504381105 05/23/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4427800

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
AIRVANA LP	09/04/2015	

RECEIVING PARTY DATA

Name:	COMMSCOPE TECHNOLOGIES LLC
Street Address:	1100 COMMSCOPE PLACE SE
City:	HICKORY
State/Country:	NORTH CAROLINA
Postal Code:	28602

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15230936

CORRESPONDENCE DATA

Fax Number: (952)465-0771

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.

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Email:docketing@fogglaw.comCorrespondent Name:FOGG & POWERS LLC

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ATTORNEY DOCKET NUMBER:	100.1651US02
NAME OF SUBMITTER:	DANIELLE N. SUESS
SIGNATURE:	/Danielle N. Suess/
DATE SIGNED:	05/23/2017

Total Attachments: 10

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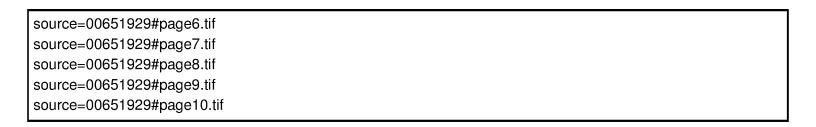
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PATENT REEL: 042483 FRAME: 0680

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PATENT REEL: 042483 FRAME: 0681

PATENT ASSIGNMENT AGREEMENT

This Patent Assignment Agreement (this "Agreement"), effective as of the execution date written below, is made by Airvana LP ("Assignor"), a Delaware limited partnership, in favor of CommScope Technologies LLC ("Assignee"), a Delaware limited liability company.

WITNESSETH:

WHEREAS, pursuant to Section 1.1 of that certain Asset Purchase Agreement, dated as of September 4, 2015, by and among Assignor, Airvana Networks India Private Limited, and Assignee (the "Asset Purchase Agreement"), Assignor desires to transfer to Assignee the Patents (as hereinafter defined);

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and of other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor hereby agrees as follows:

- Assignment of the Patents. Assignor does hereby assign, grant, transfer, 1. contribute and deliver to Assignee the full, exclusive and entire right, title, and interest in and to the patents and patent applications listed on Schedule A attached hereto, in and to any divisions, continuations, continuations-in-part, renewals and reissues thereof, and in and to all inventions disclosed and described therein, as well as any corresponding (in whole or in part) future United States or foreign patents and patent applications, and in and to the right to claim any applicable priority rights arising from the schedule patents and patent applications or otherwise required for said corresponding future United States or foreign patents and applications under the terms of any applicable conventions, treaties, statutes, or regulations (collectively, the "Patents"). Assignor hereby requests the Commissioner for Patents to issue any and all Patents to Assignee, as the assignee, for its interest and for the sole use and benefit of Assignee and its assigns and legal representatives. All rights to the Patents, including, without limitation, the right to sue for any damages and other remedies in respect of any infringement of the Patents which may have occurred prior to the date of this Agreement shall be the sole property of Assignee and inure to the benefit of Assignee.
- 2. <u>Further Assurances</u>. Assignor agrees to sign all documents, including assignments, transfers and related powers of attorney, and take all further actions as reasonably requested by Assignee to effect, record, perfect or enforce the transfers set forth in this Agreement and ensure that all of Assignor's right, title and interest in and to the Patents and all registrations and recordations thereof, are properly assigned to Assignee, its successors and assigns in accordance with this Agreement.
- 3. <u>Successors and Assigns</u>. The terms and provisions of this Agreement and the respective rights and obligations of Assignor and Assignee hereunder shall be binding upon, and inure to the benefit of, their respective successors and assigns.
- 4. <u>Recordings</u>. An executed copy of this Agreement may be filed with the United States Patent and Trademark Office or in the patent office of any other country or region, as applicable, by Assignee or Assignor at any time.

PATENT REEL: 0**32923** FRAME: 0**582** IN WITNESS WHEREOF, Assignor has caused this Agreement to be executed and delivered as of the execution date written below.

