# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7332509

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	PARTIAL RELEASE OF ABL SECURITY INTEREST

# **CONVEYING PARTY DATA**

Name	Execution Date
JPMORGAN CHASE BANK, N.A.	05/13/2022

# **RECEIVING PARTY DATA**

COMMSCOPE TECHNOLOGIES LLC
1100 COMMSCOPE PLACE SE
HICKORY
NORTH CAROLINA
28602
ARRIS ENTERPRISES LLC
1100 COMMSCOPE PLACE SE
HICKORY
NORTH CAROLINA
28602

## **PROPERTY NUMBERS Total: 45**

Property Type	Number
Patent Number:	8976067
Patent Number:	8644223
Patent Number:	10069733
Patent Number:	7190672
Patent Number:	6873839
Patent Number:	6904275
Patent Number:	7151769
Patent Number:	7072650
Patent Number:	7145903
Patent Number:	6961575
Patent Number:	7756041
Patent Number:	6970703
Patent Number:	7522537
Patent Number:	7412241
Patent Number:	7280483

**PATENT** 

**REEL: 060073 FRAME: 0483** 507285586

Property Type	Number
Patent Number:	7734809
Patent Number:	7558818
Patent Number:	7061925
Patent Number:	7215966
Patent Number:	7408911
Patent Number:	7920586
Patent Number:	8180351
Patent Number:	7706390
Patent Number:	7710986
Patent Number:	7676805
Patent Number:	7382740
Patent Number:	7269155
Patent Number:	7796633
Patent Number:	7801143
Patent Number:	7315548
Patent Number:	7969928
Patent Number:	7801079
Patent Number:	8676245
Patent Number:	8270429
Patent Number:	8248949
Patent Number:	8068454
Patent Number:	7701887
Patent Number:	9166799
Patent Number:	8374174
Patent Number:	8279800
Patent Number:	8274929
Patent Number:	9451452
Patent Number:	8031647
Application Number:	14872846
Patent Number:	8548526

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PATENT

REEL: 060073 FRAME: 0484

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NAME OF SUBMITTER:	ELAINE CARRERA
SIGNATURE:	/Elaine Carrera/
DATE SIGNED:	05/16/2022
Total Attachments: 8	
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PATENT REEL: 060073 FRAME: 0485

# PARTIAL TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENTS

May 13, 2022

This PARTIAL TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENTS (the "Release") is executed as of the date hereof, by JPMorgan Chase Bank, N.A., as Collateral Agent (together with its permitted successors in such capacity, the "Collateral Agent") for the Secured Parties (as defined in the Credit Agreement referred to below) in favor of COMMSCOPE TECHNOLOGIES LLC, a Delaware limited liability company ("CommScope") and ARRIS ENTERPRISES LLC, a Delaware limited liability company ("ARRIS" and together with CommScope, the "Grantors", and, each a "Grantor"). Unless otherwise indicated, capitalized terms used herein and not otherwise defined herein shall have the respective meanings provided therefor in the Revolving Credit Agreement as referred to below.

WHEREAS, reference is made to that certain Revolving Credit Agreement, dated as of April 4, 2019 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Revolving Credit Agreement"), by and among CommScope Holding Company, Inc. ("Holdings"), CommScope, Inc. (the "Borrower"), the subsidiaries of the Borrower identified therein as Co-Borrowers, JPMorgan Chase Bank, N.A., as the Administrative Agent and Collateral Agent and the Lenders party thereto from time to time;

WHEREAS, reference is made to that certain Revolving Credit Facility Security Agreement, dated as of April 4, 2019 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement"), by and among Holdings, the Borrower, the other grantors party thereto from time to time and the Collateral Agent;

WHEREAS, each Grantor and the Collateral Agent executed a certain Patent Security Agreement, dated as of April 4, 2019 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Patent Security Agreement") pursuant to which such Grantor (among others) granted to the Collateral Agent a continuing security interest in all of such Grantor's right, title and interest in, to and under the Collateral (as defined therein) (the "Security Interest"), including the Patents listed on Exhibit A hereto (the "Patents");

WHEREAS, the Patent Security Agreement was recorded with the United States Patent and Trademark Office ("<u>USPTO</u>") on July 3, 2019 at Reel 049892 and Frame 0396; and

WHEREAS, the Collateral Agent has agreed to terminate and release its Security Interest solely with respect to the Patents listed on Exhibit A hereto.

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which the parties acknowledge, the Collateral Agent hereby releases, terminates and discharges the Security Interest granted under the Patent Security Agreement solely with respect to the Patents, and any right, title or interest of the Collateral Agent arising under the Patent Security Agreement in and to the Patents shall hereby terminate, cease and become void. This Release does not release, relinquish, discharge or terminate the Collateral Agent's security interest in any Intellectual Property or any other asset of each Grantor other than the Patents. The Collateral Agent hereby consents to the recording of this Release with the USPTO and agrees to duly execute and deliver any further documents and do such other acts as may be reasonably necessary, at each Grantor's sole cost and expense, to effect the release of the Security Interest solely with respect to the Patents as contemplated hereby.

This Release shall be governed by, and construed in accordance with, the laws of the State of New York.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the undersigned has caused this Release to be duly executed as of the date first written above.

