# 505610316 08/07/2019 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5657118

SUBMISSION TYPE:		NEW ASSIGNMENT			
NATURE OF CONVEY	ANCE:	ASSIGNMENT	ASSIGNMENT		
CONVEYING PARTY	DATA				
		Name	Execution Date		
DAMBALLA, INC.			02/07/2019		
RECEIVING PARTY D	ΑΤΑ				
Name:	HELP/S	YSTEMS, LLC			
Street Address:	6455 CI1	TY WEST PARKWAY			
City:	EDEN P	RAIRIE			
State/Country:	MINNES				
Postal Code:	55344				
PROPERTY NUMBER	RS Total: 1		_		
Property Type	e	Number			
Patent Number:	9	306969			
	DATA				
Fax Number: Correspondence will	be sent to a if provided;	<i>the e-mail address first; if that is un</i> <i>if that is unsuccessful, it will be se</i> 124927000			
Fax Number: <i>Correspondence will using a fax number, i</i> Phone: Email:	<b>be sent to</b> a <b>if provided;</b> 6 ip	r <b>if that is unsuccessful, it will be se</b> 124927000 p@fredlaw.com, mmoores@fredlaw.co	nt via US Mail.		
Fax Number: <i>Correspondence will using a fax number, i</i> Phone: Email: Correspondent Name	be sent to a if provided; 6 ip e: F	<b>if that is unsuccessful, it will be se</b> 124927000 o@fredlaw.com, mmoores@fredlaw.co RYAN M. SPANHEIMER	nt via US Mail.		
Fax Number: <i>Correspondence will using a fax number, i</i> Phone: Email: Correspondent Name Address Line 1:	i be sent to a if provided; 6 ip e: F	<b>if that is unsuccessful, it will be se</b> 124927000 p@fredlaw.com, mmoores@fredlaw.co RYAN M. SPANHEIMER FREDRIKSON & BYRON P.A.	<i>nt via US Mail.</i> om		
Fax Number: <i>Correspondence will using a fax number, i</i> Phone: Email: Correspondent Name	i <b>be sent to</b> if provided; 6 iμ e: Π F 2	<b>if that is unsuccessful, it will be se</b> 124927000 o@fredlaw.com, mmoores@fredlaw.co RYAN M. SPANHEIMER	<i>nt via US Mail.</i> om 000		
Fax Number: <i>Correspondence will using a fax number, i</i> Phone: Email: Correspondent Name Address Line 1: Address Line 2: Address Line 4:	<b>be sent to</b> if provided; 6 ip e: F 2 N	<b>if that is unsuccessful, it will be se</b> 124927000 p@fredlaw.com, mmoores@fredlaw.co RYAN M. SPANHEIMER REDRIKSON & BYRON P.A. 200 SOUTH SIXTH STREET SUITE 40 MINNEAPOLIS, MINNESOTA 55402-1	<i>nt via US Mail.</i> om 000		
Fax Number: Correspondence will using a fax number, i Phone: Email: Correspondent Name Address Line 1: Address Line 2: Address Line 4:	if provided; 6 if e: F 2 NUMBER:	<b>if that is unsuccessful, it will be se</b> 124927000 p@fredlaw.com, mmoores@fredlaw.co RYAN M. SPANHEIMER FREDRIKSON & BYRON P.A. 200 SOUTH SIXTH STREET SUITE 40 MINNEAPOLIS, MINNESOTA 55402-1 51940.29.117.5	<i>nt via US Mail.</i> om 000		
Fax Number: Correspondence will using a fax number, i Phone: Email: Correspondent Name Address Line 1: Address Line 2: Address Line 2: Address Line 4: ATTORNEY DOCKET I	if provided; 6 if e: F 2 NUMBER:	if that is unsuccessful, it will be set5124927000c@fredlaw.com, mmoores@fredlaw.comc@fredlaw.com, mmoores@fredlaw.comCRYAN M. SPANHEIMERFREDRIKSON & BYRON P.A.200 SOUTH SIXTH STREET SUITE 40AINNEAPOLIS, MINNESOTA 55402-151940.29.117.5RYAN M. SPANHEIMER	<i>nt via US Mail.</i> om 000		
Fax Number: <i>Correspondence will</i> <i>using a fax number, i</i> Phone: Email: Correspondent Name Address Line 1: Address Line 2: Address Line 2: Address Line 4: ATTORNEY DOCKET I NAME OF SUBMITTER SIGNATURE:	if provided; 6 if e: F 2 NUMBER:	if that is unsuccessful, it will be set       5124927000       c@fredlaw.com, mmoores@fredlaw.com       RYAN M. SPANHEIMER       FREDRIKSON & BYRON P.A.       200 SOUTH SIXTH STREET SUITE 400       /INNEAPOLIS, MINNESOTA 55402-1       51940.29.117.5       RYAN M. SPANHEIMER       /Ryan M. SPANHEIMER       /Ryan M. Spanheimer/	<i>nt via US Mail.</i> om 000		
