

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT7788290

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	MIMOSA NETWORKS, INC.	12/30/2020
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	AIRSPAN IP HOLDCO LLC	
<b>Street Address:</b>	777 YAMATO ROAD	
<b>Internal Address:</b>	SUITE 310	
<b>City:</b>	BOCA RATON	
<b>State/Country:</b>	FLORIDA	
<b>Postal Code:</b>	33431	
<b>PROPERTY NUMBERS Total: 1</b>		
	<b>Property Type</b>	<b>Number</b>
	Application Number:	18107453
<b>CORRESPONDENCE DATA</b>		
<b>Fax Number:</b>	(650)812-3444	
<i>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.</i>		
<b>Phone:</b>	6508123400	
<b>Email:</b>	patdocket@carrferrell.com, pshah@carrferrell.com	
<b>Correspondent Name:</b>	MYRNA M. SCHELLING	
<b>Address Line 1:</b>	CARR & FERRELL LLP	
<b>Address Line 2:</b>	411 BOREL AVENUE, SUITE 603	
<b>Address Line 4:</b>	SAN MATEO, CALIFORNIA 94402	
<b>ATTORNEY DOCKET NUMBER:</b>	10074US/10074/MIMOSA	
<b>NAME OF SUBMITTER:</b>	PRIYANKA SHAH	
<b>SIGNATURE:</b>	/Priyanka Shah/	
<b>DATE SIGNED:</b>	02/09/2023	
<b>Total Attachments: 35</b>		
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## PATENT ASSIGNMENT AGREEMENT

**THIS PATENT ASSIGNMENT AGREEMENT** (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Assignment") entered into as of December 30, 2020 (the "Effective Date"), between AIRSPAN IP HOLDCO LLC, a Delaware limited liability company ("Assignee"), on the one hand, and AIRSPAN NETWORKS INC., a Delaware corporation, and MIMOSA NETWORKS, INC., a Delaware corporation (individually, an "Assignor" and collectively, the "Assignors"), on the other hand.

**WHEREAS**, Assignors, Assignee, and certain of their subsidiaries and affiliates are borrowers and guarantors (collectively the "Loan Parties") pursuant to the terms of that certain Credit Agreement dated as of December 30, 2020 (such agreement, as amended, restated, supplemented or otherwise modified from time to time, including any replacement agreement therefor, being hereinafter referred to as the "Credit Agreement") entered into by, among others AIRSPAN NETWORKS INC., as borrower, the Guarantors and Lenders from time to time party thereto, DBFIP ANI LLC, a Delaware limited liability company ("Fortress"), as collateral agent and trustee for the Lenders (Fortress in such capacity, together with its successors and assigns in such capacity, the "Collateral Agent"), as administrative agent for the Lenders (in such capacity, together with its successors and assigns in such capacity, the "Administrative Agent" and together with the Collateral Agent, each an "Agent" and, collectively, the "Agents"), pursuant to which the Lenders have made certain loans and other advances of credit to the Borrower; and

**WHEREAS**, Assignors have agreed to assign to Assignee pursuant to the Credit Agreement, and Assignee wishes to acquire from Assignor, certain patents, patent applications and ancillary rights thereto.

**NOW THEREFORE**, in consideration of the premises and mutual agreements and subject to the terms and conditions set forth herein and in the Credit Agreement, and intending to be legally bound hereby, the parties agree as follows:

**SECTION 1. Loan Documents.** Terms capitalized but not otherwise defined herein shall have the meanings ascribed thereto in the Credit Agreement. The parties hereto acknowledge and agree that this Assignment is entered into pursuant to the Credit Agreement, and further reference is made to the Loan Documents for the rights and obligations of the parties with respect to the Assigned Patents. In the event of a conflict between the Loan Documents and the terms of this Assignment, the terms of the Loan Documents shall govern.

**SECTION 2. Assignment.** Assignors hereby sell, assign, transfer, convey, set over, and deliver to Assignee all right, title, and interest, whether now or hereafter existing or existing, acquired or arising in, to, and under the following (collectively, the "Assigned Patents"):

- (a) all patents owned or exclusively licensed to, issued to, or for which applications have been filed by or are pending in the name of, Assignor, including, without limitation, the patents and patent applications set forth on Schedule 1 attached hereto;

(b) all patents and patent applications: (i) to which any of the Assigned Patents directly or indirectly claims priority; or (ii) for which any of the Assigned Patents directly or indirectly forms a basis for priority;

(c) all reissues, reexaminations, extensions, renewals, continuations, continuations in part, continuing prosecution applications, requests for continuing examinations, and divisionals of any item in any of the foregoing clauses (a) and (b);

(d) all foreign patents, patent applications, and counterparts relating to any item in any of the foregoing clauses (a) through (c), including, without limitation, certificates of invention, utility models, industrial design protection, design patent protection, and other governmental grants or issuances;

(e) all items in any of the foregoing in clauses (b) through (d), whether or not expressly listed on the Disclosure Schedules to the Credit Agreement and whether or not claims in any of the foregoing have been rejected, withdrawn, cancelled, or the like;

(f) inventions, invention disclosures, and discoveries described in any of the Assigned Patents or any item in the foregoing clauses (b) through (e) that: (i) are included in any claims therein or any item in the foregoing clauses (b) through (e); (ii) are subject matter capable of being reduced to a patent claim in a reissue or reexamination proceeding brought on any item in the foregoing clauses (b) through (e); or (iii) could have been included as a claim in any of the Assigned Patents or any item in the foregoing clauses (b) through (e);

(g) all rights to apply in any or all countries of the world for patents or other governmental grants or issuances of any type related to any item in any of the foregoing clauses (a) through (f), including, without limitation, under the Paris Convention for the Protection of Industrial Property, the International Patent Cooperation Treaty, or any other convention, treaty, agreement, or understanding;

(h) all claims, causes of action (whether known or unknown or whether currently pending, filed, or otherwise) and other enforcement rights under, or on account of any type related to any item in any of the foregoing clauses (a) through (g), whether for (i) damages; (ii) injunctive relief; and (iii) any other remedies of any kind for past, current, and future infringement, misappropriation, or other violation; and

(i) all rights to collect income, royalties, damages and other payments due or payable under or with respect to any of the foregoing clauses (a) through (h).