JPMORGAN CHASE BANK, N.A., as Collateral Agent

Name: Inderjeet Aneja

Title: Executive Director

IN WITNESS WHEREOF, the undersigned has caused this Release to be duly executed as of the date first written above.

# JPMORGAN CHASE BANK, N.A., as Collateral Agent

# **COMMSCOPE TECHNOLOGIES LLC**, as Grantor ARRIS ENTERPRISES LLC, as Grantor

Name: Kyle Lorentzen

DocuSigned by:

Title: Executive Vice President and Chief Financial

Officer

# EXHIBIT A

See attached.

PATENT REEL: 060073 FRAME: 0489

# Partial Release of Term Loan Patent Security Agreement recorded July 3, 2019 at Reel/Frame 049905/0504 Partial Release of ABL Patent Security Agreement recorded July 3, 2019 at Reel/Frame 049892/0396 and

Part	Total Control		<b>,</b>	T 48 2 2 2 87		
dio frequency 13588172 817/2012 8644223 2/4/2014   nel metropolitan 10021062 12/19/2001 7190672 3713/2007   09815164 3722/2001 6873839 3/29/2005   09815164 3722/2001 6994275 6/7/2005   098829305 5/18/2001 7072650 7/4/2006   098829305 6/15/2001 7072650 7/4/2006   09982790 6/29/2001 7072500 7/4/2006   09982790 6/29/2001 7072500 7/4/2006   09982790 6/29/2001 7072500 7/4/2006   099987790 5/31/2002 6970703 11/29/2006   099287979 5/31/2002 7756041 7/13/2010   09928799 6/7/2004 7412241 8/12/2009   09928799 6/7/2004 7412241 8/12/2009   09928799 6/7/2004 7412241 8/12/2009   09928799 6/7/2004 7412241 8/12/2009   09928799 6/7/2004 7412241 8/12/2009   09928799 6/7/2004 7412241 8/12/2009   09928799 6/7/2004 7412241 8/12/2009   09928799 6/7/2004 7412241 8/12/2009   09928799 6/7/2004 7412241 8/12/2009   09928799 6/7/2004 7412241 8/12/2009   09928799 6/7/2004 7412241 8/12/2009   09928799 6/7/2004 7412241 8/12/2009   09928799 6/7/2004 7412241 8/12/2009   099287979 6/7/2004 7412241 8/12/2009   09928799 6/7/2004 7412241 8/1	Antenna module having integrated radio frequency circuitry	13492339	6/8/2012	8976067	3/10/2015	COMMSCOPE TECHNOLOGIES LLC
nel metropolitan         15347369         8252016         10069733         94/2018           nel metropolitan         10021062         12/19/2001         7190672         3/13/2007           0981514         3/22/2001         7190672         3/13/2007           0988790         6/18/2001         6873839         3/29/2005           n battery-power         09887920         6/18/2001         7072550         7/14/2006           ar networks         0987929         6/18/2001         7072550         12/19/2006           ar networks         09952928         9/17/2001         6961575         11/1/2005           re architecture         10753346         1/13/2002         7756941         7/13/2010           re architecture         10753346         1/13/2004         7522537         4/21/2009           re architecture         10053518         1/23/2002         6970703         11/29/2005           and nodes in a         10863183         6/7/2004         7528483         109/2009           ricless network         10863453         6/7/2004         7734809         6/8/2010           network         10863871         6/7/2004         7734809         6/8/2010           sis a wireless         10863872         11/8/2004	Enterprise mobile network for providing cellular wireless service using licensed radio frequency spectrum and the session initiation protocol	13588172	8/17/2012	8644223	2/4/2014	COMMSCOPE TECHNOLOGIES LLC
nel metropolitan 10021062 12/19/2001 7190672 3/13/2007   09815164 3/22/2001 6873839 3/29/2005   09815164 3/22/2001 6873839 3/29/2005   09818164 3/22/2001 6893839 3/29/2005   6/7/2005 6/7/2005 6/7/2005 6/7/2005   2/77500   2/77	Managing Ethernet backpressure at a network device	15247369	8/25/2016	10069733	9/4/2018	ARRIS ENTERPRISES LLC
09815164         3)22/2001         6873839         3/29/2005           an battery-power         09828/20         5/18/2001         69/1275         6/7/2005           ar networks         09828/20         6/15/2001         70726/30         7/4/2006           ar networks         0989/790         6/29/2001         70726/30         7/4/2006           ar networks         0989/790         6/29/2001         70726/30         11/29/2006           ar networks         0989/799         5/31/2002         75041         7/13/2010           ar network         10055518         1/23/2002         6970703         11/29/2005           and nodes in a         10753346         1/13/2004         7522537         4/21/2009           sincless network         10863183         6/7/2004         7228483         10/9/2007           mmunication         10863453         6/7/2004         724809         6/8/2010           mmunication         10863871         6/7/2004         724809         6/8/2010           iteless         10863871         6/7/2004         721596         5/8/2007           sin a wireless         10863871         1/7/2004         721596         5/8/2007           sin a wireless         1028623         1/7/2005	System and method for using destination-directed spreading codes in a multi-channel metropolitan area wireless communications network	10021062	12/19/2001	7190672	3/13/2007	ARRIS ENTERPRISES LLC
