900276852

TRADEMARK ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
Broncus Medical Inc.		01/09/2014	CORPORATION: CALIFORNIA

RECEIVING PARTY DATA

Name:	LIFETECH SCIENTIFIC (HONG KONG) CO., LTD.
Street Address:	Cybio Electronic Building, Langshan 2nd Street, North Area of High-tech Park
City:	Nanshan District, Shenzhen
State/Country:	CHINA
Entity Type:	COMPANY: HONG KONG

Name:	DINOVA VENTURE PARTNERS LP II, L.P.
Street Address:	Suite 1610, New World Center, 6009 Yitian Rd.
City:	Futian District, Shenzhen
State/Country:	CHINA
Entity Type:	LIMITED PARTNERSHIP: CHINA

Name:	TIP-BRONCUS LIMITED	
Street Address:	1816, 18/F Hutchison House, 10 Harcourt Road, Central	
City:	Hong Kong	
State/Country:	HONG KONG	
Entity Type:	COMPANY: HONG KONG	

Name:	Aether Corporate Limited	
Street Address:	Suite 1610, New World Center, 6009 Yitian Rd.	
City:	Futian District, Shenzhen	
State/Country:	CHINA	
Entity Type:	COMPANY: HONG KONG	

PROPERTY NUMBERS Total: 6

	Property Type	Number	Word Mark
יו			TDANEMA DL

REEL: 005190 FRAME: 0468

Registration Number:	2810885	EXHALE
Registration Number:	2833083	В
Registration Number:	2845076	BRONCUS
Registration Number:	3724031	LUNGPOINT
Registration Number:	3955908	FLEXNEEDLE
Serial Number:	86019848	ARCHIMEDES

CORRESPONDENCE DATA

Fax Number: 4156932222

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

Phone: 4156932440
Email: crhem@cooley.com

Correspondent Name: Cooley LLP

Address Line 1: 101 California Street, 5th Floor

Address Line 4: San Francisco, CALIFORNIA 94111

ATTORNEY DOCKET NUMBER: 320271-100 BRONCUS

DOMESTIC REPRESENTATIVE

Name:

Address Line 1: Address Line 2: Address Line 3: Address Line 4:

NAME OF SUBMITTER:	C. Rhem
Signature:	/CR/
Date:	01/09/2014

Total Attachments: 25

source=Broncus AR IPSA#page1.tif

source=Broncus AR IPSA#page2.tif

source=Broncus AR IPSA#page3.tif

source=Broncus AR IPSA#page4.tif

source=Broncus AR IPSA#page5.tif

source=Broncus AR IPSA#page6.tif

source=Broncus AR IPSA#page7.tif

source=Broncus AR IPSA#page8.tif

source=Broncus AR IPSA#page9.tif

source=Broncus AR IPSA#page10.tif

source=Broncus AR IPSA#page11.tif

source=Broncus AR IPSA#page12.tif

source=Broncus AR IPSA#page13.tif

source=Broncus AR IPSA#page14.tif



AMENDED AND RESTATED INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS AMENDED AND RESTATED INTELLECTUAL PROPERTY SECURITY AGREEMENT dated as of January 9, 2014 ("Security Agreement"), is made by BRONCUS MEDICAL INC., a California corporation ("Grantor"), in favor of the secured parties listed on the signature pages hereto (each, a "Secured Party" and, collectively, the "Secured Parties").

RECITALS

- A. Secured Parties and Grantor are parties to a certain Amended and Restated Secured Convertible Note Purchase Agreement dated January 9, 2014 (the "Purchase Agreement"). Pursuant to the Purchase Agreement, Secured Parties have made and have agreed to make certain advances of money and to extend certain financial accommodations to Grantor as evidenced by those certain Secured Convertible Promissory Notes dated January 9, 2014 executed by Grantor in favor of Secured Parties, and such other Secured Convertible Promissory Notes which may be executed by Grantor in favor of Secured Parties after the date hereof (each, a "Note" and, collectively, the "Notes"), such advances, future advances, and financial accommodations being referred to herein as the "Loans".
- **B.** LifeTech Scientific (Hong Kong) Co., Ltd. ("**LifeTech**"), Dinova Venture Partners LP II, L.P. ("**Dinova**"), and TIP-Broncus Limited ("**Themes**") have entered into an Intellectual Property Security Agreement on September 16, 2013 ("**Previous Security Agreement**"). Secured Parties hereto wish to amend and restate the Previous Security Agreement in accordance with the provisions of this Security Agreement.
- C. Secured Parties are willing to make the Loans to Grantor, but only upon the condition, among others, that Grantor shall have executed and delivered to Secured Parties this Security Agreement.

AGREEMENT

Now, Therefore, in order to induce Secured Parties to make the Loans and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, and intending to be legally bound, Grantor hereby represents, warrants, covenants and agrees as follows:

1. **DEFINED TERMS**. When used in this Security Agreement the following terms shall have the following meanings (such meanings being equally applicable to both the singular and plural forms of the terms defined):

"Bankruptcy Code" means Title XI of the United States Code.

"Collateral" shall have the meaning assigned to such term in Section 2 of this Security Agreement.

1

"Copyright License" means any agreement, whether in written or electronic form, in which Grantor now holds or hereafter acquires any interest, granting any right in or to any Copyright or Copyright registration (whether Grantor is the licensee or the licensor thereunder) including, without limitation, licenses pursuant to which Grantor has obtained the exclusive right to use a copyright owned by a third party.

