

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT7204253

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST

**CONVEYING PARTY DATA**

Name	Execution Date
MOVANDI CORPORATION	03/02/2022

**RECEIVING PARTY DATA**

<b>Name:</b>	SILICON VALLEY BANK, AS AGENT
<b>Street Address:</b>	3003 TASMAN DRIVE
<b>City:</b>	SANTA CLARA
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	95054

**PROPERTY NUMBERS Total: 68**

Property Type	Number
Patent Number:	10014567
Patent Number:	10014887
Patent Number:	10062965
Patent Number:	10122404
Patent Number:	10135153
Patent Number:	10142096
Patent Number:	10181866
Patent Number:	10199717
Patent Number:	10256537
Patent Number:	10290920
Patent Number:	10291296
Patent Number:	10298275
Patent Number:	10298284
Patent Number:	10323943
Patent Number:	10355770
Patent Number:	10389041
Patent Number:	10484078
Patent Number:	10560179
Patent Number:	10587313
Patent Number:	10630373

PATENT

<b>Property Type</b>	<b>Number</b>
<b>Patent Number:</b>	10637159
<b>Patent Number:</b>	10834724
<b>Patent Number:</b>	10854995
<b>Patent Number:</b>	10916861
<b>Patent Number:</b>	11038581
<b>Patent Number:</b>	11056764
<b>Patent Number:</b>	11145986
<b>Patent Number:</b>	9692489
<b>Patent Number:</b>	9755601
<b>Patent Number:</b>	9813231
<b>Patent Number:</b>	9813269
<b>Patent Number:</b>	9887760
<b>Patent Number:</b>	9923712
<b>Patent Number:</b>	9948260
<b>Patent Number:</b>	9967087
<b>Patent Number:</b>	10177828
<b>Patent Number:</b>	10321332
<b>Patent Number:</b>	9935663
<b>Patent Number:</b>	10348371
<b>Patent Number:</b>	10090887
<b>Patent Number:</b>	10862559
<b>Patent Number:</b>	10142006
<b>Patent Number:</b>	10171115
<b>Patent Number:</b>	10243594
<b>Patent Number:</b>	10666326
<b>Patent Number:</b>	10447372
<b>Patent Number:</b>	10530401
<b>Patent Number:</b>	10721634
<b>Patent Number:</b>	11088457
<b>Patent Number:</b>	10389412
<b>Patent Number:</b>	11108167
<b>Patent Number:</b>	10785705
<b>Patent Number:</b>	10938347
<b>Patent Number:</b>	10819415
<b>Patent Number:</b>	11026198
<b>Patent Number:</b>	11108168
<b>Patent Number:</b>	11088756
<b>Patent Number:</b>	10951274

Property Type	Number
Patent Number:	10917126
Patent Number:	11082123
Patent Number:	11057077
Patent Number:	11109243
Patent Number:	11018752
Application Number:	15278970
Application Number:	15279171
Application Number:	15279219
Application Number:	15600443
Application Number:	15870671

#### CORRESPONDENCE DATA

**Fax Number:**

*Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.*

**Phone:** (619) 699-2708  
**Email:** christian.cruz@us.dlapiper.com  
**Correspondent Name:** DLA PIPER LLP (US)  
**Address Line 1:** 401 B STREET  
**Address Line 2:** SUITE 1700  
**Address Line 4:** SAN DIEGO, CALIFORNIA 92101

<b>NAME OF SUBMITTER:</b>	MATT SCHWARTZ
<b>SIGNATURE:</b>	/s/ Matt Schwartz
<b>DATE SIGNED:</b>	03/02/2022

**Total Attachments: 11**

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## INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement (“Agreement”) is entered into as of March 2, 2022 by and between **SILICON VALLEY BANK**, a California corporation in its capacity as administrative agent and collateral agent for Lenders (in such capacity, “Agent”) and **MOVANDI CORPORATION**, a Delaware corporation (“Grantor”).

