PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4075385

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	FIRST LIEN PATENT SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date	
CRIMSON CORPORATION	09/27/2016	

RECEIVING PARTY DATA

Name:	JEFFERIES FINANCE LLC, AS COLLATERAL AGENT
Street Address:	520 MADISON AVENUE
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10022

PROPERTY NUMBERS Total: 119

Property Type	Number
Patent Number:	7356578
Patent Number:	5938745
Patent Number:	6279054
Patent Number:	7299246
Patent Number:	8504579
Patent Number:	6363359
Patent Number:	6446046
Patent Number:	7555683
Patent Number:	7606242
Patent Number:	6438711
Patent Number:	7529820
Patent Number:	7165202
Patent Number:	7836337
Patent Number:	7522906
Patent Number:	7363022
Patent Number:	7802065
Patent Number:	7032110
Patent Number:	7127607
Patent Number:	8412797
Patent Number:	7146531

PATENT REEL: 040182 FRAME: 0345

504028726

Property Type	Number
Patent Number:	7225430
Patent Number:	7965842
Patent Number:	6965674
Patent Number:	7133526
Patent Number:	6523072
Patent Number:	6711634
Patent Number:	7376538
Patent Number:	8341708
Patent Number:	7714852
Patent Number:	7664034
Patent Number:	7770168
Patent Number:	8341622
Patent Number:	7529809
Patent Number:	8275895
Patent Number:	7827263
Patent Number:	8166177
Patent Number:	7672992
Patent Number:	8225091
Patent Number:	8095961
Patent Number:	8185945
Patent Number:	7624423
Patent Number:	8135775
Patent Number:	8150961
Patent Number:	8295157
Patent Number:	7949641
Patent Number:	7865889
Patent Number:	7565544
Patent Number:	7757228
Patent Number:	6850990
Patent Number:	8561131
Patent Number:	8621451
Patent Number:	8584194
Patent Number:	8635069
Patent Number:	8533309
Patent Number:	8521864
Patent Number:	8533332
Patent Number:	8601542
Patent Number:	9172583

Property Type	Number
Patent Number:	8788707
Patent Number:	8732690
Patent Number:	8869154
Patent Number:	9032394
Patent Number:	8825651
Patent Number:	9229773
Patent Number:	9107194
Patent Number:	8793782
Patent Number:	8806246
Patent Number:	8982129
Patent Number:	9092201
Patent Number:	9083541
Patent Number:	8930177
Patent Number:	8930193
Patent Number:	9137780
Patent Number:	8787576
Patent Number:	8973113
Patent Number:	8959182
Patent Number:	8838759
Patent Number:	8782740
Patent Number:	8902449
Patent Number:	8719815
Patent Number:	8799174
Patent Number:	8706849
Patent Number:	8898276
Application Number:	13303894
Application Number:	12787641
Application Number:	12904882
Application Number:	11214467
Application Number:	13771753
Application Number:	13592975
Application Number:	12980861
Application Number:	11762576
Application Number:	12327668
Application Number:	12967985
Application Number:	12969912
Application Number:	13484094
Application Number:	13471253

Property Type	Number
Application Number:	13525790
Application Number:	13526193
Application Number:	13484077
Application Number:	13790353
Application Number:	14068830
Application Number:	14190959
Application Number:	14256809
Application Number:	14061015
Application Number:	14464369
Application Number:	14332733
Application Number:	14332737
Application Number:	14503664
Application Number:	14504169
Application Number:	14206860
Application Number:	14445353
Application Number:	14583531
Application Number:	14243119
Application Number:	14853788
Application Number:	14992774
Application Number:	15154733
Application Number:	15250496
Application Number:	15222739
Application Number:	13590339

CORRESPONDENCE DATA

Fax Number: (212)751-4864

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.

Phone: 212-906-1200

Email: angela.amaru@lw.com

Correspondent Name: LATHAM & WATKINS LLP C/O ANGELA M. AMARU

Address Line 1: 885 THIRD AVENUE

Address Line 2: SUITE 1000

Address Line 4: NEW YORK, NEW YORK 10022

DATE SIGNED:	09/29/2016
SIGNATURE:	/S/ Angela M. Amaru
NAME OF SUBMITTER:	ANGELA M. AMARU
ATTORNEY DOCKET NUMBER:	038507-0541

Total Attachments: 20

source=Landesk - 1L Patent Security Agreement [executed]#page1.tif
source=Landesk - 1L Patent Security Agreement [executed]#page2.tif
source=Landesk - 1L Patent Security Agreement [executed]#page3.tif
source=Landesk - 1L Patent Security Agreement [executed]#page4.tif
source=Landesk - 1L Patent Security Agreement [executed]#page5.tif
source=Landesk - 1L Patent Security Agreement [executed]#page6.tif
source=Landesk - 1L Patent Security Agreement [executed]#page7.tif
source=Landesk - 1L Patent Security Agreement [executed]#page8.tif
source=Landesk - 1L Patent Security Agreement [executed]#page9.tif
source=Landesk - 1L Patent Security Agreement [executed]#page10.tif
source=Landesk - 1L Patent Security Agreement [executed]#page11.tif
source=Landesk - 1L Patent Security Agreement [executed]#page12.tif
source=Landesk - 1L Patent Security Agreement [executed]#page13.tif
source=Landesk - 1L Patent Security Agreement [executed]#page14.tif
source=Landesk - 1L Patent Security Agreement [executed]#page15.tif
source=Landesk - 1L Patent Security Agreement [executed]#page16.tif
source=Landesk - 1L Patent Security Agreement [executed]#page17.tif
source=Landesk - 1L Patent Security Agreement [executed]#page18.tif
source=Landesk - 1L Patent Security Agreement [executed]#page19.tif
source=Landesk - 1L Patent Security Agreement [executed]#page20.tif