Fax Number: <i>Correspondence will</i> <i>using a fax number, i</i> Phone: Email: Correspondent Name Address Line 1: Address Line 2: Address Line 2: Address Line 4: ATTORNEY DOCKET I NAME OF SUBMITTER SIGNATURE: DATE SIGNED:	if provided; 6 if e: F 2 NUMBER:	if that is unsuccessful, it will be set5124927000c@fredlaw.com, mmoores@fredlaw.comc@fredlaw.com, mmoores@fredlaw.comCRYAN M. SPANHEIMERFREDRIKSON & BYRON P.A.200 SOUTH SIXTH STREET SUITE 40AINNEAPOLIS, MINNESOTA 55402-151940.29.117.5RYAN M. SPANHEIMER	<i>nt via US Mail.</i> om 000		
Fax Number: <i>Correspondence will</i> <i>using a fax number, i</i> Phone: Email: Correspondent Name Address Line 1: Address Line 2: Address Line 4: ATTORNEY DOCKET I NAME OF SUBMITTER SIGNATURE: DATE SIGNED: Total Attachments: 8	be sent to a if provided; 6 ip 6 ip 7 8 F 2 N N NUMBER:	if that is unsuccessful, it will be set       5124927000       c@fredlaw.com, mmoores@fredlaw.com       CRYAN M. SPANHEIMER       FREDRIKSON & BYRON P.A.       200 SOUTH SIXTH STREET SUITE 40       AINNEAPOLIS, MINNESOTA 55402-1       51940.29.117.5       RYAN M. SPANHEIMER       /Ryan M. SPANHEIMER       /Ryan M. Spanheimer/       08/07/2019	<i>nt via US Mail.</i> om 000		
Fax Number: Correspondence will using a fax number, i Phone: Email: Correspondent Name Address Line 1: Address Line 2: Address Line 2: Address Line 4: ATTORNEY DOCKET I NAME OF SUBMITTER SIGNATURE: DATE SIGNED: Total Attachments: 8 source=51940.29.117.5	be sent to a if provided; 6 ip 6 : F 2 N F 2 N N NUMBER: 8:	if that is unsuccessful, it will be set       s124927000       c@fredlaw.com, mmoores@fredlaw.com       SYAN M. SPANHEIMER       FREDRIKSON & BYRON P.A.       s00 SOUTH SIXTH STREET SUITE 400       /INNEAPOLIS, MINNESOTA 55402-1       51940.29.117.5       RYAN M. SPANHEIMER       /Ryan M. SPANHEIMER       /Ryan M. Spanheimer/       08/07/2019	<i>nt via US Mail.</i> om 000		
Fax Number: Correspondence will using a fax number, i Phone: Email: Correspondent Name Address Line 1: Address Line 2: Address Line 2: Address Line 4: ATTORNEY DOCKET I NAME OF SUBMITTER SIGNATURE: DATE SIGNED: Total Attachments: 8 source=51940.29.117.5	be sent to if provided; 6 ip e: F 2 N F 2 N F 2 N F 2 N F 2 N F 2 N F 2 N F 2 N F 2 N F 2 N F 2 N F 2 N F 2 N F 2 N F 2 N F 2 N F 2 N F 5 S F 5 S F 5 S F 5 S F 5 S F 5 S F 5 S S F 5 S S S S	if that is unsuccessful, it will be set       5124927000       c@fredlaw.com, mmoores@fredlaw.com       CRYAN M. SPANHEIMER       FREDRIKSON & BYRON P.A.       200 SOUTH SIXTH STREET SUITE 40       AINNEAPOLIS, MINNESOTA 55402-1       51940.29.117.5       RYAN M. SPANHEIMER       /Ryan M. SPANHEIMER       /Ryan M. Spanheimer/       08/07/2019	<i>nt via US Mail.</i> om 000		
Fax Number: Correspondence will using a fax number, i Phone: Email: Correspondent Name Address Line 1: Address Line 2: Address Line 2: Address Line 4: ATTORNEY DOCKET I NAME OF SUBMITTER SIGNATURE: DATE SIGNED: Total Attachments: 8 source=51940.29.117.5 source=51940.29.117.5	be sent to a if provided; 6 ip 6 ip 7 8 8 8 8 8 8 9 9 0 8 10 10 10 10 10 10 10 10 10 10 10 10 10	if that is unsuccessful, it will be set       5124927000       c@fredlaw.com, mmoores@fredlaw.com       SYAN M. SPANHEIMER       FREDRIKSON & BYRON P.A.       200 SOUTH SIXTH STREET SUITE 40       AINNEAPOLIS, MINNESOTA 55402-1       51940.29.117.5       RYAN M. SPANHEIMER       /Ryan M. SPANHEIMER       /Ryan M. Spanheimer/       08/07/2019	<i>nt via US Mail.</i> om 000		