n battery-power         09859305         51,18/2001         6904275         6/7/2005           ar networks         0982720         6/15/2001         7151769         12/19/2006           ar networks         09897790         6/29/2001         7072650         7/4/2006           ar networks         09934159         9/12/2001         7072650         7/4/2006           09948129         9/12/2001         691575         11/12/2006           10252518         1/13/2002         6970703         11/29/2005           and nodes in a         10755346         1/13/2004         7522537         4/21/2009           iticless network by         10863183         6/7/2004         7412241         8/12/2008           iticless network by         10863183         6/7/2004         7280483         10/9/2007           mmunication         10863183         6/7/2004         7280483         10/9/2007           mmunication         10863183         6/7/2004         7280483         10/9/2007           iricless network by         10863871         6/7/2004         724899         6/8/2010           iricless         10863871         6/7/2004         721596         5/8/2007           11268121         117/8/2004         721596         <	Prioritized-routing for an ad-hoc, peer-to-peer, mobile radio access system	09815164	3/22/2001	6873839	3/29/2005	ARRIS ENTERPRISES LLC
in battery-power         09882820         6/15/2001         7151769         12/19/2006           ar networks         09897790         6/29/2001         7072650         7/4/2006           ar networks         09948159         9/6/2001         7145903         12/5/2006           ar networks         09952928         9/17/2001         6961575         11/1/2005           ar network         10655518         1/23/2002         6776041         713/2010           and nodes in a         10755346         1/13/2004         7522537         471/2009           tions network by         10863453         6/7/2004         7280483         10/9/2007           mmunication         10863453         6/7/2004         7258818         7/7/2009           iicless         10863514         6/7/2004         7258818         7/7/2009           iicless         10863871         6/7/2004         7258818         7/7/2009           iicless         10863871         6/7/2004         7215966         5/8/2007           iin a wireless         1082837         11/8/2004         7215966         5/8/2007           inetwork         11238672         9/2/2005         720586         4/5/2011           test over a network         11258612	Prioritized-routing for an ad-hoc, peer-to-peer, mobile radio access system	09859305	5/18/2001	6904275	6/7/2005	ARRIS ENTERPRISES LLC
ar networks 09897790 6/29/2001 7072650 7/4/2006 2714/2001 11/25/2006 2714/2001 11/25/2006 2714/2001 11/25/2006 2714/2001 11/25/2006 2714/2001 11/25/2006 2714/2001 2714/2001 2714/2001 2714/2001 2714/2001 2714/2001 2714/2001 2714/2001 2714/2001 2714/2001 2714/2001 2714/2001 2714/2001 2714/2001 2714/2001 2714/2001 2714/2001 2714/2009 2714/2001 2714/2001 2714/2009 2714/2001 2714/2001 2714/2009 2714/2001 271	Prioritized-routing for an ad-hoc, peer-to-peer, mobile radio access system based on battery-power levels and type of service	09882820	6/15/2001	7151769	12/19/2006	ARRIS ENTERPRISES LLC
09948159 9/6/2001 7145903 12/5/2006 ar networks 09952928 9/17/2001 7145903 11/1/2005 re architecture 10157979 5/31/2002 69161575 11/1/2005 11/17/2001 6961575 11/1/2005 11/17/2001 6961575 11/1/2005 11/17/2002 6970703 11/29/2005 11/17/2004 7522537 4/21/2009 11/17/2004 7522537 4/21/2009 11/17/2004 7522537 4/21/2009 11/17/2004 7522537 4/21/2009 11/17/2004 7522537 4/21/2009 11/17/2004 7522537 4/21/2009 11/17/2004 7522537 4/21/2009 11/17/2004 7522537 4/21/2009 11/17/2004 7522537 4/21/2009 11/17/2004 7528818 7/7/2009 11/17/2004 7558818 7/7/2009 11/17/2004 7558818 7/7/2009 11/17/2004 7558818 7/7/2009 11/17/2004 7558818 7/7/2009 11/17/2004 7558818 7/7/2009 11/17/2004 7558818 7/7/2009 11/17/2004 7558818 7/7/2009 11/17/2004 7558818 7/7/2009 11/17/2005 756801 5/8/2007 11/17/2005 7920586 4/5/2011 11/17/2005 7920586 4/5/2011 11/17/2006 756805 3/9/2010 11/17/2006 756805 3/9/2010 11/17/2006 756805 3/9/2010 11/17/2006 7580143 9/11/2010 11/17/2006 7580143 9/11/2010 11/17/2007 7580143 9/11/2010 11/17/2008 11/17/2006 7315548 11/1/2008 11/17/2007 7569928 6/28/2011 11/17/2007 8876245 3/18/2011 11/17/2007 8876245 3/18/2012 11/17/2007 8876245 3/18/2012	Ad hoc peer-to-peer mobile radio access system interfaced to the PSTN and cellular networks	09897790	6/29/2001	7072650	7/4/2006	ARRIS ENTERPRISES LLC
re architecture 10157979 5/31/2002 6961575 11/1/2005 re architecture 10157979 5/31/2002 6970703 11/29/2005 and nodes in a 10755346 1/13/2004 752537 4/21/2009 and nodes in a 10755346 1/13/2004 7522537 4/21/2009 and nodes in a 10755346 1/13/2004 7522537 4/21/2009 ireless network 10863069 6/7/2004 7528537 4/21/2009 ireless network 10863453 6/7/2004 7528483 10/9/2007 mmunication 10863453 6/7/2004 7534809 6/8/2010 ireless 10863710 6/7/2004 7558818 7/7/2009 ireless 10863871 6/7/2004 7558818 7/7/2009 ireless 10863871 6/7/2004 7061925 6/13/2006 irentwork 10863871 6/7/2004 7061925 6/13/2006 irentwork 10982837 11/8/2004 7408911 8/5/2007 s in a wireless 10982837 11/8/2004 7408911 8/5/2008 ets over a network 11238572 9/29/2005 7920586 4/5/2011 network 11238572 9/29/2005 8180351 5/15/2012 network 11268134 11/7/2005 7706390 4/27/2010 terminals in a 1126823 1/10/2006 7706390 4/27/2010 etrminals in a 11328623 1/10/2006 7882740 6/3/2008 sensor networks 11383130 1/12/2006 726633 9/14/2010 sensor networks 11681625 3/2/2007 796928 6/28/2011 of wireless sensor 11681634 3/2/2007 7801049 9/21/2010 11844561 8/24/2007 8876245 3/18/2012 in an ad hoc 11936513 117/2007 8876245 3/18/2012	Multi-master bus architecture for system-on-chip designs	09948159	9/6/2001	7145903	12/5/2006	ARRIS ENTERPRISES LLC