FIRST LIEN PATENT SECURITY AGREEMENT

This First Lien Patent Security Agreement, dated as of September 27, 2016 (this "Patent Security Agreement"), by and among Jefferies Finance LLC and each guarantor listed on Schedule 1 hereto (the "Pledgor"), in favor of Jefferies Finance LLC, in its capacity as collateral agent for the Secured Parties (in such capacity, together with any successor thereof, the "Collateral Agent") pursuant to that certain First Lien Credit Agreement, dated as of September 27, 2016 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), by and among Landslide Holdings, Inc., a Delaware corporation ("Borrower"), LANDesk Group, Inc., a Delaware corporation ("Holdings"), the Pledgor and each of the other guarantors listed on the signature pages thereto, the lenders from time to time party thereto, the several agents party thereto, including the Collateral Agent, Jefferies Finance LLC, as swingline lender and as issuing bank.

WITNESSETH:

WHEREAS, the Pledgor is party to a that certain First Lien Security Agreement dated as of September 27, 2016 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement") in favor of the Collateral Agent pursuant to which the Pledgor is required to execute and deliver this Patent Security Agreement.

NOW, THEREFORE, in consideration of the premises and to induce the Collateral Agent, for the ratable benefit of the Secured Parties, to enter into the Credit Agreement, the Pledgor hereby agrees with the Collateral Agent as follows:

SECTION 1. <u>Defined Terms</u>. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.

SECTION 2. Grant of Security Interest in Patent Collateral. The Pledgor hereby pledges and grants to the Collateral Agent for the ratable benefit of the Secured Parties a Lien on and security interest in and to all of its right, title and interest in, to and under all the following Pledged Collateral of such Pledgor, in each case excluding Excluded Property, whether now existing or hereafter arising or acquired from time to time (collectively, the "Patent Collateral"): all patents and patent applications (whether issued or applied for), including the United States patents and patent applications, listed on Schedule 2 attached hereto,, together with any and all (i) rights and privileges arising under applicable Legal Requirements with respect to the foregoing, (ii) inventions and improvements described and claimed therein, (iii) reissues, substitutes, reexaminations, divisions, renewals, extensions, continuations and continuations-in-part thereof and amendments thereto, (iv) proceeds, income, fees, royalties, damages and payments now or hereafter due and/or payable thereunder and with respect thereto including damages, claims and payments for past, present or future infringements or other violations thereof, (v) rights corresponding thereto throughout the world and (vi) rights to sue for past, present or future infringements or other violations thereof.

SECTION 3. <u>Security Agreement</u>. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Collateral Agent pursuant to the Security Agreement, and the Pledgor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interest in the Patent Collateral made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In

First Lien Patent Security Agreement

the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control.

SECTION 4. Termination. Once the Commitments have been terminated and the principal of and interest and premium (if any) on each Loan, all Fees and all other expenses or amounts payable under any Loan Document, any Specified Hedging Agreement and any Bank Product Agreement have been paid in full (other than contingent indemnification obligations that, pursuant to the terms of the Credit Agreement, the other Loan Documents, any Specified Hedging Agreement and any Bank Product Agreement, survive the termination thereof) and all Letters of Credit have been canceled or have expired and all amounts drawn thereunder have been reimbursed in full or Cash Collateralized, the security interest granted pursuant to the Security Agreement and the security interest granted herein shall terminate and be deemed released and upon written request of the Borrower, the Collateral Agent shall execute, acknowledge, and deliver to the Pledgor an instrument in writing in recordable form releasing the collateral pledge, grant, lien and security interest in the Patent Collateral under this Patent Security Agreement.

SECTION 5. <u>Counterparts</u>. This Patent Security Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Patent Security Agreement by signing and delivering one or more counterparts.

SECTION 6. Governing Law. This Patent Security Agreement and the transactions contemplated hereby, and all disputes between the parties under or relating to this Patent Security Agreement or the facts or circumstances leading to its execution, whether in contract, tort or otherwise, shall be construed in accordance with and governed by the laws (including statutes of limitation) of the State of New York, without regard to conflicts of law principles that would require the application of the laws of another jurisdiction.

[Signature Page Follows]

First Lien Patent Security Agreement

IN WITNESS WHEREOF, each Pledgor and the Collateral Agent have caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

CRIMSON CORPORATION,

as Pledgor

Name: Mark C. McBride

Title: Chief Financial Officer

[Signature Page to Patent Security Agreement (First Lien)]

ACCEPTED AND AGREED:

JEFFERIES FINANCE LLC,

as Collateral Agent

By:
Name: Brian Buoye
Title: Managing Director

[Signature Page to Patent Security Agreement (First Lien)]

SCHEDULE 1 to FIRST LIEN PATENT SECURITY AGREEMENT

PLEDGOR

NAME	ADDRESS
Crimson Corporation	c/o LANDesk Software, Inc., 698 West 10000
	South, Suite 500
	South Jordan, UT 84095