"Copyrights" means all of the following now owned or hereafter acquired or created (as a work for hire for the benefit of Grantor) by Grantor or in which Grantor now holds or hereafter acquires or receives any right or interest, in whole or in part: (a) all copyrights, whether registered or unregistered, held pursuant to the laws of the United States, any State thereof or any other country; (b) registrations, applications, recordings and proceedings in the United States Copyright Office or in any similar office or agency of the United States, any State thereof or any other country; (c) any continuations, renewals or extensions thereof; (d) any registrations to be issued in any pending applications, and shall include any right or interest in and to work protectable by any of the foregoing which are presently or in the future owned, created or authorized (as a work for hire for the benefit of Grantor) or acquired by Grantor, in whole or in part; (e) prior versions of works covered by copyright and all works based upon, derived from or incorporating such works; (f) income, royalties, damages, claims and payments now and hereafter due and/or payable with respect to copyrights, including, without limitation, damages, claims and recoveries for past, present or future infringement; (g) rights to sue for past, present and future infringements of any copyright; and (h) any other rights corresponding to any of the foregoing rights throughout the world.

"Event of Default' means (i) any failure by Grantor forthwith to pay or perform any of the Secured Obligations, (ii) any report, information or notice made to, obtained or received by any Secured Party at any time after the date hereof shall indicate that Secured Parties' security interest in the Collateral is not prior to all other security interests or other interests in the Collateral reflected in such report, information or notice, except for Permitted Liens, (iii) any breach by Grantor of any warranty, representation, or covenant set forth herein, and (iv) any "Event of Default" as defined in the Notes or the Purchase Agreement.

"Intellectual Property" means any intellectual property, in any medium, of any kind or nature whatsoever, now or hereafter owned or acquired or received by Grantor or in which Grantor now holds or hereafter acquires or receives any right or interest, and shall include, in any event, any Copyright, Trademark, Patent, License, trade secret, customer list, marketing plan, internet domain name (including any right related to the registration thereof), proprietary or confidential information, mask work, source, object or other programming code, invention (whether or not patented or patentable), technical information, procedure, design, knowledge, know-how, software, data base, data, skill, expertise, recipe, experience, process, model, drawing, material or record.

"License" means any Copyright License, Patent License, Trademark License or other license of rights or interests, whether in-bound or out-bound, whether in written or electronic form, now or hereafter owned or acquired or received by Grantor or in which Grantor now holds or hereafter acquires or receives any right or interest, and shall include any renewals or extensions of any of the foregoing thereof.

"Lien" means any mortgage, lien, deed of trust, charge, pledge, security interest or other encumbrance.

"Patent License" means any agreement, whether in written or electronic form, in which Grantor now holds or hereafter acquires any interest, granting any right with respect to any invention on which a Patent is in existence (whether Grantor is the licensee or the licensor thereunder).

"Patents" means all of the following in which Grantor now holds or hereafter acquires any interest: (a) all letters patent of the United States or any other country, all registrations and recordings thereof and all applications for letters patent of the United States or any other country, including, without limitation, registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States, any State thereof or any other country; (b) all reissues, divisions, continuations, renewals, continuations-in-part or extensions thereof; (c) all petty patents, divisionals and patents of addition; (d) all patents to issue in any such applications; (e) income, royalties, damages, claims and payments now and hereafter due and/or payable with respect to patents, including, without limitation, damages, claims and recoveries for past, present or future infringement; and (f) rights to sue for past, present and future infringements of any patent.

"Permitted Lien" means: (a) any Liens existing on the date of this Security Agreement and set forth on Schedule A attached hereto; (b) Liens for taxes, fees, assessments or other governmental charges or levies, either not delinquent or being contested in good faith by appropriate proceedings, provided the same have no priority over any of Secured Parties' security interests created hereunder; (c) licenses or sublicenses granted to others in the ordinary course of Grantor's business if such are not otherwise prohibited under this Security Agreement and do not interfere in any material respect with the business of Grantor; (d) any right, title or interest of a licensor under a license provided that such license or sublicense does not prohibit the grant of the security interest granted hereunder; and (e) Liens arising from judgments, decrees or attachments to the extent and only so long as such judgment, decree or attachment has not caused or resulted in an Event of Default.

"Proceeds" means and includes any "proceeds," as such term is defined in Article 9 of the UCC, now or hereafter owned or acquired or received by Grantor or in which Grantor now holds or hereafter acquires or receives any right or interest, and shall include, in any event, any and all (a) accounts, chattel paper, instruments, investment property, cash or other forms of money, currency or funds or other property of any nature or type whatsoever payable to or renewable by Grantor from time to time in respect of the Collateral, including upon the sale, lease, license, exchange or other disposition of any Collateral, (b) proceeds of any insurance, indemnity, warranty or guaranty payable to Grantor from time to time with respect to any of the Collateral, including by reason of the loss, nonconformity or interference with the use of, defects or infringement of rights in, or damage to, any of the Collateral, (c) payments (in any form whatsoever) made or due and payable to Grantor from time to time in connection with any requisition, confiscation, condemnation, seizure or forfeiture of all or any part of the Collateral by any governmental authority (or any person acting under color of governmental authority), (d) claims of Grantor against third parties arising out of the loss, nonconformity, interference with the use of, defects or infringements of rights in, or damage to, any of the Collateral,

including any claim (i) for past, present or future infringement of any Patent or Patent License, Copyright or Copyright License or (ii) for past, present or future infringement or dilution of any Trademark or Trademark License or for injury to the goodwill associated with any Trademark, Trademark registration or Trademark licensed under any Trademark License, (e) rights arising out of any of the Collateral, and (f) other property of any nature, type or kind whatsoever from time to time paid or payable under or in connection with, collected on, or distributed on account of, any of the Collateral.

"Pro Rata" means, as to any Secured Party at any time, the percentage equivalent at such time of such Secured Party's aggregate unpaid principal amount of Loans, divided by the combined aggregate unpaid principal amount of all Loans of all Secured Parties.

"Requisite Holders" has the meaning contained in the Purchase Agreement.

"Secured Obligations" means (a) the obligation of Grantor to repay Secured Parties all of the unpaid principal amount of, and accrued interest on (including any interest that accrues after the commencement of bankruptcy), the Loans and (b) the obligation of Grantor to pay any fees, costs or expenses of any Secured Party under the Notes, the Purchase Agreement, or this Security Agreement.