### RECITALS

A. **SILICON VALLEY BANK** and **SVB INNOVATION CREDIT FUND VIII, L.P.**, a Delaware limited partnership (collectively, the “Lenders”) have agreed to make certain advances of money and to extend certain financial accommodations to Grantor (the “Loans”) in the amounts and manner set forth in that certain Mezzanine Loan and Security Agreement by and among the Lenders, Agent, and Grantor dated as of the date hereof (as the same may be amended, modified or supplemented from time to time, the “Loan Agreement”; capitalized terms used herein are used as defined in the Loan Agreement). Lenders are willing to make the Loans to Grantor, but only upon the condition, among others, that Grantor shall grant to Agent, for the ratable benefit of the Lenders, a security interest in certain Copyrights, Trademarks, Patents, and Mask Works (as each term is described below) to secure the obligations of Grantor under the Loan Agreement.

B. Pursuant to the terms of the Loan Agreement, Grantor has granted to Agent, for the ratable benefit of the Lenders, a security interest in all of Grantor’s right, title and interest, whether presently existing or hereafter acquired, in, to and under all of the Collateral.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, as collateral security for the prompt and complete payment when due of its obligations under the Loan Agreement, Grantor hereby represents, warrants, covenants and agrees as follows:

### AGREEMENT

1. Grant of Security Interest. To secure its obligations under the Loan Agreement, Grantor grants and pledges to Agent, for the ratable benefit of the Lenders, a security interest in all of Grantor’s right, title and interest in, to and under its intellectual property (all of which shall collectively be called the “Intellectual Property Collateral”), including, without limitation, the following:

(a) Any and all copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held, including without limitation those set forth on Exhibit A attached hereto (collectively, the “Copyrights”);

(b) Any and all trade secrets, and any and all intellectual property rights in computer software and computer software products now or hereafter existing, created, acquired or held;

(c) Any and all design rights that may be available to Grantor now or hereafter existing, created, acquired or held;

(d) All patents, patent applications and like protections including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same, including without limitation the patents and patent applications set forth on Exhibit B attached hereto (collectively, the “Patents”);

(e) Any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Grantor connected with and symbolized by such trademarks, including without limitation those set forth on Exhibit C attached hereto (collectively, the "Trademarks");

(f) All mask works or similar rights available for the protection of semiconductor chips, now owned or hereafter acquired, including, without limitation those set forth on Exhibit D attached hereto (collectively, the "Mask Works");

(g) Any and all claims for damages by way of past, present and future infringements of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights identified above;

(h) All licenses or other rights to use any of the Copyrights, Patents, Trademarks, or Mask Works and all license fees and royalties arising from such use to the extent permitted by such license or rights;

(i) All amendments, extensions, renewals and extensions of any of the Copyrights, Trademarks, Patents, or Mask Works; and

(j) All proceeds and products of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

2. Recordation. Grantor authorizes the Commissioner for Patents, the Commissioner for Trademarks and the Register of Copyrights and any other government officials to record and register this Agreement upon request by Agent.

3. Authorization. Grantor hereby authorizes Agent to (a) modify this Agreement unilaterally by amending the exhibits to this Agreement to include any Intellectual Property Collateral which Grantor obtains subsequent to the date of this Agreement, and (b) file a duplicate original of this Agreement containing amended exhibits reflecting such new Intellectual Property Collateral.

4. Loan Documents. This Agreement has been entered into pursuant to and in conjunction with the Loan Agreement, which is hereby incorporated by reference. The provisions of the Loan Agreement shall supersede and control over any conflicting or inconsistent provision herein. The rights and remedies of Agent with respect to the Intellectual Property Collateral are as provided by the Loan Agreement and related documents, and nothing in this Agreement shall be deemed to limit such rights and remedies.

5. Execution in Counterparts. This Agreement may be executed in counterparts (and by different parties hereto in different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. Delivery of an executed counterpart of a signature page to this Agreement by facsimile or in electronic (i.e., "pdf" or "tif" format) shall be effective as delivery of a manually executed counterpart of this Agreement.

6. Successors and Assigns. This Agreement will be binding on and shall inure to the benefit of the parties hereto and their respective successors and assigns.

7. Governing Law. This Agreement and any claim, controversy, dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this Agreement and the

transactions contemplated hereby and thereby shall be governed by, and construed in accordance with, the laws of the United States and the State of California, without giving effect to any choice or conflict of law provision or rule (whether of the State of California or any other jurisdiction).

