Docket No.: 10-07-2003 FORM PTO-1595 (Modified) COVER SHEET U.S. DEPARTMENT OF COMMERCE (Rev. 6-93) Patent and Trademark Office OMB No. 0651-0011 (exp.4/94) ONLY Copyright 1994-97 LegalStar P08/REV02 102568804 Tab settings -To the Honorable Commissioner of Patents and Trademarks. release record the attached original documents or copy thereof. Name and address of receiving party(ies): Name of conveying party(ies): Reed Carver and Brian Kolkowski Name: Orbital Research Inc. Internal Address: Additional names(s) of conveying party(ies) ☐ Yes ☐ No 3. Nature of conveyance: Street Address: 4415 Euclid Avenue, Suite 500 ☐ Merger Assignment Change of Name ☐ Security Agreement City: Cleveland State: OH ZIP: 44103 □ Other Execution Date: September 22, 2003 Additional name(s) & address(es) attached? Application number(s) or registration numbers(s): If this document is being filed together with a new application, the execution date of the application is: September 22,2003 B. Patent No.(s) A. Patent Application No.(s) Additional numbers attached? ☐ Yes 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: concerning document should be mailed: Name: Brian M. Kolkowski 7. Total fee (37 CFR 3.41):.....\$ 40.00 Internal Address: Orbital Research Inc. Enclosed - Any excess or insufficiency should be credited or debited to deposit account 0/06/2003 LINJELLER 00000077-500704 1 FC:4021 Authorized to be charged to deposit account Street Address: 4415 Euclid Avenue, Suite 500 8. Deposit account number: State: OH ZIP: 44077 City: Cleveland DO NOT USE THIS SPACE 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correst and any attached copy is a true copy of the original document. Brian M. Kolkowski Date Signature Name of Person Signing

Total number of pages including cover sheet, attachments, and document:

PATENT

**REEL: 014551 FRAME: 0656** 

	Assignment of Rights, Title a (Multiple inventors;	Docket No. Orb-021						
This is an A	ssignment of the following rights, tit	le and interest: (check all that apply):						
X	United States of America rights, ti	tle and interest in the invention						
×	Foreign rights, title and interest in the invention							
	United States Patent Application Serial No.							
	Date of Execution:	Date of Filing:						
	United States Provisional Patent A	Application Serial No.						
	United States Patent No(s).							
	International (PCT) Patent Application Serial No.							
	Other (specify)							
Title of the l	Invention							
nventors (a	essignors)							
	Name	Address						
Reed Carv	er	10214 Spinnaker Run, Aurora, OH 442	02					
Brian M. K	olkowski	6340 Taylor Road, Leroy, OH 44077						
·								
	***************************************							
Assignee								
	Name	Address						
Orbital Res	search Inc.	4415 Euclid Avenue, Suite 500 Cleveland, OH 44103						

[Page 1 of 3 ]

AS03A/REV01

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

Docket No. Orb-021

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 Commissioner of Patents and Trademarks 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
Reed Carver	Beech (2000 19/22/03
Brian M. Kolkowski	Bullboch 9/22/03