AIRVANA LP

Name: Ki

Kichard Lowe

Title: President

Execution Date: October 1, 2015

* * * *

[Signature page to Patent Assignment Agreement]

Schedule A

Country Name	Filed Date	Serial #	Title	Issue Date	Patent #
UNITED	12/15/2006	11/640,415	CONTROLLING	4/17/2012	8,160,629
STATES			REVERSE LINK		
			INTERFERENCE IN		
			PRIVATE ACCESS		
			POINTS FOR		
			WIRELESS	* * * * * * * * * * * * * * * * * * *	
			NETWORKING		
UNITED	12/15/2006	11/640,501	PROVISIONING	4/1/2014	8,688,809
STATES		ŕ	PRIVATE ACCESS		
			POINTS FOR		
			WIRELESS		
			NETWORKING		
UNITED	9/6/2007	0905844.7	PROVISIONING	3/9/2011	2456090
KINGDOM			PRIVATE ACCESS		
			POINTS FOR		
			WIRELESS		
			NETWORKING		
UNITED	12/15/2006	11/640,503	CONFIGURING	12/13/2011	8,078,165
STATES	12/13/2000	11/0/10,505	PREFERRED USER	12/13/2011	0,070,100
DITTIES.			ZONE LISTS FOR		
			PRIVATE ACCESS		
			POINTS FOR		
			WIRELESS		
			NETWORKING		
UNITED	12/20/2006	11/642,245	COMMUNICATION	6/4/2013	8,457,084
STATES	12/20/2000	11/042,243	GROUP	0/4/2013	0,437,004
SIAILS			CONFIGURATION		
			IN A NETWORK		
CHINA	12/18/2007	200780051497.8	COMMUNICATION	1	
CHINA	12/18/2007	200700031497.0	GROUP		
			CONFIGURATION		
T EN TERTETEN	12/19/2007	0010000	IN A NETWORK	5/11/0011	0.457412
UNITED	12/18/2007	0910839.0	COMMUNICATION	5/11/2011	2457413
KINGDOM			GROUP		
			CONFIGURATION		
TATATT	10/10/2007	0000 F4010F	IN A NETWORK	7/10/0010	5010010
JAPAN	12/18/2007	2009-543127	COMMUNICATION	7/12/2013	5313918
			GROUP		
			CONFIGURATION		
			IN A NETWORK		

Country Name	Filed Date	Serial #	Title	Issue Date	Patent#
UNITED STATES	12/28/2006	11/617,298	ASSIGNING CODE SPACE TO PORTABLE BASE STATIONS	7/24/2012	8,229,498
UNITED STATES	7/23/2012	13/555,830	ASSIGNING CODE SPACE TO PORTABLE BASE STATIONS	5/20/2014	8,731,574
UNITED STATES	12/27/2006	11/645,986	AUTHENTICATION PROTOCOL	5/8/2012	8,176,327
UNITED STATES	12/29/2006	11/618,106	HANDOFF OF A SECURE CONNECTION AMONG GATEWAYS	4/12/2011	7,926,098
UNITED STATES	4/13/2007	11/735,107	ACTIVATING PRIVATE ACCESS POINTS FOR WIRELESS NETWORKING	3/19/2013	8,400,989
UNITED STATES	4/13/2007	11/735,073	CONTROLLING ACCESS TO PRIVATE ACCESS POINTS FOR WIRELESS NETWORKING	7/15/2014	8,781,483
UNITED KINGDOM	4/11/2008	0918096.9	CONTROLLING ACCESS TO PRIVATE ACCESS POINTS FOR WIRELESS NETWORKING	11/30/2011	2461444
UNITED STATES	12/31/2007	11/967,370	NETWORK ADDRESS TRANSLATION FOR TUNNEL MOBILITIY	1/1/2013	8,345,694
UNITED STATES	8/3/2007	11/833,740	DISTRIBUTED NETWORK	9/24/2013	8,543,139
UNITED STATES	12/31/2007	11/968,090	ADAPTATION OF PORTABLE BASE STATIONS INTO CELLULAR NETWORKS	10/8/2013	8,554,231