SCHEDULE 2 to FIRST LIEN PATENT SECURITY AGREEMENT

UNITED STATES PATENTS AND PATENT APPLICATIONS

		****	CHEST A A		PATENT	racrit	
TITLE	COUNTRY	FILING DATE	SERIAL NO.	STATUS	/ PUBL. NO.	ISSUE DATE	OWNER
A SYSTEM FOR	U.S.	5/28/2003	10/446,308	Issued	7356578	4/8/2008	Crimson
CONSTRUCTING A							Corporation
NETWORK							
SPANNING TREE							
USING							
COMMUNICATION							
METRICS							
DISCOVERED BY							
MULTICAST ALIAS							
DOMAINS							
ARBITRATOR FOR	U.S.	6/25/1997	08/882,195	Issued	5938745	8/17/1999	
MODEM IN A							Crimson
SYSTEM WITHOUT							Corporation
SHARED PROCESS							
SPACE THAT PASSES							
A DUPLICATE							
HANDLE TO A FIRST							
LISTENING							
APPLICATION WITH MATCHING							
IDENTIFICATION							
STRING							
ARBITRATOR FOR	U.S.	6/18/1999	09/336,006	Issued	6279054	8/21/2001	
MULTIPLE	0.5.	0/10/1999	09/330,000	188464	02/9034	8/21/2001	Crimson
PROCESSES							Corporation
SHARING A PORT							Corporation
CLIENT INITIATED	U.S.	1/16/2004	10/759,711	Issued	7299246	11/20/2007	Crimson
MULTICAST	0.5.	1/10/2001	10/735,711	155404	7233210	11,20,200,	Corporation
DOMAIN							Joseph State of the State of th
DISCOVERY							
FILTERING A DATA	U.S.	12/30/2010	12/982,532	Issued	8504579	8/6/2013	Crimson
SET USING TREES			,				Corporation
ON A COMPUTING							'
DEVICE							
INVENTORY	U.S.	12/21/1999	09/468,963	Issued	6363359	3/26/2002	
DETERMINATION							Crimson
FOR FACILITATING							Corporation
COMMERCIAL							
TRANSACTIONS							

First Lien Patent Security Agreement

US-DOCS\71330311.4

		.	•	1		1	***************************************
		FILENC	ANETERS A E		PATENT	addais:	
TITLE	COLUMBAN	FILING DATE	SERIAL	COURT & CRITETIES	/ PUBL.	ISSUE DATE	OWNER
INVENTORY	U.S.	12/23/1999	NO. 09/471,530	STATUS Issued	NO. 6446046	9/3/2002	OWNER
DETERMINATION	U.S.	12/23/1999	09/4/1,330	Issueu	0440040	9/3/2002	Crimson
FOR FACILITATING							Corporation
COMMERCIAL							
TRANSACTIONS							
DURING							
DIAGNOSTIC TESTS		- 11 - 12 0 0 0	10400001			£ 12 0 12 0 0 0	
INVENTORY	U.S.	7/17/2002	10/198,031	Issued	7555683	6/30/2009	
DETERMINATION							Crimson
FOR FACILITATING							Corporation
COMMERCIAL							
TRANSACTIONS							
DURING							
DIAGNOSTIC TESTS							
MANAGED	U.S.	8/2/2002	10211841	Issued	7606242	10/20/2009	
ROAMING FOR							Corporation
WLANS							
METHOD AND	U.S.	7/15/1998	09/116,310	Issued	6438711	8/20/2002	
APPARATUS FOR							Crimson
PERFORMING FIELD							Corporation
DIAGNOSTICS ON A							
COMPUTER SYSTEM							
METHOD AND	U.S.	6/26/2001	09/892,296	Issued	7529820	5/5/2009	
APPARATUS TO							Crimson
PERFORM							Corporation
AUTOMATED TASK							1
HANDLING							
METHOD AND	U.S.	3/22/2001	09/815,441	Issued	7165202	1/16/2007	
APPARATUS TO			,				Crimson
PERFORM							Corporation
CUSTOMIZED							
ERROR HANDLING							
METHOD AND	U.S.	7/9/2004	10888289	Issued	7836337	11/16/2010	Crimson
SYSTEM FOR							Corporation
RESTORATION OF A							1
MOBILE DEVICE TO							
IT'S STATE PRIOR TO							
LOSS OF MEMORY							
MOBILE UNIT	U.S.	8/9/2002	10215701	Issued	7522906	4/21/2009	Crimson
CONFIGURATION							Corporation
MANAGEMENT FOR							F
WLANS							
MOBILE UNIT	U.S.	9/23/2002	10252849	Issued	7363022	4/22/2008	Crimson
CONFIGURATION	0.0.	372372002	10232019	155404	7505022	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Corporation
MANAGEMENT FOR							2 or portuon
WLANS							
PEER TO PEER	U.S.	5/3/2004	10/837,729	Issued	7802065	9/21/2010	Crimson
BASED CACHE	0.5.	3/3/2007	10/05/1,729	100000	, 002003	7,21,2010	Corporation
MANAGEMENT							Corporation
PKI-BASED	U.S.	6/30/2000	09/608,986	Issued	7032110	4/18/2006	
CLIENT/SERVER	U.S.	0/30/2000	09/000,900	138000	1032110	7/10/2000	Crimson
							Corporation
AUTHENTICATION					L		Corporation

