PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5474089

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
CLOVER TECHNOLOGIES GROUP, LLC	04/12/2019

RECEIVING PARTY DATA

Name:	BANK OF AMERICA, N.A., AS AGENT
Street Address:	100 N TRYON STREET
City:	CHARLOTTE
State/Country:	NORTH CAROLINA
Postal Code:	28255

PROPERTY NUMBERS Total: 56

Property Type	Number
Patent Number:	8995873
Patent Number:	8843021
Patent Number:	8909102
Patent Number:	9164474
Patent Number:	9122203
Patent Number:	9421783
Patent Number:	6577830
Patent Number:	6773087
Patent Number:	6684039
Patent Number:	6987937
Patent Number:	7104641
Patent Number:	7618507
Patent Number:	7740346
Patent Number:	7590369
Patent Number:	7689141
Patent Number:	7853173
Patent Number:	8926869
Patent Number:	7747189
Patent Number:	8041271
Patent Number:	8011771

PATENT REEL: 049988 FRAME: 0106

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Property Type	Number
Patent Number:	7693448
Patent Number:	8152946
Patent Number:	8509649
Patent Number:	7903996
Patent Number:	8369740
Patent Number:	8467699
Patent Number:	8494407
Patent Number:	9146533
Patent Number:	8602542
Patent Number:	9063456
Patent Number:	8971755
Patent Number:	8929769
Patent Number:	8879949
Patent Number:	9102161
Patent Number:	9612573
Patent Number:	9128414
Patent Number:	9223251
Patent Number:	9329517
Patent Number:	9201376
Patent Number:	9164464
Patent Number:	9162470
Patent Number:	9798275
Patent Number:	9588485
Patent Number:	9927800
Patent Number:	9651915
Patent Number:	9573378
Patent Number:	10162288
Patent Number:	9946199
Patent Number:	10232630
Application Number:	14558082
Application Number:	15414298
Application Number:	15590498
Application Number:	15597916
Application Number:	15790761
Application Number:	15987558
PCT Number:	US1415046

CORRESPONDENCE DATA

PATENT REEL: 049988 FRAME: 0107 **Fax Number:** (800)494-7512

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: 202-370-4756

Email: ipteam@cogencyglobal.com

Correspondent Name: JAY DASILVA

Address Line 1: 1025 VERMONT AVE NW, SUITE 1130

Address Line 2: COGENCY GLOBAL INC.

Address Line 4: WASHINGTON, D.C. 20005

ATTORNEY DOCKET NUMBER:	1069485 PAT
NAME OF SUBMITTER:	KAREN COTTRELL
SIGNATURE:	/Karen Cottrell/
DATE SIGNED:	04/15/2019

Total Attachments: 8

source=#91938037v1 - (Patent Security Agreement for Filing)#page2.tif source=#91938037v1 - (Patent Security Agreement for Filing)#page3.tif source=#91938037v1 - (Patent Security Agreement for Filing)#page4.tif source=#91938037v1 - (Patent Security Agreement for Filing)#page5.tif source=#91938037v1 - (Patent Security Agreement for Filing)#page6.tif source=#91938037v1 - (Patent Security Agreement for Filing)#page7.tif source=#91938037v1 - (Patent Security Agreement for Filing)#page8.tif source=#91938037v1 - (Patent Security Agreement for Filing)#page9.tif

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PATENT SECURITY AGREEMENT

THIS PATENT SECURITY AGREEMENT, dated as of April 12, 2019, is made by each of the entities listed on the signature pages hereof (each a "Grantor" and, collectively, the "Grantors"), in favor of Bank of America, N.A. ("Bank of America"), as administrative agent (in such capacity, together with its successors and permitted assigns, the "Agent") for the Lenders and the L/C Issuers (as defined in the Credit Agreement referred to below) and the other Secured Parties.

WITNESSETH:

WHEREAS, pursuant to the Credit Agreement, dated as of May 8, 2014 (as the same may be amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), among Clover Technologies Group, LLC and 4L Technologies Inc. (collectively, the "Borrowers"), Clover Technologies Group, LLC, as the Borrower Representative, the other Credit Parties party thereto, the Lenders and the L/C Issuers from time to time party thereto and Bank of America, as administrative agent (in such capacity, the "Agent") for the Lenders and the L/C Issuers, the Lenders and the L/C Issuers have severally agreed to make extensions of credit to the Borrowers upon the terms and subject to the conditions set forth therein;

WHEREAS, each Grantor has agreed, pursuant to a Guaranty and Security Agreement dated as of May 8, 2014 in favor of the Agent (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Guaranty and **Security Agreement**"), to guarantee the Obligations (as defined in the Credit Agreement) of each Borrower; and

WHEREAS, all of the Grantors are party to the Guaranty and Security Agreement pursuant to which the Grantors party hereto are required to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and to induce the Lenders and the L/C Issuers to make their respective extensions of credit to the Borrowers thereunder, each Grantor hereby agrees with the Agent as follows:

Section 1. Defined Terms. Capitalized terms used herein without definition are used as defined in the Guaranty and Security Agreement.

