Form PTO-1595 (Rev. 08/08) OMB No. 0651-0027 (exp. 9/30/2008) U.S. DEPARTMENT OF COMMERCE United States Patent & Trademark Office

RECORDATION FORM PATENTS (	
To the Director of the U.S. Pater	Attorney Docket No. 058501.00075 nt and Trademark Office
Please record the attached documents	or the new address(es) below
Name of conveying party(ies)	Name and address of receiving party(les):
1) Dr. Rajeev Kumar BARUA; 2) Matthew SMITHSON	Name: University of Maryland
Additional name(s) of conveying party(ies) attached?	Street Address: 0133 Cole Student Activities Bldg.
☐ Yes	City: College Park State: MD
<u> </u>	Country: US Zip: 20742
Nature of conveyance/Execution Date(s):	Additional name(s) & address(es) attached?
Execution Date(s): 1) May 24, 2010; 2) May 24, 2010	
	☐ Yes     No
4. Application or patent number(s):	This document is being filed together with a new application.
A. Patent Application No.(s)	B. Patent No.(s)
12/785,923	
Additional numbers attached?	′es ⊠ No
Name and address to whom correspondence concerning document should be mailed:	Total number of applications and patents involved:     One
Name: Squire Sanders & Dempsey L.L.P.	7, Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00
Internal Address:	□ Authorized to be charged to deposit account     □ Enclosed. Check No
Street Address: 8000 Towers Crescent Drive, 14th Floor City: Vienna	None required (government interest not affecting title)
State: Virginia Zip; 22182-6212 Phone Number: (703) 720-7800	8. Payment Information
Fax Number: (703) 720-7802	, ·
Email Address: ipgeneraltyo@ssd.com	Deposit Account Number: 50-2222 Authorized User Name: Peter Flanagan
Q 320	Married 2010
9. Signature: Vitu Vlora a a Signature	<u>May 25, 2010</u>
Peter Flanagan, Reg. No. 58,178	
Name of Person Signing Tota	il number of pages including cover sheet, attachments, documents:

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

## SQUIRE SANDERS & DEMPSEY L.L.P.

Docket	No.	058501	.00071

## WORLDWIDE INVENTION ASSIGNMENT

For good and valuable consideration paid to the undersigned inventor(s) (hereinafter ASSIGNOR)

	by	good and vantable consid	cration para to the encertagness in the	
(Insert	University of	Maryland		
ASSIGNEE's		udent Activities Bldg.		<del>-</del>
Name(s) Address(cs)]	College Park		·	
Address(es)]		<u> </u>		
	ASSIGNOR interest to the	hereby selfs, assigns and invention entitled	and sufficiency of which is hereby d transfers to ASSIGNEE the ent	acknowledged, the undersigned ire and exclusive right, title and
[Title of Invention]	BINARY KE	WRITING WITHOUT	RELOCATION INFORMATION	
[*]f the assignment is being filed	for which the	following applications w	ere filed:	
after the filing of the	"Filed on:	24 May 2010	Application Number(s)	12/785,923
application, this section must be		(Day Month Year)	Number(s)	12//03/923
completed)	(Squ and/or filing o	ire, Sanders & Dempsey late hereon, when known	L.L.P. is hereby authorized to inset)	ert the series code, serial number
	continuation,	rs Patent of any country division, renewal, substi ne may be granted.	in the world to be obtained the tute, reissue or reexamination there	refor on said application or any eof for the full term or terms for
	continuing, o	livisional, reissue or re	xecute all papers necessary in con- examination applications thereof pplications as the ASSIGNEE may	and also to execute separate
	litigation, or o division, reis cooperate wit	other legal proceeding whose or reexamination th	execute all papers necessary in conich may be declared concerning this nereof or Letters Patent or reissury way possible in obtaining and priner legal proceeding.	s application or any continuation, e patent issued thereon and to
	IN WITNESS	WHEREOF, the undersi	gned inventor(s) has (have) affixed	his/her/their signature(s).
(Signature(s)	(Br		Dr. Rajcev Kumar BAR	UA 5/24/10
of Assignor(s))	(SI	GNATURE)	(TYPE NAME)	/ (DATK)
			Matthew SMITHSO!	
	(SI	GNATURE)	(TYPE NAME)	(DATE)