	100000000000000000000000000000000000000	***************************************	100000000000000000000000000000000000000			1	***************************************
					PATENT		
		FILING	SERIAL		/PUBL.	ISSUE	
TITLE	COUNTRY		NO.	STATUS	NO.	DATE	OWNER
PKI-BASED	U.S.	5/28/2004	10/856,450	Issued	7127607	10/24/2006	
CLIENT/SERVER							Crimson
AUTHENTICATION							Corporation
PLATFORM FOR	U.S.	8/27/2010	12/870,322	Issued	8412797	4/2/2013	Crimson
DEVELOPMENT AND							Corporation
DEPLOYMENT OF							•
SYSTEM							
ADMINISTRATION							
SOLUTIONS							
REPAIRING	U.S.	12/28/2000	09/753,082	Issued	7146531	12/5/2006	
APPLICATIONS	0.0.	12/20/2000	07/133,062	100000	1140221	12/3/2000	Crimson
ATTENTIONS							Corporation
SOFTWARE CODE	U.S.	7/26/2001	09/915,862	Issued	7225430	5/29/2007	Corporation
MANAGEMENT	0.5.	772072001	09/913,802	155400	7225450	312912001	Crimson
METHOD AND							Corporation
APPARATUS							Corporation
SYSTEM AND	U.S.	6/28/2002	10184750	Issued	7965842	6/21/2011	Crimson
METHOD FOR	0.3.	0/26/2002	10164730	Issueu	7903642	0/21/2011	Corporation
DETECTING							Corporation
UNAUTHORIZED							
WIRELESS ACCESS							
POINTS							
	U.S.	6/20/2011	12164450	T	0707576	7/22/2014	Crimson
SYSTEM AND	U.S.	6/20/2011	13164459	Issued	8787576	7/22/2014	
METHOD FOR							Corporation
DETECTING							
UNAUTHORIZED							
WIRELESS ACCESS							
POINTS	U.S.	11/20/2002	10200224	т 1	6065674	11/15/2005	
SYSTEM AND	0.8.	11/20/2002	10300324	Issued	6965674	11/15/2005	l I
METHOD FOR							Corporation
PROVIDING WLAN							
SECURITY							
THROUGH							
SYNCHRONIZED							
UPDATE AND							
ROTATION OF WEP							
KEYS							
SYSTEM AND	U.S.	11/15/2005	11280507	Issued	7133526	11/7/2006	Crimson
METHOD FOR							Corporation
PROVIDING WLAN							
SECURITY							
THROUGH							
SYNCHRONIZED							
UPDATE AND							
ROTATION OF WEP							
KEYS							

					PATENT		
		FILING	SERIAL		/ PUBL.	ISSUE	
TITLE	COUNTRY	DATE	NO.	STATUS	NO.	DATE	OWNER
SYSTEM AND	U.S.	12/23/1999	09/471,544	Issued	6523072	2/18/2003	
METHOD OF							Crimson
TRANSMITTING							Corporation
KEYSTROKE							Corporation
INFORMATION TO A							
CLIENT TERMINAL							
SYSTEM AND	U.S.	12/20/2002	10/323,706	Issued	6711634	3/23/2004	
METHOD OF	0.5.	12/20/2002	10/323,700	Issued	0711054	312312004	Crimson
TRANSMITTING							Corporation
KEYSTROKE							Corporation
INFORMATION TO A							
CLIENT TERMINAL	TIC	5/10/2005	11/122 000	т 1	7276520	5/20/2000	
SYSTEMS AND	U.S.	5/19/2005	11/132,880	Issued	7376538	5/20/2008	Crimson
METHODS FOR							Corporation
AUDITING THE							
ACTIONS							
PERFORMED BY A							
REMOTE CONTROL							
OPERATOR DURING							
A REMOTE							
CONTROL SESSION							
SYSTEMS AND	U.S.	8/29/2006	11/468,255	Issued	8341708	12/25/2012	Crimson
METHODS FOR							Corporation
AUTHENTICATING							_
CREDENTIALS FOR							
MANAGEMENT OF A							
CLIENT							
SYSTEMS AND	U.S.	11/10/2005	11/271,638	Issued	7714852	5/11/2010	Crimson
METHODS FOR							Corporation
BLANKING A							r
DISPLAY SCREEN							
ON A DISPLAY							
DEVICE OF A							
COMPUTER SYSTEM							
SYSTEMS AND	U.S.	10/24/2005	11/257,257	Issued	7664034	2/16/2010	Crimson
METHODS FOR	0.5.	10/24/2003	11/23/,23/	Issued	700-05-	2/10/2010	
COLLECTIVE							Corporation
BANDWIDTH							
THROTTLING							
	II C	E /2E /200E	11/127 212	Tanad	7770169	9/2/2010	Cuirana
SYSTEMS AND	U.S.	5/25/2005	11/137,312	Issued	7770168	8/3/2010	Crimson
METHODS FOR							Corporation
DISTRIBUTING							
SOFTWARE USING							
NODES WITHIN A							
NETWORK GROUP				1	ĺ		