Country Name	Filed Date	Serial #	Title	Issue Date	Patent #
UNITED	3/28/2011	13/073,512	ADAPTATION OF	6/10/2014	8,750,271
STATES			PORTABLE BASE		
			STATIONS INTO		
			CELLULAR		
			NETWORKS		
UNITED	12/19/2008	1011043.5	ADAPTION OF	8/1/2012	1011043.5
KINGDOM			PORTABLE BASE		
			STATIONS INTO		
			CELLULAR		
			NETWORKS (as		
			amended)		
INDIA	12/19/2008	2406/KOLNP/2010	AGGREGATING		
			PORTABLE BASE		
			STATIONS OF		
			FEMTOCELLS		
UNITED	12/21/2007	7 11/962,983	ALLOCATING	5/28/2013	8,452,299
STATES		, and the second	CODE SPACE TO		
			BASE STATIONS		
UNITED	9/24/2007	11/903,742	SELECTING	11/26/2013	8,594,663
STATES		Í	EMBEDDED CELLS		, ,
			IN WIRELESS		
			NETWORKS		
UNITED	10/2/2007	11/866,238	WIRELESS	4/26/2011	7,933,619
STATES		,,	CONTROL OF		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
			ACCESS POINTS		
UNITED	10/2/2008	1005735.4	WIRELESS	9/19/2012	2466155
KINGDOM			CONTROL OF		
			ACCESS POINTS		
UNITED	12/18/2007	11/958,975	ABSOLUTE TIME	8/27/2013	8,520,659
STATES			RECOVERY		-,,
UNITED	12/19/2007	11/960,026	PROXIMITY	1/15/2013	8,355,727
STATES	12/19/2007	11/700,020	DETECTION IN A	1/13/2013	0,333,727
BIALLO			NETWORK		
UNITED	12/28/2007	11/966,195	SECURE MOBILE	 	8,060,058
STATES	12/20/2007	11/900,193	BASE STATION	11/13/2011	8,000,038
BIALLS			CONNECTIONS		
UNITED	12/21/2007	11/962,734	PROVIDING ZONE	12/24/2013	8,615,593
STATES	12/21/2007	11/204,134	INDICATIONS FOR	12/27/2013	0,010,020
STATES			WIRELESS		
			NETWORKING		
UNITED	12/18/2007	11/958,934	ATTRACTING	9/4/2012	8,259,671
	12/10/2007	11/700,704	ACCESS	7/4/2012	0,239,071
STATES			į.		
			TERMINALS		

Country Name	Filed Date	Serial #	Title	Issue Date	Patent #
UNITED	12/31/2007	11/968,088	IMS SECURITY FOR		
STATES		,	FEMTOCELLS		
UNITED	12/21/2007	11/963,574	ADJUSTING	12/9/2014	8,909,278
STATES		· ,	WIRELESS SIGNAL	X	, ,
			TRANSMISSION		
			POWER		
UNITED	12/18/2008	1010586.4	ADJUSTING	9/12/2012	2468451
KINGDOM			WIRELESS SIGNAL		
			TRANSMISSION		
			POWER		
UNITED	12/31/2007	11/967,925	INTERFERENCE	11/16/2010	7,835,698
STATES			MITIGATION IN		
			WIRELESS		
T 7% TYZYYYY	10/05/0005	33100000000	NETWORKS	1/21/2012	2.165.500
UNITED	12/27/2007	11/965,070	INTERFERENCE	4/24/2012	8,165,528
STATES			MITIGATION IN WIRELESS	1 1 1 1 1	
			NETWORKS	X X X X X X X X X	
UNITED	12/19/2007	11/960,100	MANAGING	7/19/2011	7,983,672
STATES	12/19/2007	11/900,100	COMMUNICATIONS	1/19/2011	1,983,072
SIAIES			WITH PRIVATE		
			ACCESS POINTS IN		
			WIRELESS		
			NETWORKS		
UNITED	12/28/2007	11/966,535	SECURE PROXIES	3/19/2013	8,402,143
STATES		,	FOR FLAT		-,,-
			NETWORKS	X X X X X	
UNITED	12/18/2008	1011041.9	SECURE PROXIES	9/19/2012	2468259
KINGDOM			FOR FLAT	1 1 1 1 1	
			NETWORKS		
UNITED	9/23/2008	12/236,420	ACCESS TERMINAL	7/24/2012	8,229,397
STATES			AUTHORIZATION		
			AT PRIVATE		
			ACCESS POINTS IN		
			WIRELESS		
V VA TVIVIVANA	2 (2 2 (2 2 2 2	12/201 000	NETWORKS	10/20/2012	0.205.256
UNITED	8/29/2008	12/201,380	PRIVATE ACCESS	10/23/2012	8,295,256
STATES			POINT BEACON		
			SIGNALS IN WIRELESS		
			NETWORKS		
EUROPEAN	8/1/2005	05767588.6	SIGNAL	4/25/2012	1779543
PATENT	0/1/2003	03707366.0	TRANSMISSION	7/23/2012	1117543
CONVENTION			METHOD FROM A		
	<u> </u>		1,111,110,110,111,111		