re architecture 1015779 \$/31/2002 7756041 7/13/2010    10055518   1/23/2002 6970703 11/29/2005 and nodes in a 10755346 1/13/2004 7522537 4/21/2009     10863183   1075234   1/2004 7522537 4/21/2009     10863183   6/7/2004   7412241 8/12/2008     10863183   6/7/2004   7280483 10/9/2007     10863183   6/7/2004   7280483 10/9/2007     10863183   6/7/2004   7734809 6/8/2010     10863534   6/7/2004   7734809 6/8/2010     10863871   6/7/2004   7758818 7/7/2009     10863871   6/7/2004   7061925 6/13/2006     10982837   11/8/2004   7408911 8/5/2008     10982837   11/8/2004   7408911 8/5/2008     10982837   11/8/2004   7408911 8/5/2008     10982837   11/8/2004   7408911 8/5/2008     10982837   11/8/2004   7408911 8/5/2008     10982837   11/8/2005   8180351 5/15/2011     1176800   11268134   11/7/2005   8180351 5/15/2011     1176800   11268134   11/7/2006   7706390 4/27/2010     11881330   11328623 1/10/2006   7706390 4/27/2010     11881330   11328624 1/10/2006   7801143 9/21/2010     11881330   11403245 4/13/2006   7796633 9/14/2010     11881634   3/2/2007   7801079 9/21/2010     11844561   8/24/2007   8270429 9/18/2012     11844561   8/24/2007 8270429 9/18/2012     11936513   1177/2007 8068454 1/1/29/2011	Ad Hoc peer-to-peer mobile radio access system interfaced to the PSTN and cellular networks	09952928	9/17/2001	6961575	11/1/2005	ARRIS ENTERPRISES LLC
and nodes in a 10055518 1/23/2002 6970703 11/29/2005 and nodes in a 10755346 1/13/2004 7522537 4/21/2009 iricless network 10863183 6/7/2004 7412241 8/12/2009 itions network by 10863183 6/7/2004 7280483 10/9/2007 immunication 10863453 6/7/2004 7280483 10/9/2007 in network 10863710 6/7/2004 7280483 10/9/2007 in network 10863871 6/7/2004 7061925 6/13/2006 ion network 10863871 6/7/2004 7061925 6/13/2006 ion network 10982837 11/8/2004 7489911 8/5/2008 is a wireless 10982837 11/8/2004 7489911 8/5/2008 in a wireless 11288572 9/29/2005 7920586 4/5/2011 interwork 11268612 10/31/2005 7920586 4/5/2011 network 11268613 11/7/2005 7706390 4/27/2010 iterminals in a 11328624 11/10/2006 7382740 6/3/2008 ition node in a 11383077 5/12/2006 7796633 9/14/2010 ition node in a 11403245 11681634 3/2/2007 7801079 9/21/2010 ition node in a 11681634 3/2/2007 7801079 9/21/2010 ition node in a 11694876 3/30/2007 8876245 3/18/2011 if an ad hoc 11936513 11/7/2007 8868454 11/29/2011	Embedded routing algorithms under the internet protocol routing layer of a software architecture protocol stack in a mobile Ad-Hoc network	10157979	5/31/2002	7756041	7/13/2010	ARRIS ENTERPRISES LLC
and nodes in a 10755346 1/13/2004 7522537 4/21/2009 ritreless network 10863069 6/7/2004 7412241 8/12/2008 tions network by 10863183 6/7/2004 7280483 10/9/2007 mmunication 10863453 6/7/2004 7280483 10/9/2007 ireless 10863183 6/7/2004 7280483 10/9/2007 ireless 10863871 6/7/2004 7289489 6/8/2010 ion network 10863871 6/7/2004 7061925 6/13/2006 ion network 11238572 9/29/2005 720586 4/5/2011 ets over a network 11238572 9/29/2005 7920586 4/5/2012 network 11226512 10/31/2005 720586 4/5/2012 network 11278680 4/5/2005 7710989 5/15/2012 in a wireless 11328624 1/10/2006 7676805 3/9/2010 terminals in a 11328623 1/10/2006 7382740 6/3/2008 ition node in a 11403245 4/13/2006 7801143 9/21/2010 sensor networks 11681634 3/2/2007 7801079 9/21/2010 if wireless sensor 11681634 3/2/2007 7801079 9/21/2010 11884561 8/24/2007 8876245 3/18/2012 in an ad hoc 11936513 1/1/2007 8828949 8/21/2012	Integrated personal communications system and method	10055518	1/23/2002	6970703	11/29/2005	ARRIS ENTERPRISES LLC
tions network tions network ty 10863069 6/7/2004 7412241 8/12/2008 tions network by 10863183 6/7/2004 7280483 10/9/2007 mmunication 10863183 6/7/2004 7280483 10/9/2007 10/9/2007 10/9/2007 10/9/2007 10/9/2007 10/9/2007 10/9/2007 10/9/2007 10/9/2007 10/9/2009 10/9/200	System and method for providing connectivity between an intelligent access point and nodes in a wireless network	10755346	1/13/2004	7522537	4/21/2009	ARRIS ENTERPRISES LLC
tions network by 10863183 6/7/2004 7280483 10/9/2007  mmunication 10863453 6/7/2004 7734809 6/8/2010  10863534 6/7/2004 7758818 777/2009  10863871 6/7/2004 7061925 6/13/2006  ion network 10863871 6/7/2004 7215966 5/8/2007  s in a wireless 10982837 11/8/2004 7408911 8/5/2008  ets over a network 11238572 9/29/2005 7920586 4/5/2011  ar networks 11263612 10/31/2005 8180351 5/15/2012  network 11278680 4/5/2006 7706390 4/27/2010  terminals in a 11328623 1/10/2006 7382740 6/3/2008  terminals in a vireless 11328624 1/10/2006 7382740 6/3/2008  tion node in a 11403245 4/13/2006 7801143 9/21/2010  s sensor networks 11681625 3/2/2007 7801079 9/21/2010  11844561 8/24/2007 8876245 3/18/2014  11858507 9/20/2007 8248949 8/21/2012  in an ad hoc 11936513 11/7/2007 8068454 11/29/2011	Method to provide a measure of link reliability to a routing protocol in an ad hoc wireless network	10863069	6/7/2004	7412241	8/12/2008	ARRIS ENTERPRISES LLC
