Form PTO-15/5 (Rev. 10/02) OMB No. 0651-0027

05-19-2005



U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office

	OMB No. 0651-0027 (2005) 10300597	78Docket No. 3001-34/1160.44736X00		
	To the Honorable Commissioner of Patents and Trademarks: F			
	Name of conveying party(ies):	Name and address of receiving party(ies)		
	Ravinderpal Singh SANDHU Brett Jason SCHOPPERT Ravi GANESAN	Name: TriCipher, Inc.		
	Mihir BELLARE Colin Joseph DeSa	Address:		
1	Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No	1		
\\\	Nature of conveyance:	Street Address: 1900 Alameda de las Pulgas, Suite 112		
Ç	☐ Merger			
\mathcal{O}	☐ Security Agreement ☐ Change of Name			
<i>"</i>	☐ Other .	City: San Mateo State: CA Zip: 94403		
5.160	Execution Date: March 2&19, April 4, 2005.	Additional name(s) & address(es) attached? ☐ Yes ☒ No		
1)	Application number(s) or patent number(s):			
,	If this document is being filed together with a new application, the A. Patent Application No.(s)	execution date of the application is: . B. Patent Registration No.(s)		
	11/055,988 February 14, 2005			
	Additional number(s) attached ☐ Yes ☒ No			
	Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved 1		
	Name: ANTONELLI, TERRY, STOUT & KRAUS, LLP	7. Total fee (37 CFR 3.41)		
		⊠ Enclosed		
	Internal Address:	☑ Authorized to be charged to deposit account		
	1300 NORTH 17 TH STREET – SUITE 1800	Deposit account number:		
	City: ARLINGTON State: VA Zip 22209	01-2135		
		(Attach duplicate copy of this page if paying by deposit account)		
	DO NOT USE THIS SPACE			
	 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. 			
	ALFRED A. STADNICKI, Reg#30,226	05/16/2005		
	Name of Person Signing Signal	ture Date		
	Total number of pages including cover sheet, attachments, and document: 5			
	Mail documents to be recorded wit	h required cover sheet information to:		
	1	Frademarks, Box Assignments on, D.C. 20231		
05/17/200	05/17/2005 HALI11 00000078 11055988 \			
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PATENT PEEL: 016568 EDAME

REEL: 016568 FRAME: 0573

ASSIGNMENT

WHEREAS, I/we (as applicable), Ravinderpal Singh SANDHU, Brett Jason SCHOPPERT, Ravi GANESAN, Mihir BELLARE and Collin Joseph deSa have made a certain new and useful invention as set forth in an application for United States Letters Patent, entitled "AUTHENTICATION PROTOCOL USING A MULTI-FACTOR ASYMMETRIC KEY PAIR", for which an application for United States Letters Patent [] is filed herewith or [X] was filed on February 14, 2005 as Application Serial No. 11055,98

AND WHEREAS, I/we hereby acknowledge my/our obligation to transfer the entire right, title and interest to said invention and in and to any and all Letters Patent of the United States and foreign countries which may be obtained therefore to TriCipher, Inc. (hereinafter referred to as ASSIGNEE), a corporation organized and existing under the laws of the State/Commonwealth of California and having an address of 1900 Alameda de las Pulgas, Suite 112, San Mateo, CA 94403:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/we do hereby sell, assign, transfer and set over unto said ASSIGNEE, its legal representatives, successors, and assigns, the entire right, title and interest in and to said invention as set forth in the above-mentioned application, including any continuations, continuations-in-part, divisions, reissues, re-examinations or extensions thereof, and in and to any and all patents of the United States and foreign countries which may be issued for said invention including rights to priority under the International Convention of Paris (1883), as amended;

UPON SAID CONSIDERATIONS, I/we hereby acknowledge and agree that I/we have not and will not execute any writing or do any act whatsoever conflicting with these presents, and that we will, at any time upon request, without further or additional consideration but at the expense of said ASSIGNEE, execute such additional assignments and other writings, for example statements and other affidavits, and do such additional acts, for example giving testimony, as said ASSIGNEE may deem necessary or desirable to perfect the ASSIGNEE's enjoyment of rights granted in said invention, and render all necessary assistance in making application for and obtaining original, continuations, continuations-in-part, reexamined, reissued, or extended Letters Patent of the United States or of any and all foreign countries on said invention, and in any proceedings or transactions involving such applications or patents, including those relating to the enforcement of any rights or chose in action accruing as a result of said applications or patents, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of the successors, assigns and legal representatives of me/us and ASSIGNEE;