Section 2. Grant of Security Interest in Patent Collateral. Each Grantor, as collateral security for the prompt and complete payment and performance when due (whether at stated maturity, by acceleration or otherwise) of the Secured Obligations of such Grantor, hereby mortgages, pledges and hypothecates to the Agent for the benefit of the Secured Parties, and grants to the Agent for the benefit of the Secured Parties a Lien on and security interest in, all of its right, title and interest in, to and under the following Collateral (to the extent not constituting Excluded Property) of such Grantor (the "Patent Collateral"):

1

- (a) all of its Patents (to the extent not constituting Excluded Property), including, without limitation, those referred to on Schedule 1 hereto;
- (b) all reissues, reexaminations, continuations, continuations-in-part, divisionals, renewals and extensions of the foregoing; and
- (c) all income, royalties, proceeds and Liabilities at any time due or payable or asserted under and with respect to any of the foregoing, including, without limitation, all rights to sue and recover at law or in equity for any past, present and future infringement, misappropriation, dilution, violation or other impairment thereof.
- Section 3. Guaranty and Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Agent pursuant to the Guaranty and Security Agreement and each Grantor hereby acknowledges and agrees that the rights and remedies of the Agent with respect to the security interest in the Patent Collateral made and granted hereby are more fully set forth in the Guaranty and Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event of any conflict between the Guaranty and Security Agreement and this Patent Security Agreement, the terms of the Guaranty and Security Agreement shall control.
- Section 4. Grantor Remains Liable. Each Grantor hereby agrees that, anything herein to the contrary notwithstanding, such Grantor shall assume full and complete responsibility for the prosecution, defense, enforcement or any other necessary or desirable actions in connection with their Patents and IP Licenses subject to a security interest hereunder.
- Section 5. Counterparts. This Patent Security Agreement may be executed in any number of counterparts and by different parties in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Signature pages may be detached from multiple separate counterparts and attached to a single counterpart.
- Section 6. Governing Law. This Patent Security Agreement and the rights and obligations of the parties hereto shall be governed by, and construed and interpreted in accordance with, the law of the State of New York.

[SIGNATURE PAGES FOLLOW]

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

Very truly yours,

CLOVER TECHNOLOGIES GROUP,

LLC,

a Delaware limited liability Company, as

Grantor

By:

Name: George Milton

Title: Chief Executive Officer

[Patent Security Agreement]

ACCEPTED AND AGREED as of the date first above written:

BANK OF AMERICA, N.A.

as Agent

By:

Denise Jones

Its:

Name: Vice President
Duly Authorized Signatory

[SIGNATURE PAGE TO PATENT SECURITY AGREEMENT]

PATENT REEL: 049988 FRAME: 0112

SCHEDULE I TO PATENT SECURITY AGREEMENT

Patent Registration

UNITED STATES PATENTS AND PATENT APPLICATIONS

REWELDED CARTRIDGE AND METHOD OF 11405853 4/18/2006 7618507 11/17/2009 Clover Technologic	RESEALED INK CARTRIDGE AND METHOD OF 10882471 7/1/2004 7104641 9/12/2006 Clover Technologic MANUFACTURE	REASSEMBLEDTONER CARTRIDGE AND 10457600 6/9/2003 6987937 1/17/2006 Clover Technologic METHOD OF MANUFACTURE	REASSEMBLED PROCESS CARTRIDGE AND 10278730 10/22/2002 6684039 1/27/2004 Clover Technologic METHOD OF MANUFACTURE	RESEALED INK CARTRIDGE AND METHOD OF 10265448 10/7/2002 6773087 8/10/2004 Clover Technologic MANUFACTURE	REASSEMBLED TONER CARTRIDGE AND 10238658 9/9/2002 6577830 6/10/2003 Clover Technologic METHOD OF MANUFACTURE	46	Electronic patch for refurbishing a used print cartridge PCT/US14/150 02/06/2014 Clover Technologic	Electronic patch for refurbishing a used print cartridge 14/174,056 02/06/2014 9421783 8/23/2016 Clover Technologic	Heat sealed remanufactured toner cartridge 14/168,216 01/30/2014 9122203 9/1/2015 Clover Technologic	Toner drum gear projection 14/150,105 01/08/2014 9164474 10/20/2015 Clover Technologic	Electrophotographic drum gear socket configurations 14/068,569 10/31/2013 8909102 12/9/2014 Clover Technologic	Toner cartridge seal refurbishment system and 14/067,101 10/30/2013 8843021 9/23/2014 Clover Technologic method	System and method for refurbishing print cartridges and print cartridge toner blades 14/030,255 9/18/2013 8995873 3/31/2015 Clover Technologic	TITLE APPL # APPL DATE REG # REG DATE REGISTERED O
Clover Technologies Group, LLC	Clover Technologies Group, LLC	Clover Technologies Group, LLC	Clover Technologies Group, LLC	Clover Technologies Group, LLC	Clover Technologies Group, LLC		Clover Technologies Group, LLC	Clover Technologies Group, LLC	Clover Technologies Group, LLC	Clover Technologies Group, LLC	Clover Technologies Group, LLC	Clover Technologies Group, LLC	Clover Technologies Group, LLC	REGISTERED OWNER

