505123061 10/02/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5169822

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	RELEASE OF SECURITY INTEREST AT REEL/FRAME 032708/0849

CONVEYING PARTY DATA

Name	Execution Date
SILICON VALLEY BANK	09/21/2018

RECEIVING PARTY DATA

Name at	ODOGC MATOLLING
Name:	CROSS MATCH, INC.
Street Address:	3950 RCA BOULEVARD, SUITE 5001
City:	PALM BEACH GARDENS
State/Country:	FLORIDA
Postal Code:	33410
Name:	CROSS MATCH HOLDINGS, INC.
Street Address:	3950 RCA BOULEVARD, SUITE 5001
City:	PALM BEACH GARDENS
State/Country:	FLORIDA
Postal Code:	33410
Name:	CROSS MATCH TECHNOLOGIES, INC.
Street Address:	3950 RCA BOULEVARD, SUITE 5001
City:	PALM BEACH GARDENS
State/Country:	FLORIDA
Postal Code:	33410
Name:	DIGITALPERSONA, INC.
Street Address:	3950 RCA BOULEVARD, SUITE 5001
City:	PALM BEACH GARDENS
State/Country:	FLORIDA
Postal Code:	33410
Name:	CROSS MATCH TECHNOLOGIES GMBH
Street Address:	UNSTRUTWEG 4
City:	07743 JENA
State/Country:	GERMANY

PROPERTY NUMBERS Total: 31

Property Type	Number
Application Number:	08646531

505123061 REEL: 047184 FRAME: 0569

PATENT

Property Type	Number
Application Number:	08837549
Application Number:	08970304
Application Number:	08970494
Application Number:	08971157
Application Number:	09089316
Application Number:	09124182
Application Number:	09153782
Application Number:	09255037
Application Number:	09470097
Application Number:	09514964
Application Number:	09538926
Application Number:	09539292
Application Number:	09591029
Application Number:	09707417
Application Number:	10822897
Application Number:	11360377
Application Number:	11762001
Application Number:	12185802
Application Number:	12579288
Application Number:	12619665
Application Number:	13474484
Application Number:	13560082
Application Number:	13584716
Application Number:	13676058
Application Number:	13676062
Application Number:	13830909
Application Number:	14144426
Application Number:	14217083
Application Number:	29079070
Application Number:	61115512

CORRESPONDENCE DATA

Fax Number: (212)446-4900

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Email: susan.zablocki@kirkland.com

Correspondent Name: SUSAN ZABLOCKI

Address Line 1: KIRKLAND & ELLIS LLP
Address Line 2: 601 LEXINGTON AVENUE
Address Line 4: NEW YORK, NEW YORK 10022

PATENT

REEL: 047184 FRAME: 0570

ATTORNEY DOCKET NUMBER:	15496-4
NAME OF SUBMITTER:	SUSAN ZABLOCKI
SIGNATURE:	/susan zablocki/
DATE SIGNED:	10/02/2018

Total Attachments: 18

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TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENTS

This TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENTS (this "Termination and Release") is made as of September 21, 2018 by SILICON VALLEY BANK, as Administrative Agent (the "Assignee"), in favor of Cross Match, Inc., a Delaware corporation ("Holdings"), Cross Match Holdings, Inc., a Delaware corporation ("Parent"), Cross Match Technologies, Inc., a Delaware corporation ("Borrower"), DIGITALPERSONA, Inc., a California corporation ("DigitalPersona") and Cross Match Technologies Gmbh, a German limited liability company (Gesellschaft mit beschränkter Haftung) ("German Subsidiary"); and together with Holdings, Parent, Borrower and DigitalPersona are, individually, each a "Grantor", and collectively, the "Grantors").

WHEREAS, Grantors and Assignee entered into (i) that certain Guarantee and Collateral Agreement, dated as of July 13, 2012 (as amended, amended and restated, supplemented, restructured or otherwise modified, renewed or replaced from time to time, the "Guarantee and Collateral Agreement"), and (ii) that certain Credit Agreement, dated as of July 13, 2012 (as amended, amended and restated, supplemented, restructured or otherwise modified, renewed or replaced from time to time, the "Credit Agreement"), pursuant to which Grantors executed and delivered a Patent Security Agreement, dated as of July 13, 2012 (as amended, supplemented, and in effect, the "IP Agreement");

WHEREAS, the IP Agreement was recorded with the United States Patent and Trademark Office ("*USPTO*") on July 16, 2012, at Reel 028541, Frame 0559;