AND I/we request the Commissioner of Patents and Trademarks to issue

File No.: 1160.44736X00 My commission expires _____ Ravi GANESAN State/Commonwealth of: <u>California</u> County of: San Mates Then personally appeared the above-named Ravi Ganesan of TVICIPIAR
this 19 day of March , 2005, to me personally known and known to me to be the person described in and who executed the foregoing assignment and acknowledged the same to be his or her own free act and deed, before me. CARLOS GARCIA Z COMM. # 1320220 NOTARY PUBLIC - CALIFORNIA J SAN MATEO COUNTY My Comm. Expires SEP 08, 2005 Notary Public My commission expires 564,8,2005Date: _____ (signed) Mihir BELLARE State/Commonwealth of: County of: Then personally appeared the above-named _____ of______this ______, to me personally known and the foregoing known to me to be the person described in and who executed the foregoing assignment and acknowledged the same to be his or her own free act and deed, before me. Notary Public

Docket No.: 3001-34

My commission expires _____

ASSIGNMENT

WHEREAS, I/we (as applicable), Ravinderpal Singh SANDHU, Brett Jason SCHOPPERT, Ravi GANESAN, Mihir BELLARE and Collin Joseph deSa have made a certain new and useful invention as set forth in an application for United States Letters Patent, entitled "AUTHENTICATION PROTOCOL USING A MULTI-FACTOR ASYMMETRIC KEY PAIR", for which an application for United States Letters Patent [] is filed herewith or [X] was filed on February 14, 2005 as Application Serial No. \(\frac{11\055\980}{1055\980}\);

AND WHEREAS, I/we hereby acknowledge my/our obligation to transfer the entire right, title and interest to said invention and in and to any and all Letters Patent of the United States and foreign countries which may be obtained therefore to TriCipher, Inc. (hereinafter referred to as ASSIGNEE), a corporation organized and existing under the laws of the State/Commonwealth of California and having an address of 1900 Alameda de las Pulgas, Suite 112, San Mateo, CA 94403;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/we do hereby sell, assign, transfer and set over unto said ASSIGNEE, its legal representatives, successors, and assigns, the entire right, title and interest in and to said invention as set forth in the above-mentioned application, including any continuations, continuations-in-part, divisions, reissues, re-examinations or extensions thereof, and in and to any and all patents of the United States and foreign countries which may be issued for said invention including rights to priority under the International Convention of Paris (1883), as amended;

UPON SAID CONSIDERATIONS, I/we hereby acknowledge and agree that I/we have not and will not execute any writing or do any act whatsoever conflicting with these presents, and that we will, at any time upon request, without further or additional consideration but at the expense of said ASSIGNEE, execute such additional assignments and other writings, for example statements and other affidavits, and do such additional acts, for example giving testimony, as said ASSIGNEE may deem necessary or desirable to perfect the ASSIGNEE's enjoyment of rights granted in said invention, and render all necessary assistance in making application for and obtaining original, divisional, continuations, continuations-in-part, reexamined, reissued, or extended Letters Patent of the United States or of any and all foreign countries on said invention, and in any proceedings or transactions involving such applications or patents, including those relating to the enforcement of any rights or chose in action accruing as a result of said applications or patents, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of the successors, assigns and legal representatives of me/us and ASSIGNEE;

AND I/we request the Commissioner of Patents and Trademarks to issue

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Date: Name: _____ (signed) Ravi GANESAN State/Commonwealth of: County of: _____ Then personally appeared the above-named _____ _____, this _____ day of _____ to me personally known and known to me to be the person of described in and who executed the foregoing assignment and acknowledged the same to be his or her own free act and deed, before me. Notary Public My commission expires Date: 4/4/05 Name: whi subme (signed) Mihir BELLARE State/Commonwealth of: GALIFORNIA

