

03-12-2003



3ET

U.S. Department of Commerce
Patent and Trademark Office

102387729

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies): **37-03**
Primex Technologies, Inc.
10101 9th Street North
St. Petersburg, Florida 33716-3807
2. Name and address of receiving party(ies):
Name: Aerojet-General Corporation
P.O. Box 97009
11650 NE 137th Place
Redmond, Washington 98073-9709
Additional names and addresses attached?
() Yes (X) No

3. Nature of conveyance:

(X) ASSIGNMENT () Other _____

Execution Date (1) March 5, 2003

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:

(1) _____ (2) _____ (3) _____

A. Patent Application No.(s)

B. Patent No.(s)

~~1. 4,800,716~~

2. 4,907,407

3. 5,111,656

4. 5,423,384

[] Additional Numbers Attached

[X] Additional Numbers Attached

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

Name: Gregory S. Rosenblatt
Wiggin & Dana
One Century Tower
New Haven, CT 06508-1832

6. Total number of applications and patents involved

(15)

7. Total fee (37 CFR 3.41): \$600.00

() Enclosed

(X) Authorized to be charged to Deposit
Account No. 23-16658. Deposit Account No.: 23-1665(Attach duplicate copy of this page if paying by
Deposit Account)

03/11/2003 ECDOPER 00000160 231665 4800716

01 FC:8921 600.00 CH

DO NOT USE THIS SPACE

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.

Gregory S. Rosenblatt
Name of Person SigningGregory S. Rosenblatt
SignatureMARCH 7, 2003
Date

Total number of pages comprising cover sheet (5)

**RECORDATION FORM COVER SHEET
(ADDED PAGE 2)**

FURTHER PATENTS BEING ASSIGNED:

B. Patent No.(s) Continued

5. 5,449,041
6. 5,464,961
7. 5,465,795
8. 5,485,722
9. 5,513,087
10. 5,568,723
11. 5,605,039
12. 5,609,210
13. 5,613,562
14. 5,636,513
15. 5,640,844

ASSIGNMENT

WHEREAS, PRIMEX TECHNOLOGIES, INC., a corporation of the Commonwealth of Virginia with a place of business at 10101 9th Street North, St. Petersburg, Florida 33716-3807, is the owner of the entire right, title and interest, together with all rights of priority, in and to the following United States of America patents (hereinafter referred to as "U.S. patents"):

U.S. PATENTS

Inventor(s)	Title	Patent No.	Issue Date
W.W. Smith S.C. Knowles	EFFICIENCY ARCJET THRUSTER WITH CONTROLLED ARC STARTUP AND STEADY STATE ATTACHMENT	4,800,716	01/31/89
M.A. Simon S. Knowles W. Smith	LIFETIME ARCJET THRUSTER	4,907,407	03/13/90
M.A. Simon G.W. Butler	ARCJET NOZZLE HAVING IMPROVED ELECTRICAL-TO-THRUST CONVERSION EFFICIENCY AND HIGH VOLTAGE OPERATION	5,111,656	05/12/92
L.D. Galbraith G.F. Holland D.R. Poole R.M. Mitchell	APPARATUS FOR SUPPRESSING A FIRE	5,423,384	06/13/95
L.D. Galbraith	APPARATUS AND METHOD FOR SUPPRESSING A FIRE	5,449,041	9/12/95
P.G. Lichon	ARCJET ANODE	5,464,961	11/07/95
L.D. Galbraith G.F. Holland D.R. Poole R.M. Mitchell	FIRE SUPPRESSING APPARATUS FOR GENERATING STEAM FROM A WATER-ICE MIXTURE	5,465,795	11/14/95
E.W. Schmidt D.F. Gavin	CATALYTIC DECOMPOSITION OF HYDROXYLAMMONIUM NITRATE-BASED MONOPROPELLANTS	5,485,722	01/23/96
R.J. Kay	ARCJET STARTUP USING A SHUNT OUTPUT HIGH VOLTAGE PULSE CIRCUIT	5,513,087	04/30/96
W.K. Burke C.R. Roberts F.R. Schwam	LONG LIFE CATALYTIC GAS GENERATOR FOR SPACE PROPULSION APPLICATIONS	5,568,723	10/29/96
S.D. Meyer R.J. Kay	PARALLEL ARCJET STARTER SYSTEM	5,605,039	02/25/97

L.D. Galbraith G.F. Holland D.R. Poole R.M. Mitchell	APPARATUS AND METHOD FOR SUPPRESSING A FIRE	5,609,210	03/11/97
L.D. Galbraith G.F. Holland D.R. Poole R.M. Mitchell	APPARATUS FOR SUPPRESSING A FIRE	5,613,562	03/25/97
D.A. Pahl	TWO STAGE PRESSURIZATION SYSTEM FOR AEROSPACE APPLICATIONS	5,636,513	06/10/97
D.A. Pahl	PRESSURIZATION AND CONTROL DEVICES USING HIGH VAPOR PRESSURE LIQUIDS	5,640,844	06/24/97

WHEREAS, AEROJET-GENERAL CORPORATION, a corporation of the Commonwealth of Ohio with a place of business at P.O. Box 97009, 11650 NE 137th Place, Redmond, Washington 98073-9709 is desirous of acquiring the following assets (hereinafter referred to as the "Patent Assets"):

- a) said U.S. patents and the inventions thereof, including any patents or patent applications comprising: divisions, continuations, continuations-in-part and reissues of said U.S. patents; and
- b) all foreign counterpart patents or patent applications derived from said U.S. patents or any such divisions, continuations, continuations-in-part and reissues of said U.S. patents.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, said PRIMEX TECHNOLOGIES, INC. does hereby sell, assign and transfer to said AEROJET-GENERAL CORPORATION all of its right, title and interest, together with all rights of priority, in and to said Patent Assets.

PRIMEX TECHNOLOGIES, INC. further agrees that when requested it will without charge to said AEROJET-GENERAL CORPORATION, but at its expense, cause all papers and rightful oaths to be signed, and do all acts which may be reasonably necessary, for securing and maintaining patents for said inventions in any and all countries and for vesting title thereto in AEROJET-GENERAL CORPORATION, its successors, assigns, legal representatives or nominees.

PRIMEX TECHNOLOGIES, INC. DOES NOT REPRESENT OR WARRANT THAT THE PATENT ASSETS ASSIGNED HEREBY ARE VALID OR ENFORCEABLE, OR THAT THE INVENTIONS CLAIMED THEREIN ARE FIT FOR ANY PARTICULAR USE OR PURPOSE.

PRIMEX TECHNOLOGIES, INC.

By Del S. Dameron
Del S. Dameron

Title Vice President and General Counsel

STATE OF FLORIDA)
) SS.
COUNTY OF Pinellas)

On this 5th day of March, 2003, before me a Notary Public in and for said County and State, personally appeared Del S. Dameron who being duly sworn, deposes and says that she is Vice President and General Counsel of PRIMEX TECHNOLOGIES, INC. the corporation described in the above ASSIGNMENT and that he executed the above ASSIGNMENT as a free act on behalf of PRIMEX TECHNOLOGIES, INC.

Catherine A. Pearcy
Notary Public

SEAL:



Catherine A. Pearcy
Commission # CC 965311
Expires Sep. 3, 2004
Bonded Thru
Atlantic Bonding Co., Inc.