WHEREAS, the IP Agreement was supplemented by (a) that certain First Supplement to Patent Security Agreement dated as of April 17, 2014 and recorded with the USPTO at Reel 032708, Frame 0849, and (b) that certain Second Supplement to Patent Security Agreement dated as of June 23, 2015 and recorded with the USPTO at Reel 036015, Frame 0243;

WHEREAS, Grantors have requested that Assignee hereby terminate, release and discharge fully its security interests in and liens on all right, title and interest of Grantors in, to and under the patent collateral pledged in the Guarantee and Collateral Agreement and the IP Agreement (collectively, the "IP Collateral") as herein provided; and

WHEREAS, Grantors have requested that the Assignee provide a document suitable for recording with the USPTO to evidence the release of the Assignee's security interests in and liens on the IP Collateral as herein provided.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Assignee hereby:

- 1. terminates the Grants and releases, terminates and discharges all liens and security interests in all right, title and interest of each Grantor in, to and under the Patent Collateral, including those Patents and Patent applications identified in <u>Schedule I</u> hereto, and all goodwill associated therewith; and
- 2. authorizes and requests that this Termination and Release be recorded with the USPTO.

THIS TERMINATION AND RELEASE AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, AND SHALL BE CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

[Signature page follows]

IN WITNESS WHEREOF, the undersigned has executed this Termination and Release by its duly authorized officer as of the date first above written.

SILICON VALLEY BANK, as Assignee

Ву:

Name:

Title:

[Signature Page to Termination and Release of Security Interest in Patents]

SCHEDULE I TO TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENTS

Grantor Cross Match	Date of Registration / Date			
		Application No. /	Title of Patent or Patent	
	of Patent	Registration No.	Application	Status
Closs Match	R: 4/17/1997	08/839,934	Hand-held fingerprint	Granted
Technologies,	P: 8/29/2000	6,111,977	recognition and transmission	
Inc.			device	
Cross Match	R: 4/28/1998	09/067,792	Individualized fingerprint	Granted
Technologies,	P: 1/23/2001	6,178,255	scanner	
Inc.				
Cross Match	R: 1/16/2001	09/759,344	Individualized fingerprint	Granted
Technologies,	P: 9/30/2003	6,628,813	scanner	
Inc.	_	40/550 4.4		
Cross Match	R:	10/653,141	Methods for capturing	Granted
Technologies,	9/3/2003 Pr 0/5/2006	7,103,201	fingerprint images using a	
Inc.	P: 9/5/2006		moving platen	
Cross Match	R: 5/18/1998	09/080,911	Code Reader Fingerprint	Granted
Technologies,	P: 7/17/2001	6,263,090	Scanner	
Inc.			<u> </u>	
Cross Match	R: 5/28/1999	09/321,533	Access Control Unit Interface	Granted
Technologies,	P: 8/7/2001	6,272,562		
Inc.				
Cross Match	R: 6/23/2000	09/599,255	Rechargeable Mobile Hand-	Granted
Technologies,	P: 4/26/2005	6,886,104	Held Fingerprint Scanner With	
Inc.			A Data And Power	
C M + 1	D 0/10/1000	00/277 507	Communication Interface	G . 1
Cross Match	R: 8/19/1999	09/377,597	Method and Apparatus for	Granted
Technologies,	P: 11/19/2002	6,483,932	Rolled Fingerprint Capture	
Inc. Cross Match	R: 9/20/2002	10/247 295	Mathad And Amanatas Fan	Cuantad
		10/247,285	Method And Apparatus For	Granted
Technologies, Inc.	P: 8/22/2006	7,095,880	Rolled Fingerprint Capture	
Cross Match	R: 10/29/1999	09/430,296	Hand-Held Fingerprint Scanner	Granted
Technologies,	P: 6/1/2004	6,744,910	With On-Board Image	Granieu
Inc.	1. 0/1/2004	0,744,910	Normalization Data Storage	
Cross Match	R: 12/18/2002	10/321,548	System And Method For	Granted
Technologies,	P: 6/27/2006	7,068,822	Sending A Packet With Position	Granica
Inc.	1. 0/2//2000	7,000,022	Address And Line Scan Data	
			Over An Interface Cable	
Cross Match	R: 12/15/1999	09/461,344	Adjustable, Rotable Finger	Granted
Technologies,	P: 2/3/2004	6,687,391	Guide In Tenprint Scanner With	
Inc.		-,,	Movable Prism Platen	
Cross Match	R: 10/25/1999	09/425,947	Calibration And Correction In A	Granted
Technologies,	P: 12/2/2003	6,658,164	Fingerprint Scanner	
Inc.		7	J F	
Cross Match	R: 10/23/2003	10/690,641	Calibration And Correction In A	Granted
Technologies,	P: 3/7/2006	7,010,148	Fingerprint Scanner	
Inc.				
Cross Match	R: 5/9/1997	08/854,157	Lens Systems For Use In	Granted

