of Attorney. Without limiting the generality of any power of attorney granted to Agent under the Credit Agreement or any Other Document, each Grantor hereby authorizes Agent, its successors and assigns, and any officer, employee, attorney or agent thereof, as such Grantor's true and lawful attorney-in-fact, with the power (i) to execute and endorse on behalf of and in the name of such Grantor any Supplement to this Agreement or other security agreement or similar document or instrument which Agent may deem necessary or desirable in order to create, protect, perfect or enforce the security interest in the Intellectual Property Collateral provided for herein and in each case to file or record any such Supplement or other security agreement or similar document or instrument with the United States Patent and Trademark Office and/or the United States Copyright Officer, as applicable, in the name of and on behalf of such Grantor and (ii) after the occurrence and during the continuance of an Event of Default, to execute and endorse on behalf of and in the name of such Grantor any assignment, bill of sale or similar document or instrument which Agent may deem necessary or desirable in order for Agent to assign, pledge, convey or otherwise sell, transfer title in or dispose of the Intellectual Property Collateral, and in each case to file or record with the United States Patent and Trademark Office and/or the United States Copyright Officer, as applicable, in the name of and on behalf of such Grantor any such assignment or bill of sale or other document executed by Agent, its successors and assigns, and any officer, employee, attorney or Agent thereof under this power of attorney. Each Grantor hereby unconditionally ratifies all that any person authorized under this power of attorney shall lawfully do or cause to be done by virtue hereof and in accordance with the terms hereof and of the Credit Agreement and the Other Documents. This power of attorney is coupled with an interest and is and shall be irrevocable

Section 10. <u>Counterparts</u>. This Agreement may be executed in counterparts, each of which shall constitute an original, but all of which when taken together shall constitute a single contract. Any signature delivered by a party by facsimile or electronic transmission (including email transmission of a PDF copy) shall be deemed to be an original signature hereto.

Governing Law. This Agreement, and all matters relating hereto or arising herefrom (whether arising under contract law, tort law or otherwise) shall, in accordance with Section 5-1401 of the General Obligations Law of the State of New York, be governed by and construed in accordance with the laws of the State of New York. Without limiting the generality of the general incorporation of the Credit Agreement herein provided for above, the provisions of Section 16.1 of the Credit Agreement (agreements regarding, consents to and waivers regarding jurisdiction and venue), Section 16.5 of the Credit Agreement (indemnities by Grantors), Section 16.6 of the Credit Agreement (notices), Section 16.7 of the Credit Agreement (survival of certain provisions), Section 16.9 of the Credit Agreement (expenses), Section 16.10 of the Credit Agreement (injunctive relief) and Article XII of the Credit Agreement (certain waivers including waivers of the rights of jury trial) are hereby specifically incorporated by reference. If any part of this Agreement is contrary to, prohibited by, or deemed invalid under Applicable Laws or regulations, such provision shall be inapplicable and deemed omitted to the extent so contrary, prohibited or invalid, but the remainder hereof shall not be invalidated thereby and shall be given effect so far as possible. This Agreement shall be binding upon and inure to the benefit of Grantors and Agent, and their respective successors and assigns, except that no Grantor may assign or transfer any of its rights or obligations under this Agreement without the prior written consent of Agent.

In witness whereof, Grantors have caused this Intellectual Property Security Agreement to be executed and delivered by their duly authorized officer as of the date first set forth above.

GRANTORS

IROBOT DEFENSE HOLDINGS, INC.

By:

Christopher N. Stallmann Secretary and Vice President

ENDEAVOR ROBOTIC INTERMEDIATE HOLDINGS, INC.

By:

Christopher N. Stallmann Secretary and Vice President ACCEPTED AND AGREED as of the date first above written:

<u>AGENT</u>

PNC BANK, NATIONAL ASSOCIATION

Ву:

Keith Moldellage Keith Moellering Senior Vice President

Acknowledgment of Grantors

STATE OF Manyland COUNTY OF Montgomery) ss	
On this day of hv, 2016 before me personally appeared Christ Stallmann, proved to me on the basis of satisfactory evidence to be the person who exe foregoing instrument on behalf of IROBOT DEFENSE HOLDINGS, INC., who being duly sworn did depose and say that he is an authorized officer of said corporation, that instrument was signed on behalf of said corporation as authorized by its board of directors he acknowledged said instrument to be the free act and deed of said corporation.	ng by me
Emmy E. Frenz NOTARY PUBLIC	
STATE OF MAY (and My Commission Expires 08/21/2016	
COUNTY OF Montgomery) ss	
On this Arian, proved to me on the basis of satisfactory evidence to be the person who exforegoing instrument on behalf of ENDEAVOR ROBOTIC INTERMEDIATE HO INC., who being by me duly sworn did depose and say that he is an authorized offic corporation, that the said instrument was signed on behalf of said corporation as author board of directors and that he acknowledged said instrument to be the free act and decorporation.	LDINGS, er of said ized by its