For clarity, the “Assigned Patents” shall include all patents and patent applications assigned to Assignee, and that are deemed to be “Assigned Patents”, pursuant to Section 6.18 of the Credit Agreement.

**SECTION 3. Authorization and Request.** Assignor hereby authorizes and requests the U.S. Patent and Trademark Office or corresponding foreign patent office or Governmental Authority in each jurisdiction to issue and record any and all patents, certificates of invention, utility models or other governmental grants or issuances that may be granted upon

any of the Assigned Patents in the name of Assignee, as the assignee to the entire interest therein, subject to licenses to Assignor and third parties and sublicensees of such parties.

**SECTION 4. Further Assurances.** Assignor will, at the reasonable request of Assignee, and provided Assignee bears the cost of doing so, do all things reasonably within its power and that are necessary, proper, or advisable, including without limitation, the execution, acknowledgment, and recordation of specific assignments, oaths, declarations, and other documents on a country-by-country basis, to assist Assignee in obtaining, perfecting, sustaining, or enforcing the Assigned Patents.

**SECTION 5. Successors and Assigns.** The terms and conditions of this Assignment will inure to the benefit of Assignee, its successors, assigns, and other legal representatives and will be binding upon Assignor, its successors, assigns, and other legal representatives.

**SECTION 6. Governing Law; Submission to Jurisdiction.** This Assignment shall be governed by and construed in accordance with the laws of the State of New York without regard to its rules of conflict of law, except Section 5-1401 of the New York General Obligations Law; *provided, however*, that the prosecution, perfection, issuance, maintenance, validity and enforceability of any Assigned Patent Rights arising under the Laws of any other jurisdiction, and the interpretation and enforceability of any rights granted under such Assigned Patent Rights, will be governed by the Laws of that jurisdiction without reference to choice of law principles to the contrary. Assignor hereby irrevocably submits to the nonexclusive jurisdiction of any New York State or Federal court sitting in the County of New York over any suit, action or proceeding arising out of or relating to this Assignment, and Assignor hereby agrees and consents that, in addition to any methods of service of process provided for under applicable Law, all service of process in any such suit, action or proceeding in any New York State or Federal court sitting in the County of New York may be made by certified or registered mail, return receipt requested, or overnight mail with a reputable national carrier, directed to the Assignor at the address indicated above, and service so made shall be complete five (5) days after the same shall have been so mailed (one day in the case of an overnight mail service).

**SECTION 7. Jury Trial Waiver.** ASSIGNEE AND ASSIGNOR HEREBY AGREE NOT TO ELECT A TRIAL BY JURY OF ANY ISSUE TRIABLE OF RIGHT BY JURY, AND WAIVE ANY RIGHT TO TRIAL BY JURY FULLY TO THE EXTENT THAT ANY SUCH RIGHT SHALL NOW OR HEREAFTER EXIST WITH REGARD TO THIS AGREEMENT, OR ANY CLAIM, COUNTERCLAIM OR OTHER ACTION ARISING IN CONNECTION THEREWITH. THIS WAIVER OF RIGHT TO TRIAL BY JURY IS GIVEN KNOWINGLY AND VOLUNTARILY BY ASSIGNEE AND ASSIGNOR, AND IS INTENDED TO ENCOMPASS INDIVIDUALLY EACH INSTANCE AND EACH ISSUE AS TO WHICH THE RIGHT TO A TRIAL BY JURY WOULD OTHERWISE ACCRUE. ASSIGNEE AND ASSIGNOR ARE EACH HEREBY AUTHORIZED TO FILE A COPY OF THIS SECTION IN ANY PROCEEDING AS CONCLUSIVE EVIDENCE OF THIS WAIVER.

**SECTION 8. Severability of Provisions.** If any provision of this Assignment is held to be illegal, invalid or unenforceable, (a) the legality, validity and enforceability of the

remaining provisions of this Assignment shall not be affected or impaired thereby and (b) the parties shall endeavor in good faith negotiations to replace the illegal, invalid or unenforceable provisions with valid provisions the economic effect of which comes as close as possible to that of the illegal, invalid or unenforceable provisions. The invalidity of a provision in a particular jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.


**SECTION 9. Counterparts.** This Assignment may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all of which taken together, constitute one agreement.

**[THIS SPACE INTENTIONALLY LEFT BLANK]**

IN WITNESS WHEREOF, the parties have caused this Assignment to be executed by their duly authorized representatives as of the Effective Date.

ASSIGNEE:

**AIRSPAN IP HOLDCO LLC**, a Delaware limited liability company

By:   
Name: David Brant  
Title: Senior Vice President and Chief Financial Officer


ATTESTATION OF SIGNATURE UNDER 28 U.S.C. § 1746

The undersigned witnessed the signature of David Brant to the above Patent Assignment on behalf of **AIRSPAN IP HOLDCO LLC**, a Delaware limited liability company and makes the following statements:

1. I am over the age of 18 and competent to testify as to the facts in this Attestation block if called upon to do so.
2. David Brant is personally known to me (or proved to me on the basis of satisfactory evidence) and appeared before me on December 30, 2020 to execute the above Patent Assignment on behalf of **AIRSPAN IP HOLDCO LLC**, a Delaware limited liability company.
3. David Brant subscribed to the above Patent Assignment on behalf of **AIRSPAN IP HOLDCO LLC**, a Delaware limited liability company.

I declare under penalty of perjury under the Laws of the United States of America that the statements made in the three (3) numbered Sections immediately above are true and correct.