	Date of			
	Registration / Date	Application No. /	Title of Patent or Patent	
Grantor	of Patent	Registration No.	Application	Status
Technologies,	P: 5/4/1999	5,900,993	Fingerprint Detection	Status
Inc.	1. 3/4/1777	3,700,773	I ingerprint Detection	
Cross Match	R: 10/25/1999	09/425,888	Method, System And Computer	Granted
Technologies,	P: 1/9/2007	7,162,060	Program Product For Control Of	Granicu
Inc.	1. 1/7/2007	7,102,000	Platen Movement During A	
me.			Live Scan	
Cross Match	R: 3/30/2001	09/821,044	Fingerprint Scanner Auto-	Granted
Technologies,	P: 1/3/2006	6,983,062	Capture System And Method	Grantea
Inc.	1. 1,0,2000	3,3 55,3 52	System Find French	
Cross Match	R: 12/29/2005	11/320,472	Fingerprint Scanner Auto-	Granted
Technologies,	P: 2/2/2010	7,657,067	Capture System And Method	
Inc.		,,,,,,,,,	Cupunt System 1 222 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
Cross Match	R: 12/18/2001	10/020,498	Palm Scanner Using A	Granted
Technologies,	P: 8/9/2005	6,928,195	Programmable Nutating Mirror	
Inc.		, ,	For Increased Resolution	
Cross Match	R: 2/17/2006	11/356,036	Silicone Rubber Surfaces For	Granted
Technologies,	P: 1/15/2008	7,319,565	Biometric Print TIR Prisms	
Inc.				
Cross Match	R: 1/17/2002	10/047,983	Platen Heaters For Biometric	Granted
Technologies,	P: 10/26/2004	6,809,303	Image Capturing Devices	
Inc.				
Cross Match	R: 9/6/2002	10/235,665	System And Method For	Granted
Technologies,	P: 3/29/2005	6,872,916	Biometric Image Capturing	
Inc.				
Cross Match	R: 1/16/2003	10/345,366	Biometric Imaging System And	Granted
Technologies,	P: 12/11/2007	7,308,122	Method	
Inc.				
Cross Match	R: 4/12/2005	11/103,426	Biometric Imaging System And	Granted
Technologies,	P:	8,073,209	Method	
Inc.	12/6/2011			
Cross Match	R: 1/16/2003	10/345,420	Biometric Imaging System And	Granted
Technologies,	P: 4/10/2007	7,203,344	Method	
Inc.				
Cross Match	R: 4/12/2005	11/103,426	Biometric imaging system and	Granted
Technologies,	P: 12/6/2011	8,073,209	method	
Inc.	T. 44 T (2002	70/07000		~ .
Cross Match	R: 1/17/2002	10/050,046	Systems And Methods For	Granted
Technologies,	P: 10/11/2005	6,954,260	Illuminating A Platen In A Print	
Inc.	D. 4/0/2002	10/400 15/	Scanner	C 1
Cross Match	R: 4/9/2003	10/409,156	Light Wedge For Illuminating A	Granted
Technologies,	P: 3/15/2005	6,867,850	Platen In A Print Scanner	
Inc. Cross Match	R: 10/27/2004	10/973,898	Light Wodge For Illumination A	Grantad
	P: 9/8/2009	7,586,591	Light Wedge For Illuminating A Platen In A Print Scanner	Granted
Technologies, Inc.	1. 7/0/2007	1,300,371	i iaten in A Finit Scallici	
IIIC.				
Cross Match	R: 10/7/2005	11/245,470	Systems And Methods For	Granted
Technologies,	P: 9/18/2007	7,271,881	Illuminating A Platen In A Print	Jianicu
Inc.	1, 7/10/2007	1,271,001	Scanner Scanner	
Cross Match	R: 7/31/2002	29/164,704	Fingerprint Scanner	Granted
Technologies,	P: 8/26/2003	D478,905	i ingerprint seminor	Siuniou
i comologics,	1. 0/20/2003	1 2 170,703		