	•				100000000000000000000000000000000000000	1	
					PATENT		
		FILING	SERIAL		/ PUBL.	ISSUE	
TITLE	COUNTRY		NO.	STATUS	NO.	DATE	OWNER
SYSTEMS AND	U.S.	12/15/2005	11/304,035	Issued	8341622	12/25/2012	
METHODS FOR							Corporation
EFFICIENTLY USING							
NETWORK							
BANDWIDTH TO							
DEPLOY							
DEPENDENCIES OF							
A SOFTWARE							
PACKAGE							
SYSTEMS AND	U.S.	12/5/2005	11/294,248	Issued	7529809	5/5/2009	Crimson
METHODS FOR							Corporation
EFFICIENTLY USING							_
NETWORK							
BANDWIDTH TO							
DOWNLOAD							
RESOURCES							
SYSTEMS AND	U.S.	12/21/2006	11/614,873	Issued	8275895	9/25/2012	Crimson
METHODS FOR							Corporation
ESTABLISHING A							Corporation
TRUSTED DYNAMIC							
HOST							
CONFIGURATION							
PROTOCOL							
CONNECTION							
SYSTEMS AND	U.S.	8/30/2006	11/468,584	Issued	7827263	11/2/2010	Crimson
METHODS FOR	0.5.	0/20/2000	117 100,501	IBB aca	, 02, 203	11,2,2010	Corporation
MANAGING A							Corporation
COMPUTER OVER A							
NETWORK							
SYSTEMS AND	U.S.	10/27/2006	11/553,921	Issued	8166177	4/24/2012	Crimson
METHODS FOR	0.5.	10/2//2000	11/555,521	133404	0100177	7/2-7/2012	Corporation
MANAGING							Corporation
REQUESTS FOR							
CONNECTIONS TO							
SERVICES ON A							
COMPUTER SYSTEM							
SYSTEMS AND	U.S.	6/12/2003	10/460,079	Issued	7672992	3/2/2010	Crimson
METHODS FOR	U.S.	0/12/2003	10/400,079	Issueu	1012992	3/2/2010	
MONITORING A							Corporation
MODEM IN A							
NETWORKED							
ENVIRONMENT EXCTEMS AND	IIC	2/20/2004	10/012 240	To an a d	0225001	7/17/2012	Cuina
SYSTEMS AND	U.S.	3/30/2004	10/813,248	Issued	8225091	7/17/2012	Crimson
METHODS FOR							Corporation
PROTECTING							
SENSITIVE FILES							
FROM							
UNAUTHORIZED							
ACCESS							

ER on ation
n
n
ation
on
ation
on
ation
uuon
on
ation
auon
on .
ation
on .
ation
on
ation

		.	1	1	100000000000000000000000000000000000000	1	***************************************
TITLE	COUNTRY	FILING DATE	SERIAL NO.	STATUS	PATENT / PUBL. NO.	ISSUE DATE	OWNER
SYSTEMS AND	U.S.	9/14/2006	11/532,033	Issued	7865889	1/4/2011	Crimson
METHODS FOR	0.5.	3/1 1/2000	117552,055	133404	7003009	17 172011	Corporation
VERIFYING THE							Corporation
COMPATIBILITY OF							
SOFTWARE WITH A							
GROUP OF							
MANAGED NODES							
SYSTEMS AND	U.S.	4/4/2005	11/009 710	Laguad	7565544	7/21/2000	Crimson
	U.S.	4/4/2005	11/098,719	Issued	/303344	7/21/2009	
METHODS FOR							Corporation
VERIFYING THE							
TRUSTWORTHINESS							
OF A FILE							
COMPRISING							
COMPUTER							
INSTRUCTIONS							
SYSTEMS AND	U.S.	2/26/2004	10/787,366	Issued	7757228	7/13/2010	Crimson
METHODS FOR							Corporation
WRITING AN IMAGE							
TO A COMPUTER							
SYSTEM							
TRANSFER OF	U.S.	7/14/1999	09/353,211	Issued	6850990	2/1/2005	
SYNCHRONIZED							Crimson
DATA FROM 16-BIT							Corporation
CODE TO A 32-BIT							
PROCESS							
ACTIVELY	U.S.	11/22/2011	13/302,171	Issued	9172583	10/27/2015	Crimson
PROVISIONING A							Corporation
MANAGED NODE							_
ALLOCATING	U.S.	6/30/2011	13/173,947	Issued	8561131	10/15/2013	Crimson
PRODUCTS TO			,				Corporation
LICENSES ON A							1
COMPUTING							
DEVICE							
ASSIGNING A	U.S.	5/27/2010	12/789,293	Issued	8788707	7/22/2014	
RANDOM STATIC IP							Crimson
ADDRESS IN A							Corporation
QUARANTINE							Corporation
NETWORK							
COMPUTING	U.S.	10/27/2011	13/283,298	Issued	8732690	5/20/2014	Crimson
DEVICE FOR	0.5.	10/2//2011	15/205,250	Issued	0,320,0	3/20/2011	Corporation
INSTALLING AN							Corporation
APPLICATION							
CONTROLLING	U.S.	3/29/2010	12/748,873	Issued	8869154	10/21/2014	
PROCESSOR USAGE	5.5.	5,25,2010	12,710,075	135404	0007107	10/21/2014	Crimson
ON A COMPUTING							Corporation
DEVICE							Corporation
DEPLOYING	U.S.	12/16/2010	12/970,448	Issued	9032394	5/12/2015	Crimson
DRIVERS FOR AN	0.5.	12/10/2010	12/7/0,770	155000	703437 4	3/12/2013	Corporation
OPERATING							Corporation
SYSTEM ON A							
COMPUTING							
DEVICE							
DEVICE	I						