Country Name	Filed Date	Serial#	Title	Issue Date	Patent #
- UK			LOCAL NETWORK NODE		
UNITED KINGDOM	8/1/2005	05767588.6	SIGNAL TRANSMISSION METHOD FROM A LOCAL NETWORK NODE	4/25/2012	1779543
UNITED STATES	1/30/2007	11/572,973	SIGNAL TRANSMISSION METHOD FROM A LOCAL NETWORK NODE	8/6/2013	8,503,342
UNITED STATES	3/29/2011	13/074,813	METHOD AND SYSTEM OF SETTING TRANSMITTER POWER LEVELS	11/13/2012	8,311,570
UNITED STATES	11/9/2012	13/673,648	METHOD AND SYSTEM OF SETTING TRANSMITTER POWER LEVELS	11/11/2014	8,886,249
EUROPEAN PATENT CONVENTION	8/1/2005	05767920.1	POWER CONTROL IN A LOCAL NETWORK NODE (LNN)		
UNITED STATES	1/30/2007	11/572,977	POWER CONTROL IN A LOCAL NETWORK NODE (LNN)	10/16/2012	8,290,527
EUROPEAN PATENT CONVENTION	8/1/2005	05767600.9	A LOCAL NETWORK NODE		
UNITED STATES	1/30/2007	11/572,979	A LOCAL NETWORK NODE		
UNITED KINGDOM	10/7/2006	0619892.3	IN-C DEVICE TO CORE NETWORK INTERFACE SPECIFICATION	8/10/2011	2452688
UNITED STATES	10/7/2008	12/246,861	ALLOCATING COMMUNICATION FREQUENCIES TO CLUSTERS OF	1/27/2015	8,942,136

Country Name	Filed Date	Serial#	Title	Issue Date	Patent #
			ACCESS POINTS		
UNITED STATES	12/24/2008	12/343,850	OBTAINING TIME INFORMATION IN A CELLULAR NETWORK	2/19/2013	8,379,625
UNITED STATES	12/29/2008	12/345,472	PROVIDING A CELLULAR NETWORK WITH CONNECTIVITY TO A DIFFERENT NETWORK	2/10/2015	8,953,566
UNITED STATES	12/31/2008	12/347,574	PERSONAL ACCESS POINT MEDIA SERVER	7/7/2015	9,078,284
UNITED STATES	12/23/2008	12/343,438	ACCESS TERMINAL HAND-OFF METHODS IN WIRELESS NETWORKS	7/8/2014	8,774,134
UNITED STATES	12/31/2008	12/347,511	GEOGRAPHY AWARE PEER-TO- PEER OVERLAY CREATION	10/2/2012	8,280,376 B2
UNITED STATES	12/30/2008	12/346,464	INFORMATION SHARING IN A PRIVATE ACCESS POINT NETWORK	5/1/2012	8,170,598
UNITED STATES	11/18/2011	13/300,242	INFORMATION SHARING IN A PRIVATE ACCESS POINT NETWORK	12/4/2012	8,326,342
UNITED STATES	12/23/2008	12/343,445	ESTIMATING BANDWIDTH IN COMMUNICATION NETWORKS	8/9/2011	7,995,493
UNITED STATES	12/31/2008	12/347,201	FEMTO PERSONAL PROXY APPLICATION CLIENT		
UNITED STATES	12/31/2008	12/347,234	FEMTO PERSONAL POLICY SERVER	4/8/2014	8,693,987
UNITED STATES	1/7/2009	12/350,156	POWER CONTROL FOR REVERSE LINK	4/17/2012	8,160,631

