

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT3584224

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
NEWLANS, INC.	09/21/2015
RECEIVING PARTY DATA	
Name:	SPERO DEVICES, INC.
Street Address:	43 NAGOG PARK
Internal Address:	SUITE 215
City:	ACTON
State/Country:	MASSACHUSETTS
Postal Code:	01720
PROPERTY NUMBERS Total: 9	
Property Type	Number
Patent Number:	8527003
Patent Number:	8913652
Patent Number:	8866531
Patent Number:	8970252
Patent Number:	8750438
Application Number:	62105936
Application Number:	62112737
Application Number:	14017850
Patent Number:	8779832
CORRESPONDENCE DATA	
Fax Number:	(978)341-0136
<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>	
Phone:	978-341-0036
Email:	cheryl.thomas@hbsr.com
Correspondent Name:	TIMOTHY J. MEAGHER
Address Line 1:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C.
Address Line 2:	530 VIRGINIA ROAD, P.O. BOX 9133
Address Line 4:	CONCORD, MASSACHUSETTS 01742-9133
ATTORNEY DOCKET NUMBER:	3620.0000-000

PATENT

NAME OF SUBMITTER:	CHERYL THOMAS
SIGNATURE:	/Cheryl Thomas/
DATE SIGNED:	10/23/2015
Total Attachments: 11 source=Spero-IP Assignment#page1.tif source=Spero-IP Assignment#page2.tif source=Spero-IP Assignment#page3.tif source=Spero-IP Assignment#page4.tif source=Spero-IP Assignment#page5.tif source=Spero-IP Assignment#page6.tif source=Spero-IP Assignment#page7.tif source=Spero-IP Assignment#page8.tif source=Spero-IP Assignment#page9.tif source=Spero-IP Assignment#page10.tif source=Spero-IP Assignment#page11.tif	

INTELLECTUAL PROPERTY ASSIGNMENT

This Intellectual Property Assignment (this "Agreement") is made and entered into as of September 21, 2015, by and between Newlans, Inc., a Delaware corporation (the "Contributor") and Spero Devices, Inc., a Delaware corporation (the "Company").

WHEREAS, the Contributor and Company are parties to that certain Contribution and Preferred Stock Purchase Agreement (the "Purchase Agreement"), dated as of the date hereof, pursuant to which the Company will acquire from the Contributor certain Contributed Assets ;

WHEREAS, this Agreement is being delivered pursuant to the terms of the Purchase Agreement;

WHEREAS, Contributor is the owner of the entire right, title, interest, benefits and privileges in and to the intellectual property that constitutes a portion of the Contributed Assets, which intellectual property is more particularly described in Exhibit A annexed hereto (the "Contributed Intellectual Property");

WHEREAS, pursuant to the Purchase Agreement, Contributor wishes to assign to Company the Contributor's entire right, title, interest, benefits, privileges and goodwill in and to the Contributed Intellectual Property; and

WHEREAS, Company is desirous of acquiring Contributor's entire right, title, interest, benefits and privileges and goodwill in and to the Contributed Intellectual Property.

NOW, THEREFORE, for and in consideration of the promises and the mutual covenants contained herein, and in the Purchase Agreement, and for other good and valuable consideration, the receipt, adequacy and legal sufficiency of which are hereby acknowledged, the parties do hereby agree as follows:

1. Capitalized Terms. Capitalized terms used but not defined herein shall have the meanings set forth in the Purchase Agreement.

2. Assignment and Acceptance. Effective as of the Closing, Contributor hereby unconditionally and irrevocably grants, bargains, sells, assigns, transfers and sets over (collectively, the "Assignment") to Company all of the rights, titles and interest, legal or equitable, in and to the Contributed Intellectual Property, and all other corresponding rights that are or may be hereafter secured under the laws of any country, now or hereafter in effect, for Company's own use and enjoyment, and for the use and enjoyment of Company's successors, assigns or other legal representatives, as fully and entirely as the same would have been held and enjoyed by Contributor if this Agreement had not been made, together with all payments due or payable as of the Closing Date or thereafter, including without limitation, all claims for damages by reason of past, present or future infringement or other unauthorized use of the foregoing intellectual property, with the right to sue for, and collect the same for Company's own use and enjoyment and for the use and enjoyment of Company's successors, assigns or other legal representatives, and Company hereby accepts the Assignment. Contributor hereby sells, assigns, transfers and sets over to Company, its successors, assigns and legal representatives, its entire right, title, interest, benefits, privileges and goodwill in and throughout the United States of America (including its territories and dependencies) and all countries and jurisdictions foreign thereto in and to said Contributed Intellectual Property, including, without limitation, the right to sue any third parties for any past infringement of the Contributed Intellectual Property or otherwise enforce or exploit the Contributed Intellectual Property, or the right to renew any registrations within or outside the United States based in whole or in part upon the Contributed Intellectual Property.

