
Form **PTO-1595** (Rev. 03-09) OMB No. 0651-0027 (exp. 03/31/2009) U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office

| RECORDATION FO | |
|--|---|
| PATENT | |
| To the Director of the U.S. Patent and Trademark Office: Pleas | e record the attached documents or the new address(es) below. |
| 1. Name of conveying party(ies) | Name and address of receiving party(ies) |
| Birger Erik YDSTIE | Name:Carnegie Mellon University |
| Sudhir RANJAN Balaji SUKUMAR | Internal Address: |
| Sridhar SEETHARAMAN | |
| Additional name(s) of conveying party(ies) attached? Ves X No | |
| 3. Nature of conveyance/Execution Date(s): | Street Address: <u>5000 Forbes Avenue</u> |
| Execution Date(S) <u>December 7, 2009</u> | |
| Assignment Merger | City: Pittsburgh |
| Security Agreement Change of Name | |
| Joint Research Agreement | State: <u>PA</u> |
| Government Interest Assignment | Country: USAZip: <u>15213</u> |
| Executive Order 9424, Confirmatory License | |
| Other | Additional name(s) & address(es) attached? 🛄 Yes 🔀 No |
| 4. Application or patent number(s): | document is being filed together with a new application. |
| A. Patent Application No.(s) | B. Patent No.(s) |
| | |
| PCT/US09/06114 | |
| Additional numbers at | l tachad? Yes XNo |
| 5. Name and address to whom correspondence | 6. Total number of applications and patents |
| concerning document should be mailed: | involved: <u>1</u> |
| Name Darren E. Wolf | 7. Total fee (37 CFR 1.21(h) & 3.41) \$40 |
| Internal Address: | |
| | X Authorized to be charged to deposit account |
| Street Address:Thorp Reed & Armstrong, LLP | Enclosed |
| One Oxford Centre, 301 Grant Street, 14th Floor | None required (government interest not affecting title) |
| | 8. Payment Information |
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| State: <u>PA</u> Zip: <u>15219-1425</u> | |
| Phone Number: <u>412-394-2305</u> | Deposit Account Number _ <u>20-0888</u> |
| Fax Number. <u>412-394-2555</u> | Authorized User Name Darren E. Wolf |
| Email Address: dwolf@morpreed.com | |
| 9. Signature: Junen Walf | 6 January 2010 |
| Signature | Date |
| Darren E. Wolf | Total number of pages including cover |
| Name of Person Signing | sheet, attachments, and documents: |
| Documents to be recorded (including cover she | et) should be faxed to (571) 273-0140, or mailed to: |

Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria PATENT

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PATENT

Attorney's Docket No. ____DB001358-001_

- For: 🗵 U.S. and/or 🖻 Foreign Rights
- For: U.S. Application
- For: U.S. Provisional Application
- For: DU.S. Patent
- For: PCT Application
- By: Multiple Inventors

ASSIGNMENT OF INVENTION (MULTIPLE INVENTORS)

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,

| ASSIGNORS (Inventors): | Carnegie Mellon Univers | ity |
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| (type or print name of inventors) | Address | Nationality |
| hereby sells, assigns and transfers to | | |
| TIEFEDY Sells, assigns and transfere to | | |
| ASSIGNEE: | | |
| | 5000 Forbes Avenue | |
| Carnegie Mellon University | <u> </u> | _ |
| (type or print name(s) of ASSIGNEE(S)) | Adiess | |
| Pennsylvania Non-Profit Corporation | | _ |
| Nationality | | |
| | | <u> </u> |
| Each Inventor: Initial and date here for acknowledgement of this part | × 55 | |
| (15) Kul Hales and (15) | whostor | |
| | | ATENT - |
| 10626811 | | |

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Attorney Docket Number: DB001358-001

and the successors, assigns and legal representatives of the ASSIGNEE

(complete one of the following)

the entire right, title and interest ×

______percent (_____%) interest an undivided n. for the United States and its territorial possession

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

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

METHODS FOR CASTING BY A FLOAT PROCESS AND ASSOCIATED APPARATUSES

(check and complete (a), (b), (c), (d), (e), (f) and/or (g))

and which is found in

| (a |) (T | US | natent application | n executed on | even date herewith |
|----|------|------|----------------------|---------------|--------------------|
| | / 1 | ···· | paton to approve the | | |

- (þ) 🗆
- (c) []
- U.S. patent application executed on ______ filed on ______ filed on ______ U.S. provisional application no. ______ filed on ______ filed on ______ (d) 💷
- International application no. PCT/US/09/06114 filed on November 13, 2009 (e) 🗵
- U.S. patent no. _____ issued (f) 11

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

(also check (g), if foreign application(s) is also being assigned)

and any legal equivalent thereof in a foreign country, including the right x (g) – 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 reissue 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;

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 Letter Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

| Each Inventor; Initial and date here for acknowledgement | nt of this page | (s 12/07(09 | |
|--|-----------------|----------------|------------------------------|
| (01062001) | 2 | REEL: (| PATENT 023742 FRAME: 0587 |

Attorney Docket Number: DB001358-001

IN WITNESS WHEREOF, We have hereunto set hand and seal this

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

Birger Erik YDSTIE (type name of inventor)

WITNESS:

ALICE YOCHUM (type or print name of witness)

WITNESS:

aura Shaheen (type or print name of witness)

Sudhir RANJAN

WITNESS:

ALICE YOCHUM (type or print name of witness)

WITNESS:

Laura Shaheen

Balaji SUKUM<u>AR</u>

WITNESS:

ALICE YOCHUM (type or print name of witness)

WITNESS:

Laura Shaheen (type or print name of witness)

INVENTOR

Da 7-2009

12-07-09

12-1-09 Date

<u>Ulice</u> Jocheem Signature of WITNESS

Signature of INVENTOR

Alice Jochum Signature of WITNESS

12/07/2009

12-01-09 Date

1<u>2-7-</u>09 Date

<u>*) haharn</u> Signature of WITNESS

alice Jochum Signature of WITNESS

<u>Dec.7.</u> 209

12-07-09 Date

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Signature of WITNESS

12-7-09 Date

| Each Inventor: Initial and date here for acknowledgem | ent of this page | SS WO7(07 | |
|---|------------------|--------------|--|
| (01062681) | 3 | PATENT | |

Attorney Docket Number: DB001358-001

Sridhar SEETHARAMAN

WITNESS:

aura

(type or print name of witness)

WITNESS:

ALICE YOCHUM (type or print name of witness)

gnature of INVENTOR

Signature of WITNESS

12/7/07 Date

Date

lue n Signature of WITNESS

<u>12-01-09</u> Date

Notarization or Legalization Page Added.

No witnessing, notarization or legalization is necessary. If the assignment is notarized or legalized, Note: then it will only be prima facle evidence of execution. 35 USC 261. Use next page if notarization is desired.