source=51940.29.117.5 Damballa-Help Assignment#page6.tif source=51940.29.117.5 Damballa-Help Assignment#page7.tif source=51940.29.117.5 Damballa-Help Assignment#page8.tif

> PATENT REEL: 049988 FRAME: 0382

#### INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT

THIS INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT ("<u>Assignment</u>") is made as of February 7, 2019 by Damballa, Inc., a Delaware corporation ("<u>Assignor</u>"), in favor of Help/Systems, LLC, a Delaware limited liability company ("<u>Assignee</u>").

Assignor and Assignee are parties to the Asset Purchase Agreement dated as of the same date hereof (the "<u>Purchase Agreement</u>"), whereby Assignor has agreed to assign certain unregistered and registered intellectual property, including without limitation the telephone and fax numbers, domain name and website and any content (including any copyright therein) set forth on <u>Exhibit A</u> (collectively, the "<u>Assigned IP</u>"), and has agreed to execute and deliver this Assignment for recording with governmental authorities including, but not limited to, the United States Patent and Trademark Office.

NOW, THEREFORE, in consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. <u>Assignment</u>. Assignor hereby absolutely, irrevocably and unconditionally conveys, assigns, transfers and agrees to assign and deliver to Assignee and its successors and assigns forever, without any restrictions, limitations or reservations, all of Assignor's right, title and interest in and to the Assigned IP together with the goodwill of the business connected with the use of, and symbolized by, the Assigned IP, as fully and entirely as the same would have been held and enjoyed by Assignor had this Assignment not been made, including the following:

a) all (i) trademark registrations and applications set forth on <u>Exhibit A</u>, and (ii) trademarks underlying the trademark registrations and applications set forth on <u>Exhibit A</u>

b) all domain names, websites, and any content set forth on Exhibit A;

c) the telephone and fax numbers set forth on <u>Exhibit A</u>;

d) any and all rights of any kind whatsoever of Assignor accruing under any of the foregoing provided by applicable law of any jurisdiction, by international treaties and conventions and otherwise throughout the world;

e) any and all royalties, fees, income, payments and other proceeds now or hereafter due or payable with respect to any and all of the foregoing; and

f) any and all claims and causes of action, with respect to any of the foregoing, whether accruing before, on or after the date hereof, including all rights to and claims for damages, restitution and injunctive and other legal and equitable relief for past, present and future infringement, misappropriation, violation, misuse, breach or default, with the right but no obligation to sue for such legal and equitable relief and to collect, or otherwise recover, any such damages.