mmunication         10863453         6/7/2004         7734809         6/8/2010           ireless         10863534         6/7/2004         7558818         7/7/2009           ion network         10863710         6/7/2004         7061925         6/13/2006           ion network         10863871         6/7/2004         7061925         6/13/2006           ets over a network         11238572         9/29/2005         7920586         4/5/2011           ets over a network         11238134         11/7/2005         7920586         4/5/2011           network         11268134         11/7/2005         7706390         4/5/2012           network         11278680         4/5/2006         7676805         3/9/2010           terminals in a         11328623         1/10/2006         7382740         6/3/2008           leway in a wireless         11383077         5/12/2006         7269155         9/11/2007           'of mobile         11383130         5/12/2006         779633         9/14/2010           sensor networks         11681625         3/2/2007         796933         9/14/2010           sensor networks         11681634         3/2/2007         7801079         9/21/2010           11844561         8/24	System and method to improve the network performance of a wireless communications network by finding an optimal route between a source and a destination	10863183	6/7/2004	7280483	10/9/2007	ARRIS ENTERPRISES LLC
ireless 10863534 6/7/2004 7558818 7/7/2009 ireless 10863710 6/7/2004 7061925 6/13/2006 in network 10863871 6/7/2004 7061925 6/13/2006 s in a wireless 10982837 11/8/2004 7408911 8/5/2008 ets over a network 11238572 9/29/2005 7920586 4/5/2011 ar network 11263612 10/31/2005 8180351 5/15/2012 network 11268134 11/7/2005 7706390 4/27/2010 terminals in a 11328623 1/10/2006 7676805 3/9/2010 terminals in a 11328624 1/10/2006 7382740 6/3/2008 teway in a wireless 11383077 5/12/2006 7269155 9/11/2007 of mobile 11383130 5/12/2006 7801143 9/21/2010 s sensor networks 11681625 3/2/2007 796928 6/28/2011 s sensor networks 11681625 3/2/2007 796928 6/28/2011 s sensor networks 11681625 3/2/2007 7801079 9/21/2010 11844561 8/24/2007 8270429 9/21/2010 11858507 9/20/2007 8270429 9/18/2012 in an ad hoc 11936513 11/7/2007 8248949 8/21/2012	System and method to maximize channel utilization in a multi-channel wireless communication network	10863453	6/7/2004	7734809	6/8/2010	ARRIS ENTERPRISES LLC
ireless 10863710 6/7/2004 7061925 6/13/2006  ion network 10863871 6/7/2004 7215966 5/8/2007  s in a wireless 10982837 11/8/2004 7408911 8/5/2008  ets over a network 11238572 9/29/2005 7920586 4/5/2011  ar networks 11263612 10/31/2005 8180351 5/15/2012  network 11268134 11/7/2005 7706390 4/27/2010  11029794 1/5/2006 7676805 5/4/2010  111278680 4/5/2006 7676805 3/9/2010  terminals in a 11328623 1/10/2006 7269155 9/11/2007  of mobile 11383077 5/12/2006 7269155 9/11/2007  s sensor networks 11681625 3/2/2007 796933 9/14/2010  s sensor networks 11681625 3/2/2007 7969928 6/28/2011  11694876 3/30/2007 7969928 6/28/2011  11858507 9/20/2007 8270429 9/21/2012  in an ad hoc 11936513 11/7/2007 8278494 1/129/2011	System and method for characterizing the quality of a link in a wireless network	10863534	6/7/2004	7558818	7/7/2009	ARRIS ENTERPRISES LLC
ion network         10863871         6/7/2004         7215966         5/8/2007           s in a wireless         10982837         11/8/2004         7408911         8/5/2008           ets over a network         11238572         9/29/2005         7920586         4/5/2011           ar networks         11263612         10/31/2005         8180351         5/15/2012           network         11278680         11/7/2005         7706390         4/27/2010           11029794         11/5/2005         7710986         5/4/2010           11128623         11/10/2006         7676805         3/9/2010           terminals in a         11328624         1/10/2006         7269155         9/11/2007           eway in a wireless         11383077         5/12/2006         7269155         9/11/2007           of mobile         11383130         5/12/2006         7796633         9/14/2010           11383130         5/12/2006         7801143         9/21/2010           s sensor networks         11681625         3/2/2007         7969928         6/28/2011           of wireless sensor         11684561         8/24/2007         8676245         3/18/2014           na ad hoc         11884561         8/24/2007         8270429	System and method for decreasing latency in locating routes between nodes in a wireless communication network	10863710	6/7/2004	7061925	6/13/2006	ARRIS ENTERPRISES LLC
sin a wireless 10982837 11/8/2004 7408911 8/5/2008 ets over a network 11238572 9/29/2005 7920586 4/5/2011 ar networks 11263612 10/31/2005 8180351 5/15/2012 11028794 11/7/2005 7706390 4/27/2010 11029794 11/5/2005 7710986 5/4/2010 11029794 11/5/2006 7676805 3/9/2010 terminals in a 11328623 1/10/2006 7382740 6/3/2008 leway in a wireless 11328624 1/10/2006 7382740 6/3/2008 etway in a wireless 11328624 1/10/2006 7269155 9/11/2007 of mobile 11383077 5/12/2006 7796633 9/14/2010 11383130 5/12/2006 7801143 9/21/2010 11383130 5/12/2006 7801143 9/21/2010 11681625 3/2/2007 7969928 6/28/2011 of wireless sensor 11681634 3/2/2007 7801079 9/21/2010 11844561 8/24/2007 8270429 9/18/2012 11858507 9/20/2007 8270429 9/18/2012 in an ad hoc 11936513 11/7/2007 8068454 11/29/2011	System and method for determining location of a device in a wireless communication network	10863871	6/7/2004	7215966	5/8/2007	ARRIS ENTERPRISES LLC