	Date of			
	Registration / Date	Application No. /	Title of Patent or Patent	
Grantor	of Patent	Registration No.	Application	Status
Inc.				
C 1 1	D = 101/2002	20/1/4/202	G	G . 1
Cross Match	R: 7/31/2002	29/164,705	Computer Cabinet	Granted
Technologies,	P; 12/16/2003	D483,755		
Inc. Cross Match	R: 4/19/2002	10/125,650	A Distributed System And	Granted
Technologies,	P: 7/18/2006	7,079,007	Method For Access Control	Granicu
Inc.	1. 7/10/2000	7,077,007	iviethod I of Access Condo	
Cross Match	R: 4/19/2002	10/125,646	System And Methods For	Granted
Technologies,	P: 9/13/2005	6,944,768	Access Control Utilizing Two	014111041
Inc.		-,,	Factors To Control Access	
Cross Match	R: 4/21/2003	10/419,093	Mobile Handheld Code Reader	Granted
Technologies,	P: 7/11/2006	7,073,711	And Print Scanner System And	
Inc.			Method	
Cross Match	R: 1/16/2003	10/345,374	Web-Enabled Live Scanner And	Granted
Technologies,	P: 8/16/2005	6,930,792	Method For Control	
Inc.				
Cross Match	R: 8/9/2005	11/199,222	Web-Enabled Live Scanner And	Granted
Technologies,	P: 1/26/2010	7,652,780	Method For Control	
Inc.				
Cross Match	R: 8/1/2003	10/631,899	System And Method For	Granted
Technologies,	P: 2/7/2006	6,996,259	Counting Ridges In A Captured	
Inc.	D. 0/14/2002	10// 40 / 90	Print Image	C 1
Cross Match	R: 8/14/2003 P: 5/23/2006	10/640,689	Light Integrating Column	Granted
Technologies, Inc.	P. 3/23/2000	7,048,424		
Cross Match	R: 2/28/2003	10/375,088	Dynamic Image Adaptation	Granted
Technologies,	P: 1/16/2007	7,164,440	Method For Adjusting The	Granicu
Inc.	1. 1/10/2007	7,101,110	Quality Of Digital Prints	
Cross Match	R: 12/3/2003	10/725,537	System For Obtaining Print And	Granted
Technologies,	P: 5/15/2007	7,218,761	Other Hand Characteristic	
Inc.			Information Using A Non-	
			Planar Prism	
Cross Match	R: 12/3/2003	10/725,543	System Having A Rotating	Granted
Technologies,	P: 1/31/2006	6,993,165	Optical System And A Non-	
Inc.			Planar Prism That Are Used To	
			Obtain Print And Other Hand	
	D 10/2/2002	10/505 543	Characteristic Information	0 1
Cross Match	R: 12/3/2003	10/725,541	System and method for	Granted
Technologies,	P: 1/22/2008	7,321,671	generating a preview display in	
Inc.			a print capturing system using a non-planar prism	
Cross Match	R: 3/20/2006	11/378,238	Non-Planar Prism	Granted
Technologies,	P: 3/13/2007	7,190,535	11011-1 141141 1 115111	Granicu
Inc.	1. 5/15/2007	1,170,000		
Cross Match	R: 10/8/2004	10/960,747	Palm Print Scanner And	Granted
Technologies,	P: 7/25/2006	7,081,951	Methods	
Inc.	· · · · · · · · · · · · · · · · · · ·	, , -		
Cross Match	R: 6/17/2003	10/462,592	System And Method For	Granted
Technologies,	P: 10/11/2005	6,954,261	Illuminating A Platen In A Live	
Inc.			Scanner And Producing High-	