PATENT REEL: 049988 FRAME: 0383 2. <u>Moral Rights</u>. To the extent that any rights of paternity, integrity, attribution, disclosure, withdrawal, and any other rights that may be known as "moral rights" ("<u>Moral Rights</u>") are vested in Assignor as an author of any of the works of authorship assigned under this Assignment, Assignor hereby absolutely and irrevocably waives, in favor of Assignee, to the extent permitted by applicable law, any and all claims Assignor may now or hereafter have in any jurisdiction to all such Moral Rights in relation to such works of authorship.

3. <u>Recordation and Further Actions</u>. Assignor hereby authorizes the Commissioner for Patents or Trademarks in the United States Patent and Trademark Office and the officials of corresponding entities or agencies in any applicable jurisdictions to record and register this Assignment upon request by Assignee. Following the date hereof, upon Assignee's reasonable request and at no cost to Assignee, Assignor shall take such steps and actions, and provide such cooperation and assistance to Assignee and its successors, assigns and legal representatives, including the execution and delivery of any affidavits, declarations, oaths, exhibits, assignments, powers of attorney, or other documents, as may be reasonably necessary to effect, evidence or perfect the assignment of the Assigned IP to Assignee, or any assignee or successor thereto. To effectuate the assignment of any domain name, at no cost but without additional consideration to Assignor, Assignor shall, and shall cause its affiliates and persons under its control to, take any and all actions that are reasonably necessary to perfect the assignment of the domain names and/or to transfer control of the domain names to Assignee.

4. <u>Miscellaneous</u>. Assignor and Assignee hereby agree and acknowledge that this Assignment is being entered into pursuant to and subject to the terms and conditions set forth in the Purchase Agreement. In the event of any irreconcilable inconsistency between this Assignment and the Purchase Agreement, the Purchase Agreement shall control. This Assignment will bind and inure to the benefit of Assignor and Assignees and their respective successors and permitted assigns. This Assignment may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement. A signed copy of this Assignment delivered by facsimile, e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Assignment. If any term or provision of this Assignment is invalid, illegal, or unenforceable in any jurisdiction, such invalidity, illegality, or unenforceability shall not affect the enforceability of any other term or provision of this Assignment or invalidate or render unenforceable such term or provision in any other jurisdiction.

[Signature Page Follows]

IN WITNESS WHEREOF, Assignor has duly executed and delivered this Intellectual Property Assignment Agreement as of the date first written above.

#### **Assignor:**

## DAMBALLA, INC.

By: Simon Uu Name: Simon Yu Its: Secretary

## AGREED TO AND ACCEPTED:

#### Assignee:

## HELP/SYSTEMS, LLC

By:\_\_\_\_\_

Name: Wesley C. Fredenburg Its: Secretary IN WITNESS WHEREOF, Assignor has duly executed and delivered this Intellectual Property Assignment Agreement as of the date first written above.

Assignor:

## DAMBALLA, INC.

By:\_\_\_\_\_ Name: Simon Yu Its: Secretary

AGREED TO AND ACCEPTED:

Assignee:

HELP/ŞYSTEMS, LLC By: By:\_\_\_\_\_\_ Name: Wesley C Fredenburg ..... Its: Secretary