PATENT

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I	Clover Technologies Group, LLC	7/23/2013	8494407	5/27/2010	12788474	LASER PRINTER CARTRIDGE WITH INCREASED TONER STORAGE CAPACITY
1	Clover Technologies Group, LLC	6/18/2013	8467699	4/8/2010	12756913	REMANUFACTURED TONER CARTRIDGE WITH ADDED PRIMARY CHARGE ROLLER CLEANER AND METHODS
I	Clover Technologies Group, LLC	2/5/2013	8369740	4/2/2010	12753748	REMANUFACTURED TONER CARTRIDGE WITH ADDED CLEANING ROLLER FOR THE PRIMARY CHARGE ROLLER AND METHODS
1	Clover Technologies Group, LLC	3/8/2011	7903996	3/10/2010	12721192	ANGLED SEAL FOR LASER TONER CARTRIDGE HOPPER
ı	Clover Technologies Group, LLC	8/13/2013	8509649	2/9/2010	12702441	LASER PRINTER TONER CARTRIDGE SEAL AND METHOD
i	Clover Technologies Group, LLC	4/10/2012	8152946	11/15/2009	12618757	REWELDED CARTRIDGE AND METHOD OF MANUFACTURE
i l	Clover Technologies Group, LLC	4/6/2010	7693448	6/5/2009	12479628	ANGLED SEAL FOR LASER TONER CARTRIDGE HOPPER
	Clover Technologies Group, LLC	9/6/2011	8011771	2/10/2009	12368959	REMANUFACTURED INKJET PRINTER CARTRIDGE, SYSTEM AND PROCESS
ı	Clover Technologies Group, LLC	10/18/2011	8041271	3/11/2008	12046326	PREVENTION SYSTEM AND PROCESS
	Clover Technologies Group, LLC	6/29/2010	7747189	12/19/2007	11959994	PROCESS AND APPARATUS FOR INSTALLING ORIGINAL DRIVE GEAR ON A LASER PRINTER TONER CARTRIDGE DRUM
1 1	Clover Technologies Group, LLC	1/6/2015	8926869	10/28/2007	11926089	METHOD AND COMPOSITION FOR RECOATING TONER CARTRIDGE DEVELOPING MEMBER
	Clover Technologies Group, LLC	12/14/2010	7853173	10/27/2007	11925848	EXCESS TONER EVACUATION PROCESS
	Clover Technologies Group, LLC	3/30/2010	7689141	10/27/2007	11925751	LASER PRINTER TONER CARTRIDGE SEAL AND METHOD
	Clover Technologies Group, LLC	9/15/2009	7590369	5/1/2007	11799350	SYSTEM AND METHOD FOR SEPARATING AND REPAIRING A LASER TONER CARTRIDGE
	Clover Technologies Group, LLC	6/22/2010	7740346	9/8/2006	11518370	RESEALED INK CARTRIDGE AND METHOD OF MANUFACTURE