"Security Agreement" means this Intellectual Property Security Agreement and all Schedules hereto, as the same may from time to time be amended, modified, supplemented or restated.

"Trademark License" means any agreement, whether in written or electronic form, in which Grantor now holds or hereafter acquires any interest, granting any right in and to any Trademark or Trademark registration (whether Grantor is the licensee or the licensor thereunder).

"Trademarks" means any of the following in which Grantor now holds or hereafter acquires any interest: (a) any trademarks, tradenames, corporate names, company names, business names, trade styles, service marks, logos, other source or business identifiers, prints and labels on which any of the foregoing have appeared or appear, designs and general intangibles of like nature, now existing or hereafter adopted or acquired, all registrations and recordings thereof and any applications in connection therewith, including, without limitation, registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States, any State thereof or any other country (collectively, the "Marks"); (b) any reissues, extensions or renewals thereof; (c) the goodwill of the business symbolized by or associated with the Marks; (d) income, royalties, damages, claims and payments now and hereafter due and/or payable with respect to the Marks, including, without limitation, damages, claims and recoveries for past, present or future infringement; and (e) rights to sue for past, present and future infringements of the Marks.

"UCC" means the Uniform Commercial Code as the same may from time to time be in effect in the State of California (and each reference in this Security Agreement to an Article thereof (denoted as a Division of the UCC as adopted and in effect in the State of California) shall refer to that Article (or Division, as applicable) as from time to time in effect; provided, however, in the event that, by reason of mandatory provisions of law, any or all of the

attachment, perfection or priority of Secured Parties' security interest in any Collateral is governed by the Uniform Commercial Code as in effect in a jurisdiction other than the State of California, the term "UCC" shall mean the Uniform Commercial Code (including the Articles thereof) as in effect at such time in such other jurisdiction for purposes of the provisions hereof relating to such attachment, perfection or priority and for purposes of definitions related to such provisions.

- 2. Grant of Security Interest. As collateral security for the full, prompt, complete and final payment and performance when due (whether at stated maturity, by acceleration or otherwise) of all the Secured Obligations and in order to induce Secured Parties to cause the Loans to be made, Grantor hereby assigns, conveys, mortgages, pledges, hypothecates and transfers to Secured Parties, and hereby grants to Secured Parties, a security interest in all of Grantor's right, title and interest in, to and under the following, whether now owned or hereafter acquired (all of which being collectively referred to herein as the "Collateral"):
- **2.1** the Intellectual Property, including, without limitation, any and all Copyrights, Copyright Licenses, Patents, Patent Licenses, Trademarks, and Trademark Licenses set forth on **Schedule B** attached hereto and incorporated herein by this reference; and
- **2.2** all Proceeds of the foregoing and all accessions to, substitutions and replacements for and rents, profits and products of the foregoing.

Notwithstanding the foregoing provisions of this Section 2, the grant, assignment and transfer of a security interest as provided herein shall not extend to, and the term "Collateral" shall not include: (a) "intent-to-use" trademarks at all times prior to the first use thereof, whether by the actual use thereof in commerce, the recording of a statement of use with the United States Patent and Trademark Office or otherwise or (b) any License in which Grantor has any right, title or interest if and to the extent such License includes a provision containing a restriction on assignment such that the creation of a security interest in the right, title or interest of Grantor therein would be prohibited and would, in and of itself, cause or result in a default thereunder enabling another person party to such License to enforce any remedy with respect thereto; provided that the foregoing exclusion shall not apply if (i) such prohibition has been waived or such other person has otherwise consented to the creation hereunder of a security interest in such License or (ii) such prohibition would be rendered ineffective pursuant to Sections 9-406(d), 9-407(a) or 9-408(a) of the UCC, as applicable and as then in effect in any relevant jurisdiction, or any other applicable law (including the Bankruptcy Code) or principles of equity); provided further that immediately upon the ineffectiveness, lapse or termination of any such provision, the Collateral shall include, and Grantor shall be deemed to have granted on the date hereof a security interest in, all its rights, title and interests in and to such License as if such provision had never been in effect; and provided further that the foregoing exclusion shall in no way be construed so as to limit, impair or otherwise affect Secured Parties' unconditional continuing security interest in and to all rights, title and interests of Grantor in or to any payment obligations or other rights to receive monies due or to become due under any such License and in any such monies and other proceeds of such License.

3. RIGHTS OF SECURED PARTIES.

- (a) Notwithstanding anything contained in this Security Agreement to the contrary, Grantor expressly agrees that it shall remain liable under each of its Licenses to observe and perform all the conditions and obligations to be observed and performed by it thereunder and that it shall perform all of its duties and obligations thereunder, all in accordance with and pursuant to the terms and provisions of each such License. Secured Parties shall not have any obligation or liability under any such License by reason of or arising out of this Security Agreement or the granting to Secured Parties of a lien therein or the receipt by Secured Parties of any payment relating to any such License pursuant hereto, nor shall Secured Parties be required or obligated in any manner to perform or fulfill any of the obligations of Grantor under or pursuant to any such License, or to make any payment, or to make any inquiry as to the nature or the sufficiency of any payment received by any of them or the sufficiency of any performance by any party under any such License, or to present or file any claim, or to take any action to collect or enforce any performance or the payment of any amounts which may have been assigned to it or to which it may be entitled at any time or times.
- (b) Secured Parties may at any time, upon the occurrence and during the continuance of any Event of Default, without notifying Grantor of their intention to do so, notify parties to the Licenses of Grantor that the right, title and interest of Grantor in and under such Licenses have been assigned to Secured Parties and that payments shall be made directly to Secured Parties. Upon the occurrence and during the continuance of any Event of Default, upon the request of Secured Parties, Grantor shall so notify such parties to such Licenses. Secured Parties may, in their name or in the name of others, communicate with such parties to such Licenses to verify with such parties, to Secured Parties' satisfaction, the existence, amount and terms of any such Licenses.
- **4. REPRESENTATIONS AND WARRANTIES.** Grantor hereby represents and warrants to Secured Parties that:
- **4.1** Except for the security interest granted to Secured Parties under this Security Agreement and Permitted Liens, Grantor is the sole legal and equitable owner of each item of the Collateral in which it purports to grant a security interest hereunder, having good and marketable title thereto, free and clear of any and all Liens.
- **4.2** No effective security agreement, financing statement, equivalent security or lien instrument or continuation statement covering all or any part of the Collateral exists, except such as may have been filed by Grantor in favor of Secured Parties pursuant to this Security Agreement and except for Permitted Liens.
- **4.3** This Security Agreement creates a legal and valid security interest on and in all of the Collateral in which Grantor now has rights and will create a legal and valid security interest in the Collateral in which Grantor later acquires rights.
- **4.4** Grantor is a California corporation. Grantor's chief executive office, principal place of business, and the place where Grantor maintains its records concerning the Collateral are presently located at the address set forth on the signature page hereof.