Notary Page to Intellectual Property Security Agreement

Emmy E. Frenz
NOTARY PUBLIC
Montgomery County, Maryland
My Commission Expires 08/21/2

Schedule 1

Intellectual Property Security Agreement

PATENTS, TRADEMARKS, AND COPYRIGHTS

None.

1. Grantors' copyrights:

2. Grantors' trademarks:

WARRIOR	UPOINT	PACKBOT	NEGOTIATOR	KOBRA	FIRSTLOOK	FASTAC	EXPLORER
US	US	US	US	US	US	US	US
Registered	Pending	Registered	Registered	Pending	Registered	Registered	Registered
Reg. No. 3,726,780	Ser. No. 86/418,229 Class 09 Filed October 8, 2014	Reg. No. 2,865,183	Reg. No. 3,717,521	Serial No. 86/169,012 Filed 01/17/2014	Reg. No. 4,183,719 Class 09	Reg. No. 3824893	Reg. No. 3,747,768

3. Grantors' patents:

			4. Issued Patents		
Country	Patent No	Issue Date	Title	Applicant / Assignee pursuant to Acquisition Agreement	First named inventor
US	6,263,989	07/24/01	Robotic Platform	iRobot Defense Holdings, Inc.	Chikyung Won
US	6,431,296	08/13/02	Robotic Platform	iRobot Defense Holdings, Inc.	Chikyung Won
US	6,615,885	09/09/03	Wheel Structure-Resilient	iRobot Defense Holdings, Inc.	Timothy R. Ohm
US	6,668,951	12/30/03	Robotic Platform	iRobot Defense Holdings, Inc.	Chikyung Won
US	6,769,004	7/27/2004	Method and System for Incremental Stack Scanning	iRobot Defense Holdings, Inc.	Kim A. Barrett
US	6,860,206	03/01/05	Remote Digital Firing System	iRobot Defense Holdings, Inc.	Pavlo E. Rudakevych
US	7,143,696	12/05/06	Remote Digital Firing System	iRobot Defense Holdings, Inc.	Pavlo E. Rudakevych
US	7,331,436	02/19/08	Communications Spooler for a Mobile Robot	iRobot Defense	Robert Todd Pack

Grinnell More	iRobot Defense	Mitigating Recoil in a Ballistic Robot	02/01/11	7,878,105	US
Inc.	iRobot Defense Holdings,	Control System for a Remote Vehicle	11/30/10	7,843,431	US
Inc.	iRobot Defense Holdings, Inc	Robotic Vehicle	08/31/10	7,784,570	US
Inc.	iRobot Defense Holdings,	Maneuvering Robotic Vehicle Having a Positionable Sensor Head	02/02/10	7,654,348	US
, Inc.	iRobot Defense Holdings,	Robotic Vehicle with Dynamic Range Actuators	10/13/09	7,600,593	US
s, Inc.	iRobot Defense Holdings,	Robotic Platform	10/06/09	7,597,162	US
s, Inc.	iRobot Defense Holdings,	Remote Digital Firing System	07/14/09	7,559,269	US
e gs, Inc.	iRobot Defense Holdings,	Robotic Platform	07/07/09	7,556,108	US
s, Inc.	iRobot Defense Holdings,	Robotic Platform	06/16/09	7,546,891	US
s, Inc.	iRobot Defense Holdings,	Method and Device for Controlling a Remote Vehicle	06/16/09	7,548,697	US
s, Inc.	iRobot Defense Holdings, Inc	Communications Spooler for a Mobile Robot	06/16/09	7,546,912	US
T S	Ualdings	_	_		_