					PATENT		
		#2## #B123	evenwa-e a e		*********	*CCTT**	
ALKERIA KA	**************************************	FILING	SERIAL	CHES & FRIE 121	/ PUBL.	ISSUE	FATE/87538
TITLE	COUNTRY		NO.	STATUS	NO.	DATE	OWNER
DETERMINING A	U.S.	6/30/2011	13/173,843	Issued	8825651	9/2/2014	Crimson
GROUP OF RELATED							Corporation
PRODUCTS ON A							
COMPUTING							
DEVICE							
DETERMINING	U.S.	6/30/2010	12/827,051	Issued	9229773	1/5/2016	Crimson
WHEN TO PERFORM							Corporation
A MAINTENANCE							
OPERATION ON A							
COMPUTING							
DEVICE BASED ON							
STATUS OF A							
CURRENTLY							
RUNNING PROCESS							
OR APPLICATION							
ON THE COMPUTING							
DEVICE							
DYNAMIC MESH	U.S.	8/23/2011	13127350		9107194	8/11/2015	Crimson
NETWORKS				Issued			Corporation
ENFORCING A	U.S.	5/27/2010	12/789,283	Issued	8793782	7/29/2014	
HEALTH POLICY IN							Crimson
A LOCAL AREA							Corporation
NETWORK							
ENFORCING AND	U.S.	5/5/2011	13/101,936	Issued	8806246	8/12/2014	Crimson
COMPLYING WITH A			, i				Corporation
COMPUTING							1
DEVICE POWER							
POLICY							
IDENTIFYING A	U.S.	11/23/2011	13/303,894	Pending			Crimson
REMOTE IDENTITY	0.0.	11,23,2011	15/505,071	Chams			Corporation
REQUEST VIA A							Corporation
BIOMETRIC DEVICE							
RESPONSIVENESS	U.S.	1/19/2012	13/354,205	Issued	8621451	12/31/2013	Crimson
OF A COMPUTING	0.3.	1/19/2012	13/334,203	188000	0021431	12/31/2013	Corporation
							Corporation
DEVICE IN							
CONNECTION WITH							
SOFTWARE							
DISTRIBUTION	11.0	5/06/2010	12/202 (11	D 11			
MANAGING ASSETS	U.S.	5/26/2010	12/787,641	Pending			[
ON A COMPUTING							Crimson
DEVICE							Corporation
MAPPING GRAPH	U.S.	12/30/2010	12/982,517	Issued	8982129	3/17/2015	Crimson
DATA TO A TREE							Corporation
STRUCTURE ON A							
COMPUTING							
DEVICE					1		

					PATENT		
		FILING	SERIAL		/ PUBL.	ISSUE	
TITLE	COUNTRY	DATE	NO.	STATUS	NO.	DATE	OWNER
MODIFYING	U.S.	10/14/2010	12/904,882	Pending			Crimson
SYSTEM- DEFINED							Corporation
USER INTERFACE							
CONTROL							
FUNCTIONALITY ON							
A COMPUTING							
DEVICE							
NETWORK ACCESS	U.S.	8/29/2005	11/214,467	Issued	8584194	11/12/2013	Crimson
CONTROL USING A							Corporation
QUARANTINED							·
SERVER							
PLATFORM FOR	U.S.	4/1/2013	13/854,286	Issued	9092201		Crimson
DEVELOPMENT AND			,			7/28/2015	Corporation
DEPLOYMENT OF							1
SYSTEM							
ADMINISTRATION							
SOLUTIONS							
PREDICTING	U.S.	2/20/2013	13/771,753	Pending			Crimson
WHETHER A PARTY			,				Corporation
WILL PURCHASE A							
PRODUCT							
PROVIDING AN	U.S.	8/23/2012	13/592,975	Pending			Crimson
INFORMATION			,				Corporation
TECHNOLOGY							1
MANAGEMENT							
PRESCRIPTION							
REMOTELY	U.S.	12/29/2010	12/980,861	Pending			Crimson
INVOKING			,				Corporation
DYNAMIC CLASSES							•
ON A COMPUTING							
DEVICE							
RETRANSMITTING	U.S.	12/28/2010	12/979,725	Issued	9083541	7/14/2015	Crimson
LOST PACKETS FOR			,				Corporation
MULTICAST DATA							•
DISTRIBUTION							
SCRIPTING SUPPORT	U.S.	8/16/2007	11893676	Issued	8635069	1/21/2014	Crimson
FOR DATA							Corporation
IDENTIFIERS, VOICE							1
RECOGNITION AND							
SPEECH IN A							
TELNET SESSION							
SCRIPTING SUPPORT	U.S.	5/9/2012	13/467,673	Issued	8930177	1/6/2015	Crimson
FOR DATA			,				Corporation
IDENTIFIERS, VOICE							
RECOGNITION AND							
SPEECH IN A							
TELNET SESSION							
	L	L		1	1		

	•				PATENT		
		TOTAL TAILS	CHURNEAR			TCCTIT!	
CHARGE EA	COUNTRY	FILING DATE	SERIAL	STATUS	/ PUBL. NO.	ISSUE	OWNER
TITLE	COUNTRY		NO.			DATE	***************************************
SCRIPTING SUPPORT	U.S.	5/9/2012	13/467,461	Issued	8930193	1/6/2015	Crimson
FOR DATA							Corporation
IDENTIFIERS, VOICE							
RECOGNITION AND							
VOICE INPUT IN A							
TELNET SESSION							
SYNCHRONIZING	U.S.	12/28/2010	12/979,987	Issued	9137780	9/15/2015	Crimson
MULTICAST DATA							Corporation
DISTRIBUTION ON A							
COMPUTING							
DEVICE							
SYSTEM AND	U.S.	6/20/2011	13164459	Issued	8787576	7/22/2014	Crimson
METHOD FOR							Corporation
DETECTING							F
UNAUTHORIZED							
WIRELESS ACCESS							
POINTS							
SYSTEMS AND	U.S.	4/15/2010	12/761,114	Issued	8973113	3/3/2015	
METHODS FOR	0.3.	4/13/2010	12//01,114	188000	09/3113	3/3/2013	Crimson
AUTOMATICALLY							Corporation
RESETTING A							
PASSWORD			104100 40=		0050105	2/5/2015	
SYSTEMS AND	U.S.	4/15/2008	12/103,437	Issued	8959182	2/7/2015	Crimson
METHODS FOR							Corporation
COMPUTER DATA							
RECOVERY AND							
DESTRUCTION							
SYSTEMS AND	U.S.	6/13/2007	11/762,576	Pending			Crimson
METHODS FOR							Corporation
DECOUPLING							
BUSINESS PROCESS							
MANAGEMENT							
COMPONENTS							
FROM DATA							
SOURCES							
SYSTEMS AND	U.S.	6/29/2007	11/771,735	Issued	8838759	9/6/2014	Crimson
METHODS FOR	0.5.	0/23/2007	11///1,/55	155404	0050755	770/2011	Corporation
DETECTING							Corporation
UNMANAGED							
NODES WITHIN A							
SYSTEM							
SYSTEMS AND	II C	1/29/2000	12/261 254	Isonad	8782740	7/15/2014	
	U.S.	1/28/2009	12/361,354	Issued	0/82/40	7/15/2014	
METHODS FOR							Crimson
DETECTION OF							Corporation
UNAUTHORIZED OR							
UNSECURED							
ACCESS POINTS							