- 4.5 All Copyrights, Copyright Licenses, Patents, Patent Licenses, Trademarks and Trademark Licenses now owned, held or in which Grantor otherwise has any interest are listed on **Schedule B** attached hereto. Grantor shall amend **Schedule B** from time to time in accordance with Section 5.8 below to reflect any additions to or deletions from this list. Except as set forth on **Schedule B**, none of the Patents, Trademarks or Copyrights have been licensed to any third party.
- 5. COVENANTS. Grantor covenants and agrees with Secured Parties that from and after the date of this Security Agreement and until the Secured Obligations have been performed and paid in full and any commitment of Secured Parties to make Loans to Grantor has expired or terminated:
- **5.1 Disposition of Collateral.** Grantor shall not sell, lease, transfer or otherwise dispose of any of the Collateral, or attempt or contract to do so, other than the granting of (i) non-exclusive Licenses and similar arrangements for the use of the property of the Grantor or its subsidiaries in the ordinary course of business and (ii) Licenses that could not result in a legal transfer of title of the licensed property but that may be exclusive in respects other than territory and that may be exclusive as to territory only as to discrete geographical areas outside of the United States.
- 5.2 Change of Jurisdiction of Organization, Relocation of Business or Collateral. Grantor shall not change its jurisdiction of organization, relocate its chief executive office, principal place of business or its records, from such address(es) provided to Secured Parties pursuant to Section 4.4 above without thirty (30) days prior written notice to Secured Parties.
- **5.3 Limitation on Liens on Collateral.** Grantor shall not, directly or indirectly, create, permit or suffer to exist, and shall defend the Collateral against and take such other action as is necessary to remove, any Lien on the Collateral, except (a) Permitted Liens and (b) the Lien granted to Secured Parties under this Security Agreement. Grantor shall further defend the right, title and interest of Secured Parties in and to any of Grantor's rights under the Collateral against the claims and demands of all persons whomsoever.
- 5.4 Limitations on Modifications of Licenses, Etc. Upon the occurrence and during the continuance of any Event of Default, Grantor shall not, without Secured Parties' prior written consent, grant any extension of the time of payment of any amounts due under any License, compromise, compound or settle the same for less than the full amount thereof, release, wholly or partly, any person liable for the payment thereof, or allow any credit or discount whatsoever thereon other than trade discounts and rebates granted in the ordinary course of Grantor's business.
- **5.5 Insurance**. Grantor shall maintain insurance policies insuring the Collateral against loss or damage from such risks and in such amounts and forms and with such companies as are customarily maintained by businesses similar to Grantor.
- **5.6 Maintenance of Records**. Grantor shall keep and maintain at its own cost and expense satisfactory and complete records of the Collateral.

register or cause to be registered (to the extent not already registered) the most recent version of any Copyright, Copyright License, Patent, Patent License, Trademark or Trademark License, which, individually or in the aggregate, is material to the conduct of Grantor's business, with the United States Copyright Office or Patent and Trademark Office, as applicable, including, without limitation, in all such cases the filing of applications for renewal, affidavits of use, affidavits of noncontestability and opposition and interference and cancellation proceedings. Grantor shall register or cause to be registered with the United States Copyright Office or Patent and Trademark Office, as applicable, those additional rights and interests developed or acquired by Grantor after the date of this Security Agreement, including, without limitation, any additions to the rights and interests of Grantor listed on **Schedule B** hereto, which individually or in the aggregate, are material to the conduct of Grantor's business.

5.8 Notification Regarding Changes in Intellectual Property. Grantor shall:

- (a) promptly advise Secured Parties in writing of any subsequent ownership right or interest of the Grantor in or to any Copyright, Patent, Trademark or License not specified on **Schedule B** hereto, and shall amend or permit Secured Parties to amend such Schedule, as necessary, to reflect any addition or deletion to such ownership rights;
- (b) promptly give Secured Parties written notice of any applications or registrations of intellectual property rights filed with the United States Patent and Trademark Office, including the date of such filing and the registration or application numbers, if any; and
- (c) (i) give Secured Parties not less than 30 days prior written notice of the filing of any applications or registrations with the United States Copyright Office, including the title of such intellectual property rights to be registered, as such title will appear on such applications or registrations, and the date such applications or registrations will be filed, and (ii) prior to the filing of any such applications or registrations, shall execute such documents as Secured Parties may reasonably request for Secured Parties to maintain their perfection and priority in such intellectual property rights to be registered by Grantor, and upon the request of Secured Parties, shall file such documents simultaneously with the filing of any such applications or registrations. Upon filing any such applications or registrations with the United States Copyright Office, Grantor shall promptly provide Secured Parties with (x) a copy of such applications or registrations, without the exhibits, if any, thereto, (y) evidence of the filing of any documents requested by Secured Parties to be filed for Secured Parties to maintain the perfection and priority of their security interest in such intellectual property rights, and (z) the date of such filing.
- (d) Secured Parties may audit Grantor's Intellectual Property to confirm compliance with Section 5.7 and this Section 5.8, provided such audit may not occur more often than twice per year, unless an Event of Default has occurred and is continuing. Secured Parties shall have the right, but not the obligation, to take, at Grantor's sole expense, any actions that Grantor is required under this Section 5.8 to take but which Grantor fails to take, after five (5) days' notice to Grantor (provided that no such notice shall be required if an Event of Default has occurred and is continuing). Grantor shall reimburse and indemnify Secured

Parties for all reasonable costs and reasonable expenses incurred in the reasonable exercise of their rights under Section 5.7 or this Section 5.8.

