503538126 10/23/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

EPAS ID: PAT3584753

CONVEYING PARTY DATA

Name	Execution Date
DAVID K. AHN	01/09/2013
STEVEN ROGERS	01/11/2013
SEAN MOORE	12/31/2012

RECEIVING PARTY DATA

Name:	CENTRIPETAL NETWORKS, INC.
Street Address:	2251 CORPORATE PARK DRIVE
Internal Address:	SUITE 150
City:	HERNDON
State/Country:	VIRGINIA
Postal Code:	20171

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14921718

CORRESPONDENCE DATA

Fax Number:

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: wwooten@bannerwitcoff.com, bwptopat@bannerwitcoff.com

Correspondent Name: BANNER & WITCOFF, LTD.

Address Line 1: 1100 13TH STREET NW

Address Line 2: SUITE 1200

Address Line 4: WASHINGTON, D.C. 20005

ATTORNEY DOCKET NUMBER:	007742.00063
NAME OF SUBMITTER:	WILLIAM E. WOOTEN
SIGNATURE:	/William E. Wooten/
DATE SIGNED:	10/23/2015

Total Attachments: 4

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PATENT 503538126 REEL: 036871 FRAME: 0148

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PATENT REEL: 036871 FRAME: 0149

ASSIGNMENT

	WHEREAS, We, David K. Ahn, a resident of burg, VA, and Sean Moore, a resident of Hollntions and improvements described in the follows:	is, NH (ASSIGNORS), are	O ,
	U.S. Provisional Application numbertitle	, filed on	, and having the
\boxtimes	U.S. patent application no. <u>13/739,178</u> , filed <u>SWAPPING IN A PACKET NETWORK</u>	on even date herewith, and	having the title RULE
	and WHEREAS		
	Centripetal Networks, Inc. 41378 Raspberry Drive Leesburg, VA 20176-7826		

ASSIGNEE, desires to acquire the entire right, title and interest in and to the said application, inventions and improvements and any patents that may be granted on or as a result thereof in the United States of America (U.S.) and in any and all foreign countries;

USA

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged,

We hereby assign, to the above named ASSIGNEE, its successors, assigns and legal representatives (NOMINEES) the entire right, title and interest in and to said application, inventions and improvements throughout the world and to any and all patents, petty patents and utility model patents which may be granted therefor, and all continuations, continuations-in-part, divisions, reissues, extensions, renewals, and any non-provisional based on a provisional thereof (LETTERS PATENT).

And we covenant that we have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement or do anything in conflict herewith;

And we further covenant and agree that we will without undue delay execute without further consideration all such papers as may be necessary to perfect the title to said application, inventions and improvements, and LETTERS PATENT in the ASSIGNEE or its NOMINEES, and we agree to communicate to said ASSIGNEE or its NOMINEES all known facts respecting said application, inventions, improvements, and LETTERS PATENT, to testify in any legal proceedings, to sign all lawful papers, and generally to do all things necessary to aid ASSIGNEE or its NOMINEES to obtain and enforce for their own benefit patent protection for said application, inventions and improvements in any and all countries, all at the expense, however, of the ASSIGNEE or its NOMINEES;

And we authorize the ASSIGNEE or its NOMINEES to file in our name or their own, as appropriate, application for LETTERS PATENT in any and all countries of the world, and we authorize and request the Commissioner of Patents and Trademarks of the United States, and any proper official of any country, to issue to said ASSIGNEE or its NOMINEES any and all LETTERS PATENT for said application, inventions and improvements, for their sole use, to the full end of the term for which such LETTERS PATENT may be granted;

And we hereby grant our attorneys at the law firm of Banner & Witcoff the power to insert into this document information sufficient to identify the patent application to which this assignment pertains.

Date: 1-9-2013	Inventor:
	David K. Āhn
Date:	Inventor:
	Steven Rogers
Date:	Inventor:
Date	Sean Moore

LAW OFFICES

BANNER & WITCOFF, LTD. 1100 13th STREET, N.W., Ste. 1200 WASHINGTON, D.C. 20005-4051 (202) 824-3000 And we authorize the ASSIGNEE or its NOMINEES to file in our name or their own, as appropriate, application for LETTERS PATENT in any and all countries of the world, and we authorize and request the Commissioner of Patents and Trademarks of the United States, and any proper official of any country, to issue to said ASSIGNEE or its NOMINEES any and all LETTERS PATENT for said application, inventions and improvements, for their sole use, to the full end of the term for which such LETTERS PATENT may be granted;

And we hereby grant our attorneys at the law firm of Banner & Witcoff the power to insert into this document information sufficient to identify the patent application to which this assignment pertains.

Date:	Inventor: David K. Ahn
Date:	Inventor: Steven Rogers
Date: 31-Dec-2012	Inventor: Jean Manne

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And we hereby grant our attorneys at the law firm of Banner & Witcoff the power to insert into this document information sufficient to identify the patent application to which this assignment pertains.

Date:	Inventor:
	David K. Ahn
Date: <u>Jan 11, 2013</u>	Inventor:
	Steven Rogers
Date:	Inventor:
•	Sean Moore

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