EXECUTED on December 30, 2020

  
Name: CHRISTINE GREEN

**ASSIGNOR:**

**AIRSPAN NETWORKS INC.**, a Delaware corporation

By: 

Name: David Brant

Title: Senior Vice President and Chief  
Financial Officer

**ATTESTATION OF SIGNATURE UNDER 28 U.S.C. § 1746**

The undersigned witnessed the signature of David Brant to the above Patent Assignment on behalf of **AIRSPAN NETWORKS INC.**, a Delaware corporation and makes the following statements:

1. I am over the age of 18 and competent to testify as to the facts in this Attestation block if called upon to do so.
2. David Brant is personally known to me (or proved to me on the basis of satisfactory evidence) and appeared before me on December 30, 2020 to execute the above Patent Assignment on behalf of **AIRSPAN NETWORKS INC.**, a Delaware corporation.
3. David Brant subscribed to the above Patent Assignment on behalf of **AIRSPAN NETWORKS INC.**, a Delaware corporation.

I declare under penalty of perjury under the Laws of the United States of America that the statements made in the three (3) numbered Sections immediately above are true and correct.

EXECUTED on December 30, 2020

  
Name: CHRISTINE GREEN



**ASSIGNOR:**

**MIMOSA NETWORKS, INC.**, a Delaware corporation

By: 

Name: David Brant

Title: Senior Vice President and Secretary

**ATTESTATION OF SIGNATURE UNDER 28 U.S.C. § 1746**

The undersigned witnessed the signature of David Brant to the above Patent Assignment on behalf of **MIMOSA NETWORKS, INC.**, a Delaware corporation and makes the following statements:

1. I am over the age of 18 and competent to testify as to the facts in this Attestation block if called upon to do so.
2. David Brant is personally known to me (or proved to me on the basis of satisfactory evidence) and appeared before me on December 30, 2020 to execute the above Patent Assignment on behalf of **MIMOSA NETWORKS, INC.**, a Delaware corporation.
3. David Brant subscribed to the above Patent Assignment on behalf of **MIMOSA NETWORKS, INC.**, a Delaware corporation.

I declare under penalty of perjury under the Laws of the United States of America that the statements made in the three (3) numbered Sections immediately above are true and correct.

EXECUTED on December 30, 2020

  
Name: CHRISTINE GREEN

**Schedule 1**  
**Assigned Patents**

Airspan Networks Inc. Granted Patents

<b>Country</b>	<b>Title</b>	<b>Owner</b>	<b>Application No.</b>	<b>Patent/Registration No.</b>	<b>Registration Date</b>
China	Doherty Power Amplifier	Airspan Networks Inc.	201380053793.7	ZL201380053793.7	12/29/2017
China	Cooperative components in a wireless feeder network	Airspan Networks Inc.	201380024967.7	ZL201380024967.7	1/9/2018
China	System and method for determining a communications schedule for relay nodes of a wireless relay network	Airspan Networks Inc.	201280061579.1	ZL201280061579.1	1/12/2018
China	System and method for determining the modulation control information and reference signal design that use the machine node of being launched	Airspan Networks Inc.	201480018214.X	ZL 201480018214.X	10/16/2018
China	Apparatus and method for controlling a wireless feeder network	Airspan Networks Inc.	201180059478.6	ZL 201180059478.8	2/8/2017
China	For controlling equipment and the method for wireless feeder network	Airspan Networks Inc.	201180059479.0	ZL201180059479.0	8/10/2016
China	For controlling equipment and the method for wireless feeder network	Airspan Networks Inc.	201180059477.1	ZL201180059477.1	12/7/2016
China	Initial and Continuous Link Optimisation in a Wireless Feeder Network	Airspan Networks Inc.	201180059476.7	ZL201180059476.7	12/14/2016

France	A rotatable antenna apparatus	Airspan Networks Inc.	16723494.7	3314782	4/17/2019
France	A Configurable Antenna and Method of Operating Such a Configurable Antenna	Airspan Networks Inc.	16731257.8	3314779	7/31/2019
France	A rotatable antenna apparatus	Airspan Networks Inc.	16724941.6	3314784	3/27/2019
France	Wireless network configuration using path loss determination between nodes	Airspan Networks Inc.	16727802.7	3314778	4/24/2019
France	Antenna apparatus and method of performing spatial nulling within the antenna apparatus	Airspan Networks Inc.	16720508.7	3314780	6/19/2019
France	Sub-sampling antenna elements	Airspan Networks Inc.	16727801.9	3314785	4/24/2019
France	Managing external interference in a wireless network	Airspan Networks Inc.	16727803.5	3314963	4/24/2019
France	Antenna apparatus and method of configuring a transmission beam for the antenna apparatus	Airspan Networks Inc.	16720502	3314777	4/24/2019
France	Doherty Power Amplifier	Airspan Networks Inc.	13848746.7	2912769	10/16/2019
France	Cooperative components in a wireless feeder network	Airspan Networks Inc.	13705235.3	2826179	5/18/2016
France	System and method for determining a communications schedule for relay nodes of a wireless relay network	Airspan Networks Inc.	12787487.3	2795966	12/9/2015

France	System and method for determining modulation control information and a reference signal design to be used by a transmitter node	Airspan Networks Inc.	14711601.6	2979411	1/25/2017
France	Apparatus and method for controlling a wireless feeder network	Airspan Networks Inc.	11767043	2625916	1/28/2015
France	Apparatus and method for controlling a wireless network	Airspan Networks Inc.	11754721.6	2625915	1/21/2015
France	Apparatus and method for controlling a wireless feeder network	Airspan Networks Inc.	11754720.8	2625914	11/2/2016
France	Apparatus and Method for Controlling a Wireless Feeder Network	Airspan Networks Inc.	11754718.2	2625913	6/20/2018
France	Point to Multipoint Device for Communication with a Plurality of Telecommunication Units	Airspan Networks Inc.	6808704.8	1958348	3/27/2013
France	Point to multipoint device for communication with a plurality of telecommunications units	Airspan Networks Inc.	6808695.8	1958351	8/11/2010
France	IST - Inductive Loop	Airspan Networks Inc.	5701955.6	1707021	7/1/2009
Germany	A rotatable antenna apparatus	Airspan Networks Inc.	16723494.7	3314782	4/17/2019
Germany	A Configurable Antenna and Method of Operating Such a Configurable	Airspan Networks Inc.	16731257.8	3314779	7/31/2019

