

PATENT ASSIGNMENT

Electronic Version v1.1
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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Andrew ALLEN	11/28/2012
John LYMER	11/28/2012
Kerry SPRING	11/29/2012
Rangaswamy RAVINDRAN	12/03/2012
RECEIVING PARTY DATA	
Name:	MACDONALD DETTWILER & ASSOCIATES INC.
Street Address:	9445 Airport Road
City:	Brampton, ON
State/Country:	CANADA
Postal Code:	L6S 4J3
PROPERTY NUMBERS Total: 2	
Property Type	Number
Application Number:	13678281
Application Number:	61559801
CORRESPONDENCE DATA	
Fax Number:	7037399888
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
Phone:	703-739-9888
Email:	dowell@dowellpc.com
Correspondent Name:	DOWELL & DOWELL P.C.
Address Line 1:	103 Oronoco St.
Address Line 2:	Suite 220
Address Line 4:	Alexandria, VIRGINIA 22314
ATTORNEY DOCKET NUMBER:	18320
NAME OF SUBMITTER:	Ralph A Dowell

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Total Attachments: 7

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WORLDWIDE ASSIGNMENT

WE, **Andrew ALLEN, John LYMER, Kerry SPRING and Rangaswamy RAVINDRAN**, whose post office address are, 8 Havelock Street, Toronto, Ontario M6H 3B4, Canada, 116 Cranbrooke Avenue, Toronto, Ontario M5M 1M5, Canada, 46 Tiffany Crescent, Kanata, Ontario K2K 1W2, Canada and 36 Humber Trail, Caledon, Ontario L7E 0B2, Canada, have invented **APROPELLANT TRANSFER SYSTEM AND METHOD FOR RESUPPLY OF PROPELLANT TO ON-ORBIT SPACECRAFT** for which the United States provisional patent application was filed:

Filing Date: November 15, 2011

Serial No.: 61/559,801

and for which the U.S. patent application was filed:

Filing Date: November 15, 2012

Serial No.: 13/678,281

and for which the International PCT patent application was filed:

Filing Date: November 15, 2012

Serial No.: PCT/CA2012/050814

in consideration of Two Dollars (\$2.00) paid to us, the receipt and sufficiency of which is hereby acknowledged, and other good and valuable consideration, WE by these presents confirm that WE have sold, transferred and assigned and do hereby sell, transfer and assign to **MACDONALD DETTWILER & ASSOCIATES INC.**, ("Assignee") having offices at, 9445 Airport Road, Brampton, Ontario L6S 4J3, Canada, its successors and assigns or nominees, all OUR rights, title and interest in the United States, and all other countries of the world in and to OUR invention as fully described and claimed in the United States and International PCT patent applications, and WE sell, assign and transfer to **MACDONALD DETTWILER & ASSOCIATES INC.**, all OUR rights to apply for patent on said invention in the United States, and all other countries of the world including any and all full utility applications, divisions, continuations, continuation-in-part, re-examinations, renewals, reissues and/or extensions thereof, International PCT patent applications originating therefrom and all national phase applications and all OUR corresponding rights, title and interest in and to any patent which may issue therefor in the United States, and all other countries of the world, and we each make this assignment independently of each other.

AND WE UNDERTAKE to sign such further documents to effect the aforesaid sale, assignment and transfer as may be required from time to time, without reimbursement, but at the expense of **MACDONALD DETTWILER & ASSOCIATES**

PATENT

REEL: 029691 FRAME: 0974

INC.

AND WE authorize HILL & SCHUMACHER, Patent and Trademark Agents, of 264 Avenue Road, Toronto, Ontario M4V 2G7, Canada to enter the particulars of the signature and particulars of the Declaration of Witness when missing.

This assignment can be signed in counterparts.

The agreement shall be retroactive *nunc pro tunc* to the filing date of the PCT application such that the effective date of this agreement is **November 15, 2012.**

Signed at (city/town) BRAMPTON

This 28th day of NOVEMBER, 2012.



Andrew ALLEN

DECLARATION OF WITNESS

I, Colleen Howe, whose full post office address
is, 9445 Airport Road, hereby declare
that that I was personally present and did see Andrew ALLEN who is personally known
to me to be the person named in the above assignment duly sign and execute the
same.

DECLARED at (city/town) Brampton

This 28th day of November, 2012.



(Signature of Witness)

Signed at (city/town) Brampton

This 28 day of Nov, 2012.

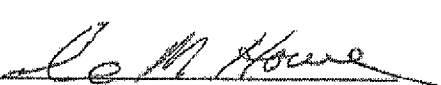

John LYMER

DECLARATION OF WITNESS

I, Colleen Howe, whose full post office address
is, 9445 Airport Road, hereby declare
that that I was personally present and did see John LYMER who is personally known to
me to be the person named in the above assignment duly sign and execute the same.

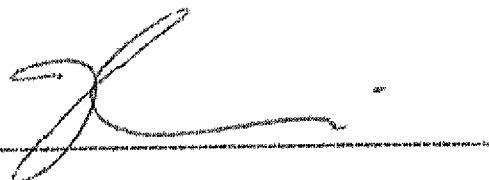
DECLARED at (city/town) Brampton

This 28th day of November, 2012.


(Signature of Witness)

Signed at (city/town) Ottawa, Ontario

This 29th day of November, 2012.



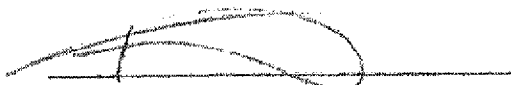
Kerry SPRING

DECLARATION OF WITNESS

I, Robert Baughman, whose full post office address
is, 85 TARDIFF (aka CHESTERVILLE box 232, hereby declare
that that I was personally present and did see Kerry SPRING who is personally known to
me to be the person named in the above assignment duly sign and execute the same.

DECLARED at (city/town) OTTAWA

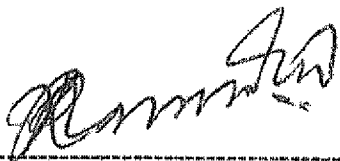
This 29th day of November, 2012.



(Signature of Witness)

Signed at (city/town) BRAMPTON

This 3 day of DECEMBER, 2012.



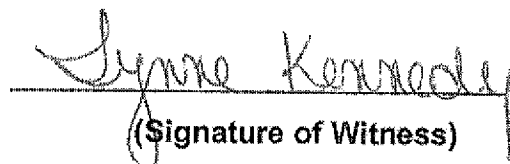
Rangaswamy RAVINDRAN

DECLARATION OF WITNESS

I, Synne Kennedy, whose full post office address
is, 9445 Airport Road, hereby declare
that that I was personally present and did see Rangaswamy RAVINDRAN who is
personally known to me to be the person named in the above assignment duly sign and
execute the same.

DECLARED at (city/town) Brampton, Ontario

This 3 day of December, 2012.


(Signature of Witness)

ACCEPTANCE

The Assignee accepts this assignment.

Signed at (city/town) Brampton

This 3 day of Dec, 2012.

MACDONALD DETTWILER & ASSOCIATES INC.

[Signature]

Name: Matt Savely

Position: Contracts Specialist

DECLARATION OF WITNESS

I, Linda Hollingdale, whose full post office address is, 9445 Airport Road, Brampton, hereby declare that I was personally present and did see, Matt Savely, who is personally known to me to be the person that has duly signed and executed the above assignment on behalf of **MACDONALD DETTWILER & ASSOCIATES INC.**

DECLARED at (city/town) Brampton

This 3RD day of December, 2012.

[Signature]
(Signature of Witness)