

| | | | | | |
|---|--|---|--|--|--|
| Form PTO-1595 1-31-92 MD 12-8-99 | | 12-28-1999 101231937 | | A7539 U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office | |
| To the Honorable Commissioner of P. | | T ached original documents or copy thereof. | | | |
| 1. Name of conveying party(ies): Pranav ASHAR Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no | | 2. Name and address of receiving party(ies)? NEC USA, INC. 4 Independence Way Princeton, New Jersey 08540 Additional name(s) & address(es) attached? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no | | | |
| 3. Nature of Conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Names <input type="checkbox"/> Other | | Execution Date: November 16, 1999 | | | |
| 4. Application number(s) or patent number(s): 09/456506 If this document is being filed together with a new application, the execution date of the application is: November 11, 1999 | | | | | |
| A. Patent Application No.(s) | | B. Patent No.(s) | | | |
| Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | | |
| 5. Name and address of party to whom correspondence concerning document should be mailed: SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 Pennsylvania Avenue, N.W. Suite 800 Washington, D.C. 20037-3213 | | 6. Total number of applications and registration involved: 1 | | | |
| 7. Total Fee (37 CFR 3.41): \$40.00 <input checked="" type="checkbox"/> Enclosed. Please charge any underpayment in connection with this Assignment to Deposit Account No. 19-4880. <input type="checkbox"/> Authorized to be charged to Deposit Account | | 8. Deposit Account No. 19-4880 | | | |
| DO NOT WRITE IN 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. | | | | | |
| Howard L. Bernstein | | Reg. No. 25,665 | | December 8, 1999 Date | |
| TOTAL NUMBER OF PAGES COMPRISING COVER SHEET, ATTACHMENTS AND DOCUMENT: 2 | | | | | |
| OMB No. 0651-0011 (exp. 4/94) | | | | | |
| Do not detach this portion | | | | | |
| Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231 | | | | | |

12/28/1999 INVENT 0000073 09/456506

01 FC:581

40.00 00

PATENT
REEL: 010454 FRAME: 0380

ASSIGNMENT

(from Inventors to Princeton University)

WHEREAS, We, Peixin ZHONG and Margaret MARTONOSI,

hereinafter called assignors, jointly with Pranav ASHAR, have invented certain improvements in

**METHOD AND APPARATUS FOR SAT SOLVER ARCHITECTURE
WITH VERY LOW SYNTHESIS AND LAYOUT OVERHEAD**and have executed an application for Letters Patent of the United States of America therefor on
11/17/99 11/18/1999; and**WHEREAS**,Princeton University
5 New South Building
P.O. Box 36
Princeton, New Jersey 08540

hereinafter called assignee, desires to acquire our entire right, title, and interest in the said application and the invention disclosed therein, and to any United States and foreign patents to be obtained therefrom;

NOW THEREFORE, for valuable consideration, receipt whereof is hereby acknowledged,

We, the above-named assignors, hereby sell, assign and transfer to the above-named assignee, its successors and assigns, our entire right, title, and interest in the application and the invention disclosed therein for the United States of America and all countries foreign thereto, including rights of priority under 35 U.S.C. § 119 and the International Convention of Paris (1883) as amended, and in and to any and all Letters Patent to be held by the above-named assignee as it would have been held by us had this assignment, transfer and sale not been made; and we request that any Letters Patent upon the invention to be issued in our names be issued in the name of our assignee herein, its successors and assigns; and we hereby agree that the assignee may apply for foreign Letters Patent on the invention and we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee.

We hereby authorize and request our attorneys, SUGHRUE, MION, ZINN, MACPEAK & SEAS, of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3202 to insert here in parentheses (Application Number _____, filed _____) the filing date and application number of said application when known.

Date: 11/18/1999Peixin ZHONG
Peixin ZHONG

NOTARY

State of New JerseyCounty of Essex ss:

On this 18th day of November 1999, before me personally came Peixin ZHONG, to me personally known, and known to me to be the person described in and who executed the foregoing assignment, and he acknowledged to me that he executed the same as his free act and deed.

Ann K. Meighan
NotaryANN K. MEIGHAN
Notary Public of New Jersey
My Comm. Exp. March 12, 2003**PATENT****REEL: 010454 FRAME: 0381**

Date: 11/17/99

Margaret Martonosi
Margaret MARTONOSI

NOTARY

State of New Jersey)

County of Middlesex) ss:

On this 17th day of November, before me personally came Margaret MARTONOSI, to me personally known, and known to me to be the person described in and who executed the foregoing assignment, and she acknowledged to me that she executed the same as her free act and deed.

Jill M. Thompson
Notary

JILL M. THOMPSON

Notary Public of New Jersey

My Commission Expires November 13, 2002

RECORDED: 12/08/1999

PATENT

REEL: 010454 FRAME: 0382