

08-24-2001



To the Director of U.S. Patent and Trademark Office

101821845

original documents or copy thereof.

1. Name of conveying party(ies):

8-17-01

Brack G. HATTLER

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:



Assignment



Merger



Security Agreement



Change of Name



Other

Execution Date: December 13, 2000

2. Name and address of receiving party(ies):

Name: ALUNG TECHNOLOGIES, INC.

428 Center for Biotechnology and Bioengineering

Address: 300 Technology Drive

City: Pittsburgh State: PA Zip: 15219-3112

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s)

If this document is being filed together with a new application, the execution date of the application is: Ddate

A. Patent Application No(s).

B. Patent No(s).

SEE ATTACHED

Additional numbers attached? ☒ Yes ☐ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Jody L. Burtner, Senior Paralegal

REED SMITH LLP

Address: P.O. Box 488

City: Pittsburgh State: PA Zip: 15230

6. Total number of applications and patents involved:

9

7. Total fee (37 CFR 3.41):

\$360.00



Enclosed



Authorized to be charged to deposit account



Charge any deficiency to deposit account

8. Deposit account number:

18-0582

(Attach duplicate copy of this page if paying by deposit account)

08/23/2001 330YRNE 00000120 4911689

01-FC-501

360.00 00

DO NOT USE THIS SPACE

9. Statement and signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true and copy of the original document.

Jody L. Burtner, Senior Paralegal  
Name of Person Signing

Signature

August 15, 2001  
Date

Total number of pages including cover sheet, attachments, and document: 8

Mail documents to be recorded with required cover sheet information to:  
Director of the U.S. Patents & Trademark Office, Box Assignments  
Washington, D.C. 20231

**1.A Additional Conveying Party(ies) Name(s) To Be Recorded**

**4.A Additional Patent Application Serial Numbers To Be Recorded**

**4.B Additional Patent Registration Numbers To Be Recorded**

<b>4911689</b>	<b>4986809</b>	<b>5122113</b>	<b>5207640</b>	<b>5219326</b>	<b>5271743</b>
<b>5376096</b>	<b>5501663</b>	<b>5865789</b>			

## TECHNOLOGY ASSIGNMENT AGREEMENT

**THIS TECHNOLOGY ASSIGNMENT AGREEMENT** (the "Agreement") is entered into as of the 13<sup>th</sup> day of December, 2000, but intended by the parties to be effective as of November 1, 1999, by and between ALung Technologies, Inc., a Pennsylvania corporation (the "Company"), and Brack G. Hattler, M.D., a Pennsylvania resident ("Hattler").

### **RECITALS:**

**WHEREAS**, Hattler has made various inventions relating to intravenous gas transfer devices/methods for transferring oxygen gas, carbon dioxide gas and/or other substances (such as anesthetics, for example) to and/or from the blood (hereinafter the "Intravenous Gas Transfer Devices/Methods") including, but not limited to, those inventions disclosed or claimed in the patents set forth on Exhibit A hereto (the "Hattler Patents");

**WHEREAS**, Hattler may possess various other intellectual property rights, in addition to the Hattler Patents, relating to Intravenous Gas Transfer Devices/Methods;

**WHEREAS**, Hattler obtained certain rights in the Hattler Patents from Medtronic, Inc. ("Medtronic") in exchange for his agreement to cause the Company to (i) issue common stock in the Company in an amount valued at \$562,000 to Medtronic and (ii) agree to pay to Medtronic a 3% royalty on "products" sold by the Company, subject to a cumulative cap of \$1,000,000;

**WHEREAS**, so long as Hattler remains an employee of the University of Pittsburgh or one of its affiliates (the "University"), future intellectual property developed by Hattler may be the property of the University;

**WHEREAS**, Hattler has agreed to use commercially reasonable efforts to obtain such future intellectual property for the Company and cause such intellectual property to be assigned or licensed to the Company; and

**WHEREAS**, the Company desires to acquire all right, title and interest in any and all intellectual property presently owned and developed in the future by Hattler which relates, in whole or in part to, Intravenous Gas Transfer Devices/Methods.