Grantor	Date of Registration / Date of Patent	Application No. / Registration No.	Title of Patent or Patent Application Contrast Print Images	Status
Cross Match Technologies, Inc.	R: 10/11/2005 P: 10/10/2006	11/246,525 7,119,890	System And Method For Illuminating A Platen In A Live Scanner And Producing High- Contrast Print Images	Granted
Cross Match Technologies, Inc.	R: 11/1/2004 P: 10/10/2006	10/977,946 7,119,889	Apparatus for reducing ambient light into an optical print scanner	Granted
Cross Match Technologies, Inc.	R: 8/1/2003 P: 10/2/2007	10/631,890 7,277,562	Biometric Imaging Capture System And Method	Granted
Cross Match Technologies, Inc.	R: 6/12/2006 P: 6/29/2010	11/450,893 7,747,046	Apparatus And Method For Obtaining Images Using A Prism	Granted
Cross Match Technologies, Inc.	R: 6/28/2010 P: 5/31/2011	12/824,765 7,953,259	Apparatus And Method For Obtaining Images Using A Prism	Granted
Cross Match Technologies, Inc.	R: 8/1/2005 P: 9/16/2008	11/193,324 7,426,020	System for print imaging with prism illumination optics	Granted
Cross Match Technologies, Inc.	R: 12/22/2004 P: 4/4/2006	29/219,777 D518,482	Scanner	Granted
Cross Match Technologies, Inc.	R: 8/23/2005 P: 5/22/2007	11/209,038 7,221,489	Live print scanner with holographic platen	Granted
Cross Match Technologies, Inc.	R: 8/23/2005 P: 2/20/2007	11/209,037 7,180,643	Live print scanner with holographic imaging at different magnifications	Granted
Cross Match Technologies, Inc.	R: 10/31/2008	12/290,564	Apparatus and method for two eye imaging for iris identification	Filed
Cross Match Technologies, Inc.	R: 11/3/2009	12/590,153	Apparatus and method for the identification of fake fingerprints	Filed
Cross Match Technologies, Inc.	R: 11/12/2010	12/927,352	Apparatus and method for determining sequencing of fingers in images to a two-finger scanner of fingerprint images	Filed
Cross Match Technologies, Inc.	R: 5/17/2011	61/486,766	Thin film transistor sensors for fingerprint scanning	Filed
Cross Match Technologies, Inc.	R: 7/29/2011	61/574,264	Image enhancing membrane for fingerprint scanners	Filed
Cross Match Technologies, Inc.	R: 11/11/2011	61/558,497	Ambient light rejection for non- imaging contact sensors	Filed
Cross Match Technologies,	R: 11/12/2011	61/559,071	Ambient light illumination for non-imaging contact sensors	Filed

	Date of Registration / Date	Application No. / Registration No.	Title of Patent or Patent	Status
Inc.	oi raten	Registi ation No.	Аррисации	Status

Grantor	Date of Registration / Date of Patent	Application No./ Registration No.	Title of Patent or Patent Application	Status
Cross Match	R: 2/5/2001	09/762,351	Assembly for detecting the	Granted
Technologies GmbH	P: 6/18/2002	6,407,804	superficial structures of fingers and/or palms	
Cross Match	R: 7/7/2000	09/582,977	Process and apparatus for the	Granted
<u>Technologies</u>	P: 9/21/2004	6,795,570	electronic recording of an image	
<u>GmbH</u>				
Cross Match	R: 12/13/2002	10/319,178	Method and arrangement for	Granted
<u>Technologies</u>	P: 10/31/2006	7,130,456	low-distortion recordings of the	
<u>GmbH</u>			intensity patterns occurring on a	
			contact surface through	
			frustrated total reflection	
Cross Match	R: 12/7/2004	11/008,819	Method and arrangement for	Granted
<u>Technologies</u>	P: 11/3/2009	7,613,334	electronic recording of rolled	
<u>GmbH</u>			fingerprints	
Cross Match	R: 1/27/2006	11/341,081	Arrangement for the	Granted
<u>Technologies</u>	P: 7/28/2009	7,567,342	optoelectronic recording of large	
<u>GmbH</u>			area fingerprints	

Cross Match Technologies, Inc. Patents:

Country of Registration	Date of Registration / Date of Patent	Application No. / Registration No.	Title of Patent or Patent Application	Status
U.S.	13/474,484	05/17/2012	Fingerprint Sensors	Pending
Europe	12 785 162.4	05/17/2012	Fingerprint Sensors	Pending
U.S.	13/560,082	07/27/2012	Image enhancing membrane for Fingerprint Scanners	Pending
U.S.	13/676,058	11/13/2012	Ambient light rejection for non- imaging contact sensors	Pending
PCT	PCT/US12/06488 2	11/13/2012	Ambient light rejection for non- imaging contact sensors	Pending

U.S.	13/676,062	11/13/2012	Ambient light rejection for non- imaging contact sensors	Pending
PCT	PCT/US12/06488	11/13/2012	Ambient light rejection for non- imaging contact sensors	Pending
U.S.	13/830,909	03/14/2013	System for capturing a biometric image in high ambient light environments	Pending
U.S.	14/217,083	03172014	System and method of conversion of fingerprint cards into digital format using machine readable code	Pending
PCT	PCT/US14/30552	03172014	System and method of conversion of fingerprint cards into digital format using machine readable code	Pending