	Antenna				
Germany	A rotatable antenna apparatus	Airspan Networks Inc.	16724941.6	3314784	3/27/2019
Germany	Wireless network configuration using path loss determination between nodes	Airspan Networks Inc.	16727802.7	3314778	4/24/2019
Germany	Antenna apparatus and method of performing spatial nulling within the antenna apparatus	Airspan Networks Inc.	16720508.7	3314780	6/19/2019
Germany	Sub-sampling antenna elements	Airspan Networks Inc.	16727801.9	3314785	4/24/2019
Germany	Managing external interference in a wireless network	Airspan Networks Inc.	16727803.5	3314963	4/24/2019
Germany	Antenna apparatus and method of configuring a transmission beam for the antenna apparatus	Airspan Networks Inc.	16720502	3314777	4/24/2019
Germany	Doherty Power Amplifier	Airspan Networks Inc.	13848746.7	2912769	10/16/2019
Germany	Cooperative components in a wireless feeder network	Airspan Networks Inc.	13705235.3	2826179	5/18/2016
Germany	System and method for determining a communications schedule for relay nodes of a wireless relay network	Airspan Networks Inc.	12787487.3	2795966	12/9/2015
Germany	System and method for determining modulation control information and a reference signal	Airspan Networks Inc.	14711601.6	2979411	1/25/2017

	design to be used by a transmitter node				
Germany	Apparatus and method for controlling a wireless feeder network	Airspan Networks Inc.	11767043	2625916	1/28/2015
Germany	Apparatus and method for controlling a wireless network	Airspan Networks Inc.	11754721.6	2625915	1/21/2015
Germany	Apparatus and method for controlling a wireless feeder network	Airspan Networks Inc.	11754720.8	2625914	11/2/2016
Germany	Apparatus and Method for Controlling a Wireless Feeder Network	Airspan Networks Inc.	11754718.2	2625913	6/20/2018
Germany	Point to Multipoint Device for Communication with a Plurality of Telecommunication Units	Airspan Networks Inc.	6808704.8	1958348	3/27/2013
Germany	Synchronized Uplink Fast Fully Adaptive Beam Switched Antenna System for Wireless Communications	Airspan Networks Inc.	6808695.8	1958351	8/11/2010
Germany	IST - Inductive Loop	Airspan Networks Inc.	5701955.6	1707021	7/1/2009
Israel	Doherty Power Amplifier	Airspan Networks Inc.	238028	238028	6/30/2018
Israel	Point to multipoint device for communication with a plurality of telecommunications units	Airspan Networks Inc.	191452	191452	2/1/2013

Israel	Point to multipoint device for communication with a plurality of telecommunications units	Airspan Networks Inc.	191453	191453	9/29/2012
Israel	IST - Inductive Loop	Airspan Networks Inc.	175867	175867	5/29/2011
Korea	Point to multipoint device for communication with a plurality of telecommunications units	Airspan Networks Inc.	2008-7013784	1294116	8/1/2013
Korea	Point to multipoint device for communication with a plurality of telecommunications units	Airspan Networks Inc.	2008-7013783	1292037	7/26/2013
UK	Apparatus and method selecting a base station in a network	Airspan Networks Inc.	1815793.3	2568385	5/13/2020
UK	Apparatus and method for providing network configurability in a wireless network	Airspan Networks Inc.	1815790.9	2568799	7/29/2020
UK	An apparatus and method for providing network configurability in a wireless network	Airspan Networks Inc.	1815785.9	2568798	7/29/2020
UK	A rotatable antenna apparatus	Airspan Networks Inc.	16723494.7	3314782	4/17/2019
UK	A Configurable Antenna and Method of Operating Such a Configurable Antenna	Airspan Networks Inc.	16731257.8	3314779	7/31/2019
UK	A rotatable antenna apparatus	Airspan Networks Inc.	16724941.6	3314784	3/27/2019

UK	Wireless network configuration using path loss determination between nodes	Airspan Networks Inc.	16727802.7	3314778	4/24/2019
UK	Antenna apparatus and method of performing spatial nulling within the antenna apparatus	Airspan Networks Inc.	16720508.7	3314780	6/19/2019
UK	Sub-sampling antenna elements	Airspan Networks Inc.	16727801.9	3314785	4/24/2019
UK	Managing external interference in a wireless network	Airspan Networks Inc.	16727803.5	3314963	4/24/2019
UK	Antenna apparatus and method of configuring a transmission beam for the antenna apparatus	Airspan Networks Inc.	16720502	3314777	4/24/2019
UK	Doherty Power Amplifier	Airspan Networks Inc.	13848746.7	2912769	10/16/2019
UK	Cooperative components in a wireless feeder network	Airspan Networks Inc.	13705235.3	2826179	5/18/2016
UK	System and method for determining a communications schedule for relay nodes of a wireless relay network	Airspan Networks Inc.	12787487.3	2795966	12/9/2015
UK	System and method for determining modulation control information and a reference signal design to be used by a transmitter node	Airspan Networks Inc.	14711601.6	2979411	1/25/2017
UK	Apparatus and method for controlling a wireless feeder network	Airspan Networks Inc.	11767043	2625916	1/28/2015



