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Form PTO-1595 (modified)		HEET U.S. D	EP/RTMENT OF COMMERCE
(Rev. 03/01)	102313774		U.S. Patent and Trademark Office
OMB No. 0651-0027 To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.			
1. Name of conveying party(ies):		ess of receiving party(ie	
Malay GANAI	NEC USA, INC.		,
Zhang LINTAO	4 Independence W	'ay	
Aarti GUPTA	Princeton, New Je	rsey 08540	
Zijiang YANG Pranav ASHAR 12 - 12 - 6	2		
Pranav ASHAR			
]	ļ		
Additional name(s) of conveying party(ies) attached?] Yes ☑ No		
3. Nature of conveyance:			
☐ Assignment ☐ Merger			
☐ Security Agreement ☐ Change of Name	2	# 4 1	
☑ Other To correct the Assignee's Name a 013243, Frame 0050	t Reel		e de la Agrica de L La Agrica de La Agr
Execution Date: July 23, 2002; July 24, 2002;	July 24	!	
2002; August 7, 2002; and July 24, 2002; respectively.	- (& address(es) attached?	I Yes ☑ No
4. Application number(s) or patent number(s):	-, -, -, -, -, -, -, -, -, -, -, -, -, -	33(15)	
If this document is being filed together with a new application, the execution date of the application is:			
A. Patent Application No.(s)	B. Patent No.(s)		
10/157,486	İ		
Additio	onal numbers attached?	as Mo	
Additional numbers attached?			
concerning document should be mailed:		l	iis involved
SUGHRUE MION, PLLC	7. Total fee (37 C	FR 3.41): \$40.00)
2100 Pennsylvania Avenue, N.W.	☑ Enclosed.	,	
Suite 800	☐ Authorized	to be charged to Deposi	it Account No. 19-4880.
Washington, D.C. 20037-3213	i	directed and authorized	
		Issue Fee and the Publ	
		880. Please also credit a	any overpayments to said
	Deposit Account.		
	8. Deposit Accour	it Number: 19-4880	
	(Attach duplic	19-4660 ate copy of this page if pay	ring by deposit account)
	DO NOT USE THIS SPACE	7	and of arboan arrows.
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.			
(Circum Sellicum		December	12, 2002
Chidambaram Subramanian	Reg. No. 43,355	Dat	
Total number of pages including cover sheet, attachments, and documents: 7			
Mail documents to be recorded with required cover sheet information to:			
Commissioner of Patents & Trademarks			
Box Assignment Washington D.C. 20231			
Washington, D.C. 20231			

12/17/2002 LMUELLER 00000050 10157486

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ASSIGNMENT

(from Inventor to NEC USA, Inc.)

WHEREAS, We, Malay GANAI, Lintao ZHANG, Aarti GUPTA, Zijiang YANG, and Pranav ASHAR,

hereinafter called assignors, have invented certain improvements in

EFFICIENT APPROACHES FOR BOUNDED MODEL CHECKING

and have executed an application for Letters Patent of the United States of America therefor on May 30, 2002 and the application having been assigned U.S. Application No. 10/157,486; and

WHEREAS.

NEC USA, Inc. 4 Independence Way Princeton, New Jersey 08540

(assignee) desires to acquire the entire right, title, and interest in the application and invention for the United States of America, and to any United States 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, the entire right, title, and interest in the invention disclosed therein for the United States of America, and we request the Commissioner of Patents to issue any Letters Patent granted upon the invention set forth in the application(s) to the assignee, its successors and assigns; and we hereby agree that we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application(s) when called upon to do so by the assignee.

We hereby authorize and request our attorneys, SUGHRUE MION, PLLC, of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3202 to insert here in parentheses (Application Number 10/157,486, filed May 30, 2002) the filing date and application number of said application when known.

Date: 07/23/02

Malay GANA

NOTARY

State of New Jersey)
County of MMALV) ss:

On this 23 day of 2000, before me personally came Malay GANAI, 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.

Notary

ANN K. MEIGHAN
Notary Public of New Jersey
My Comm. Exp. March 12, 2003

Date: 07/24/2002	- item huy	
	·Lintao ZHANG	
NOTARY		
State of New Jersey) County of (1) (1) (1) ss:		
On this 4 day of <u>July 2000</u> , before me personally came Lintao ZHANG, 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.		
	Notary ANN K. MEIGHAN Notary Public of New Jersey My Comm. Exp. March 12, 2003	
Date: $\frac{7/24/02}{}$	Aarti GUPTA	
NOTARY		
State of New Jersey) County of Mlane) ss:		
On this 4 day of 4000, before me personally came Aarti GUPTA, 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.		
	Notary ANN K. MEIGHAN J Notary Public of New Jersey My Comm. Exp. March 12, 2003	
Date: <u>08/07/02</u>	Zijiang YANG	
NOTARY		
State of New Jersey) County of Much) ss:		
On this 9 day of 1000 , before me personally came Zijiang YANG, to me personally known, and known to the 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
Notary Public of New Jersey
My Comm. Exp. March 12, 2003

Notary

For U.S. Filing A-8336 CCRL 1140 Page 3 of 3

Date: 7/24/02

Tranan N A

NOTARY

State of New Jersey)
County of The County ss:

On this 24 day of 202, before me personally came Pranav ASHAR, 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.

Notary

ANN K. MEIGHAN Notary Public of New Jersey My Comm. Exp. March 12, 2003



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: A8336

Malay GANAI, et al.

Appln. No.: 10/157,486

Group Art Unit: 2123

Confirmation No.: 7813

Examiner: Not Yet Assigned

Filed: May 30, 2002

,

For: EFFICIENT APPROACHES FOR BOUNDED MODEL CHECKING

REQUEST FOR CORRECTED NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

U.S. Patent and Trademark Office

Assignment Division BOX ASSIGNMENT

North Tower Building, Suite 10C35

Washington, D.C. 20231

Sir:

We enclose copies of the NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT and Assignment which were recorded in the Patent Office at Reel 013243, Frame 0050, and request correction as follows:

ASSIGNEE: [NEC CORPORATION] NEC USA, INC.

Since the need for correction was caused by our office, a check in the amount of \$40.00, along with a new PTO-1595 form is attached. The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted,

SUGHRUE MION, PLLC

2100 Pennsylvania Avenue, N.W. Washington, D.C. 20037-3213

Telephone: (202) 293-7060 Facsimile: (202) 293-7860

Date: December 12, 2002

Chidambaram Subramanian Registration No. 43,355

(C. dela Salana

NOVEMBER 15, 2002

PTAS

SUGHRUE MION, PLLC HOWARD L. BERNSTEIN 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, D.C. 20037-3213 Under Secretary of Commerce For Intellectual Property and Director of the United States Patent and Trademark Office Washington, DC 20231 www.uspto.gov



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UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 08/28/2002

REEL/FRAME: 013243/0050

NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

GANAI, MALAY

DOC DATE: 07/23/2002

ASSIGNOR:

LINTAO, ZHANG

DOC DATE: 07/24/2002

ASSIGNOR:

GUPTA, AARTI

DOC DATE: 07/24/2002

ASSIGNOR:

YANG, ZIJIANG

DOC DATE: 08/07/2002

ASSIGNOR:

ASHAR, PRANAV

DOC DATE: 07/24/2002

ASSIGNEE:

NEC CORPORATION NEC USA, INC.

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PRINCETON, NEW JERSEY 08540

013243/0050 PAGE 2

SERIAL NUMBER: 10157486

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FILING DATE: 05/30/2002

ISSUE DATE:

ALLYSON PURNELL, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

RECORDED: 12/12/2002