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LLC	Clover Technologies Group, LLC	10/24/2017	9798275	6/5/2015	14731550	SYSTEM AND METHOD FOR APPLYING LUBRICANT ONTO A SURFACE
oup, LLC	Clover Technologies Group, LLC	10/20/2015	9162470	1/12/2015	14594246	REMANUFACTURED INKJET PRINTER CARTRIDGE SYSTEM AND PROCESS
up, LLC	Clover Technologies Group, LLC		None	12/2/2014	14558082	FORMING OF VACUUM BAG PACKAGING
up, LLC	Clover Technologies Group, LLC	10/20/2015	9164464	11/3/2014	14531533	TONER DRUM GEAR PROJECTION
up, LLC	Clover Technologies Group, LLC	12/1/2015	9201376	10/2/2014	14504870	LASER PRINTER TONER CARTRIDGE SEAL AND METHOD
up, LLC	Clover Technologies Group, LLC	5/3/2016	9329517	9/30/2014	14501307	DRIVE RECEIVING MEMBER FOR AN IMAGING CARTRIDGE
up, LLC	Clover Technologies Group, LLC	12/29/2015	9223251	5/12/2014	14275185	TONER CARTRIDGE AND METHOD FOR REDUCING IMAGE ARTIFACT
ıp, LLC	Clover Technologies Group, LLC	9/8/2015	9128414	3/14/2014	14214540	SEAL
ıp, LLC	Clover Technologies Group, LLC	4/4/2017	9612573	3/14/2014	14214509	METHOD FOR REMOVING GEARS
ıp, LLC	Clover Technologies Group, LLC	8/11/2015	9102161	7/31/2013	13956168	REMANUFACTURED INKJET PRINTER CARTRIDGE, SYSTEM AND PROCESS
ιp, LLC	Clover Technologies Group, LLC	11/4/2014	8879949	7/10/2013	13939042	LASER PRINTER TONER CARTRIDGE SEAL AND METHOD
ıp, LLC	Clover Technologies Group, LLC	1/6/2015	8929769	6/23/2013	13924596	LASER PRINTER CARTRIDGE WITH INCREASED TONER STORAGE CAPACITY
ıp, LLC	Clover Technologies Group, LLC	3/3/2015	8971755	1/3/2013	13733838	REMANUFACTURED TONER CARTRIDGE WITH ADDED CLEANING ROLLER FOR THE PRIMARY CHARGE ROLLER AND METHODS
ıp, LLC	Clover Technologies Group, LLC	6/23/2015	9063456	6/7/2012	13491215	SEAL CONFIGURATIONS FOR IMAGE FORMING APPARATUS
ıp, LLC	Clover Technologies Group, LLC	12/10/2013	8602542	8/1/2011	13195557	REMANUFACTURED INKJET PRINTER CARTRIDGE SYSTEM AND PROCESS
ıp, LLC	Clover Technologies Group, LLC	9/29/2015	9146533	4/4/2011	13079780	PROCESS FOR INSTALLING ORIGINAL DRIVE GEAR ON A LASER PRINTER TONER CARTRIDGE DRUM

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I <u> </u>	Clover Technologies Group, LLC		None	5/23/2018	15987558	SYSTEM AND METHOD OF REMANUFACTURING A TONER CONTAINER
	Clover Technologies Group, LLC		None	10/23/2017	15790761	SYSTEM AND METHOD FOR APPLYING LUBRICANT ONTO A SURFACE
	Clover Technologies Group, LLC		None	5/17/2017	15597916	METHOD OF REMANUFACTURING A TONER CARTRIDGE
I	Clover Technologies Group, LLC		None	5/9/2017	15590498	REMANUFACTURED TONER CARTRIDGE AND METHOD
	Clover Technologies Group, LLC		None	1/24/2017	15414298	SYSTEM AND METHOD FOR SPLITTING A PRINTER CARTRIDGE
	Clover Technologies Group, LLC	3/19/2019	10232630	1/17/2017	15407629	ELECTRONIC PATCH FOR REFURBISHING A USED PRINT CARTRIDGE
	Clover Technologies Group, LLC	4/17/2018	9946199	9/23/2016	15274404	SYSTEM AND METHOD OF FILLING A TONER CONTAINER
	Clover Technologies Group, LLC	12/25/2018	10162288	9/23/2016	15274383	SYSTEM AND METHOD OF REMANUFACTURING A TONER CONTAINER
	Clover Technologies Group, LLC	2/21/2017	9573378	8/5/2016	15229306	ELECTRONIC PATCH FOR REFURBISHING A USED PRINT CARTRIDGE
PA1	Clover Technologies Group, LLC	5/16/2017	9651915	3/4/2016	15061391	PROCESS CARTRIDGE MODIFICATION AND METHOD FOR RETRACTABLE PROCESS
ENT	Clover Technologies Group, LLC	3/27/2018	9927800	12/3/2015	14957726	MANUFACTURING SYSTEM WITH INTERCHANGEABLE TOOLING HEADS AND TOOLING NESTS
	Clover Technologies Group, LLC	3/7/2017	9588485	10/13/2015	14881534	SYSTEM AND METHOD FOR SPLITTING A PRINTER CARTRIDGE

RECORDED: 04/15/2019 REEL: 049988 FRAME: 0116