<u>DigitalPersona</u>, <u>Inc. Patents</u>:

COUNTRY	STATUS	SERIAL NUMBER	FILING DATE	PATENT NUMBER	ISSUE DATE	TITLE
US	Issued	08/837,549	Apr 21, 1997	6,125,192	Sep 26, 2000	FINGERPRINT RECOGNITION SYSTEM
US	Issued	09/470,097	Dec 21, 1999	6,741,729	May 25, 2004	FINGERPRINT RECOGNITION SYSTEM
US	Issued	10/822,897	Apr 12, 2004	7,231,070	Jun 12, 2007	FINGERPRINT RECOGNITION SYSTEM
US	Issued	11/762,001	Jun 12, 2007	7,519,204	Apr 14, 2009	A FINGERPRINT RECOGNITION SYSTEM

COUNTRY	STATUS	SERIAL NUMBER	FILING DATE	PATENT NUMBER	ISSUE DATE	TITLE
JP	Issued	545709/98	Feb 26, 1998	4,125,794	May 16, 2008	A FINGERPRINT RECOGNITION SYSTEM - UTILITY - JAPAN
US	Issued	08/646,531	May 10, 1996	5,796,858	Aug 18, 1998	A FINGERPRINT SENSING SYSTEM USING A SHEET PRISM - UTILITY - CONTINUATION
US	Issued	29/079,070	Nov 7, 1997	D404,667	Jan 26, 1999	FINGERPRINT INDICATING SENSING UNIT
US	Issued	08/970,494	Nov 14, 1997	5,997,339	Dec 7, 1999	CABLE CONNECTION
US	Issued	08/971,157	Nov 14, 1997	6,122,737	Sep 19, 2000	METHOD FOR USING FINGERPRINTS TO DISTRIBUTE INFORMATION OVER A NETWORK
US	Issued	09/514,964	Feb 29, 2000	6,292,576	Sep 18, 2001	METHOD AND APPARATUS FOR DISTINGUISHING A HUMAN FINGER FROM REPRODUCTION OF A FINGERPRINT
US	Issued	08/970,304	Nov 14, 1997	6,035,398	Mar 7, 2000	CRYPTOGRAPHIC KEY GENERATION USING BIOMETRIC DATA
JP	Issued	2000-521614	May 15, 2000	4460763	Feb 19, 2010	CRYPTOGRAPHIC KEY GENERATION USING BIOMETRIC DATA - UTILITY -

COUNTRY	STATUS	SERIAL NUMBER	FILING DATE	PATENT NUMBER	ISSUE DATE	TITLE
						<u>JAPAN</u>
US	Issued	09/153,782	Sep 16, 1998	6,950,539	Sep 27, 2005	CONFIGURABLE MULTI- FUNCTION TOUCHPAD DEVICE
DE	Issued	99969165.2	Sep 7, 1999	699 41 901.8	Jan 6, 2010	A CONFIGURABLE MULTI- FUNCTION TOUCHPAD DEVICE - UTILITY - GERMANY
EP	Issued	99969165.2	Sep 7, 1999	1 114 394	Jan 6, 2010	A CONFIGURABLE MULTI- FUNCTION TOUCHPAD DEVICE - UTILITY - EPO
JP	Issued	2000-570709	Mar 16, 2001	4460777	Feb 19, 2010	A CONFIGURABLE MULTI- FUNCTION TOUCHPAD DEVICE - UTILITY - JAPAN
TW	Issued	88116004	Oct 11, 1999	NI-139369	Sep 1, 2001	A CONFIGURABLE MULTI- FUNCTION TOUCHPAD DEVICE - UTILITY - TAIWAN
US	Issued	09/255,037	Feb 22, 1999	6,097,035	Aug 1, 2000	FINGERPRINT DETECTION APPARATUS WITH PARTIAL FINGERPRINT IMAGES
EP	Issued	99949934.6	Sep 27, 1999	1166223?DE 69925393.	May 18, 2005	FINGERPRINT DETECTION APPARATUS - UTILITY - EPO
TW	Issued	88119051	Nov 2, 1999	NI-139968	Sep 11, 2001	FINGERPRINT DETECTION APPARATUS -