UK	Apparatus and method for controlling a wireless network	Airspan Networks Inc.	11754721.6	2625915	1/21/2015
UK	Apparatus and method for controlling a wireless feeder network	Airspan Networks Inc.	11754720.8	2625914	11/2/2016
UK	Creation of High-Reliability Wireless Feeder Links Based on Channel Sounding	Airspan Networks Inc.	1016648.6	2484279	11/12/2014
UK	Apparatus and Method for Controlling a Wireless Feeder Network	Airspan Networks Inc.	11754718.2	2625913	6/20/2018
UK	Initial and Continuous Link Optimisation in a Wireless Feeder Network	Airspan Networks Inc.	1016650.2	2484280	10/8/2014
UK	Point to Multipoint Device for Communication with a Plurality of Telecommunication Units	Airspan Networks Inc.	6808704.8	1958348	3/27/2013
UK	Point to multipoint device for communication with a plurality of telecommunications units	Airspan Networks Inc.	6808695.8	1958351	8/11/2010
UK	IST - Inductive Loop	Airspan Networks Inc.	5701955.6	1707021	7/1/2009
UK	Contactless Management of a Subscriber Terminal	Airspan Networks Inc.	401278.7	2410397	11/14/2007
United States	Apparatus and method for facilitating communication between a	Airspan Networks Inc.	16/227,999	10,659,156	5/19/2020

	telecommunications network and a user device within a building				
United States	Metrics using parameters for multiple radio configurations	Airspan Networks Inc.	16/122,543	10,771,992	9/8/2020
United States	Apparatus and method for improving connectivity for items of user equipment in a wireless network	Airspan Networks Inc.	16/001,550	10,728,768	7/28/2020
United States	Network access sub-node configuration by a proxy	Airspan Networks Inc.	15/655,051	10,742,490	8/11/2020
United States	Apparatus and method for providing network configurability in a wireless network	Airspan Networks Inc.	15/802,804	10,616,824	4/7/2020
United States	Apparatus and method for providing network configurability in a wireless network	Airspan Networks Inc.	15/782,035	10,708,854	7/7/2020
United States	Scanning in a wireless network	Airspan Networks Inc.	16/026,257	10,476,724	11/12/2019
United States	Apparatus and method for improving connectivity for items of user equipment in a wireless network	Airspan Networks Inc.	15/499,027	10,721,669	7/21/2020
United States	Quality of service in wireless backhauls	Airspan Networks Inc.	15/187,570	10,834,614	11/10/2020
United States	Bearing calculation	Airspan Networks Inc.	15/186,900	10,667,145	5/26/2020

United States	Rotatable antenna apparatus	Airspan Networks Inc.	15/187,159	10,028,154	7/17/2018
United States	Configurable antenna and method of operating such a configurable antenna	Airspan Networks Inc.	15/187,680	10,098,018	10/9/2018
United States	Rotatable antenna apparatus	Airspan Networks Inc.	15/186,955	10,448,264	10/15/2019
United States	Wireless network configuration using path loss determination between nodes	Airspan Networks Inc.	15/187,616	9,973,943	5/15/2018
United States	Antenna apparatus and method of performing spatial nulling within the antenna apparatus	Airspan Networks Inc.	15/186,134	9,706,419	7/11/2017
United States	Sub-sampling antenna elements	Airspan Networks Inc.	15/187,515	10,070,325	9/4/2018
United States	Node role assignment in networks	Airspan Networks Inc.	15/187,574	10,231,139	3/12/2019
United States	Managing external interference in a wireless network	Airspan Networks Inc.	15/187,602	10,257,733	4/9/2019
United States	Antenna apparatus and method of configuring a transmission beam for the antenna apparatus	Airspan Networks Inc.	15/182,209	9,924,385	3/20/2018
United States	Configurable antenna and method of operating such a configurable antenna	Airspan Networks Inc.	15/187,188	10,306,485	5/28/2019
United States	Doherty Power Amplifier	Airspan Networks Inc.	13/658,354	8,829,998	9/9/2014
United States	Cooperative components in a wireless feeder network	Airspan Networks Inc.	13/783,023	9,560,676	1/31/2017

United States	System and method for determining a communications schedule for relay nodes of a wireless relay network	Airspan Networks Inc.	13/722,686	9,392,613	7/12/2016
United States	System and method for determining modulation control information and a reference signal design to be used by a transmitter node	Airspan Networks Inc.	14/355,829	9,300,496	3/29/2016
United States	Apparatus and method for controlling a wireless feeder network	Airspan Networks Inc.	13/252,131	8,467,397	6/18/2013
United States	Apparatus and method for controlling a wireless network	Airspan Networks Inc.	13/218,829	8,842,621	9/23/2014
United States	Apparatus and method for controlling a wireless feeder network	Airspan Networks Inc.	13/218,744	8,811,243	8/19/2014
United States	Apparatus and method for controlling a wireless feeder network	Airspan Networks Inc.	13/218,722	8,472,339	6/25/2013
United States	Point to multipoint device for communication with a plurality of telecommunications units	Airspan Networks Inc.	11/564,232	7,953,065	5/31/2011
United States	Point to multipoint device for communication with a plurality of telecommunications units	Airspan Networks Inc.	11/564,248	7,627,348	12/1/2009
United States	Handling transfer of management data to and from a telecommunications unit of a	Airspan Networks Inc.	11/039,353	7,440,727	10/21/2008

	telecommunications system				
United States	Transfer of different data types in a telecommunications system	Airspan Networks Inc.	09/942,829	6,816,726	11/9/2004
United States	Transfer of data packets in a wireless telecommunications system	Airspan Networks Inc.	09/802,239	6,907,247	6/14/2005