3. Warranty of Title. Contributor warrants title to the intellectual property as set forth in the Purchase Agreement.

4. Terms of the Purchase Agreement. The terms of the Purchase Agreement, including but not limited to Contributor's representations, warranties, covenants, agreements and indemnities relating to the Intellectual Property, are incorporated herein by this reference. The Contributor acknowledges and agrees that the representations, warranties, covenants, agreements and indemnities contained in the Purchase Agreement shall not be superseded hereby but shall remain in full force and effect to the full extent provided therein. In the event of any conflict or inconsistency between the terms of the Purchase Agreement and the terms hereof, the terms of the Purchase Agreement shall govern.

5. Further Actions. Each of the parties hereto covenants and agrees to execute and deliver, at the request of the other party hereto, such further instruments of transfer and assignment and to take such other action as such other party may reasonably request to more effectively consummate the assignments and assumptions contemplated by this Agreement.

6. Miscellaneous.

(a) **Effectiveness.** This Agreement is being entered into in connection with the Purchase Agreement. This Agreement shall become automatically effective without any further action of the parties upon, and only upon, the closing of the transactions as contemplated by the Purchase Agreement. In the event the Closing of the transactions contemplated by the Purchase Agreement is not consummated and the Purchase Agreement is terminated, this Agreement shall become null and void and of no further force and effect.

(b) **Headings.** The section headings used herein are inserted for convenience only and shall not affect in any way the meaning or interpretation of this Agreement.

(c) **Governing Law.** This Assignment shall be governed by, and construed in accordance with (i) the laws of the United States, in respect to trademark and patent issues; and (ii) in all other respects, including as to validity (except for patent and trademark issues), interpretation and effect, the domestic laws of the State of Delaware without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of Delaware.

(d) **Assignability.** Neither the rights nor the obligations of any party to this Agreement may be transferred or assigned, provided that (i) the Company may assign its rights under this Agreement to any affiliate and (ii) Company may assign its interest in this Agreement to any lender providing financing to Company for collateral security purposes. Any other purported assignment of this Agreement or any of the rights and obligations hereunder shall be null, void and of no effect.

(e) **Binding Effect; Third Party Beneficiaries.** This Agreement shall be binding upon and shall inure to the benefit of the parties and their respective successors and, if applicable, permitted assigns. Each party intends that this Agreement shall not benefit or create any right or cause of action in any Person other than the parties hereto.

(f) **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall constitute an original but when taken together shall constitute but one instrument.

(g) **Amendments.** This Agreement may be amended, modified or waived only by a written agreement signed by the Contributor and the Company. With regard to any power, remedy or

right provided in this Agreement or otherwise available to any party, (i) no waiver or extension of time shall be effective unless expressly contained in a writing signed by the waiving party, (ii) no alteration, modification or impairment shall be implied by reason of any previous waiver, extension of time, delay or omission in exercise or other indulgence, and (iii) waiver by any party of the time for performance of any act or condition hereunder does not constitute a waiver of the act or condition itself.

[Signature Page to Follow]

IN WITNESS WHEREOF, the parties have executed this Intellectual Property Assignment as of the date first above written.

CONTRIBUTOR:

Newlans, Inc.

By: *David Singh*
Its: CEO

COMPANY:

Spero Devices, Inc.