#### EXHIBIT A TO THE INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT

# U.S. Patents

Patent No. Filing Date		Title	Owner	Status	
10,084,806	,806 08-30-2013 TRAFFIC SIMULATION TO IDENTIFY MALICIOUS ACTIVITY		DAMBALLA, INC.	Issued	
10,050,986	02-08-2017	SYSTEMS AND METHODS FOR TRAFFIC CLASSIFICATION	DAMBALLA, INC.	Issued	
10,027,688	08-10-2009	METHOD AND SYSTEM FOR DETECTING MALICIOUS AND/OR BOTNET-RELATED DOMAIN NAMES	DAMBALLA, INC.	Issued	
9,948,671	06-27-2014	METHOD AND SYSTEM FOR NETWORK- BASED DETECTING OF MALWARE FROM BEHAVIORAL CLUSTERING	DAMBALLA, INC.	Issued	
9,922,190	01-24-2013	METHOD AND SYSTEM FOR DETECTING DGA-BASED MALWARE	DAMBALLA, INC.	Issued	
9,894,088	08-30-2013	DATA MINING TO IDENTIFY MALICIOUS ACTIVITY	DAMBALLA, INC.	Issued	
9,686,291	12-04-2013	METHOD AND SYSTEM FOR DETECTING MALICIOUS DOMAIN NAMES AT AN UPPER DNS HIERARCHY	DAMBALLA, INC.	Issued	
9,680,861	08-30-2013	HISTORICAL ANALYSIS TO IDENTIFY MALICIOUS ACTIVITY	DAMBALLA, INC.	Issued	
9,571,511	06-16-2014	SYSTEMS AND METHODS FOR TRAFFIC CLASSIFICATION	DAMBALLA, INC.	Issued	
9,525,699	9 09-30-2013 METHOD AND SYSTEM FOR DETECTING MALWARE		DAMBALLA, INC.	Issued	
9,166,994	08-30-2013	8-30-2013 AUTOMATION DISCOVERY TO IDENTIFY DAMBALLA, INC. MALICIOUS ACTIVITY		Issued	
8,826,438	01-18-2011	-18-2011 METHOD AND SYSTEM FOR NETWORK- BASED DETECTING OF MALWARE FROM BEHAVIORAL CLUSTERING DAMBALLA, INC.		Issued	
8,631,489	01-25-2012	METHOD AND SYSTEM FOR DETECTING DAMBA MALICIOUS DOMAIN NAMES AT AN UPPER DNS HIERARCHY		Issued	
8,578,497	01-05-2011	METHOD AND SYSTEM FOR DETECTING	DAMBALLA, INC.	Issued	

Patent No.	Filing Date	Title	Owner	Status
		MALWARE		
9,516,058	08-09-2011	METHOD AND SYSTEM FOR DETERMINING WHETHER DOMAIN NAMES ARE LEGITIMATE OR MALICIOUS	DAMBALLA, INC.	Issued
9,930,065	03-25-2015	MEASURING, CATEGORIZING, AND/OR MITIGATING MALWARE DISTRIBUTION PATHS	DAMBALLA, INC. and UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC.	Issued
10,044,748	02-09-2016	METHODS AND SYSTEMS FOR DETECTING COMPROMISED COMPUTERS	GEORGIA TECH RESEARCH CORPORATION	Issued
9 306 969	08-30-2013	METHODS AND SYSTEMS FOR DETECTING COMPROMISED NETWORKS AND/OR COMPUTERS	GEORGIA TECH RESEARCH CORPORATION	Issued
8,566,928	10-03-2006	METHOD AND SYSTEM FOR DETECTING AND RESPONDING TO ATTACKING NETWORKS	GEORGIA TECH RESEARCH CORPORATION	Issued

# **U.S. Patent Applications**

App. No. Pub. No.		Filing Date Title		Owner	Status	
14/010,016	2014-0059216	2014-0059216   08-26-2013   METHODS AND SYSTEMS FOR NETWORK FLOW ANALYSIS   D		DAMBALLA, INC.	Published	
61/835,358	-	06-14-2013	SYSTEMS AND METHODS FOR TRAFFIC CLASSIFICATION	DAMBALLA, INC.	Expired	
61/696,013	-	08-31-2012	HISTORICAL ANALYSIS TO IDENTIFY MALICIOUS ACTICITY	DAMBALLA, INC.	Expired	
61/696,009	-	08-31-2012	DATA MINING TO IDENTIFY MALICIOUS ACTIVITY	DAMBALLA, INC.	Expired	
61/696,004	-	08-31-2012	TRAFFIC SIMULATION TO IDENTIFY MALICIOUS ACTIVITY	DAMBALLA, INC.	Expired	
61/696,001	-	08-31-2012	AUTOMATION DISCOVERY TO IDENTIFY MALICIOUS ACTIVITY	DAMBALLA, INC.	Expired	
61/693,607 - 08-27-2012 METHODS AND SYSTEMS FOR NETWORK FLOW ANALYSIS		DAMBALLA, INC.	Expired			