Airspan Networks Inc. Pending Applications

Country	Title	Owner	Application No.	Application Filing Date
China	Antenna apparatus and method of performing spatial nulling within the antenna apparatus	Airspan Networks Inc.	201680035501.0	4/28/2016
China	Antenna apparatus and method of configuring a transmission beam for the antenna apparatus	Airspan Networks Inc.	201680035511.4	4/28/2016
China	A rotatable antenna apparatus	Airspan Networks Inc.	201680035656.4	5/17/2016
China	A rotatable antenna apparatus	Airspan Networks Inc.	201680035658.3	5/18/2016
China	Wireless network configuration using path loss determination between nodes	Airspan Networks Inc.	201680037142.2	6/2/2016
China	Managing external interference in a wireless network	Airspan Networks Inc.	201680037158.3	6/2/2016
China	Wireless network controller and method of controlling a	Airspan Networks Inc.	201680037303.8	5/18/2016

	wireless network			
China	A Configurable Antenna and Method of Operating Such a Configurable Antenna	Airspan Networks Inc.	201680037354.0	6/14/2016
China	Node role assignment in networks	Airspan Networks Inc.	201680037366.3	5/5/2016
China	Quality of service in wireless backhails	Airspan Networks Inc.	201680037403.0	4/29/2016
China	Bearing calculation	Airspan Networks Inc.	201680037418.7	5/12/2016
China	Sub-sampling antenna elements	Airspan Networks Inc.	201680037422.3	6/2/2016
EPO	Node role assignment in networks	Airspan Networks Inc.	16721895.7	5/5/2016
EPO	Bearing calculation	Airspan Networks Inc.	16723467.3	5/12/2016
EPO	Wireless network controller and method of controlling a wireless network	Airspan Networks Inc.	16724937.4	5/18/2016
EPO	Apparatus and method for improving connectivity for items of user equipment in a wireless network	Airspan Networks Inc.	18716326.6	3/27/2018
EPO	Apparatus and method for improving connectivity for items of user equipment in a wireless network	Airspan Networks Inc.	18723910.8	4/30/2018
EPO	Access node configuration in a network	Airspan Networks Inc.	18735685.2	6/14/2018
EPO	Network access sub-node configuration by a proxy	Airspan Networks Inc.	18737011.9	6/14/2018

EPO	Scanning in a wireless network	Airspan Networks Inc.	18746253.6	7/4/2018
EPO	Metrics using parameters for multiple radio configurations	Airspan Networks Inc.	18769433.6	9/5/2018
EPO	An apparatus and method for providing network configurability in a wireless network	Airspan Networks Inc.	18783554.1	9/26/2018
EPO	Apparatus and method selecting a base station in a network	Airspan Networks Inc.	18792444.4	9/26/2018
EPO	Apparatus and method for providing network configurability in a wireless network	Airspan Networks Inc.	18792985.6	9/26/2018
EPO	Moveable antenna apparatus	Airspan Networks Inc.	19708634.1	2/22/2019
EPO	Technique For Tuning The Resonance Frequency Of An Electric-Based Antenna	Airspan Networks Inc.	19716507.9	3/28/2019
EPO	Moveable antenna apparatus	Airspan Networks Inc.	19727469.9	5/23/2019
EPO	Timing adjustment within a wireless communication system for a moving vehicle	Airspan Networks Inc.	20157730.1	2/17/2020
EPO	Frequency adjustment within a wireless communication system for a moving vehicle	Airspan Networks Inc.	20158047.9	2/18/2020
EPO	Handover analysis for a moving vehicle	Airspan Networks Inc.	20160448.5	3/2/2020
EPO	Transmission adjustment within a wireless network for a	Airspan Networks Inc.	20160484	3/2/2020

	moving vehicle			
EPO	Remote Modems	Airspan Networks Inc.	20166798.7	3/30/2020
EPO	Adaptive Channel Orchestration	Airspan Networks Inc.	20166810	3/30/2020
EPO	Configuring the Zone Served by a Base Station Providing Wireless Communication	Airspan Networks Inc.	20167161.7	3/31/2020
EPO	Adaptive Carrier Switching	Airspan Networks Inc.	20168984.1	4/9/2020
EPO	Highly Efficient Wideband Dipole Antenna with Cost Effective Manufacturing	Airspan Networks Inc.	20194609.2	9/4/2020
Germany	Quality of service in wireless backhails	Airspan Networks Inc.	112016002847.4	4/29/2016
UK	Bearing calculation	Airspan Networks Inc.	1514938.8	8/21/2015
UK	Wireless network controller and method of controlling a wireless network	Airspan Networks Inc.	1516901.4	9/24/2015
UK	Node role assignment in networks	Airspan Networks Inc.	1518654.7	10/21/2015
UK	Quality of service in wireless backhails	Airspan Networks Inc.	1519216.4	10/30/2015
UK	A Configurable Antenna and Method of Operating Such a Configurable Antenna	Airspan Networks Inc.	1519220.6	10/30/2015
UK	Antenna apparatus and method of performing spatial nulling within the antenna apparatus	Airspan Networks Inc.	1519237	10/30/2015



UK	Managing external interference in a wireless network	Airspan Networks Inc.	1519270.1	10/30/2015
UK	Sub-sampling antenna elements	Airspan Networks Inc.	1519272.7	10/30/2015
UK	Scanning in a wireless network	Airspan Networks Inc.	1710867.1	7/6/2017
UK	Apparatus and method for improving connectivity for items of user equipment in a wireless network	Airspan Networks Inc.	1716422.9	10/6/2017
UK	Metrics using parameters for multiple radio configurations	Airspan Networks Inc.	1716673.7	10/12/2017
UK	Apparatus and method for improving connectivity for items of user equipment in a wireless network	Airspan Networks Inc.	1804897.5	3/27/2018
UK	Moveable antenna apparatus	Airspan Networks Inc.	1805878.4	4/9/2018
UK	Technique For Tuning The Resonance Frequency Of An Electric-Based Antenna	Airspan Networks Inc.	1806844.5	4/26/2018
UK	Access node configuration in a network	Airspan Networks Inc.	1809777.4	6/14/2018
UK	Network access sub-node configuration by a proxy	Airspan Networks Inc.	1809780.8	6/14/2018
UK	Moveable antenna apparatus	Airspan Networks Inc.	1810220.2	6/21/2018
UK	Apparatus and method for configuring a communication link	Airspan Networks Inc.	1816253.7	10/5/2018