COUNTRY	STATUS	SERIAL NUMBER	FILING DATE	PATENT NUMBER	ISSUE DATE	TITLE
						UTILITY - TAIWAN
US	Issued	09/124,182	Jul 28, 1998	6,188,781	Feb 13, 2001	METHOD AND APPARATUS FOR ILLUMINATING A FINGERPRINT THROUGH A SLIDE ILLUMINATION OF A PLATEN
KR	Issued	2000-7003307	Mar 28, 2000	611135	Aug 3, 2006	METHOD AND APPARATUS FOR ILLUMINATING A FINGERPRINT - UTILITY - KOREA
TW	Issued	88112620	Jul 26, 1999	NI-161311	Aug 21, 2002	METHOD FOR ILLUMINATING A FINGERPRINT - UTILITY - TAIWAN
US	Issued	09/089,316	Jun 2, 1998	6,324,310	Nov 27, 2001	METHOD AND APPARATUS FOR SCANNING A FINGERPRINT USING A LINEAR SENSOR
CN	Issued	99801019.7	May 27, 1999	ZL 99801019.7	May 25, 2005	METHOD AND APPARATUS FOR SCANNING A FINGERPRINT USING A LINEAR SENSOR - UTILITY - CHINA
JP	Issued	2000-552620	May 27, 1999	4285909	Apr 3, 2009	METHOD AND APPARATUS FOR SCANNING A FINGERPRINT USING A LINEAR SENSOR - UTILITY - JAPAN
KR	Issued	2000-7000826	May 27,	752575	Aug 21,	METHOD AND

COUNTRY	STATUS	SERIAL NUMBER	FILING DATE	PATENT NUMBER	ISSUE DATE	TITLE
			1999		2007	APPARATUS FOR SCANNING A FINGERPRINT USING A LINEAR SENSOR - UTILITY - KOREA
ТН	Issued	050809	Jun 2, 1999	26613	Sep 11, 2009	METHOD AND APPARATUS FOR SCANNING A FINGERPRINT USING A LINEAR SENSOR - UTILITY - THAILAND
TW	Issued	88109134	Jul 3, 1999	NI-182742	Nov 26, 2003	METHOD AND APPARATUS FOR SCANNING A FINGERPRINT USING A LINEAR SENSOR - UTILITY - TAIWAN
US	Issued	09/591,029	Jun 9, 2000	6,282,303	Aug 28, 2001	METHOD AND APPARATUS FOR SCANNING A FINGERPRINT USING A LINEAR SENSOR WITHIN A CURSOR CONTROL DEVICE
US	Issued	09/539,292	Mar 30, 2000	6,799,275	Sep 28, 2004	METHOD AND APPARATUSFOR SECURING A SECURE PROCESSOR
US	Issued	09/538,926	Mar 30, 2000	7,698,565	Apr 13, 2010	A CRYPTO-PROXY SERVER ANDMETHOD OF USING THE SAME
US	Issued	09/707,417	Nov 6, 2000	7,409,543	Aug 5, 2008	METHOD AND APPARATUS FOR USING A THIRD PARTY AUTHENTICATION

COUNTRY	STATUS	SERIAL NUMBER	FILING DATE	PATENT NUMBER	ISSUE DATE	TITLE
						SERVER
US	Issued	12/185,802	Aug 4, 2008	7,895,432	Feb 22, 2011	METHOD AND APPARATUSFOR USING A THIRD PARTY AUTHENTICATION SERVER
US	Issued	11/360,377	Feb 22, 2006	8,245,052	Aug 14, 2012	METHOD AND APPARATUSFOR A TOKEN
US	Issued	12/619,665	Nov 16, 2009	8,621,642	Dec 31, 2013	METHOD AND APPARATUSFOR AN END USER IDENTITY PROTECTION SUITE
JР	Pending	2000-552620	Feb 14, 2000			METHOD AND APPARATUS FOR SCANNING A FINGERPRINT USING A LINEAR SENSOR
BR	Pending	PI0708184-7	Feb 22, 2007			A METHOD AND APPARATUS FOR A TOKEN
US	Pending	13/584,716	Aug 13, 2012			METHOD AND APPARATUS FOR A TOKEN
ЕР	Pending	07751564.1	Feb 22, 2007			A METHOD AND APPARATUS FOR A TOKEN
MX	Pending	MX/a/2008/01 0786	Feb 22, 2007			A METHOD AND APPARATUS FOR A TOKEN
US	Pending	14/144,426	Dec 30,			METHOD AND APPARATUS FOR A