	US	US	US	US	US	US (/	US ,	US	
8,082,836	8,079,432	8,074,752	8,061,461	8,042,663 (Expired)	8,019,223	8,007,221 (Abandoned)	7,926,598	7,891,446	
12/27/11	12/20/11	12/13/11	11/22/11	10/25/11	09/13/11	08/30/11	04/19/11	02/22/11	
Mitigating Recoil in a Ballistic Robot	Maneuvering Robotic Vehicles Having a Positionable Sensor Head	Mobile Robotic Vehicle	Robotic Vehicle Deck Adjustment	Communications Spooler for a Mobile Robot	Method and Device for Controlling a Remote Vehicle	Lifting Apparatus for Remote Controlled Robotic Device	Mobile Robotic Vehicle	Robotic Vehicle Deck Adjustment	
iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	Holdings, Inc. (originally assigned to Moore Industries)
Grinnell More	Timothy R. Ohm	Pavlo E. Rudakevych	Adam P. Couture	Robert Todd Pack	Edison Hudson	Grinnell More	Pavlo E. Rudakevych	Adam P. Couture	

Thomas L. DeFazio	iRobot Defense	Wheeled Platform	10/23/12	8,292,007	US
Grinnell More	iRobot Defense Holdings, Inc. (originally assigned to Moore Industries)	Mitigating Recoil in a Ballistic Robot	10/09/12	8,281,703	US
Adam P. Couture	iRobot Defense Holdings, Inc.	Robotic Vehicle	09/04/12	8,256,542	US
Michael A. Robbins	iRobot Defense Holdings, Inc.	Autonomous Behaviors for a Remote Vehicle	08/28/12	8,255,092	US
Michael A. Robbins	iRobot Defense Holdings, Inc.	Control System for a Remote Vehicle	06/12/12	8,199,109	US
Pavlo E. Rudakevych	iRobot Defense Holdings, Inc.	Mobile Robotic Systems and Methods	02/28/12	8,122,982	US
Chikyung Won	iRobot Defense Holdings, Inc.	Robotic Platform	02/14/12	8,113,304	US
Pavlo E. Rudakevych	iRobot Defense Holdings, Inc.	Remote Digital Firing System	02/07/12	8,109,191	US
Michael A. Robbins	iRobot Defense Holdings, Inc.	Autonomous Behaviors for a Remote Vehicle	01/31/12	8,108,092	US
	assigned to Moore Industries)				

Richard Page	iRobot Defense	Robotic Vehicle	04/09/13	8,413,752	US
Michael A. Robbins	iRobot Defense Holdings, Inc.	Autonomous Behaviors for a Remote Vehicle	03/12/13	8,396,611	US
Pavlo E. Rudakevych	iRobot Defense Holdings, Inc.	Remote Digital Firing System	02/19/13	8,375,838	US
Chikyung Won	iRobot Defense Holdings, Inc.	Robotic Platform	02/05/13	8,365,848	US
Pavlo E. Rudakevych	iRobot Defense Holdings, Inc.	Mobile Robotic Vehicle	01/22/13	8,353,373	US
Michael A. Robbins	iRobot Defense Holdings, Inc.	Control System for a Remote Vehicle	01/08/13	8,350,810	SU
Mikhail Filippov	iRobot Defense Holdings, Inc.	Robotic Vehicle with Dynamic Range Actuators	01/01/13	8,342,271	SN
Adam P. Couture	iRobot Defense Holdings, Inc.	Robotic Vehicle	12/11/12	8,327,960	US
Michael A. Robbins	iRobot Defense Holdings, Inc.	Autonomous Behaviors for a Remote Vehicle	12/04/12	8,326,469	US
Timothy R. Ohm	iRobot Defense Holdings, Inc.	Maneuvering Robotic Vehicles Having a Positionable Sensor Head	12/04/12	8,322,470	SN
Adam P. Couture	iRobot Defense Holdings, Inc.	Robotic Vehicle	11/27/12	8,316,971	US
	Holdings, Inc.				

US 8,68	US 8,66	US 8,64	US 8,61	US 8,57	US 8,57	US 8,52	US 8,52	US 8,48	US 8,44	US D68
8,682,502	8,662,215	8,644,991	8,616,308	8,577,517	8,573,335	8,528,673	8,527,113	8,485,330	8,447,440	D682,362
03/28/200	03/04/14	02/04/14	12/31/13	11/05/13	11/05/13	09/10/13	09/03/13	07/16/13	05/21/13	05/14/13
Remote Vehicle Control System and Method	Maneuvering Robotic Vehicles having a Positionable Sensor Head	Maneuvering Robotic Vehicles	Mobile Robot Systems and Methods	Autonomous Behaviors for a Remote Vehicle	Mobile Robotic Vehicle	Lifting Apparatus for Remote Controlled Robotic Device	Remote Vehicle	Communications Spooler for a Mobile Robot	Autonomous Behaviors for a Remote Vehicle	Remote Controlled Vehicle
iRobot Defense	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.
Jacob Curtis Jurmain	Timothy R. Ohm	Timothy R. Ohm	Pavlo E. Rudakevych	Michael A. Robbins	Pavlo E. Rudakevych	Grinnell More	Brian Masao Yamauchi	Robert Todd Pack	Michael A. Robbins	Annan Michael Mozeika