By: *Dev Vrat Anfla*
Its: PRESIDENT

Exhibit A

INTELLECTUAL PROPERTY

Patents and Patent Applications:

All right, title and interest in the following patents and patent applications identified on the attached Patent List and listed below will be transferred and assigned to the Company:

- 1) Analog Space Time Convolution Processor
- 2) Analog Space Time Convolutional Neural Network
- 3) Hybrid CMOS/Memristor Event Driven Convolutional Neural Network



HBSR Patent List -
1_12_2015.pdf

Docket Number	Subcase	Case	Application	Publication	Patent	Status
Country Name		Type	Number/Date	Number/Date	Number/Date	
3620.1000-004/		RCE	11/801,421	20080002652	8,527,003	Granted
United States of America			09-May-2007	03-Jan-2008	03-Sep-2013	

Title: System And Apparatus For High Data Rate Wireless Communications

3620.1005-002/		PRI	PCT/US2009/001512	WO2009/114123		PCT DOR MET
Patent Cooperation Treaty			10-Mar-2009	17-Sep-2009		

Title: Method, System, And Apparatus for Wideband Signal Processing

3620.1005-003/		RCE	12/921,987	20110051782	8,913,652	Granted
United States of America			10-Mar-2009	03-Mar-2011	16-Dec-2014	

Title: Method, System, And Apparatus for Wideband Signal Processing

3620.1005-004/		PCT	09721007.4	2253066		Published
European Patent Convention			10-Mar-2009	24-Nov-2010		

Title: Method, System, And Apparatus for Wideband Signal Processing

3620.1005-005/		PCT	2010550683		5528358	Granted
Japan			10-Mar-2009		25-Apr-2014	

Title: Method, System, And Apparatus for Wideband Signal Processing

3620.1005-006/		PCT	200980108415.8	CN101971508		Allowed
China (People's Republic)			10-Mar-2009	09-Feb-2011		

Title: Method, System, And Apparatus for Wideband Signal Processing

3620.1005-007/		PCT	1020107022508			Pending
Korea, Republic of			10-Mar-2009			

Title: Method, System, And Apparatus for Wideband Signal Processing

Docket Number Country Name	Subcase	Case Type	Application Number/Date	Publication Number/Date	Patent Number/Date	Status
3620.1009-002/ Patent Cooperation Treaty		PRI	PCT/US2011/024542 11-Feb-2011	WO2011/152896 08-Dec-2011		PCT DOR MET
<i>Title:</i> Broadband Analog Radio-Frequency Components						
3620.1009-003/ China (People's Republic)		PCT	201180009401.8 11-Feb-2011	102835027 19-Dec-2012		Published
<i>Title:</i> Broadband Analog Radio-Frequency Components						
3620.1009-004/ European Patent Convention		PCT	11790125.6 11-Feb-2011	2522073 14-Nov-2012		Published
<i>Title:</i> Broadband Analog Radio-Frequency Components						
3620.1009-005/ Japan		PCT	2012553037 11-Feb-2011	2013520101 30-May-2013		Published
<i>Title:</i> Broadband Analog Radio-Frequency Components						
3620.1009-006/ Korea, Republic of		PCT	1020127023161 11-Feb-2011		101310418 12-Sep-2013	Granted
<i>Title:</i> Broadband Analog Radio-Frequency Components						
3620.1009-007/ United States of America		RCE	13/576,635 11-Feb-2011	20120293233 22-Nov-2012	8,866,531 21-Oct-2014	Granted
<i>Title:</i> Broadband Analog Radio-Frequency Integrator						
3620.1009-008/ Hong Kong		RCN	13101567.6 04-Feb-2013	1174745A 14-Jun-2013		Published
<i>Title:</i> Broadband Analog Radio-Frequency Components						

Monday, January 12, 2015		Patent List			Page: 3	
Docket Number Country Name	Subcase	Case Type	Application Number/Date	Publication Number/Date	Patent Number/Date	Status
3620.1010-001/ Patent Cooperation Treaty		PRI	PCT/US2011/058786 01-Nov-2011	WO2012/064551 18-May-2012		PCT DOR MET
<i>Title:</i> Field Programmable Analog Array						
3620.1010-002/ United States of America		PCT	13/883,597 01-Nov-2011	20130293264 07-Nov-2013		Allowed
<i>Title:</i> Field Programmable Analog Array						
3620.1013-001/ United States of America		PRI	13/491,892 08-Jun-2012	20120314822 13-Dec-2012	8,750,438 10-Jun-2014	Granted
<i>Title:</i> Interference Resistant Compressive Sampling						
3620.1013-002/ Patent Cooperation Treaty		PRI	PCT/US2012/041587 08-Jun-2012	WO2012/170840 13-Dec-2012		PCT DOR MET
<i>Title:</i> Interference Resistant Compressive Sampling						
3620.1013-003/ China (People's Republic)		PCT	201280027560.5 08-Jun-2012			Pending
<i>Title:</i> Interference Resistant Compressive Sampling						
3620.1013-004/ European Patent Convention		PCT	12730298.2 08-Jun-2012	2719085 16-Apr-2014		Published
<i>Title:</i> Interference Resistant Compressive Sampling						
3620.1013-005/ Japan		PCT	2014514888 08-Jun-2012	2014517632 17-Jul-2014		Published
<i>Title:</i> Interference Resistant Compressive Sampling						

Note: This summary is confidential information of the client for internal informational purposes only and is subject to frequent change.