UK	Timing adjustment within a wireless communication system for a moving vehicle	Airspan Networks Inc.	1903216.8	3/11/2019
UK	Frequency adjustment within a wireless communication system for a moving vehicle	Airspan Networks Inc.	1903217.6	3/11/2019
UK	Handover analysis for a moving vehicle	Airspan Networks Inc.	1910318.3	7/18/2019
UK	Transmission adjustment within a wireless network for a moving vehicle	Airspan Networks Inc.	1912797.6	9/5/2019
UK	Highly Efficient Wideband Dipole Antenna with Cost Effective Manufacturing	Airspan Networks Inc.	1913572.2	9/20/2019
UK	Configuring the Zone Served by a Base Station Providing Wireless Communication	Airspan Networks Inc.	1915024.2	10/17/2019
UK	Adaptive Carrier Switching	Airspan Networks Inc.	1915033.3	10/17/2019
UK	Remote Modems	Airspan Networks Inc.	2003024.3	3/3/2020
UK	Adaptive Channel Orchestration	Airspan Networks Inc.	2003168.8	3/5/2020
United States	Apparatus and method for providing network coverage in a wireless network	Senior, Paul Nicholas	15/498,962	4/27/2017
United States	Access node configuration in a network	Airspan Networks Inc.	15/655,035	7/20/2017
United States	Apparatus and method selecting a base station in a network	Airspan Networks Inc.	15/782,051	10/12/2017

United States	Wireless network controller and method of controlling a wireless network	Airspan Networks Inc.	15/927,880	6/20/2016
United States	Moveable antenna apparatus	Airspan Networks Inc.	16/373,953	4/3/2019
United States	Technique For Tuning The Resonance Frequency Of An Electric-Based Antenna	Airspan Networks Inc.	16/374,280	4/3/2019
United States	Moveable antenna apparatus	Airspan Networks Inc.	16/444,192	6/18/2019
United States	Apparatus and method for configuring a communication link	Airspan Networks Inc.	16/541,044	8/14/2019
United States	Timing adjustment within a wireless communication system for a moving vehicle	Airspan Networks Inc.	16/814,546	3/10/2020
United States	Frequency adjustment within a wireless communication system for a moving vehicle	Airspan Networks Inc.	16/814,553	3/10/2020
United States	Transmission adjustment within a wireless network for a moving vehicle	Airspan Networks Inc.	16/814,558	3/10/2020
United States	Handover analysis for a moving vehicle	Airspan Networks Inc.	16/814,563	3/10/2020
United States	Adaptive Channel Orchestration	Airspan Networks Inc.	16/827,970	3/24/2020
United States	Remote Modems	Airspan Networks Inc.	16/828,821	3/24/2020
United States	Adaptive Carrier Switching	Airspan Networks Inc.	16/836,638	3/31/2020

United States	Configuring the Zone Served by a Base Station Providing Wireless Communication	Airspan Networks Inc.	16/836,711	3/31/2020
United States	Highly Efficient Wideband Dipole Antenna with Cost Effective Manufacturing	Airspan Networks Inc.	17/025,959	9/18/2020
United States	Vibration Triggered Automatic Beamwidth Adjustment	Airspan Networks Inc.	17/070,764	6/17/2019
United States	APPARATUS AND METHOD FOR CONFIGURING A COMMUNICATION LINK	Airspan Networks Inc.	17/121,335	12/14/2020
WIPO	Apparatus and method for configuring a communication link	Airspan Networks Inc.	PCT/GB2019/052306	8/16/2019

Mimosa Networks Inc. Granted Patents

Country	Title	Owner	Application Filing Date (Issue Date)	Application No. (Patent No.)
United States	Enclosure for Radio, Parabolic Dish Antenna, and Side Lobe Shields	Mimosa Networks Inc.	3/5/2014	14/198,378
			(Jun 07, 2016)	9362629
United States	WiFi Management Interface for Microwave Radio and Reset to Factory Defaults	Mimosa Networks Inc.	2/18/2014	14/183,445

			(Nov 03, 2015)	9179336
United States	Quad-Sector Antenna Using Circular Polarization	Mimosa Networks Inc.	3/5/2014  (Aug 11, 2020)	14/198,473  10742275
United States	System and Method for Dual- Band Backhaul Radio	Mimosa Networks Inc.	2/18/2014  (Nov 17, 2015)	14/183,329  9191081
United States	Systems and Methods for Directing Mobile Device Connectivity	Mimosa Networks Inc.	2/18/2014  (Mar 27, 2018)	14/183,375  9930592
United States	Waterproof Apparatus for Cables and Cable Interfaces	Mimosa Networks Inc.	6/24/2013  (Sep 08, 2015)	13/925,566  9130305
United States	Wireless Access Points Providing Hybrid 802.11 and Scheduled Priority Access Communications	Mimosa Networks Inc.	5/30/2013	13/906,128

			(Mar 22, 2016)	9295103
China	Method and Device for Channel Optimization in Half Duplex Communications Systems	Mimosa Networks Inc.	1/21/2015  (May 14, 2019)	201580000078.6 (ZL201580000078.6)
United States	Channel Optimization in Half Duplex Communications Systems	Mimosa Networks Inc.	1/24/2014  (Apr 07, 2015)	14/164,081  9001689
United States	Wireless Access Points Providing Hybrid 802.11 and Scheduled Priority Access Communications	Mimosa Networks Inc.	10/3/2013  (Oct 13, 2015)	14/045,741  9161387
United States	Simultaneous Transmission on Shared Channel	Mimosa Networks Inc.	3/13/2015  (Jun 12, 2018)	14/657,942  -9998246