ets over a network 11238572 9/29/2005 7920586 4/5/2011 ar networks 11263612 10/31/2005 8180351 5/15/2012 10/31/2005 8180351 5/15/2012 10/31/2005 8180351 5/15/2012 10/31/2005 7706390 4/27/2010 11278680 11278680 4/5/2006 7676805 3/9/2010 11278680 11328623 1/10/2006 7269155 9/11/2007 26 frombile 11383077 5/12/2006 7269155 9/11/2007 27 from node in a 11403245 4/13/2006 7315548 1/1/2008 25 sensor networks 11681625 3/2/2007 7801079 9/21/2010 11844561 8/24/2007 8270429 9/18/2012 11858507 9/20/2007 8270429 9/18/2012 11858507 9/20/2007 8248949 8/21/2011 11936513 11/7/2007 8068454 11/29/2011	System and method to decrease the route convergence time and find optimal routes in a wireless communication network	10982837	11/8/2004	7408911	8/5/2008	ARRIS ENTERPRISES LLC
ar networks         11263612         10/31/2005         8180351         5/15/2012           Inetwork         11268134         11/7/2005         7706390         4/27/2010           Inetwork         1129794         1/5/2005         7706390         4/27/2010           Inetwork         11099794         1/5/2006         7706390         4/27/2010           Inetwork         1128680         4/5/2006         7676805         3/9/2010           Inetway in a wireless         11328624         1/10/2006         7269155         9/11/2007           Inetway in a wireless         11328624         1/10/2006         7269155         9/11/2007           Inetwork         11383077         5/12/2006         7796633         9/14/2010           Inetwork         11383130         5/12/2006         7796633         9/14/2010           Inetworks         11681625         3/2/2007         796928         6/28/2011           Inetworks         11681625         3/2/2007         7801079         9/21/2010           Inetworks         11684561         3/30/2007         8676245         3/18/2014           Inetworks         11684561         8/24/2007         8270429         9/18/2012           Inetworks         11888507	System and method for selecting a medium access technique for transmitting packets over a network	11238572	9/29/2005	7920586	4/5/2011	ARRIS ENTERPRISES LLC
Inetwork         11268134         11/7/2005         7706390         4/27/2010           Inetwork         11099794         1/5/2005         7710986         5/4/2010           Ineway in a wireless         11328623         1/10/2006         7678805         3/9/2010           Iceway in a wireless         11328624         1/10/2006         7269155         9/11/2007           Ineway in a wireless         11383130         5/12/2006         7796633         9/11/2010           Ineway in a wireless         11681625         3/2/2007         796928         6/28/2011           Ineway in a wireless         11681625         3/2/2007         7801079         9/21/2010           Ineway in a wireless         11681625         3/2/2007         7801079	Ad-hoc peer-to-peer mobile radio access system interfaced to the PSTN and cellular networks	11263612	10/31/2005	8180351	5/15/2012	ARRIS ENTERPRISES LLC
terminals in a         11029794         1/5/2005         7710986         5/4/2010           terminals in a         11278680         4/5/2006         7676805         3/9/2010           teway in a wireless         11328623         1/10/2006         7269155         9/11/2007           2 of mobile         11383077         5/12/2006         7269155         9/11/2007           2 of mobile         11383130         5/12/2006         7796633         9/14/2010           3 1183130         5/12/2006         7801143         9/21/2010           4 1383130         5/12/2006         7801143         9/21/2010           5 sensor networks         11681625         3/2/2007         7969928         6/28/2011           5 sensor networks         11681634         3/2/2007         7801079         9/21/2010           5 sensor networks         11681634         3/2/2007         7801079         9/21/2010           5 sensor networks         11681634         3/2/2007         7801079         9/21/2010           6 sensor networks         11681634         3/2/2007         8676245         3/18/2011           1 sensor networks         11681634         3/20/2007         8676245         3/18/2010           1 sensor networks         11681634	System and method for routing packets in a wireless multihopping communication network	11268134	11/7/2005	7706390	4/27/2010	ARRIS ENTERPRISES LLC
terminals in a 11328623 1/10/2006 76/78805 3/9/2010 terminals in a 11328623 1/10/2006 7382740 6/3/2008 teway in a wireless 11328624 1/10/2006 7269155 9/11/2007 of mobile 11383077 5/12/2006 7796633 9/14/2010 11383130 5/12/2006 7801143 9/21/2010 11383130 5/12/2006 7801143 9/21/2010 11383130 5/12/2006 7801143 9/21/2010 11681625 3/2/2007 7969928 6/28/2011 of wireless sensor 11681634 3/2/2007 7801079 9/21/2010 11694876 3/30/2007 8676245 3/18/2014 11888507 9/20/2007 8270429 9/18/2012 11858507 9/20/2007 8248949 8/21/2012 11858507 9/20/2007 8068454 11/29/2011	Multicast architecture for wireless mesh networks	11029794	1/5/2005	7710986	5/4/2010	ARRIS ENTERPRISES LLC
