



07-15-2003

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

102496472

To the Honorable Commissioner of Patents and Trademarks. Please record the _____ al documents or copy thereof.

1. Name of conveying party(ies):

Peter John MURDOCH

Additional name(s) of conveying
party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies):

NAME: Orbital Engine Company (Australia) Pty Limited

ADDRESS: 1 Whipple Street, Balcatta, Western Australia
Australia 6021

3. Name of Conveyance:

☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other
Additional name(s) & addresses(es) attached?
☐ Yes ☒ No

Execution/Effective Date: 6/1/03

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: _____

A. Patent Application No.(s)

10/311,310

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Robert B. Murray
 Internal Address: Rothwell, Figg, Ernst & Manbeck
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 City: Washington,
 State: D.C. Zip: 20005
 Telephone No.: 202/783-6040
 Facsimile No.: 202/783-6031

Attorney Docket No.: 3012-101

6. Total number of applications and patents involved: 17. Total fee (37 CFR 3.41): . . . \$ 40
☐ Enclosed
☒ Authorized to be charged to deposit account

8. Deposit account number: 02-2135

Attach duplicate copy of this page if paying by
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9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Robert B. Murray
 Name of Person Signing

Signature

July 10, 2003

Date

Total number of pages including cover sheet, attachments and documents: 2

RBM/cb

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ASSIGNMENT

WHEREAS, I, Peter John MURDOCH, a citizen of Australia, formerly residing at 21 Fairlight Street, Mosman Park, Western Australia, Australia 6012 and currently residing at

41 SHOGBRA RD ELSTERNWICK VIC 3185

am the inventor of an invention entitled SHOCKWAVE INJECTOR NOZZLE for which we have executed an application for Letters Patent of the United States, was filed on December 27, 2002, U.S. Serial Number 10/311,310.

WHEREAS, Orbital Engine Company (Australia) Pty Limited, an Australian company doing business at 1 Whipple Street, Balcatta, Western Australia, Australia, 6021 is desirous of obtaining the entire right, title and interest in, to and under the said invention and the said application;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, I, the said inventor have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said Assignee, its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said application and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may hereafter be filed for said invention in any country or countries foreign to the United States, and all Letters Patent which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof and all rights of priority in any such country or countries based upon the filing of the said application for Letters Patent of the United States which are created by any law, treaty or international convention; and I hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said Assignee, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND I HEREBY covenant that I have the full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to said Assignee, its successors, legal representatives and assigns, any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said Assignee, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this

1ST day of JUNE, 2003.



Peter John MURDOCH

L.S.