- **5.9 Defense of Intellectual Property**. Grantor shall (a) protect, defend and maintain the validity and enforceability of its Copyrights, Patents and Trademarks, (b) use its best efforts to detect infringements of its Copyrights, Patents and Trademarks and promptly advise Secured Parties in writing of material infringements detected and (c) not allow any of its Copyrights, Patents or Trademarks to be abandoned, forfeited or dedicated to the public without the prior written consent of Secured Parties.
- request of Secured Parties, and at the sole expense of Grantor, Grantor shall promptly and duly execute and deliver any and all such further instruments and documents and take such further action as Secured Parties may reasonably deem necessary or desirable to obtain the full benefits of this Security Agreement, including, without limitation, (a) using its best efforts to secure all consents and approvals necessary or appropriate for the grant of a security interest to Secured Parties in any item of Collateral held by Grantor or in which Grantor has any right or interest, (b) executing, delivering and causing to be filed any financing or continuation statements under the UCC with respect to the security interests granted hereby, and (c) filing or cooperating with Secured Parties in filing any forms or other documents required to be recorded with the United States Patent and Trademark Office, United States Copyright Office, or any actions, filings, recordings or registrations in any foreign jurisdiction or under any international treaty, required to secure or protect Secured Parties' interest in the Collateral.

6. SECURED PARTIES' APPOINTMENT AS ATTORNEY-IN-FACT; PERFORMANCE BY SECURED PARTIES.

- 6.1 Subject to Section 6(b) below, Grantor hereby irrevocably constitutes and appoints Secured Parties, and any officer or agent of Secured Parties, with full power of substitution, as its true and lawful attorney-in-fact with full, irrevocable power and authority in the place and stead of Grantor and in the name of Grantor or in its own name, from time to time at Secured Parties' discretion, for the purpose of carrying out the terms of this Security Agreement, to take any and all appropriate action and to execute and deliver any and all documents and instruments which may be necessary or desirable to accomplish the purposes of this Security Agreement and, without limiting the generality of the foregoing, hereby gives Secured Parties the power and right, on behalf of Grantor, without notice to or assent by Grantor to do the following:
- (a) to ask, demand, collect, receive and give acquaintances and receipts for any and all monies due or to become due under any Collateral and, in the name of Grantor, in its own name or otherwise to take possession of, endorse and collect any checks, drafts, notes, acceptances or other instruments for the payment of monies due under any Collateral and to file any claim or take or commence any other action or proceeding in any court of law or equity or otherwise deemed appropriate by Secured Parties for the purpose of collecting any and all such monies due under any Collateral whenever payable;

- (b) to pay or discharge any Liens, including, without limitation, any tax lien, levied or placed on or threatened against the Collateral, to effect any repairs or any insurance called for by the terms of this Security Agreement and to pay all or any part of the premiums therefor and the costs thereof, which actions shall be for the benefit of Secured Parties and not Grantor:
- (c) to (1) direct any person liable for any payment under or in respect of any of the Collateral to make payment of any and all monies due or to become due thereunder directly to Secured Parties or as Secured Parties shall direct, (2) receive payment of any and all monies, claims and other amounts due or to become due at any time arising out of or in respect of any Collateral, (3) sign and endorse any invoices, freight or express bills, bills of lading, storage or warehouse receipts, drafts against debtors, assignments, verifications and notices in connection with documents constituting or relating to the Collateral, (4) commence and prosecute any suits, actions or proceedings at law or in equity in any court of competent jurisdiction to collect the Collateral or any part thereof and to enforce any other right in respect of any Collateral, (5) defend any suit, action or proceeding brought against Grantor with respect to any Collateral, (6) settle, compromise or adjust any suit, action or proceeding described above, and in connection therewith, give such discharges or releases as Secured Parties may deem appropriate, (7) license, or, to the extent permitted by an applicable License, sublicense, whether general, special or otherwise, and whether on an exclusive or non-exclusive basis, any Copyright, Patent or Trademark throughout the world for such term or terms, on such conditions and in such manner as Secured Parties shall in their discretion determine and (8) sell, transfer, pledge, make any agreement with respect to or otherwise deal with any of the Collateral as fully and completely as though Secured Parties were the absolute owner thereof for all purposes; and
- (d) to do, at Secured Parties' option and Grantor's expense, at any time, or from time to time, all acts and things which Secured Parties may reasonably deem necessary to protect, preserve or realize upon the Collateral and Secured Parties' security interest therein in order to effect the intent of this Security Agreement, all as fully and effectively as Grantor might do.
- 6.2 Secured Parties agree that, except upon the occurrence and during the continuation of an Event of Default, they shall not exercise the power of attorney or any rights granted to Secured Parties pursuant to this **Section 6**. Grantor hereby ratifies, to the extent permitted by law, all that said attorney shall lawfully do or cause to be done by virtue hereof. The power of attorney granted pursuant to this **Section 6** is a power coupled with an interest and shall be irrevocable until the Secured Obligations are completely and indefeasibly paid and performed in full and Secured Parties no longer have any commitment to make any Loans to Grantor.
- 6.3 If Grantor fails to perform or comply with any of its agreements contained herein and Secured Parties, as provided for by the terms of this Security Agreement, shall perform or comply, or otherwise cause performance or compliance, with such agreement, the reasonable expenses, including reasonable attorneys' fees and costs, of Secured Parties incurred in connection with such performance or compliance, together with interest thereon at a rate of interest equal to the highest per annum rate of interest charged on the Loans, shall be payable by

Grantor to Secured Parties within five (5) business days of demand and shall constitute Secured Obligations secured hereby.