leway in a wireless 11328624 1/10/2006 7269155 9/11/2007 for mobile 11383077 5/12/2006 7796633 9/14/2010 11383130 5/12/2006 7801143 9/21/2010 11383130 5/12/2006 7801143 9/21/2010 11403245 4/13/2006 7315548 1/1/2008 11681625 3/2/2007 7969928 6/28/2011 of wireless sensor 11681634 3/2/2007 7801079 9/21/2010 11844561 8/24/2007 8676245 3/18/2014 11844561 8/24/2007 8270429 9/18/2012 11858507 9/20/2007 8248949 8/21/2012 11858507 9/20/2007 8068454 11/29/2011	Wireless sensor node executable code request facilitation method and apparatus  System and method to perform smooth handoff of mobile terminals between fixed terminals in a	11278680	4/5/2006 1/10/2006	7676805 7387740	3/9/2010	ARRIS ENTERPRISES LLC
teway in a wireless 11328624 1/10/2006 7269155 9/11/2007 of mobile 11383077 5/12/2006 7796633 9/14/2010 11383130 5/12/2006 7801143 9/21/2010 11383130 5/12/2006 7801143 9/21/2010 11383130 5/12/2006 7801143 9/21/2010 11403245 4/13/2006 7315548 1/1/2008 11681625 3/2/2007 7969928 6/28/2011 11681634 3/2/2007 7801079 9/21/2010 11694876 3/30/2007 8676245 3/18/2014 11844561 8/24/2007 8270429 9/18/2012 11858507 9/20/2007 8248949 8/21/2012 11858507 9/20/2007 8068454 11/29/2011	by stem and method to perform smooth handour of mobile terminals between fixed terminals in a network	11328623	1/10/2006	/382/40	6/3/2008	ARRIS ENTERPRISES LLC
stion node in a         11383077         5/12/2006         7796633         9/14/2010           ation node in a         11383130         5/12/2006         7801143         9/21/2010           s sensor networks         11681625         3/2/2007         7969928         6/28/2011           of wireless sensor         11681634         3/2/2007         7801079         9/21/2010           11694876         3/30/2007         8676245         3/18/2014           11844561         8/24/2007         8270429         9/18/2012           11888507         9/20/2007         8248949         8/21/2012           11936513         11/7/2007         8068454         11/29/2011	System and method for achieving continuous connectivity to an access point or gateway in a wireless network following an on-demand routing protocol, and to perform smooth handoff of mobile terminals between fixed terminals in the network	11328624	1/10/2006	7269155	9/11/2007	ARRIS ENTERPRISES LLC
stion node in a     11383130     5/12/2006     7801143     9/21/2010       s sensor networks     11481625     3/2/2007     7969928     6/28/2011       of wireless sensor     11681634     3/2/2007     7801079     9/21/2010       11694876     3/30/2007     8676245     3/18/2014       11844561     8/24/2007     8270429     9/18/2012       11858507     9/20/2007     8248949     8/21/2012       11936513     11/7/2007     8068454     11/29/2011	Range equalization transceiver system and method of using same	11383077	5/12/2006	7796633	9/14/2010	ARRIS ENTERPRISES LLC
sensor networks 11681625 3/2/2007 7969928 6/28/2011	System and method for groupcast packet forwarding in a wireless network	11383130	5/12/2006	7801143	9/21/2010	ARRIS ENTERPRISES LLC
s sensor networks         11681625         3/2/2007         7969928         6/28/2011           of wireless sensor         11681634         3/2/2007         7801079         9/21/2010           11694876         3/30/2007         8676245         3/18/2014           11844561         8/24/2007         8270429         9/18/2012           11858507         9/20/2007         8248949         8/21/2012           11936513         11/7/2007         8068454         11/29/2011	Method and apparatus for determining a route between a source node and a destination node in a wireless multihopping communication network	11403245	4/13/2006	7315548	1/1/2008	ARRIS ENTERPRISES LLC
of wireless sensor         11681634         3/2/2007         7801079         9/21/2010           11694876         3/30/2007         8676245         3/18/2014           11844561         8/24/2007         8270429         9/18/2012           11858507         9/20/2007         8248949         8/21/2012           11936513         11/7/2007         8068454         11/29/2011	Method and apparatus for battery-aware dynamic bandwidth allocation for wireless sensor networks	11681625	3/2/2007	7969928	6/28/2011	ARRIS ENTERPRISES LLC
11694876     3/30/2007     8676245     3/18/2014       11844561     8/24/2007     8270429     9/18/2012       11858507     9/20/2007     8248949     8/21/2012       11936513     11/7/2007     8068454     11/29/2011	Method and apparatus for battery-aware dynamic bandwidth allocation for groups of wireless sensor nodes in a wireless sensor network	11681634	3/2/2007	7801079	9/21/2010	ARRIS ENTERPRISES LLC
in an ad hoc 11844561 8/24/2007 8270429 9/18/2012 9/20/2007 8248949 8/21/2012 11936513 11/7/2007 8068454 11/29/2011	System and method for controlling the transmission power of a node	11694876	3/30/2007	8676245	3/18/2014	ARRIS ENTERPRISES LLC
in an ad hoc 11858507 9/20/2007 8248949 8/21/2012 11936513 11/7/2007 8068454 11/29/2011	Method of communicating within a mesh network	11844561	8/24/2007	8270429	9/18/2012	ARRIS ENTERPRISES LLC
asion and peer-to-peer communications in an ad hoc 11936513 11/7/2007 8068454 11/29/2011	Method and device for providing an alternative backhaul portal in a mesh network	11858507	9/20/2007	8248949	8/21/2012	ARRIS ENTERPRISES LLC
	System for enabling mobile coverage extension and peer-to-peer communications in an ad hoc network and method of operation therefor	11936513	11/7/2007	8068454	11/29/2011	ARRIS ENTERPRISES LLC