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**[Signature Page Follows]**

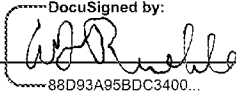
IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

GRANTOR:

Address:

MOVANDI CORPORATION  
7555 Irvine Center Drive, Suite 100  
Irvine, CA 92618  
Attn: Bill Ruehle, Chief Financial Officer

**MOVANDI CORPORATION**

By:  \_\_\_\_\_  
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Name: Bill Ruehle

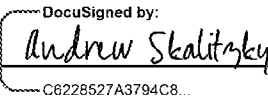
Title: Chief Financial Officer

AGENT:

Address:

SILICON VALLEY BANK  
1200 17<sup>th</sup> Street, 16<sup>th</sup> Floor  
Denver, CO 80202  
Attn: Max Froseth, Director

**SILICON VALLEY BANK, as Agent**

By:  \_\_\_\_\_  
C6228527A3794C8...

Name: Andrew Skalitzky

Title: Vice President

[Signature Page to Intellectual Property Security Agreement]

EXHIBIT A

Copyrights

Description

Registration/  
Application  
Number

Registration/  
Application  
Date

None.



EXHIBIT B

## Patents

<u>Description</u>	<u>Registration/ Application Number</u>	<u>Registration/ Application Date</u>
Novel antenna arrangements and routing configurations in large scale integration of antennas with front end chips in a wireless receiver	10014567	07/03/18
Outphasing transmitters with improved wireless transmission performance and manufacturability	10014887	07/03/18
Raised antenna patches with air dielectrics for use in large scale integration of phased array antenna panels	10062965	08/28/18
Wireless transceiver for transmitting circularly-polarized signals with modulated angular speed	10122404	11/06/18
Phased array antenna panel with configurable slanted antenna rows	10135153	11/20/18
Axial ratio and cross-polarization calibration in wireless receiver	10142096	11/27/18
Multi-beam outphasing transmitters	10181866	01/15/19
Phased array antenna panel having reduced passive loss of received signals	10199717	02/05/19
Lens-enhanced phased array antenna panel	10256537	04/09/19
Large scale integration and control of antennas with master chip and front end chips on a single antenna panel	10290920	05/14/19
Transceiver for multi-beam and relay with 5G application	10291296	05/14/19
Outphasing transmit and receive wireless systems having dual-polarized antennas	10298275	05/21/19
Full duplex transceivers	10298284	05/21/19
Wireless receiver with tracking using location, heading, and motion sensors and adaptive power detection	10323943	06/18/19
Wireless communications system including an omnidirectional broad-beam relay RF Transmitter	10355770	07/16/19
Phased array antenna panel with enhanced isolation and reduced loss	10389041	08/20/19
Reconfigurable and modular active repeater device	10484078	11/19/19
Active repeater device for operational mode based beam pattern changes for communication with a plurality of user equipment	10560179	02/11/20
Optimized multi-beam antenna array network with an extended radio frequency range	10587313	03/10/20

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354271-001467

Active repeater device shared by multiple service providers to facilitate communication with customer premises equipment	10630373	04/21/20
Waveguide antenna element-based beam forming phased array antenna system for millimeter wave communication	10637159	04/28/20
Communication device and method for low-latency initial access to non-standalone 5G new radio network	10834724	11/10/20
Wireless transceiver having receive antennas and transmit antennas with orthogonal polarizations in a phased array antenna panel	10854995	12/01/20
Three-dimensional antenna array module	10916861	02/09/21
Integrated repeater system and method to operate integrated repeater system	11038581	06/15/21
Phased array antenna panel having reduced passive loss of received signals	11056764	07/06/21
Lens-enhanced communication device	11145986	10/12/21
Transceiver using novel phased array antenna panel for concurrently transmitting and receiving wireless signals	9692489	06/27/17
Wireless receiver having improved phase shifting schemes with reduced number of phase shifters	9755601	09/05/17
Wireless phased array receiver using low resolution analog-to-digital converters	9813231	11/07/17
Wireless transceiver having a phased array antenna panel for transmitting circularly-polarized signals with modulated angular speed	9813269	11/07/17
Amplitude and phase calibration at a receiver chip in an antenna array	9887760	02/06/18
Wireless receiver with axial ratio and cross-polarization calibration	9923712	03/20/18
Wireless receiver with reduced number of phase shifters	9948260	04/17/18
Wireless receiver using low resolution analog-to-digital converters	9967087	05/08/18
Low-cost and low-loss phased array antenna panel	15278970	09/28/16
Phased array antenna panel having cavities with RF shields for antenna probes	15279171	09/28/16
Phased array antenna panel having quad split cavities dedicated to vertical-polarization and horizontal-polarization antenna probes	15279219	09/28/16
Transceiver for concurrently transmitting and receiving wireless signals	15600443	05/19/17
Method in wireless receiver for using reduced number of phase shifters	15870671	01/12/18
Amplitude and Phase Calibration at a Transmitter Chip in an Antenna Array	10177828	01/08/19