- 7. RIGHTS AND REMEDIES UPON DEFAULT. After any Event of Default shall have occurred and while such Event of Default is continuing:
- 7.1 Secured Parties may exercise in addition to all other rights and remedies granted to them under this Security Agreement, the Notes or the Purchase Agreement and under any other instrument or agreement securing, evidencing or relating to the Secured Obligations, all rights and remedies of a secured party under the UCC. Without limiting the generality of the foregoing, Grantor expressly agrees that in any such event Secured Parties, without demand of performance or other demand, advertisement or notice of any kind (except the notice specified below of time and place of public or private sale) to or upon Grantor or any other person (all and each of which demands, advertisements and notices are hereby expressly waived to the maximum extent permitted by the UCC and other applicable law), may (i) reclaim, take possession, recover, store, maintain, finish, repair, prepare for sale or lease, shop, advertise for sale or lease and sell or lease (in the manner provided herein) the Collateral, and in connection with the liquidation of the Collateral and collection of the accounts receivable pledged as Collateral, use any Trademark, Copyright, or process used or owned by Grantor and (ii) forthwith collect, receive, appropriate and realize upon the Collateral, or any part thereof, and may forthwith sell, lease, assign, give an option or options to purchase or sell or otherwise dispose of and deliver said Collateral (or contract to do so), or any part thereof, in one or more parcels at public or private sale or sales, at any exchange or broker's board or at any of Secured Parties' offices or elsewhere at such prices as it may deem best, for cash or on credit or for future delivery without assumption of any credit risk. Secured Parties shall have the right upon any such public sale or sales, and, to the extent permitted by law, upon any such private sale or sales, to purchase the whole or any part of said Collateral so sold, free of any right or equity of redemption, which equity of redemption Grantor hereby releases. Grantor further agrees, at Secured Parties' request, to assemble the Collateral and make it available to the Secured Parties at places which Secured Parties shall reasonably select, whether at Grantor's premises or elsewhere. Secured Parties shall apply the net proceeds of any such collection, recovery, receipt, appropriation, realization or sale as provided in Section 7.5 below and only after so paying over such net proceeds and after the payment by Secured Parties of any other amount required by any provision of law, need Secured Parties account for the surplus, if any, to Grantor. To the maximum extent permitted by applicable law, Grantor waives all claims, damages, and demands against Secured Parties arising out of the repossession, retention or sale of the Collateral. Grantor agrees that Secured Parties need not give more than ten (10) days' notice of the time and place of any public sale or of the time after which a private sale may take place and that such notice is reasonable notification of such matters. Grantor shall remain liable for any deficiency if the proceeds of any sale or disposition of the Collateral are insufficient to pay all amounts to which Secured Parties is entitled from Grantor, Grantor also being liable for the attorney costs of any attorneys employed by Secured Parties to collect such deficiency.
- 7.2 Grantor agrees that in any sale of any of such Collateral, whether at a foreclosure sale or otherwise, Secured Parties are hereby authorized to comply with any limitation or restriction in connection with such sale as they may be advised by counsel is necessary in order to avoid any violation of applicable law (including compliance with such

procedures as may restrict the number of prospective bidders and purchasers, require that such prospective bidders and purchasers have certain qualifications and restrict such prospective bidders and purchasers to persons who will represent and agree that they are purchasing for their own account for investment and not with a view to the distribution or resale of such Collateral), or in order to obtain any required approval of the sale or of the purchaser by any governmental authority, and Grantor further agrees that such compliance shall not result in such sale being considered or deemed not to have been made in a commercially reasonable manner, nor shall Secured Parties be liable nor accountable to Grantor for any discount allowed by the reason of the fact that such Collateral is sold in compliance with any such limitation or restriction.

- **7.3** Grantor also agrees to pay all fees, costs and expenses of Secured Parties, including, without limitation, attorneys' fees, incurred in connection with the enforcement of any of their rights and remedies hereunder.
- **7.4** Grantor hereby waives presentment, demand, protest or any notice (to the maximum extent permitted by applicable law) of any kind in connection with this Security Agreement or any Collateral.
- 7.5 The Proceeds of any sale, disposition or other realization upon all or any part of the Collateral shall be distributed by Secured Parties in the following order of priorities:

FIRST, to Aether Corporate Limited or its assigns ("ACL") in an amount sufficient to pay in full the costs of ACL in connection with such sale, disposition or other realization, including all fees, costs, expenses, liabilities and advances incurred or made by ACL in connection therewith, including, without limitation, attorneys' fees;

SECOND, to ACL in an amount equal to the then unpaid Secured Obligations owing to ACL;

THIRD, to the other Secured Parties in an amount sufficient to pay in full the costs of the other Secured Parties in connection with such sale, disposition or other realization, including all fees, costs, expenses, liabilities and advances incurred or made by the other Secured Parties in connection therewith, including, without limitation, attorneys' fees;

FOURTH, to the other Secured Parties in an amount equal to the then unpaid Secured Obligations owing to each of them; and

FINALLY, upon payment in full of the Secured Obligations, to Grantor or its representatives, in accordance with the UCC or as a court of competent jurisdiction may direct.

- **7.6** The costs of enforcing or pursuing any right or remedy hereunder, including without limitation any repossession, sale, possession and management (including, without limitation, reasonable attorneys' fees), and distribution shall be borne Pro Rata by the Secured Parties. Each Secured Party shall reimburse the other Secured Parties, as applicable, for its Pro Rata share of all such costs promptly upon demand.
- 8. ACTIONS BY THE SECURED PARTIES AND AMENDMENTS. All actions, omissions and decisions of the Secured Parties hereunder (each called herein an "Act of the Secured

Parties") shall be determined by and require the written consent of the Requisite Holders. Each Secured Party shall take such actions and execute such documents as may be necessary to confirm or accomplish any Act of the Secured Parties.