County of: SAN DIESO Then personally appeared the above-named HIHIR BELLARE of SAN DIESO this 4 day of APRIL , OS , to me personally known and known to me to be the person described in and who executed the foregoing assignment and acknowledged the same to be his or her own free act and deed, before me. <u>Julia Maureen Latinei</u> Notary Public My commission expires <u>November</u> 23, 2006 JULIA MAUREEN LATIMER

Docket No.: 3001-34 File No.: 1160.44736X00

> Commission # 1386713 Notary Public - California San Diego County My Comm. Expires Nov 23, 2006

> > 3

ASSIGNMENT

WHEREAS, I/we (as applicable), Ravinderpal Singh SANDHU, Brett Jason SCHOPPERT, Ravi GANESAN, Mihir BELLARE and Collin Joseph deSa have made a certain new and useful invention as set forth in an application for United States Letters Patent, entitled "AUTHENTICATION PROTOCOL USING A MULTI-FACTOR ASYMMETRIC KEY PAIR", for which an application for United States Letters Patent [] is filed herewith or [X] was filed on February 14, 2005 as Application Serial No. 11055,988;

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NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/we do hereby sell, assign, transfer and set over unto said ASSIGNEE, its legal representatives, successors, and assigns, the entire right, title and interest in and to said invention as set forth in the above-mentioned application, including any continuations, continuations-inpart, divisions, reissues, re-examinations or extensions thereof, and in and to any and all patents of the United States and foreign countries which may be issued for said invention including rights to priority under the International Convention of Paris (1883), as amended;

UPON SAID CONSIDERATIONS, I/we hereby acknowledge and agree that I/we have not and will not execute any writing or do any act whatsoever conflicting with these presents, and that we will, at any time upon request, without further or additional consideration but at the expense of said ASSIGNEE, execute such additional assignments and other writings, for example statements and other affidavits, and do such additional acts, for example giving testimony, as said ASSIGNEE may deem necessary or desirable to perfect the ASSIGNEE's enjoyment of rights granted in said invention, and render all necessary assistance in making application for and obtaining original, continuations, continuations-in-part, reexamined, reissued, or extended Letters Patent of the United States or of any and all foreign countries on said invention, and in any proceedings or transactions involving such applications or patents. including those relating to the enforcement of any rights or chose in action accruing as a result of said applications or patents, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of the successors, assigns and legal representatives of me/us and ASSIGNEE;

AND I/we request the Commissioner of Patents and Trademarks to issue

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PATENT REEL: 016568 FRAME: 0578

any Letters Patent of the United States which may be issued for said invention to said **ASSIGNEE**, its legal representatives, successors or assigns, as the sole owner of the entire right, title and interest in and to said patent and the invention covered thereby.

Date:	Name:
	(signed)
	Ravinderpal Singh SANDHU,
State/Commonwealth of: County of:	
	d the above- named
this day of known to me to be the person do	, to me personally known and escribed in and who executed the foregoing the same to be his or her own free act and deed,
	Notary Public My commission expires
Date: 2mAR 7005	Name: (signed)
	Brett Jason SCHOPPERT
State/Commonwealth of: County of:	Α
Then personally appeared	d the above-named Breit Jacon Schopfert
this <u>02</u> day of <u>MARCH</u> known to me to be the person do	, 2005, to me personally known and escribed in and who executed the foregoing the same to be his or her own free act and deed, Lucleu Luci. Notary Public

PATENT REEL: 016568 FRAME: 0579

Docket No.: 3001-34 File No.: 1160.44736X00 My commission expires Sep-30-2008

Name: Yusly Lucii
(signed) Date: 04/20/05 Ravi GANESAN State/Commonwealth of: County of: Then personally appeared the above-named _____ this _____ day of_____, ____, to me personally known and known to me to be the person described in and who executed the foregoing assignment and acknowledged the same to be his or her own free act and deed, before me. Notary Public My commission expires _____ Date: _____ Name: _____(signed) Mihir BELLARE State/Commonwealth of: County of: Then personally appeared the above-named _____

Notary Public
My commission expires _____

assignment and acknowledged the same to be his or her own free act and deed,

before me.

RECORDED: 05/16/2005