**NOW, THEREFORE**, for and in consideration of the mutual covenants contained herein, and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by the parties hereto, and intending to be legally bound under the laws of the Commonwealth of Pennsylvania, the parties agree as follows:

1. **Definition. "Intellectual Property"** shall mean all copyrights, copyright registrations, proprietary processes, trade secrets, license rights, specifications, technical manuals and data, drawings, inventions, designs, patents (including without limitation the Hattler Patents) and patent applications which may issue or have issued in the United States and/or in any foreign countries together with all divisions, reissues, continuations, renewals and extensions thereof, including all priority rights under the International Convention associated with each country, mask works, tradenames, trademarks, service marks, product information and data, know-how and development work-in-progress, customer lists, software, business correspondence and marketing plans and any other intangible property, whether pending, applied for or issued,

whether filed in the United States or in other countries, including, without limitation, all associated goodwill, in each case that are embodied in, derived from or relate, in whole or in part, to Intravenous Gas Transfer Devices/Methods; and all things authored, discovered, developed, made, perfected, improved, designed, engineered, acquired, produced, conceived or first reduced to practice by Hattler or any of his agents that are embodied in, derived from or relate, in whole or in part, to Intravenous Gas Transfer Devices/Methods, in any stage of development, including, without limitation, any modifications, enhancements, designs, concepts, techniques, methods, ideas, flow charts, coding sheets, notes and all other information relating thereto.

2. **Assignment.** (a) Hattler hereby sells, assigns, transfer and sets over to the Company, all right, title and interest (choate and inchoate) of Hattler in the Intellectual Property, including, but not limited to, the Hattler Patents, all such Intellectual Property to be held and enjoyed by the Company for its own use and enjoyment and for the use and enjoyment of its successors, assigns and other legal representatives, as fully and entirely as the same would have been held and enjoyed by Hattler if this Assignment had not been made. Hattler further assigns to the Company all rights in and to any claims for infringement, and/or misappropriation of Intellectual Property for acts that first began prior to the execution of this instrument, including without limitation, the full right to pursue and obtain injunctive relief and to collect money damages, enhanced damages, attorneys fees, royalties and any other form of monetary relief to which Hattler may have been entitled had this Assignment not been made.

(b) Hattler hereby sells, assigns, transfers and sets over to the Company, all right, title and interest (choate and inchoate) of Hattler in Intellectual Property pertaining to Intravenous Gas Transfer Devices/Methods developed by Hattler from and after the date hereof, all such Intellectual Property to be held and enjoyed by the Company for its own use and enjoyment and for the use and enjoyment of its successors, assigns and other legal representatives, as fully and entirely as the same would have been held and enjoyed by Hattler if this Assignment had not been made. To the extent that the University has any interests in such Intellectual Property developed from and after the date hereof, Hattler will cooperate with the Company and use commercially reasonable efforts to obtain from the University an assignment or license of such Intellectual Property for the benefit of the Company.

3. **Duties of Hattler.** Hattler agrees that he, his legal representatives or other persons duly authorized, will communicate to the Company or the representatives thereof, any facts known to him respecting the Intellectual Property, and will, upon request, testify in any legal proceedings, sign all lawful papers, make all rightful oaths, and generally do all other and further lawful acts deemed necessary or expedient by the Company or by counsel for the Company, to assist or enable the Company to obtain any enforceable benefits from the rights and interests herein assigned, all at the expense of the Company.

4. **Consideration.** In consideration of the rights and interests herein assigned by Hattler, the Company has issued shares of Common Stock of the Company to Hattler and hereby grants to Hattler the consideration set forth in the Royalty Agreement between the Company and Hattler dated as of the date hereof.