- UNEQUAL PAYMENT BY GRANTOR. Each Secured Party agrees that if it shall 9. obtain or receive, through the exercise of any right granted to the Secured Parties under this Security Agreement, under the Notes or the Purchase Agreement or by applicable law, including, but not limited to any right of set-off, any secured claim under Section 506 of the Bankruptcy Code or any other security or interest, any payment or payments greater than its Pro Rata Share of all Loans, as measured immediately prior to the receipt of such payment or payments, then (a) such Secured Party shall promptly purchase at par (and shall be deemed to have thereupon purchased) from the other Secured Parties, a participation in the Loans of such other Secured Parties, so that each Secured Party shall have received payments in proportion to its Pro Rata share immediately prior to such transactions and (b) such other adjustments shall be made from time to time as shall be equitable to ensure that the Secured Parties share the benefits of such payment on a Pro Rata basis. The term "Loan" as used in this paragraph shall include accrued interest thereon. Each Secured Party other than ACL acknowledges and agrees that its rights and remedies under this Security Agreement are expressly made subject to the subordination provisions contained in Section 8 of the Notes payable to such Secured Parties.
- 10. INDEMNITY. Grantor agrees to defend, indemnify and hold harmless Secured Parties and their respective officers, employees, and agents against (a) all obligations, demands, claims, and liabilities claimed or asserted by any other party in connection with the transactions contemplated by this Security Agreement and (b) all losses or expenses in any way suffered, incurred, or paid by Secured Parties as a result of or in any way arising out of, following or consequential to transactions between Secured Parties and Grantor, whether under this Security Agreement or otherwise (including without limitation, reasonable attorneys fees and expenses), except for losses arising from or out of Secured Parties' gross negligence or willful misconduct.
- 11. LIMITATION ON SECURED PARTIES' DUTY IN RESPECT OF COLLATERAL. Secured Parties shall be deemed to have acted reasonably in the custody, preservation and disposition of any of the Collateral if they take such action as Grantor requests in writing except during an Event of Default, but failure of Secured Parties to comply with any such request shall not in itself be deemed a failure to act reasonably, and no failure of Secured Parties to do any act not so requested shall be deemed a failure to act reasonably.
- 12. REINSTATEMENT. This Security Agreement shall remain in full force and effect and continue to be effective should any petition be filed by or against Grantor for liquidation or reorganization, should Grantor become insolvent or make an assignment for the benefit of creditors or should a receiver or trustee be appointed for all or any significant part of Grantor's property and assets, and shall continue to be effective or be reinstated, as the case may be, if at any time payment and performance of the Secured Obligations, or any part thereof, is, pursuant to applicable law, rescinded or reduced in amount, or must otherwise be restored or returned by any obligee of the Secured Obligations, whether as a "voidable preference," "fraudulent conveyance," or otherwise, all as though such payment or performance had not been made. In the event that any payment, or any part thereof, is rescinded, reduced, restored or returned, the

Secured Obligations shall be reinstated and deemed reduced only by such amount paid and not so rescinded, reduced, restored or returned.

13. MISCELLANEOUS.

- 13.1 Waivers; Modifications. None of the terms or provisions of this Security Agreement may be waived, altered, modified or amended except by an instrument in writing, duly executed by Grantor and the Requisite Holders.
- 13.2 Termination of this Security Agreement. Subject to Section 12 hereof, this Security Agreement shall terminate upon the payment and performance in full of the Secured Obligations.
- Grantor hereunder shall be binding upon the successors and assigns of Grantor, and shall, together with the rights and remedies of Secured Parties hereunder, inure to the benefit of Secured Parties, any future holder of any of the Secured Obligations and their respective successors and assigns. No sales of participations, other sales, assignments, transfers or other dispositions of any agreement governing or instrument evidencing the Secured Obligations or any portion thereof or interest therein shall in any manner affect the lien granted to Secured Parties hereunder.
- 13.4 Governing Law. In all respects, including all matters of construction, validity and performance, this Security Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of California applicable to contracts made and performed in such state, without regard to the principles thereof regarding conflict of laws, except to the extent that the UCC provides for the application of the law of a different jurisdiction.
- be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, shall be deemed to be an original, and all of which, when taken together, shall constitute but one and the same agreement. Executed copies of the signature pages of this Security Agreement sent by facsimile or transmitted electronically in Portable Document Format ("PDF"), or any similar format, shall be treated as originals, fully binding and with full legal force and effect, and the parties waive any rights they may have to object to such treatment.

[Signature pages follow.]

IN WITNESS WHEREOF, each of the parties hereto has caused this Security Agreement to be executed and delivered by its duly authorized officer on the date first set forth above.

ADDRESS OF GRANTOR

1400 N. Shoreline Blvd., Unit A8 Mountain View, CA 94043 BRONCUS MEDICAL INC., AS Cranto

By:___

Printed Name Mark Maciejewsk

Title: Director

JURISDICTION OF ORGANIZATION OF GRANTOR

California

ACCEPTED AND ACKNOWLEDGED BY:
LIFETECH SCIENTIFIC (HONG KONG) Co., LTD., as Secured Party
By: See Jue Smi
Printed Name: Xie Yuehui
Title: Director
DINOVA VENTURE PARTNERS LP II, L.P., as Secured Party
By: Dinova Venture Partners GP II, L.P., its general partner
By: Dinova Venture Partners Limited, its general partner
By:
Printed Name: Kovin Y. Lin
Title: Director
TIP-BRONCUS LIMITED, as Secured Party
By:
Printed Name: Frank Yu
Title: Director
AETHER CORPORATE LIMITED, as Secured Party
By:
Printed Name: Kevin Y. Lin
Title: Director