	US	US 9	US	SU	US	US	SO	SO	SO	US 8	_
7 117 067	9,045,049	9,031,697	8,875,816	8,884,763	8,878,734	8,843,244	8,800,695	8,763,732	8,760,397	8,706,296	
10/03/06	06/02/15	05/12/15	3/14/2013	11/11/14	11/04/14	09/23/14	08/12/14	07/01/14	06/24/14	04/22/14	
System and Methods for	System and Method For In Situ Charging of a Remote Vehicle	Auto-Reach Method for a Remote Vehicle	High Travel Suspension for Small Ground Mobile Robots	Threat Detection Sensor Suite	Antenna Support Structures	Autonomous Behaviors for a Remote Vehicle	Robotic Vehicle	Robotic Platform	Control System for a Remote Vehicle	Mobile Robot Internal Communication System	
iRobot Defence	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	iRobot Defense Holdings, Inc.	Holdings, Inc.
James McLurkin	Daniel David Hershey	Wesley Hanan Huang	Erik E. Steltz	Edison Hudson	Eddie Williams	Michael A. Robbins	Adam P. Couture	Chikyung Won	Michael A. Robbins	Wolclech Krajewski	

												Π																			
US		US	US				US			US			US			US						CO	116						US		
9,193,066		9,180,920	9,146,558				6,662,889			7,363,994			8,290,619			7,844,364						0,244,409	0 2 4 4 4 6 0						7,254,464		
11/24/201	5	11/10/201	09/29/15				12/16/03			04/29/08			10/16/12			11/30/10						00/14/12	00/14/10						08/07/07		
Maneuvering Robotic Vehicles		Mobile Robotic Vehicle	Operating Thereof	Mobile Robot and Method of			Wheeled Platforms			Wheeled Platforms		Devices	Adaptive Control of Robotic	System and Methods for	Devices	Adaptive Control of Robotic	System and Methods for								Tracking	Target Identification and	Collaborative Engagement for	Devices	Adaptive Control of Robotic	System and Methods for	Devices
iRobot	Defense Holdings, Inc.	iRobot	Holdings, Inc.	Defense	iRobot	Holdings, Inc.	Defense	iRobot	Holdings, Inc.	Defense	iRobot	Holdings, Inc.	Defense	iRobot	Holdings, Inc.	Defense	iRobot	80,	Holdings Inc	Defense	iRohot	and	University;	Mellon	Carnegie-	Inc;	Aerovironment	Holdings, Inc.	Defense	iRobot	Holdings, Inc.
Timothy R. Ohm		Pavlo E. Rudakevych		,	Timothy G. Field			Thomas L. DeFazio			Thomas L. DeFazio			James McLurkin			James McLurkin										Carol Carlin Cheung			James McLurkin	

expired

US-

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08/11/98

Robotic Platform

iRobot Defense

CHIK YUNG WON

Holdings, Inc.

expired

US-

60/079,701 | 03/27/98

Small Rugged Robotic Platform

iRobot Defense Holdings, Inc.

CHIK YUNG WON

Holdings, Inc.

Defense

Robot

																					1	
US		US			US		Country			$\overline{\mathrm{US}}$				US			US			US		
14/507,653		14/587,396			61/334,167		App. No.			8,954,194				9,216,781	14/172,546)	(App. No.	9,216,510	14/278,515)	(App. No.	9,195,256		
10/6/2014	4	12/31/201		0	05/12/201	Date	Filing		0	02/10/201	02/10/201		5	12/22/201		5	12/22/201		5	11/24/201		5
Remotely Operating a Mobile	System and Method	Remote Vehicle Control		System and Method	Remote Vehicle Control		Title	Patent Applications	System and Method	Remote Venicle Control	Domoto Vohiolo Control			Maneuvering Robotic Vehicles		System	Remote Vehicle Control		Vehicle	Control System for a Remote	Head	Having a Positionable Sensor
iRobot	Defense Holdings, Inc.	iRobot	Holdings, Inc.	Defense	iRobot		Applicant		Holdings, Inc.	Defense	iRobot	Holdings, Inc.	Defense	iRobot	Holdings, Inc.	Defense	iRobot	Holdings, Inc.	Defense	iRobot	Holdings, Inc.	Defense
Orin P.F. Hoffman		Robert Todd Pack			Robert Todd Pack		Inventor				Daniel Allis			Timothy R. Ohm			Jacob Curtis Jurmain			Michael A. Robbins		