5. **Representations of Hattler.** Hattler represents and warrants to the Company that, subject to the last sentence of this Section, he: (i) has not assigned, transferred, licensed, pledged or otherwise encumbered his current interest in the Intellectual Property or agreed to do so, (ii) has full power and authority to enter into this Agreement and to make the assignment as provided in Section 1, (iii) is not aware of any violation, infringement or misappropriation of any third parties' rights (or any claim thereof) by the Intellectual Property, and (iv) is not aware of any questions or challenges with respect to the patentability or validity of any claims of any existing patents, including without limitation the Hattler Patents, or patent applications relating to the Intellectual Property. The rights and/or obligations acquired or assumed by Hattler pursuant to agreements with Medtronic, Inc. and the University of Pittsburgh are included within the terms and conditions of this Agreement.

6. **Waiver of Rights.** Neither the failure or any delay on the part of either party to exercise any right, remedy, power or privilege under this Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of any right, remedy, power or privilege preclude any other or further exercise of the same or of any other right, remedy, power or privilege nor shall any waiver of any right, remedy, power or privilege with respect to any occurrence be construed as a waiver of such right, remedy, power or privilege with respect to any other occurrence.

7. **Conditions Precedent.** The obligations and duties of Hattler under this agreement shall not arise until the following conditions have been satisfied: (i) the execution by William Federspiel, Ph.D. ("Federspiel") of a document assigning all of Federspiel's right, title and interest in any intellectual property presently owned or developed in the future by Federspiel relating to Intravenous Gas Transfer Devices/Methods to the Company; and (ii) the issuance of shares of common stock in the Company in accordance with Exhibit B.

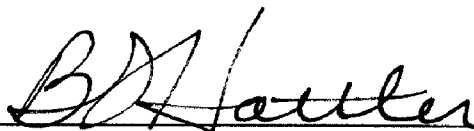
8. **Controlling Law.** This Agreement and all questions relating to its validity, interpretation, performance, mediation and enforcement (including, without limitation, provisions concerning limitations of actions) shall be governed by and construed in accordance with the domestic laws of the Commonwealth of Pennsylvania, notwithstanding any choice of law doctrines of such jurisdiction or any other jurisdiction which ordinarily would cause the substantive law of another jurisdiction to apply.

9. **Entire Agreement.** This Agreement contains the entire understanding among the parties hereto with respect to the subject matter hereof, and supersedes all prior and contemporaneous agreements and understandings, inducements or conditions, whether express or implied, oral or written.

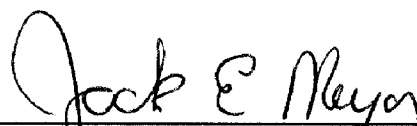
[SIGNATURES APPEAR ON THE FOLLOWING PAGE]

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

**BRACK G. HATTLER, M.D.**

  
\_\_\_\_\_

**ALUNG TECHNOLOGIES, INC.**

  
By: Jack E. Meyer  
Title: CEO

COMMONWEALTH OF PENNSYLVANIA )  
 )  
COUNTY OF ALLEGHENY ) ss.

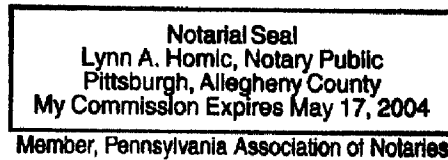
On the 13<sup>th</sup> day of DECEMBER, 2000, before me, a Notary Public, personally appeared Brack G. Hattler, M.D., known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and that said person acknowledged that he executed the same for the purposes therein contained.

In Witness Whereof, I hereunto set my hand and official seal.

Lynn A. Homic

Notary Public

My Commission Expires:



# **EXHIBIT A**

## **Patents**

<b><u>Inventor</u></b>	<b><u>Patent Number</u></b>	<b><u>Date of Patent</u></b>
Brack G. Hattler	4,911,689	March 27, 1990
Brack G. Hattler	4,986,809	January 22, 1991
Brack G. Hattler	5,122,113	June 16, 1992
Brack G. Hattler	5,207,640	May 4, 1993
Brack G. Hattler	5,219,326	June 15, 1993
Brack G. Hattler	5,271,743	December 21, 1993
Brack G. Hattler	5,376,069	December 27, 1994
Brack G. Hattler	5,501,663	March 26, 1996
Brack G. Hattler	5,865,789	February 2, 1999