### 505826984 12/18/2019

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

EPAS ID: PAT5873814

#### **CONVEYING PARTY DATA**

Name	Execution Date
ZAK SOWLE	11/19/2010
SRIKANTH VASUDEVAN	11/19/2010
MATTHEW C BIRCH	11/19/2010

#### **RECEIVING PARTY DATA**

Name:	ORBITAL RESEARCH INC.
Street Address:	4415 EUCLID AVE., SUITE 500
City:	CLEVELAND
State/Country:	ОНЮ
Postal Code:	44103

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16718420

#### **CORRESPONDENCE DATA**

**Fax Number:** (216)649-0347

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:** 2166490376

**Email:** kolkowski@orbitalresearch.com

Correspondent Name: BRIAN KOLKOWSKI

Address Line 1: 4415 EUCLID AVENUE, SUITE 500

Address Line 4: CLEVELAND, OHIO 44103

ATTORNEY DOCKET NUMBER:	ORB-161
NAME OF SUBMITTER:	MARK PENNINGTON
SIGNATURE:	/Mark Pennington/
DATE SIGNED:	12/18/2019

#### **Total Attachments: 4**

source=ORB-161\_2010-11-19\_parent-Assignment-w-CS#page1.tif source=ORB-161\_2010-11-19\_parent-Assignment-w-CS#page2.tif source=ORB-161\_2010-11-19\_parent-Assignment-w-CS#page3.tif source=ORB-161\_2010-11-19\_parent-Assignment-w-CS#page4.tif

PATENT 505826984 REEL: 051316 FRAME: 0157

	RM COVER SHEET
	e record the attached documents or the new address(es) below.
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)
Zak Sowle, Srikanth Vasudevan,	Name: Orbital Research Inc.
Matthew C. Birch	Internal Address:
Additional name(s) of conveying party(ies) attached? Yes No  3. Nature of conveyance/Execution Date(s):  Execution Date(s) 11/19/2010  Assignment Merger  Security Agreement Change of Name  Joint Research Agreement  Government Interest Assignment  Executive Order 9424, Confirmatory License  Other  4. Application or patent number(s): This  A. Patent Application No.(s)	Street Address: 4415 Euclid Ave., Suite 500  City: Cleveland State: OH  Country: US  Zip: 44103  Additional name(s) & address(es) attached? Yes No document serves as an Oath/Declaration (37 CFR 1.63).  B. Patent No.(s)
16/718,420  Additional numbers att	ached?
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
Name: Brian Kolkowski	<b>7. Total fee</b> (37 CFR 1.21(h) & 3.41) \$ 0.00
Internal Address:	
	Authorized to be charged to deposit account
Street Address: 4415 Euclid Ave., Suite 500	Enclosed
	None required (government interest not affecting title)
City: Cleveland	8. Payment Information
State: OH Zip: 44103	
Phone Number: (216) 649-0376	Daniel Access of Northern
Docket Number: ORB-161	Deposit Account Number
Email Address:_kolkowski@orbitalresearch.com	Authorized User Name
9. Signature: /Brian Kolkowski 36,847/	12/18/2019
Signature	Date
Brian Kolkowski  Name of Person Signing	Total number of pages including cover sheet, attachments, and documents:
Documents to be recorded (including cover sheet	

**REEL: 051316 FRAME: 0158** 

# Assignment of Rights, Title and Interest in Invention (Multiple inventors; single assignee)

Docket No. ORB-080

	(Multiple invent	ors; single assignee)	ORB-080
This is an A	ssigument of the following rigl	its, title and interest: (check all that apply):	
<b>⊠</b>	United States of America rig	hts, title and interest in the invention	
×	Foreign rights, title and inter	rest in the invention	
囡	United States Patent Applica	tion Serial No. 12/942, 995	<b>7</b>
	Date of Execution: No	vember 19, 2010 Date of Filing: Nove	mber 9, 2010
×	,	tent Application Serial No. 61/259,616	
	United States Patent No(s).		
	International (PCT) Patent >	Application Serial No.	***************************************
	Other (specify)		
Title of the i	Invention		
Rotating o	ontrol actuation system		
nventors (a	ssignors)		
	Name	Addres	\$
Zak Sowi	e	3714 Latimore Road	Shaker Heights OH 44122
	Vasudevan	2860 Detroit Avenue #109	Cleveland OH 44113
Matthew	C. Birch	115 Harmon Avenue	Painesville OH 44077
Assignee			
	Name	Addres	S
Orbital R	esearch Inc.	4415 Euclid Ave. Ste. 500	
		Cleveland OH 44103	
		Octobridge Of Carrier	

[Page 1 of 3 ]

AS03A/REV01

## Assignment of Rights, Title and Interest in Invention (Multiple inventors; single assignee)

Docket No. ORB-080

Whereas, we, the above-identified Inventors, have invented certain new and useful improvements in the Invention identified above and described in the above-identified patent application(s) and/or patent(s) (hereinafter referred to as "Invention");

And, whereas we desire to assign our above-identified rights, title and interest in the Invention to the above-identified Assignee;

Now, this indenture witnesseth, that for good and valuable consideration, the receipt whereof is hereby acknowledged;

We hereby assign, sell and transfer our above-identified rights, title and interest in said Invention, said application(s) as identified above, including any divisions, continuations, and continuations-in-part thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted or have granted for said Invention, and in and to any and all reissues and reexaminations thereof, and in and to any and all priority rights, Convention rights, and other benefits accruing or to accrue to us with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, unto said Assignee;

And we hereby authorize and request the Director of the United States Patent and Trademark Office to issue any United States Letters Patent which may issue for said Invention to said Assignee, as assignee of the whole right, title and interest thereto;

And we further agree to sign and execute all necessary and lawful future documents, including applications for foreign patents, for filing divisions, continuations and continuations-in-part of said application for patent, and/or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid Invention, as the Assignee or its Designee(s) may from time to time require and prepare at its own expense.

Inventors' Signatures (if Notarization is desired, do not sign here and proceed to next page)

Name	/ Signature/Date
Zak Sowle	Jalesonh 11/19/2010
Srikanth Vasudevan	Said V 11/19/2010
Matthew C. Birch	Motten Sin 11/17/2010

# Assignment of Rights, Title and Interest in Invention (Multiple inventors; single assignee)

Docket No. ORB-080

Executed this 19th day of November, in the year 70,0  at  (Signature of Inventor)	
(Signature of Inventor)	•
State of Ohio	
County of Cuyahoga	
Before me personally appeared Zak Sowle	
who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is author	rized to
execute the same this day of 600, in the year	
LIY COMMISSION HAS NO EXPIRATION DATE	*
Executed this 19th day of November, in the year 2010	
Sin SlV	
(Signature of Inventor)  State of Ohio	
State of Ohio	
County of Cuyahoga	
Before me personally appeared Srikanth Vasudevan	
who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is autho execute the same this \( \sqrt{day of} \\ \lambda_o \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	rized to
BRIAN M. KOLKOWSKI, ATTORNEY NOTARY PUBLIC, STATE OF OHIO MY COMMISSION HAS NO EXPIRATION DATE Notary Public	
Executed this 19th day of November, in the year 2010	
(Signature of Inventor)	
State of Ohio	
County of Cuyahoga	
Before me personally appeared Matthew C. Birch	
who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is anytho	rized to
execute the same this day of o, in the year	?
BRIAN M. KOLKOWSKI, ATTORNEY NOTARY PUBLIC, STATE OF OHIO MY COMMISSION HAS NO EXPIRATION DATE (Notary Public)	