COUNTRY	STATUS	SERIAL NUMBER	FILING DATE	PATENT NUMBER	ISSUE DATE	TITLE
			2013			END USER IDENTITY PROTECTION SUITE
EP	Pending	09826964.0	Nov 17, 2009			METHOD AND APPARATUS FOR A END USER IDENTITY PROTECTION SUITE
JP	Pending	2011-536595	Nov 17, 2009			METHOD AND APPARATUS FOR A END USER IDENTITY PROTECTION SUITE
US	Pending	61/115,512	Nov 17, 2008			METHOD AND APPARATUS FOR A END USER IDENTITY PROTECTION SUITE
US	Pending	12/579,288	Oct 14, 2009			PRIVATE KEY/PUBLIC KEY RESOURCE PROTECTION SCHEME
JP			Aug. 31, 1998	Japanese Patent Application No. 10-244637 CABLE CONNECTING DEVICE AND SYSTEM THEREFOR Patent Registration No. 3070920		

Cross Match Technologies, Inc. Patents:

Country of Registration	Date of Registration / Date of Patent	Application No. / Registration No.	Title of Patent or Patent Application	Status
U.S.	13/474,484	05/17/2012	Fingerprint Sensors	Pending
Europe	12 785 162.4	05/17/2012	Fingerprint Sensors	
U.S.	13/560,082	07/27/2012	Image enhancing membrane for Fingerprint Scanners	Pending

U.S.	13/676,058	11/13/2012	Ambient light rejection for non- imaging contact sensors	Pending
PCT	PCT/US12/06488 2	11/13/2012	Ambient light rejection for non- imaging contact sensors	Pending
U.S.	13/676,062	11/13/2012	Ambient light rejection for non- imaging contact sensors	Pending
PCT	PCT/US12/06488 6	11/13/2012	Ambient light rejection for non- imaging contact sensors	Pending
U.S.	13/830,909	03/14/2013	System for capturing a biometric image in high ambient light environments	Pending
U.S.	14/217,083	03172014	System and method of conversion of fingerprint cards into digital format using machine readable code	Pending
PCT	PCT/US14/30552	03172014	System and method of conversion of fingerprint cards into digital format using machine readable code	Pending

<u>DigitalPersona</u>, <u>Inc. Patents</u>:

COUNTRY	STATUS	SERIAL NUMBER	FILING DATE	PATENT NUMBER	ISSUE DATE	TITLE
US	Issued	08/837,549	Apr 21, 1997	6,125,192	Sep 26, 2000	FINGERPRINT RECOGNITION SYSTEM
US	Issued	09/470,097	Dec 21, 1999	6,741,729	May 25, 2004	FINGERPRINT RECOGNITION SYSTEM
US	Issued	10/822,897	Apr 12, 2004	7,231,070	Jun 12, 2007	FINGERPRINT RECOGNITION

COUNTRY	STATUS	SERIAL NUMBER	FILING DATE	PATENT NUMBER	ISSUE DATE	TITLE
						SYSTEM
US	Issued	11/762,001	Jun 12, 2007	7,519,204	Apr 14, 2009	A FINGERPRINT RECOGNITION SYSTEM
JP	Issued	545709/98	Feb 26, 1998	4,125,794	May 16, 2008	A FINGERPRINT RECOGNITION SYSTEM - UTILITY - JAPAN
US	Issued	08/646,531	May 10, 1996	5,796,858	Aug 18, 1998	A FINGERPRINT SENSING SYSTEM USING A SHEET PRISM - UTILITY - CONTINUATION
US	Issued	29/079,070	Nov 7, 1997	D404,667	Jan 26, 1999	FINGERPRINT INDICATING SENSING UNIT
US	Issued	08/970,494	Nov 14, 1997	5,997,339	Dec 7, 1999	CABLE CONNECTION
US	Issued	08/971,157	Nov 14, 1997	6,122,737	Sep 19, 2000	METHOD FOR USING FINGERPRINTS TO DISTRIBUTE INFORMATION OVER A NETWORK
US	Issued	29/432,525	9/17/2012	D720,359	12/30/2014	Animated Graphical User Interface for a Display
US	Issued	29/432,519	9/17/2012	D701,508	3/25/2014	Electronic Apparatus with Integrated Movable Display (Design)
US	Issued	29/432,521	9/17/2012	D721,715 S	1/27/2015	Animated Graphical User Interface for a Display
US	Pending	14/030,559	9/18/2013			Method and Apparatus

COUNTRY	STATUS	SERIAL NUMBER	FILING DATE	PATENT NUMBER	ISSUE DATE	TITLE
						for Fingerprinting on the Basis of Fingerprint Scanners in Reliable High Quality

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