

08-29-2003



102538001
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Attorney Docket No.:

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

1. Name of conveying party(ies):
Bashir I. Master
Krishnan S. Chunangad
Venkateswaran Pushpanathan

8-2003

2. Name and address of receiving party(ies)
Name: D. Glenn Vicari, ABB Lummus Global

Internal Address: _____

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

3. Nature of conveyance:

- Assignment Merger
- Security Agreement Change of Name
- Other _____

Street Address: 1515 Broad Street

City: Bloomfield State: NJ Zip: 07003

Execution Date: 8/13/03

Additional name(s) & address(es) attached? Yes No

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: 8/20/03

A. Patent Application No.(s)

B. Patent No.(s)

10644157

Additional numbers attached? Yes No

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

Name: Yuri Kateshov

Internal Address: _____

Street Address: DILWORTH & BARRESE, LLP

333 Earle Ovington Blvd.

City: Uniondale State: New York Zip: 11553

6. Total number of applications and patents involved:

7. Total fee (37 CFR 3.41).....\$ 40.00

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Signature

8/20/03
Date

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00746 U.S. PTO
10/644157
08/20/03

For: U.S. and/or Foreign Rights
 For: U.S. Application or U.S. Patent
 By: Inventor(s) or Present Owner

ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNOR:

(inventor(s) or
 person(s) or entity(ies)
 who own the invention)

Bashir I. Master, Krishnan S.
 Chunangad and Venkateswaran
 Pushpanathan

(If assignment is by person or entity to whom invention was previously assigned and this was recorded in PTO add the following)

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hereby sells, assigns and transfers to

ASSIGNEE:

ABB Lummus Global Inc.1515 Broad StreetBloomfield, NJ 07003-3096USA

and the successors, assigns and legal representatives of the
 ASSIGNEE

(Assignment of Invention [16-3] - page 1 of 4)

(complete one of the following)

- the entire right, title and interest
- an undivided _____ percent (_____ %) interest for the United States and its territorial possessions

(check the following box if foreign rights are also to be assigned)

- an in all foreign countries, including all rights to claim priority, in and to any and all improvements which are disclosed in the invention entitled:

HEAT EXCHANGER

(check and complete (a), (b), (c) or (d))

and which is described in an application for a United States Patent, the specification of which is either attached hereto or otherwise accompanies this Assignment or indicates an Attorney Docket No. 1094-44 or is found in

(a) U.S. patent application executed on even date herewith

(b) U.S. patent application executed on _____

(c) U.S. application serial no. 0 / _____ filed on _____

(d) U.S. patent no. _____ issued _____

- A change of address to which correspondence is to be sent regarding patent maintenance fees is being sent separately.

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- (e) and any legal equivalent thereof in a foreign country, including the right to claim priority

and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any re-issue or re-examination thereof

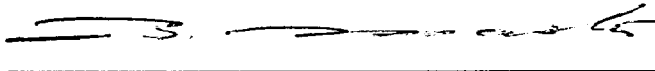
ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

(Assignment of Invention [16-3] - page 2 of 4)

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

IN WITNESS WHEREOF, I/We have hereunto set hand and seal this _____ (Date of signing).

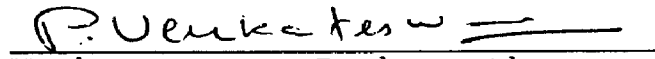
WARNING: Date of signing must be the same as the date of execution of the application if item (a) was checked above.


Bashir I. Master

Aug 13 2003
Dated


Krishnan S. Chunangad

AUG. 13, 2003
Dated


Venkateswaran Pushpanathan

Aug. 13 2003
Dated

If ASSIGNOR is a legal entity complete the following information

Type or print the name of the above person
authorized to sign on behalf of ASSIGNOR

Title

NOTE: No witnessing, notarization or legalization is necessary. If the assignment is notarized or legalized then it will only be prima facie evidence of execution 35 U.S.C. 261. Use next page if notarization is desired.

Notarization or Legalization Page Added.

(Assignment of Invention [16-3] - page 3 of 4)

STATE OF

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On this _____ day of _____, 19____, before me personally appeared _____ to me personally known and known to me to be the person who signed the foregoing assignment and acknowledged the signing of same as his free act and deed.

Notary Public

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On this _____ day of _____, 19____, before me personally appeared _____ to me personally known and known to me to be the person who signed the foregoing assignment and acknowledged the signing of same as his free act and deed.

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