Cunsy and mon	Defense Holdings, Inc.	EXOCOLO E IMPOLITE			abandon ed
Chikvung Won		Robotic Platform	3/19/2012	13/423.538	US-
	Defense Holdings, Inc.	Mobile Robotic Vehicle			
Pavlo E. Rudakevych	iRobot		9/22/2015	14/861,263	US
	Holdings, Inc.				
	Defense	Remote Vehicle			
Brian Masao Yamauchi	iRobot	Weight Shifting System for	01/19/11	13/009,833	US
	Holdings, Inc.				
	Defense				
Thomas L. DeFazio	iRobot	Wheeled Platforms	10/22/12	13/657,316	US
	Holdings, Inc.				
	Defense	System for a Remote Vehicle			
Wesley Hanan Huang	iRobot	Auto-Reach Method and	04/09/15	14/682,428	US
	Holdings, Inc.				
	Defense				
Adam P. Couture	iRobot	Robotic Vehicle	05/16/14	14/280,123	US
	Holdings, Inc.				
	Defense	Remote Vehicle			
Michael A. Robbins	iRobot	Autonomous Behaviors for a	10/01/13	14/043,390	US
	Holdings, Inc.				
	Defense	Vehicle			
Pavlo E. Rudakevych	iRobot	Small Unmanned Ground	12/31/11	13/342,022	US
	Holdings, Inc.				
	Defense				
Pavlo E. Rudakevych	iRobot	Resilient Wheel Assemblies	12/30/11	13/340,957	US
	Holdings, Inc.				
	Defense				
Chikyung Won	iRobot	Robotic Platform	12/31/08	12/347,406	US
	Holdings, Inc.				
Cinny and 11 on	Defense			1 1 00 - 3 to 0	Ö
Chikviing Won	iRohot	Robotic Platform	08/06/07	11/834 290	SII

	Holdings, Inc.	Head			
	Defense	Having A Positionable Sensor			expired
Timothy R. Ohm	iRobot	Maneuvering Robotic Vehicles	1/5/2007	60/883,731	US-
	Holdings, Inc.	Configuration			
	Defense	Flipper			expired
Adam P. Couture	iRobot	Robotic Vehicle with Dual	08/06/07	60/954,227	US-
	Holdings, Inc.				
	Defense	Robot			expired
Adam P. Couture	iRobot	Capable Large Skid Steered	06/07/07	60/942,598	US-
	Holdings, Inc.	System and Method			
	Defense	Configuration		08/058645	expired
Josef Jamieson	iRobot	Robot Operator Control Unit	03/28/08	PCT/US20	PCT-
	Holdings, Inc.	System and Method			
	Defense	Configuration			expired
Josef Jamieson	iRobot	Robot Operator Control Unit	03/29/07	60/908,932	US-
	Holdings, Inc.				
	Defense	Range Actuator			expired
Mikhail Filippov	iRobot	Robotic Vehicle with Dynamic	3/29/2007	60/908,782	US-
	Holdings, Inc.				
	Defense	Range Actuator			expired
Mikhail Filippov	iRobot	Robotic Vehicle with Dynamic	1/5/2007	60/878,877	US-
	Holdings, Inc.				ed
	Defense				abandon
Pavlo E. Rudakevych	iRobot	Remote Digital Firing System	2/6/2012	13/366,853	- SU
	Holdings, Inc.				,
	Defense	(,	expired
Pavlo Rudakevych	iRobot	Firing Circuit	12/14/01	60/340,175	-SU

iRobot Defense
iRobot Defense Holdings, Inc.
Maneuvering Robotic Vehicles iRobot Defense Holdings, Inc
iRobot Defense Holdings, Inc.
iRobot Defense Holdings, Inc
iRobot Defense Holdings, Inc.
iRobot Defense Holdings, Inc
iRobot Defense Holdings, Inc. (originally assigned to Moore Industries)