App. No. Pub. No. Filing Date Title		Title	Owner	Status	
61/590,633	-	01-25-2012	METHOD AND SYSTEM FOR DETECTING DGA-BASED MALWARE	DAMBALLA, INC.	Expired
61/438,492	-	02-01-2011	METHOD AND SYSTEM FOR DETECTING MALICIOUS DOMAIN NAMES AT AN UPPER DNS HIERARCHY	DAMBALLA, INC.	Expired
61/420,182	-	12-06-2010	METHOD AND SYSTEM OF ASSESSING AND MANAGING RISK ASSOCIATED WITH COMPROMISED NETWORK ASSETS	DAMBALLA, INC.	Expired
61/372,246	-	08-10-2010	BUILDING A DYNAMIC REPUTATION SYSTEM FOR DNS	DAMBALLA, INC.	Expired
61/296,288	-	01-19-2010	METHOD AND SYSTEM FOR NETWORK- BASED DETECTING OF BEHAVIORAL CLUSTERING OF MALWARE FROM BEHAVIORAL CLUSTERING	DAMBALLA, INC.	Expired
61/295,060	-	01-14-2010	METHOD AND SYSTEM FOR DETECTING MALWARE	DAMBALLA, INC.	Expired
61/292,592	-	01-06-2010	METHOD AND SYSTEM FOR DETECTING MALWARE	DAMBALLA, INC.	Expired
61/087,873	-	08-11-2008	METHOD AND SYSTEM FOR DETECTING MALICIOUS AND/OR BOTNET-RELATED DOMAIN NAMES	DAMBALLA, INC.	Expired
61/085,534	-	08-01-2008	SYSTEM AND METHOD FOR MALWARE ANALYSIS	DAMBALLA, INC.	Expired
60/799,248	-	05-10-2006	REVEALING BOTNET MEMBERSHIP USING DNSBL COUNTER-INTELLIGENCE	DAMBALLA, INC.	Expired
60/730,615	-	10-27-2005	METHOD TO DETECT AND RESPOND TO ATTACKING NETWORKS	DAMBALLA, INC.	Expired
14/616,387	2015-0222654	02-06-2015	METHOD AND SYSTEM OF ASSESSING AND MANAGING RISK ASSOCIATED WITH COMPROMISED NETWORK ASSETS	DAMBALLA, INC.	Abandoned
14/194,076	-	02-28-2014	METHOD AND SYSTEM FOR IDENTIFYING DOMAINS	DAMBALLA, INC.	Abandoned
15/384,025	2017-0201536	12-19-2016	METHOD AND SYSTEM FOR DETECTING MALWARE	DAMBALLA, INC.	Allowed
14/304,015	-	06-13-2014	-	DAMBALLA, INC.	Abandoned

App. No.	Pub. No.	Filing Date	Title	Owner	Status
13/309,202	2012-0143650	12-01-2011	METHOD AND SYSTEM OF ASSESSING AND MANAGING RISK ASSOCIATED WITH COMPROMISED NETWORK ASSETS	DAMBALLA, INC.	Abandoned

# **Foreign Patent Applications**

Country	App. No.	Pub. No.	Filing Date	Title	Owner	Status
WO	PCT/US06/38611	2007/050244	10-03-2006	METHOD AND SYSTEM FOR DETECTING AND RESPONDING TO ATTACKING NETWORKS	GEORGIA TECH RESEARCH CORPORATION	Expired

# **Trademark Applications and Registrations**

Trademark	Ser./Reg. No.	Filing/Reg. Date	Country	Owner	Status
DAMBALLA	r r	App 05-OCT-2006 Reg 20-JUL-2010	U.S.	DAMBALLA, INC.	Registered