					PATENT		
		FILING	SERIAL		/ PUBL.	ISSUE	
TITLE	COUNTRY		NO.	STATUS	NO.	DATE	OWNER
SYSTEMS AND	U.S.	1/3/2007	11/619,534	Issued	8902449	12/2/2014	Crimson
METHODS FOR	0.5.	17372007	11/012,334	133404	0702777	12/2/2014	Corporation
DETERMINING							Corporation
WHEN RESULTS							
FROM A CRITERIA							
SCAN ARE DELETED							
FROM A							
COMPUTING							
DEVICE							
SYSTEMS AND	U.S.	10/24/2005	11/257,246	Issued	8533309	9/10/2013	Crimson
METHODS FOR	0.3.	10/24/2003	11/23/,240	188000	0333307	9/10/2013	Corporation
DISTRIBUTED NODE							Corporation
DETECTION AND							
MANAGEMENT							
SYSTEMS AND	U.S.	12/9/2005	11/298,809	Issued	8719815	5/6/2014	Crimson
METHODS FOR	0.3.	12/9/2003	11/290,009	Issueu	0/19013	3/0/2014	Corporation
DISTRIBUTING A							Corporation
COMPUTER							
SOFTWARE							
PACKAGE USING A							
PRE- REQUISITE							
QUERY							
SYSTEMS AND	U.S.	6/15/2007	11/763,904		8799174	8/5/2014	Crimson
METHODS FOR	U.S.	0/13/2007	11//03,904	Issued	0/991/4	8/3/2014	
FACILITATING THE				Issued			Corporation
REUSE OF A CHILD							
WORKFLOW							
PROCESS BY							
MULTIPLE PARENT							
WORKFLOW							
PROCESSES							
SYSTEMS AND	U.S.	2/9/2007	11/673,447	Issued	8706849	4/22/2014	Crimson
METHODS FOR	U.S.	21912001	11/0/3,44/	Issueu	0700049	4/22/2014	Corporation
INCREASING THE							Corporation
SCALABILITY IN A							
CLIENT/SERVER							
ENVIRONMENT							
SYSTEMS AND	U.S.	1/10/2006	11/328,731	Issued	8521864	8/27/2013	Crimson
METHODS FOR	0.3.	1/10/2000	11/326,/31	Issueu	0321004	8/2//2013	Corporation
MANAGING THE							Corporation
IMPACT OF							
MONITORING							
PROCESSES							
SYSTEMS AND	U.S.	1/11/2007	11/622,398		8898276	11/25/2014	Crimeon
METHODS FOR	U.S.	1/11/2007	11/022,396	Issued	0070270	11/23/2014	Corporation
MONITORING				199000			Corporation
NETWORK PORTS							
TO REDIRECT							
COMPUTING							
DEVICES TO A							
PROTECTED							
NETWORK		<u> </u>	<u> </u>	<u> </u>]		

					PATENT		
CATACOLA EL	**************************************	FILING	SERIAL	CHES & CHIESCO	/ PUBL.	ISSUE	ATTITUTE
TITLE	COUNTRY		NO.	STATUS	NO.	DATE	OWNER
SYSTEMS AND	U.S.	6/18/2007	11/764,467	Issued	8533332	9/10/2013	Crimson
METHODS FOR							Corporation
OBTAINING							
EXCLUSIVE ACCESS							
TO A COMPUTING							
RESOURCE							
SYSTEMS AND	U.S.	12/3/2008	12/327,668	Pending			
METHODS FOR							Crimson
SECURING DATA							Corporation
SYSTEMS AND	U.S.	12/22/2008	12/341,756	Issued	8601542	12/3/2013	
METHODS							Crimson
PROVIDING FOR							Corporation
CONFIGURATION							
FILE DOWNLOADS							
UPDATING A	U.S.	12/14/2010	12/967,985	Pending			Crimson
RUNNING			ŕ				Corporation
APPLICATION ON A							1
COMPUTING							
DEVICE							
USING A MEMBER	U.S.	12/16/2010	12/969,912	Pending			Crimson
ATTRIBUTE TO	0.5.	12/10/2010	12/303,312	rename			Corporation
PERFORM A							Corporation
DATABASE							
OPERATION ON A							
COMPUTING							
DEVICE							
FORWARDING	U.S.	5/30/2012	13/484,094	Pending			Crimson
CONTENT ON A	0.3.	3/30/2012	13/464,094	rending			Corporation
							Corporation
CLIENT BASED ON A							
REQUEST	T. C	5/14/2012	12/471 252	D 1'			Crimson
DETERMINING THE	U.S.	5/14/2012	13/471,253	Pending			
STATUS OF A NODE							Corporation
BASED ON A							
DISTRIBUTED							
SYSTEM							~ .
ESTABLISHING A	U.S.	6/18/2012	13/525,790	Pending			Crimson
DIRECT							Corporation
CONNECTION							
BETWEEN REMOTE							
DEVICES							
DEVICE FOR	U.S.	6/18/2012	13/526,193	Pending			Crimson
DISPLAYING A							Corporation
REMOTE DISPLAY							
ACCORDING TO A							
MONITOR							
GEOMETRY							
OBTAINING AND	U.S.	5/30/2012	13/484,077	Pending			Crimson
RUNNING A LOCAL							Corporation
QUERY ON A							
COMPUTING							
COMPUTING DEVICE							