7/11/2012 Collaborative Engagement for Target Identification and Tracking	US – 13/546787 J	expired 5/17/2004 Dispersion of Autonomous I Robots I	60/571767 System and Method for	expired 61/528,260 8/28/2011 System and Method for in Situ Charging of a Remote Vehicle	expired expired 61/475944 4/15/2011 Auto-Reach Method and System for a Remote Vehicle I	expired 1/13/2011 Antenna Support Structures I
nt for	Aerovironment Inc;	nomous Defense Holdings, Inc.	iRobot	iRobot Defense Holdings, Inc.	iRobot hicle Defense Holdings, Inc.	iRobot Defense Holdings, Inc.
	Carol Carlin Cheung		James McLurkin	Daniel Hershey	Wesley Hanan Huang	Eddie Williams

US-	61/442,790	2/14/2011	Small Unmanned Ground	iRobot	Pavlo E. Rudakevych
expired			Vehicle	Defense	
				Holdings, Inc.	
US-	61/454,038	3/18/2011	Multiplixing of Data	iRobot	Pavlo E. Rudakevych
expired				Defense	
				Holdings, Inc.	
US-	61/232,051	8/7/2009	Remote Vehicle	iRobot	Brian Masao Yamauchi
expired				Defense	
				Holdings, Inc.	
US-	61/613,304	3/20/2012	High Travel Suspension for	iRobot	Erik E. Steltz
expired			Small Ground Mobile Robots	Defense	
				Holdings, Inc.	
US-	61/620,832	4/5/2012	Mobile Robot System	iRobot	Marshall Grinstead
expired				Defense	
				Holdings, Inc.	
US-	60/244,280	10/31/00	Priority application for U.S.	iRobot	Timothy R. Ohm
expired			6,615,885	Defense	
			(Resilient Wheel Structure)	Holdings, Inc.	
			System and Method for	iRobot	
US-			Navigation of heterogeneous	Defense	Brian Yamauchi
expired	60/373,017	4/16/2002	robot teams	Holdings, Inc.	
				iRobot	Benjamin Wirz
US-		10/11/200		Defense	
expired	60/417,836	2	Robot Beacon Module	Holdings, Inc.	
				iRobot	Robert Todd Pack
US-		12/24/200	Communication Spooler for	Defense	
expired	60/532,352	3	Robot	Holdings, Inc.	
				iRobot	Robert Todd Pack
US-			Communications Spooler for a	Defense	
expired	60/457,563	3/26/2003	Mobile Robot	Holdings, Inc.	
				iRobot	Edison HUDSON
US-				Defense	
expired	60/827,733	10/2/2006	Soldier Unmanned Vehicle	Holdings, Inc.	

	Holdings, Inc.		0		Expired
	Defense		01/29/201	12/696,795 01/29/201	US-
Andrew Shein	iRobot	Robotic Vehicle			
	Holdings, Inc.	System for a Remote Vehicle	4	62/096,218	Expired
	Defense	Auto-Reach Method and	12/23/201		-SU
Wesley H. Huang	iRobot				
	Holdings, Inc.	System and Method	9/28/2007	60/960,446	expired
	Defense	Remote Vehicle Control			US-
Jacob C. Jurmain	iRobot				
	Holdings, Inc.	Interface for Robot and Robot	3/29/2007	60/908,715	expired
	Defense				US-
Jacob C. Jurmain	iRobot				
	Holdings, Inc.	Interface for Robot and Robot	3/28/2007	60/908,667 3/28/2007	expired
	Defense				US-
Jacob C. Jurmain	iRobot				
	Holdings, Inc.	Having a	10/1/2015	14/872,783	US
	Defense	Maneuvering Robotic Vehicles			
Timothy R. Ohm	iRobot				
	Holdings, Inc.	Robot Sensor System	8/24/2007	60/597,711	expired
	Defense				US-
Scott Lenser	iRobot				

EXHIBIT A

SUPPLEMENT TO INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS SUPPLEMENT TO INTELLECTUAL PROPERTY SECURITY AGREEMENT (the "Supplement") made as of this [•] day of [•], by IROBOT DEFENSE HOLDINGS, INC., a corporation organized under the laws of the State of Delaware ("iRobot"), ENDEAVOR ROBOTIC INTERMEDIATE HOLDINGS, INC., a corporation organized under the laws of the State of Delaware ("Holdings" and, together with iRobot, collectively, the "Grantors", and each a "Grantor"), in favor of PNC BANK, NATIONAL ASSOCIATION ("Agent").