Country Name	Filed Date	Serial#	Title	Issue Date	Patent #
UNITED	5/18/2009	12/467,913	MULTI-CARRIER	9/24/2013	8,542,707
STATES			SYSTEM		
			SELECTION		
JAPAN	5/17/2010	2012-511941	MULTI-CARRIER	11/29/2013	5420069
			SYSTEM		
		***************************************	SELECTION		
SOUTH	5/17/2010	10-2011-7030037	MULTI-CARRIER	2/14/2014	10-
KOREA			SYSTEM		1365583
		***************************************	SELECTION		
UNITED	3/17/2009	12/405,641	IDENTIFYING	8/12/2014	8,805,371
STATES			HAND-OVER		
			TARGETS		
UNITED	6/9/2010	12/797,138	MOBILITY IN A	2/26/2013	8,385,291
STATES			WIRELESS		
			ENTERPRISE		
Y TX 7777Y3YX	2/25/2012	4 N 199 (99 7 1 N 199)	NETWORK	10/00/0011	0.050.510
UNITED	2/25/2013	13/776,427	MOBILITY IN A	10/28/2014	8,873,512
STATES			WIRELESS		
			ENTERPRISE		
TENTITETEN	6/20/2000	10/405 105	NETWORK	3/15/2011	7,007,571
UNITED	6/30/2009	12/495,125	MOBILE AWARE	3/13/2011	7,907,571
STATES	4.5 (5.45.5.5.5)		BEACON	# / 5 / # O 5 .	
UNITED	10/7/2009	12/575,113	MITIGATING	5/6/2014	8,718,697
STATES			INTERFERENCE		
			USING		
			COOPERATIVE SCHEDULING		
UNITED	11/30/2009	12/627,285	DETERMINING IF	12/25/2012	8,340,636
STATES	11/30/2009	12/02/,283	AN ACCESS	12/23/2012	8,340,030
STATES			TERMINAL IS		
			AUTHORIZED TO		
			USE AN ACCESS		
			POINT		
UNITED	5/31/2013	13/907,508	PROVIDING		
STATES	0,01,2010	10,00,000	CIRCUIT		
			SWITCHED		
			SERVICE		
UNITED	2/7/2013	13/762,283	RADIO ACCESS		
STATES		,	NETWORKS		
WIPO	2/6/2014	PCT/US2014/015137	RADIO ACCESS		
,, <u>,,</u>		Z O I / O GMOI // O I O I O I	NETWORKS		
UNITED	2/7/2013	13/762,284	RADIO ACCESS	 	
	2/112/013	13/1029207			
STATES			NETWORKS		

Country Name	Filed Date	Serial #	Title	Issue Date	Patent #
UNITED STATES	2/7/2013	13/762,292	RADIO ACCESS NETWORKS		
UNITED STATES	6/9/2015	14/734,311	RADIO ACCESS NETWORKS		
WIPO	6/9/2014	PCT/US2015/034829	RADIO ACCESS NETWORKS		
UNITED STATES	6/9/2014	62/009,653	RADIO ACCESS NETWORKS		
UNITED STATES	9/16/2014	62/051,212	RADIO ACCESS NETWORKS		