		1			PATENT		
		FILING	SERIAL		/ PUBL.	ISSUE	
TITLE	COUNTRY		NO.	STATUS	NO.	DATE	OWNER
COMPUTING	U.S.	3/8/2013	13/790,353	Pending		DAIL	Crimson
	U.S.	3/6/2013	13/790,333	rending			
DEVICES FOR							Corporation
SENDING AND							
RECEIVING							
CONFIGURATION							
INFORMATION		10/21/2012	1 1 10 10 00		0.000.00	5 12 0 12 0 1 5	
ENCODING	U.S.	10/31/2013	14/068,830	Issued	9380300	6/28/2016	Crimson
LOCATION							Corporation
INFORMATION IN							
ALPHA CHANNELS							
FOR HTML REMOTE							
CONTROL							
SCRIPTING SUPPORT	U.S.	2/26/2014	14/190,959	Pending			Crimson
FOR DATA							Corporation
IDENTIFIERS, VOICE							
RECOGNITION AND							
SPEECH IN A							
TELNET SESSION							
SYSTEMS AND	U.S.	4/18/2014	14/256,809	Pending			Crimson
METHODS FOR				_			Corporation
INCREASED SPEED							
OF DOWNLOADING							
RESOURCES IN A							
MANAGED							
NETWORK							
SYSTEMS AND	U.S.	10/23/2013	14/061,015	Pending			Crimson
METHODS FOR			,				Corporation
MULTICAST							
MESSAGE ROUTING							
TERMINAL	U.S.	8/20/2014	14/464,369	Pending			Crimson
EMULATION OVER	0.5.	0,20,201.	1 .,	1 onumg			Corporation
HTML							Corporation
SYSTEMS AND	U.S.	7/16/2014	14/332,733	Pending			Crimson
METHODS FOR	0.5.	7710/2014	17/332,733	rending			Corporation
PROVISIONING A							Corporation
MANAGED NODE							
SYSTEMS AND	U.S.	7/16/2014	14/332,737	Pending			Crimson
METHODS FOR PEER	0.3.	7/10/2014	14/332,/37	rending			Corporation
RESOURCE							Corporation
SHARING							
	II C	10/1/2014	14/502 664	Dan din n			Colorada
SYSTEMS AND	U.S.	10/1/2014	14/503,664	Pending			Crimson
METHODS FOR				1			Corporation
NETWORK							
MANAGEMENT	T. C	10/1/2014	14/504 160	D I			
SYSTEMS AND	U.S.	10/1/2014	14/504,169	Pending			Crimson
METHODS FOR							Corporation
PATCH							
MANAGEMENT							1

					PATENT		
		FILING	SERIAL		/ PUBL.	ISSUE	
TITLE	COUNTRY		NO.	STATUS	NO.	DATE	OWNER
SYSTEMS AND	U.S.	3/12/2014	14/206,860	Issued	9252958	2/2/2016	Crimson
METHODS FOR							Corporation
PROVIDING A SELF-							
MAINTAINING PKI							
INFRASTRUCTURE							
AMONG LOOSELY							
CONNECTED							
ENTITIES							
SYSTEMS AND	U.S.	7/29/2014	14/445,353	Pending			Crimson
METHODS FOR							Corporation
ENROLLING AND							
CONFIGURING							
AGENTS							
SYSTEMS AND	U.S.	12/26/2014	14/583,531	Pending			Crimson
METHODS FOR			,				Corporation
SELF-ORGANIZING							r
MULTICAST							
METHOD AND	U.S.	4/2/2014	14/243,119	Issued	9246947	1/26/2016	Crimson
APPARATUS FOR	0.0.	1,2,2011	1 1/2 15,115	155404	2210517	172072010	Corporation
PROTECTING							Corporation
ACCESS TO							
CORPORATE							
APPLICATIONS							
FROM MOBILE							
DEVICES							
SYSTEM AND	U.S.	9/14/2015	14/853,788	Pending			Crimson
METHODS FOR	0.3.	9/14/2013	14/033,700	rending			
							Corporation
PROVIDING							
COMPUTER-							
RELATED SUPPORT	TIC	1/11/2016	1 4/002 774	D II			
SYSTEM AND	U.S.	1/11/2016	14/992,774	Pending			Crimson
METHODS FOR							Corporation
NETWORK BOOTING							
SYSTEM AND	U.S.	5/13/2016	15/154,733	Pending			Crimson
METHODS FOR							Corporation
PROVIDING A SELF-							
ELECTING SERVICE							
SYSTEMS AND	U.S.	8/29/2016	15/250,496	Pending			Crimson
METHODS FOR							Corporation
CREDENTIAL							
DISTRIBUTION							
SYSTEMS AND	U.S.	7/28/2016	15/222,739	Pending			Crimson
METHODS FOR							Corporation
PRESENTATION OF							
A TERMINAL							
APPLICATION							
SCREEN							
Method and apparatus	U.S.	13/590,339	8/21/2012	20130061307	Pending	_	Crimson
for accessing corporate							Corporation
data from a mobile							•
device							
				•			

US-DOCS\71330311.4

RECORDED: 09/29/2016