Monday, January 12, 2015		Patent List				Page: 4
Docket Number Country Name	Subcase	Case Type	Application Number/Date	Publication Number/Date	Patent Number/Date	Status
3620.1013-006/ Korea, Republic of		PCT	1020147000391 08-Jun-2012			Pending
<i>Title:</i> Interference Resistant Compressive Sampling						
3620.1013-007/ Hong Kong		REP	14108979.2 03-Sep-2014	1195681A 14-Nov-2014		Published
<i>Title:</i> Interference Resistant Compressive Sampling						
3620.1014-001/ United States of America		RCE	13/666,269 01-Nov-2012	20130106487 02-May-2013	8,779,832 15-Jul-2014	Granted
<i>Title:</i> Wideband Signal Processing						
3620.1014-002/ Patent Cooperation Treaty		PRI	PCT/US2012/062965 01-Nov-2012	WO2013/067118 10-May-2013		Published
<i>Title:</i> Wideband Signal Processing						
3620.1014-003/ China (People's Republic)		PCT	201280053794.7 01-Nov-2012	CN103959726A 30-Jul-2014		Published
<i>Title:</i> Wideband Signal Processing						
3620.1014-004/ European Patent Convention		PCT	12845592.0 01-Nov-2012	2777231 17-Sep-2014		Published
<i>Title:</i> Wideband Signal Processing						
3620.1014-005/ Japan		PCT	2014540065 01-Nov-2012			Pending
<i>Title:</i> Wideband Signal Processing						

Note: This summary is confidential information of the client for internal informational purposes only and is subject to frequent change.

Docket Number Country Name	Subcase	Case Type	Application Number/Date	Publication Number/Date	Patent Number/Date	Status
3620.1014-006/ Korea, Republic of		PCT	1020147014688 01-Nov-2012			Pending
<i>Title:</i> Wideband Signal Processing						
3620.1018-002/ United States of America		PRI	14/017,850 04-Sep-2013	20140306777 16-Oct-2014		Published
<i>Title:</i> Bi-Quad Calibration						
3620.1018-003/ Patent Cooperation Treaty		PRI	PCT/US2013/057996 04-Sep-2013	WO2014/039517 13-Mar-2014		Published
<i>Title:</i> Bi-Quad Calibration						
3620.1021-000/1 United States of America		PRO	62/056,016 26-Sep-2014			Pending
<i>Title:</i> Analog Image Alignment						
3620.1021-001/2 United States of America		PRO	62/084,852 26-Nov-2014			Pending
<i>Title:</i> Per-Pixel Analog Image Alignment						
3620.1022-000/ United States of America		PRO				Unfiled
<i>Title:</i> Analog Signal Processing For Next Generation Sequencing						
3620.1024-000/ United States of America		PRO				Unfiled
<i>Title:</i> Radar System						

Monday, January 12, 2015

Report Selection

RecordCount: 35

- ☒ by Docket Number
- ☐ by Country
- ☐ by Originating Entity
- ☐ by HBSR Client
- ☐ by Inventor

Report Format

- ☒ Concise
- ☐ Comprehensive

Inventors

- ☐ Print
- ☒ Do Not Print

Assignment

- ☐ Print
- ☒ Do Not Print

Remarks

- ☐ Primary
- ☐ Secondary
- ☐ Both
- ☒ None

Preview before printing ☒

Date Range

- ☒ Filing
- ☐ Issue
- ☐ Expiration
- ☐ Last Update

From:

To:

Docket Number: 3620*

Originating Entity:

Agent:

Country: <> FG Foreign General

Area:

Inventor:

HBSR Client:

Attorney: Orig.Atty:

Status(es):

Case Type(s):

Status Codes:

- ☒ Active
- ☐ Inactive
- ☐ All

Note: This summary is confidential information of the client for internal informational purposes only and is subject to frequent change.

RECORDED: 10/23/2015

PATENT
REEL: 036868 FRAME: 0324