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

Docket No.
Orb-021

who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authoric execute the same this day of in the year  BRIAN M. KOLKOWSKI, ATTORNEY NOTARY PUBLIC, STATE OF CHO MY COMMISSION HAS NO EXPIRATION DATE  Executed this day of , in the year  State of  County of  Before me personally appeared Brian M. Kolkowski who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authoric execute the same this day of , in the year  (Notary Public)  Executed this day of , in the year  (Notary Public)  Executed this day of , in the year  (Notary Public)  Executed this day of , in the year  (Signature of Inventor)  State of  County of  Before me personally appeared who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authoric state of	(Although notarization	is not necessary, it will be	<u>Notarization</u> considered prima facie evidence	of execution pursuant to 35 U.S.C. 261.)	PT0
County of County		22 day of Se	plemm, in the year	Reul Cev	10/66842
Before me personally appeared Reed Carver who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authoric execute the same this day of in the year NOTARY PUBLIC, STATE OF CHO MY COMMISSION HAS NO EXPRATION DATE  Executed this day of , in the year  State of  County of  Before me personally appeared Brian M. Kolkowski who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authoric execute the same this day of , in the year  Executed this day of , in the year  (Notary Public)  Executed this day of , in the year  (Signature of Inventor)  (Signature of Inventor)  State of  County of  Executed this day of , in the year	State of O			(Signature of Inventor)	
Before me personally appeared Reed Carver who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authoric execute the same this day of in the year NOTARY PUBLIC, STATE OF CHO MY COMMISSION HAS NO EXPRATION DATE  Executed this day of , in the year  State of  County of  Before me personally appeared Brian M. Kolkowski who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authoric execute the same this day of , in the year  Executed this day of , in the year  (Notary Public)  Executed this day of , in the year  (Signature of Inventor)  (Signature of Inventor)  State of  County of  Executed this day of , in the year	County of Canal	oga			
who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authoric execute the same this day of in the year  BRIAN M. KOLKOWSKI, ATTORNEY NOTARY PUBLIC, STATE OF OND MY COMMISSION HAS NO EXPTRATION DATE  Executed this day of , in the year  State of  County of  Before me personally appeared Brian M. Kolkowski who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authoric execute the same this day of , in the year  Executed this day of , in the year  (Notary Public)  Executed this day of , in the year  State of  County of  Before me personally appeared  (Signature of Inventor)  State of  County of  Before me personally appeared  who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authoric state of  County of					
Executed this day of (Notary Public)  State of  County of  Executed this day of , in the year  All of (Notary Public)  State of  County of  Executed this day of , in the year  All of (Notary Public)  State of  County of  Before me personally appeared Brian M. Kolkowski who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorize execute the same this day of , in the year  (Notary Public)  Executed this day of , in the year  (Notary Public)  Executed this day of , in the year  (Notary Public)  Executed this day of , in the year  (Signature of Inventor)  State of  County of  Before me personally appeared who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorized the control of th			to be a free act and deed	l and also represented that he or she	is authorized to
Executed this day of , in the year at  State of  County of  Before me personally appeared Brian M. Kolkowski who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorize execute the same this day of , in the year  at  Executed this day of , in the year  (Notary Public)  Executed this day of , in the year  at  (Signature of Inventor)  (Signature of Inventor)  State of  County of  Before me personally appeared who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorized that he or	execute the same this	<u> </u>	Soplander, in	the year 2003	1
State of  County of  Before me personally appeared Brian M. Kolkowski who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorisexecute the same this day of , in the year  Executed this day of , in the year at  State of  County of  Before me personally appeared who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorised.	MUIART PUBL	IC. STATE OF CHIC	m /2	(Notary Public)	
State of  County of  Before me personally appeared Brian M. Kolkowski who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authoric execute the same this day of , in the year  Executed this day of , in the year  at  State of  County of  Before me personally appeared who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authoric	Executed this	day of	, in the year		751-02
Before me personally appeared Brian M. Kolkowski who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorize execute the same this day of , in the year    (Notary Public)				(Signature of Inventor)	_
execute the same this day of , in the year  (Notary Public)  Executed this day of , in the year  at  (Signature of Inventor)  State of  County of  Before me personally appeared who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorize	Before me personally app				
Executed this day of , in the year  at  (Signature of Inventor)  State of  County of  Before me personally appeared who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorize				=	is authorized to
State of  County of  Before me personally appeared who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorize				(Notary Public)	<del></del>
State of County of Before me personally appeared who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authoriz		day of	, in the year		
County of Before me personally appeared who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authoriz	State of			(Signature of Inventor)	
County of Before me personally appeared who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authoriz	State of				
who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authoriz	County of				
	who acknowledged the fe	oregoing instrument			is authorized to
			,		
(Notary Public)				(Notary Public)	-

[Page 3 of 3]