**PATENT REEL: 024440 FRAME: 0165** 

## SQUIRE SANDERS & DEMPSEY L.L.P.

Docket No.	058501.00075	. <u></u>

## WORLDWIDE INVENTION ASSIGNMENT

Inscri	University of		<u> </u>	
SSIGNEE's		ident Activities Bldg.		
leme(x) .ddress(cs)]	College Park.	<u>MD 20742</u>		
		<u></u> -		<u> </u>
	ASSIGNOR 1 interest to the	ncreby sells, assigns and t invention entitled	d sufficiency of which is hereby a rangeers to ASSIGNEE the entire	cknowledged, the undersigned and exclusive right, title and
Title of nvention]	BINARY RE	W <u>RITI</u> NG WITHOUT RE	LOCATION INFORMATION	
^}^the assignment	for which the	following applications were	e filed:	
s being filed fier the filing of the application, this	"Filed on;	24 May 2010	Application Number(3)	12/785,923
ection must be		(Day Month Year)		en e
ompleted]	(Squi	ire, Sandors & Dempsey L	.L.P. is hereby authorized to insert	the series code, serial number
	1 -¥1 T -++->	isto Hereon, when known)	in the world to be obtained there:	for on said application or any
	and all Letter continuation, which the sam The continuing, of assignments in	rs Patent of any country is division, renewal, substitute may be granted.  ASSIGNOR agrees to exellivisional, reissue or rees necessure connection with such app	in the world to be obtained therein te, reissue of recommination thereo- cute all papers necessary in conne- termination applications thereof a lications as the ASSIGNEE may de-	ction with application and any and also to execute separate em necessary or expedient.
	and all Letter continuation, which the same continuing. Cassignments in the litigation, or a division, reis	rs Patent of any country is division, renewal, substitute may be granted.  ASSIGNOR agrees to exemply a substitute of reconnection with such appropriate to expense to expense of the legal proceeding which the reconnection of the such approximation that the such approximation the such approximation the such approximation that approximation t	cute all papers necessary in connexamination applications thereof a lications as the ASSIGNEE may descute all papers necessary in constitution may be declared concerning this areof or Letters Patent or reissue way possible in obtaining and produce.	ction with application and any and also to execute separate em necessary or expedient, nection with any interference, application or any continuation, natent issued thereon and to
	and all Letter continuation, which the same the continuing. A assignments in the litigation, or a division, reis cooperate with such inter-	rs Patent of any country is division, renewal, substitute may be granted.  ASSIGNOR agrees to exectivisional, reissue or reem connection with such approximate approximate approximation the connection approximation that assigned in every afference, litigation, or other	cute all papers necessary in connexamination applications thereof a lications as the ASSIGNEE may descute all papers necessary in constitution may be declared concerning this areof or Letters Patent or reissue way possible in obtaining and produce.	ction with application and any and also to execute separate em necessary or expedient, nection with any interference, application or any continuation, patent issued thereon and to being evidence and proceeding
(Signatury(s)	and all Letter continuation, which the same which the same continuing, it assignments in the litigation, or or division, reis cooperate with such internal litigation and the litigation of the	rs Patent of any country is division, renewal, substitute may be granted.  ASSIGNOR agrees to exectivisional, reissue or reem connection with such application legal proceeding which such a reexamination that he the ASSIGNEE in every afference, litigation, or other WHEREOF, the undersign	cute all papers necessary in connectant applications thereof a lications as the ASSIGNEE may describe all papers necessary in confident and perfect and papers necessary in confident and perfect or Letters Patent or reissue way possible in obtaining and produced inventor(s) has (have) affixed here.  Dr. Rajeev Kumar BARU	ction with application and any and also to execute separate em necessary or expedient, nection with any interference, application or any continuation, patent issued thereon and to being evidence and proceeding is/her/their signature(s).
	and all Letter continuation, which the same which the same continuing, it assignments in the litigation, or or division, reis cooperate with such internal litigation and the litigation of the	rs Patent of any country is division, renewal, substitute may be granted.  ASSIGNOR agrees to exectivisional, reissue or reem connection with such approximate approximate approximation the connection approximation that assigned in every afference, litigation, or other	cute all papers necessary in connexamination applications thereof a lications as the ASSIGNEE may descute all papers necessary in constitution of the content of the conten	ction with application and any and also to execute separate em necessary or expedient, nection with any interference, application or any continuation, patent issued thereon and to being evidence and proceeding is/her/their signature(s).
(Signature(s) of Assignor(s))	and all Letter continuation, which the same which the same continuing, it assignments in the litigation, or or division, reis cooperate with such internal litigation and the litigation of the	rs Patent of any country is division, renewal, substitute may be granted.  ASSIGNOR agrees to exectivisional, reissue or reem connection with such application legal proceeding which such a reexamination that he the ASSIGNEE in every afference, litigation, or other WHEREOF, the undersign	cute all papers necessary in connectant applications thereof a lications as the ASSIGNEE may describe all papers necessary in confident and perfect and papers necessary in confident and perfect or Letters Patent or reissue way possible in obtaining and produced inventor(s) has (have) affixed here.  Dr. Rajeev Kumar BARU	ction with application and any and also to execute separate em necessary or expedient, nection with any interference, application or any continuation, patent issued thereon and to being evidence and proceeding is/her/their signature(s).

PATENT REEL: 024440 FRAME: 0166

**RECORDED: 05/25/2010**