WITNESSETH

WHEREAS, Grantors and Agent are parties to that certain Intellectual Property Security Agreement dated as of April 4, 2016 (as the same heretofore may have been and hereafter may be amended, restated, supplemented or otherwise modified from time to time, the "IP Agreement"). Capitalized terms used herein but not otherwise defined herein shall have the meanings given thereto in the IP Agreement;

WHEREAS, pursuant to the terms of the IP Agreement, to secure the prompt payment and performance of all Obligations to each Secured Party, each Grantor has granted to Agent, for its benefit and for the ratable benefit of each other Secured Party, a continuing security interest in and to and Lien on all of such Grantors' right, title and interest in, to and under the Intellectual Property Collateral of such Grantor, all whether now owned or hereafter created, arising and/or acquired; and

WHEREAS, also pursuant to the IP Agreement, Grantors have agreed that upon the acquisition by Grantors of any new Registered Intellectual Property, Grantors shall deliver to Agent a Supplement to the IP Agreement in the form of Exhibit A to such IP Agreement pursuant to which Grantors shall reconfirm the grant by them of a security interest in all such newly acquired Registered Intellectual Property, which such Supplement is intended by the parties to be filed with the United States Patent and Trademark Office and/or United States Copyright Office, as applicable.

NOW, THEREFORE, in consideration of the premises set forth herein and for other good and valuable consideration, receipt and sufficiency of which are hereby acknowledged by each party hereto, and intending to be legally bound, and with the foregoing background and recitals incorporated by reference, Grantors agree as follows:

1. <u>Grant and Reaffirmation of Grant of Security Interests</u>. Without limiting any other grant of Lien by Grantors in any Collateral under the Credit Agreement or any Other Document, to secure the prompt payment and performance of all Obligations to each Secured Party, each Grantor hereby grants to Agent, for its benefit and for the ratable benefit of each other Secured Party, a continuing security interest in and to and Lien on all of such Grantor's right, title and interest in, to and under the following Collateral of such Grantor, all whether now owned or hereafter created, arising and/or acquired:

074658.16002/101994550v.2

- (a) the newly acquired Registered Intellectual Property listed on Schedule 1 to this Supplement (together with all reissues, reexaminations, continuations, continuations-in-part, divisionals, renewals and extensions of the foregoing);
- (b) all goodwill of the business connected with the use of, and symbolized by, any trademark and trademark application covered by (a) above; and
- (c) all other property otherwise constituting Intellectual Property Collateral relating to the foregoing.

Grantors agree that all such newly acquired Intellectual Property Collateral described above shall be included in and be part of the Intellectual Property Collateral under and subject to all of the terms and provisions of the IP Agreement. Grantors hereby authorize Agent to file and record a copy of this Supplement with the United States Patent and Trademark Office and/or United States Copyright Office, as applicable

- 2. <u>Representations and Warranties</u>. Grantors hereby represent and warrant to Agent and to the Lenders that Schedule I hereto sets forth a full, complete and correct list of all Registered Intellectual Property Collateral owned by Grantor as of the date hereof not listed on Schedule 1 to the original IP Agreement or any Schedule to any other Supplement to the original IP Agreement delivered by Grantors since the date thereof.
- 3. <u>Incorporation of the IP Agreement</u>. The terms and provisions of the IP Agreement are hereby incorporated by reference and this Supplement shall be considered an amendment and supplement to and part of the IP Agreement, all of the provisions of which IP Agreement are and remain in full force and effect.

[Signatures on Following Page]

IN WITNESS WHEREOF, Grantors have duly executed this Supplement to the IP Security Agreement as of the date first written above.

GRANTORS:

IROBOT I	DEFENSE HOLDINGS, INC.
By:Name:	
Title: ENDEAVO HOLDING	OR ROBOTIC INTERMEDIATE
	S, IIVC.
By: Name:	
Title:	

ACCEPTED AND AGREED s of the date first above written:	
AGENT:	
PNC BANK, NATIONAL ASSOCIATION	
By: Name:	
Title:	
[Signature Page to IP Security Agreement – Supplement Date]	

SCHEDULE I TO SUPPLEMENT TO TRADEMARK SECURITY AGREEMENT DATED [•], 20[•]

RECORDED: 04/06/2016