Non-Line-Of-Sight (NLOS) Coverage for Millimeter Wave Communication	10321332	06/11/19
Low-Loss Isolating Outphasing Power Combiner in a Radio Frequency Device	9935663	04/03/18
Optimized Multi-Beam Antenna Array Network with an Extended Radio Frequency Range	10348371	07/09/19
Controlled Power Transmission in a Radio Frequency (RF) Device Network	10090887	10/02/18
Signal Cancellation in Radio Frequency (RF) Device Network	10862559	12/08/20
Amplitude and Phase Calibration at a Receiver Chip in an Antenna Array	10142006	11/27/18
Outphasing Calibration in a Radio Frequency (RF) Transmitter Device	10171115	01/01/19
Low-Loss Isolating Outphasing Power Combiner in a Radio Frequency Device	10243594	03/26/19
Controlled Power Transmission in Radio Frequency (RF) Device Network	10666326	05/26/20
Amplitude and Phase Calibration at a Transmitter Chip in an Antenna Array	10447372	10/15/19
Outphasing-Calibration in a Radio Frequency (RF) Transmitter Device	10530401	01/07/20
Non-Line-Of-Sight (NLOS) Coverage for Millimeter Wave Communication	10721634	07/21/20
Waveguide antenna element based beam forming phased array antenna system for millimeter wave communication	11088457	08/10/21
Wireless Transceiver for Multi-Beam and with 5G Application	10389412	08/20/19
Waveguide Antenna Element-Based Beam Forming Phased Array Antenna System for Millimeter Wave Communication	11108167	08/31/21
Low-power and low-latency non-standalone initial access to new radio carrier	10785705	09/22/20
Outphasing power combiner	10938347	03/02/21
Reconfigurable and modular active repeater device	10819415	10/27/20
5g signals detection using neural network	11026198	06/01/21
Antenna system for portable communication device for millimeter wave communication	11108168	08/31/21
Active repeater device for operational mode based beam pattern changes for communication with a plurality of user equipment	11088756	08/10/21
Optimized Multi-Beam Antenna Array Network with an Extended Radio Frequency Range	10951274	03/16/21
Outphasing-Calibration in a Radio Frequency (RF) Transmitter Device	10917126	02/09/21

Active repeater device shared by multiple service providers to facilitate communication with customer premises equipment	11082123	08/03/21
Controlled Power Transmission in Radio Frequency (RF) Device Network	11057077	07/06/21
Non-Line-Of-Sight (NLOS) Coverage for Millimeter Wave Communication	11109243	08/31/21
Reconfigurable and modular active repeater device	11018752	05/25/21

EXHIBIT C

Trademarks

<u>Description</u>	<u>Registration/ Application Number</u>	<u>Registration/ Application Date</u>
MOVANDI	76719579	08/01/2016
5GRIDE OF YOUR LIFE	90807110	07/01/2021
5GJOYRIDE	90807024	07/01/2021

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EXHIBIT D

## Mask Works

Wafer type	TSMC PN	Die	T/O date	
280X	TMMLM95A	2801C0, 2802C0, 2803C0, 2804B0	1/28/2019	
RET1	TMML42A	2850B0 & 3950A0	9/15/2019	Not in use anymore
	TMML42B	2850B2 & 3950A2	2/17/2020	Not in use anymore
	TMML42C	2850B1 & 3950A1	2/25/2020	
	TMML42D	2850A0 & 3950A3	5/3/2020	
	TMML42E	2850B3 & 3950A4	2/17/2020	
RET2	TMML71A	2853B0, 3953A0, 3554A0, 3504A0	9/24/2019	Not in use anymore
	TMML71D	2853B1, 3953A1, 3504A1	5/15/2020	
	TMML71E	2853A0, 3953A2, 3554A1	5/20/2020	
RET3	TMML72A	2813A0, 3913A0	10/29/2019	
	TMML72B	2613A0, 3913A1	6/22/2020	

 Production

 Scrap