PATENT REEL: 060073 FRAME: 0490

Title	App. No.	App. Date	Patent No.	Issue Date	Grantor
Multiplexing apparatus in a transceiver system	11943724	11/21/2007	7701887	4/20/2010	COMMSCOPE TECHNOLOGIES LLC
IMS security for femtocells	11968088	12/31/2007	9166799	10/20/2015	COMMSCOPE TECHNOLOGIES LLC
Method and apparatus for operation of a communication device	12042825	3/5/2008	8374174	2/12/2013	ARRIS ENTERPRISES LLC
Enterprise mobile network for providing cellular wireless service using licensed radio frequency	12367451	2/6/2009	8279800	10/2/2012	COMMSCOPE TECHNOLOGIES LLC
spectrum and internet protocol backhaul					
Enterprise mobile network for providing cellular wireless service using licensed radio frequency	12367458	2/6/2009	8274929	9/25/2012	COMMSCOPE TECHNOLOGIES LLC
spectrum and the session initiation protocol					
Method of triggering a key delivery from a mesh key distributor	12493963	6/29/2009	9451452	9/20/2016	ARRIS ENTERPRISES LLC
Multiplexing apparatus in a transceiver system	12707921	2/18/2010	8031647	10/4/2011	COMMSCOPE TECHNOLOGIES LLC
Multiple-trx pico base station for providing improved wireless capacity and coverage in a building	14872846	10/1/2015			COMMSCOPE TECHNOLOGIES LLC
Multiple-trx pico base station for providing improved wireless capacity and coverage in a building	12367449	2/6/2009	8548526	10/1/2013	COMMSCOPE TECHNOLOGIES LLC

PATENT REEL: 060073 FRAME: 0491

**RECORDED: 05/16/2022**