505300512 01/29/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5347290

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
DAVID KRYZPOW	11/12/2004
JAMES ELLIOTT	11/12/2004
AARON ROOD	11/12/2004
FREDERICK J. LISY	11/12/2004

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 2

Property Type	Number
Application Number:	16039609
Patent Number:	10058259

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 AVE. STE. 500Address Line 4:CLEVELAND, OHIO 44103

NAME OF SUBMITTER:	MARK PENNINGTON
SIGNATURE: /Mark Pennington/	
DATE SIGNED: 01/29/2019	

Total Attachments: 5

source=ORB-148_2019-01-29_parent-assignment-w-CS#page1.tif source=ORB-148_2019-01-29_parent-assignment-w-CS#page2.tif source=ORB-148_2019-01-29_parent-assignment-w-CS#page3.tif

PATENT 505300512 REEL: 048162 FRAME: 0350

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PATENT REEL: 048162 FRAME: 0351

RECORDATION FO	DRM COVER SHEET
PATENT	S ONLY
To the Director of the U.S. Patent and Trademark Office: Pleas	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)
David Kryzpow, James Elliott,	Name: Orbital Research Inc.
Aaron Rood, Frederick J. Lisy	Internal Address:
Additional name(s) of conveying party(ies) attached? Yes No 3. Nature of conveyance/Execution Date(s):	Street Address: 4415 Euclid Ave., Suite 500
Execution Date(s) 2004-11-12	Street Address.
Assignment Merger	City: Cleveland
Security Agreement Change of Name	
Joint Research Agreement	State: OH
Government Interest Assignment Executive Order 9424, Confirmatory License	Country: US Zip: 44103
Other	Additional name(s) & address(es) attached? Yes
4. Application or patent number(s):	document serves as an Oath/Declaration (37 CFR 1.63). B. Patent No.(s)
16/039,609	10,058,259
Additional numbers att	l ached? ☐ Yes █ No
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 2
Name: Brian Kolkowski	7. Total fee (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	
Docket Number: ORB-131 and ORB-148	Deposit Account Number
Email Address: kolkowski@orbitalresearch.com	Authorized User Name
9. Signature:	2019-01-29
Signature	Date
Brian Kolkowski	Total number of pages including cover
Marso of Dorson Cigning	sheet, attachments, and documents: 5
Name of Person Signing Documents to be recorded (including cover sheet)	and documents, and documents.

PATENT REEL: 048162 FRAME: 0352

	Assignment of Rights, Title and Interest in Invention (Multiple inventors; single assignee) Docket N ORI-027			
This is an A	ssignment of the following rights, title	and interest: (check all that apply):		
	United States of America rights, title	and interest in the invention		
	Foreign rights, title and interest in the	he invention		
	United States Patent Application Ser	ial No.		
	Date of Execution:	Date of Filing:	in the state of th	
	United States Provisional Patent App	olication Serial No.		
	United States Patent No(s).		· · · · · · · · · · · · · · · · · · ·	
	International (PCT) Patent Applicat			
	Other (specify)			
Title of the I	nvention			
Inventors (as	ssignors)			
	Name	Address		
David K	ryzpow	3785 Claridge Oval	University Heights, OH 44118	
James E	lllott	716 Goldleaf Court	Streetsboro, OH 44214	
Aaron Ro		20330 Parkview Ave.	Rocky River, OH 44116	
Frederick	J. Lisy	3785 Claridge Oval	University Heights, OH 44118	
,				
				
(a		J		
Issignee	Name	Address		
Orbital Re	second inc	4415 Euclid Avenue, Suite 500		
	search mc.	Cleveland, Ohio 44103		

[Page 1 of 5]

AS03A/REV01

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

Docket No. ORI-027

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 filling 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
David Kryzpow	Leef Beg 11/12/2004
James Elliott	Ja. Elle 11/10/2004
Aaron Rood	100.72 W/12/04
Frederick J. Lisy	Profe Votion 11/12/04
	7

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

Docket No. ORI-027

<u>Notarization</u> (Although notarization is not necessary, it will be considered prima facie evidence of execution pursuant to 35 U.S.C. 261.)
Executed this 12 day of November, in the year 2004 at
State of Ohio (Signature of Inventor)
County of Cuyahoga
Before me personally appeared David Kryzpow who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorized to execute the same this David Notary Public, STATE OF OHIO MY COMMISSION HAS NO EXPIRATION DATE Before me personally appeared David Kryzpow Action Date The personally appeared David Kryzpow And also represented that he or she is authorized to the same this David Kryzpow And Action Date (Notary Public) Notary Public)
Executed this R day of Movember, in the year 2004 at
State of Ohio (Signature of Inventor)
County of Cuyahoga
Before me personally appeared James Elliott who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorized to execute the same this 2 day of in the year 2004.
BRIAN M. KOLKOWSKI, ATTORNEY NOTARY PUBLIC, STATE OF OHIO MY COMMISSION HAS NO EXPIRATION DATE (Manual Public)
Executed this 2 day of November, in the year 2004 at (Signature of Inventor)
State of Ohio
County of Cuyahoga
Before me personally appeared Aaron Rood who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorized to
execute the same this 12 day of Nown is the year 2004
BRIAN M. KOLKOWSKI, ATTORNEY NOTARY PUBLIC, STATE OF OHIO MY COMMISSION HAS NO EXPIRATION DATE (Notary Public)

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

Docket No. ORI-027

(Although notarizati	ion is not necessary, it will be consider	Notarization red prima facie evidence of execution pursuant to 35 U.S.C. 261.)
Executed this	2th day of Navanter	, in the year 2004
at	day of November	orthole Idia
		(Signature of Inventor
State of Ohio		$\sqrt{}$
County of Cuyahoga		
Before me personally appea	red Frederick J. Lisy	
who acknowledged the for	egoing instrument to be a fre	ee act and deed and also represented that he of she is authorized to
execute the same this	2 day of Nose	in the year 2004
BRIAN M. KOI NOTARY PUE MY COMMISSION I	LKOWSKI, ATTORNEY BLIC, STATE OF OHIO HAS NO EXPIRATION DATE	Manage Public)
Executed this	day of	, in the year
at	• •	
		And the second s
State of Ohio		(Signature of Inventor)
State of Onio		
County of Cuyahoga		
 Before me personally appea	red	T management of the state of th
		ee act and deed and also represented that he or she is authorized to
execute the same this	day of	in the year
		•
		(Notary Public)
Executed this	day of	, in the year
at		

		(Signature of Inventor)
State of Ohlo		(vigitation of involver)
•		
County of Cuyahoga		
Before me personally appear	red	
		e act and deed and also represented that he or she is authorized to
execute the same this	day of	in the year
	20 mg - 13	n. m. you
	,	(Notary Public)

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