United States	System and Method for Aligning a Radio Using an Automated Audio Guide	Mimosa Networks Inc.	3/5/2015  (Oct 03, 2017)	14/639,976  9780892
United States	Channel Optimization in Half Duplex Communications Systems	Mimosa Networks Inc.	7/7/2014  (Nov 22, 2016)	14/325,307  9504049
Canada	Wireless Repeater	Mimosa Networks Inc.	2/24/2015 (Feb 24, 2015)	2640177 2640177
China	Wireless Repeater	Mimosa Networks Inc. -	3/11/2015 (Nov 18, 2015)	201530058063.8 (ZL201530058063.8)
United States	Wireless Repeater	Mimosa Networks Inc.	9/12/2014 (Mar 29, 2016)	29/502,253 (D752566)
United States	Wireless Access Points Providing Hybrid 802.11 and Scheduled Priority Access Communications	Mimosa Networks Inc.	6/16/2015  (Jun 27, 2017)	14/741,423  9693388

United States	WiFi Management Interface for Microwave Radio and Reset to Factory Defaults	Mimosa Networks Inc.	7/17/2015  (May 29, 2018)	14/802,816  9986565
United States	Waterproof Apparatus for Cables and Cable Interfaces	Mimosa Networks Inc.	7/17/2015  (Dec 27, 2016)	14/802,829  9531114
United States	System and Method for Dual-Band Backhaul Radio	Mimosa Networks Inc.	8/21/2015  (Dec 12, 2017)	14/833,038  9843940
United States	Printed Circuit Board Mounted Antenna and Waveguide Interface	Mimosa Networks Inc.	1/10/2017  (Aug 18, 2020)	15/403,085  10749263
United States	Enclosure for Radio, Parabolic Dish Antenna, and Side Lobe Shields	Mimosa Networks Inc.	4/26/2016  (Jan 16, 2018)	15/139,225  9871302



United States	Channel Optimization in Half Duplex Communications Systems	Mimosa Networks Inc.	7/29/2016  (Feb 06, 2018)	15/224,412  9888485
United States	System and Method for Dual-Band Backhaul Radio	Mimosa Networks Inc.	8/24/2016  (Apr 17, 2018)	15/246,094  9949147
United States	Waterproof Apparatus for Cables and Cable Interfaces	Mimosa Networks Inc.	8/24/2016  (Oct 09, 2018)	15/246,118  10096933
United States	System and Method for Aligning a Radio Using an Automated Audio Guide	Mimosa Networks Inc.	6/16/2017  (Oct 02, 2018)	15/625,984  10090943
United States	Wireless Access Points Providing Hybrid 802.11 and Scheduled Priority Access Communications	Mimosa Networks Inc.	5/5/2017	15/588,092

			(Sep 22, 2020)	10785608
United States	System and Method for Dual-Band Backhaul Radio	Mimosa Networks Inc.	10/9/2017  (Oct 30, 2018)	15/728,418  10117114
United States	Enclosure for Radio, Parabolic Dish Antenna, and Side Lobe Shields	Mimosa Networks Inc.	11/10/2017  (Jan 22, 2019)	15/809,942  10186786
United States	Channel Optimization in Half Duplex Communications Systems	Mimosa Networks Inc.	11/10/2017  (Apr 07, 2020)	15/809,968  10616903
United States	Systems and Methods for Directing Mobile Device Connectivity	Mimosa Networks Inc.	1/31/2018  (Feb 05, 2019)	15/885,628  10200925
United States	System and Method for Dual-Band Backhaul Radio	Mimosa Networks Inc.	2/23/2018  (Apr 09, 2019)	15/904,220  10257722

United States	WiFi Management Interface for Microwave Radio and Reset to Factory Defaults	Mimosa Networks Inc.	3/6/2018  (Sep 24, 2019)	15/913,695  10425944
United States	Synchronized Transmission on Shared Channel	Mimosa Networks Inc.	4/18/2018  (Oct 15, 2019)	15/955,723  10447417
United States	Higher Signal Isolation Solutions for Printed Circuit Board Mounted Antenna and Waveguide Interface	Mimosa Networks Inc.	1/5/2018  (Dec 17, 2019)	15/863,059  10511074
United States	Waterproof Apparatus for Pre-terminated Cables	Mimosa Networks Inc.	8/21/2018  (Sep 29, 2020)	16/107,820  10790613
United States	System and Method for Dual-Band Backhaul Radio	Mimosa Networks Inc.	2/14/2019  (Oct 20, 2020)	16/276,611  10812994

United States	Systems and Methods for Directing Mobile Device Connectivity	Mimosa Networks Inc.	1/30/2019  (Mar 17, 2020)	16/262,720  10595253
United States	Higher Signal Isolation Solutions for Printed Circuit Board Mounted Antenna and Waveguide Interface	Mimosa Networks Inc.	10/30/2019  (Jul 14, 2020)	16/669,383  10714805

Mimosa Networks Inc. Pending Applications

Country	Title	Owner	Serial No.	Application Filing Date
EPO	Multi-Band Access Point Antenna Array	Mimosa Networks Inc.	17835073.2	7/24/2017
United States	Ellipticity Reduction in Circularly Polarized Array Antennas	Mimosa Networks Inc.	14/316,537	6/26/2014
United States	Wi-Fi Hotspot Repeater	Mimosa Networks Inc.	14/848,202	9/8/2015
United States	Multi-Band Access Point Antenna Array	Mimosa Networks Inc.	15/658,324	7/24/2017
United States	Omni-Directional Orthogonally-Polarized Antenna System for MIMO Applications	Mimosa Networks Inc.	16/284,121	2/25/2019
United States	Sector Antenna Systems and Methods for Providing High-Gain and High	Mimosa Networks Inc.	16/563,365	9/6/2019

	Side-Lobe Rejection			
United States	WiFi Management Interface for Microwave Radio and Reset to Factory Defaults	Mimosa Networks Inc.	16/575,104	9/18/2019
United States	Synchronized Transmission on Shared Channel	Mimosa Networks Inc.	16/591,589	10/2/2019