LIFETECH SCIENTIFIC (HONG KONG) Co., LTD., as Secured Party
By:
Printed Name:
Title:
DINOVA VENTURE PARTNERS LP II, L.P., as Secured Party
By: Dinova Venture Partners GP II, L.P., its general partner
By: Dinova Venture Partners Limited, its general partner
Ву:
Printed Name: Kevin Y. Lin
Title: Director
TIP-BRONCUS LIMITED, as Secured Party
By:
Printed Name:
Title:
Aether Corporate Limited , as Secured Party
Ву:
Printed Name: Kevin Y. Lin
Title: Director

ACCEPTED AND ACKNOWLEDGED BY:

LIFETECH SCIENTIFIC (HONG KONG) Co., LTD., as Secured Party
Ву:
Printed Name:
Title:
DINOVA VENTURE PARTNERS LP II, L.P., as Secured Party
By: Dinova Venture Partners GP II, L.P., its general partner
By: Dinova Venture Partners Limited, its general partner
By:
Printed Name:
Title:
TIP-BRONCUS LIMITED, as Secured Party
Ву:
Printed Name: FRANK Yu
Title: Dike erok
AETHER CORPORATE LIMITED, AS SECURED PARTY
By:
PRINTED NAME:

ACCEPTED AND ACKNOWLEDGED BY:

SCHEDULE A

LIENS EXISTING ON THE DATE OF THIS SECURITY AGREEMENT

None except Liens created pursuant to the Previous Security Agreement.

SCHEDULE B

INTELLECTUAL PROPERTY

Patents

PATENT#	APP#	TITLE	STATE	STATUS
	13/908187	Automated Fiducial Marker Planning Method	US	PENDING
8,468,003	12/861795	Automated Fiducial Marker Planning System and related methods	US	ISSUED
	201080050291.5	SYSTEM AND METHOD FOR DETERMINING AIRWAY DIAMETER USING ENDOSCOPE	China	PENDING
	12/884,735	SYSTEM AND METHOD FOR DETERMINING AIRWAY DIAMETER USING ENDOSCOPE	US	PENDING
	13/105710	Fluoroscopy-based surgical device tracking method and system	US	PENDING
	13/107471	Surgical Assistance Planning Method using lung motion analysis SYSTEM AND METHOD FOR	US	PENDING
	PCT/US12/47853	AUTOMATICALLY DETERMINING CALIBRATION PARAMETERS OF A FLUOROSCOPE	PCT	PENDING
	61/864,480	METHOD TO REGISTER 3D IMAGE WITH FLUOROSCOPIC IMAGES OF CHEST INCLUDING RIBS AND SPINE	US	PENDING
6,692,494	09/633,651	METHODS AND DEVICES FOR CREATING COLLATERAL CHANNELS IN THE LUNGS	US	ISSUED
EP 1143864 B1		METHODS AND DEVICES FOR CREATING COLLATERAL CHANNELS IN THE LUNGS	DE	ISSUED - in process of being abandoned
	3024162.4	METHODS AND DEVICES FOR CREATING COLLATERAL CHANNELS IN THE LUNGS	EP	
EP 1143864 B1		METHODS AND DEVICES FOR CREATING COLLATERAL CHANNELS IN THE LUNGS	GB	ISSUED - in process of being abandoned
6,629,951	09/908,008	DEVICES FOR CREATING COLLATERAL CHANNELS IN THE LUNGS	US	ISSUED
	12/939,956	METHODS FOR TREATING CHRONIC OBSTRUCTIVE PULMONARY DISEASE	US	PENDING
7,175,644	09/947,144	DEVICES AND METHODS FOR MAINTAINING COLLATERAL CHANNELS IN TISSUE	US	ISSUED
6,749,606	09/946,706	DEVICES FOR CREATING COLLATERAL CHANNELS	US	ISSUED

	1	MULTIFUNCTIONAL TIP CATHETER FOR	1	1	I
		APPLYING ENERGY TO TISSUE AND			
		DETECTING THE PRESENCE OF BLOOD			
7,422,563	10/080,344	FLOW (AS AMENDED)	US	ISSUED	
7,000,000	40/070 005	DEVICES FOR APPLYING ENERGY TO		IOOLIED	
7,022,088	10/079,605	TISSUE	US	ISSUED	
	44,500,047	DEVICES FOR CREATING PASSAGES AND		DENIBULO	
	11/562,947	SENSING FOR BLOOD VESSELS	US	PENDING	
		ELECTROSURGICAL DEVICE HAVING			
7 202 220	44/057.044	HOLLOW TISSUE CUTTING MEMBER AND	110	IOOLIED	
7,393,330	11/357,244	TRANSDUCER ASSEMBLY (AS AMENDED) ULTRASOUND CATHETERS FOR SENSING	US	ISSUED	
	13/670,284	BLOOD FLOW	US	PENDING	
	10/0/ 0,204	DEVICES FOR CREATING COLLATERAL	100	1 ENDING	
6,712,812	09/947,126	CHANNELS	US	ISSUED	
· ·	,	EXTRAPLEURAL AIRWAY DEVICE AND			
7,422,584	10/615,491	METHOD	US	ISSUED	
0.500.010	40/40/ 400	EXTRAPLEURAL AIRWAY DEVICE AND		100::==	
8,506,648	12/191,169	METHOD	US	ISSUED	
		ANTIPROLIFERATIVE DEVICES FOR			
		MAINTAINING PATENCY OF SURGICALLY CREATED CHANNELS IN A BODY ORGAN			
7,462,162	10/895,010	(AS AMENDED)	US	ISSUED	
7,102,102	10/000,010	METHODS AND DEVICES FOR	+ 00	ICCOLD	
		MAINTAINING PATENCY OF SURGICALLY			
7,708,712		CREATED CHANNELS IN A BODY ORGAN			
		DEVICES FOR MAINTAINING PATENCY OF			
		SURGICALLY CREATED CHANNELS IN			
7,815,590	10/894,876	TISSUE	US	ISSUED	
		DEVICES FOR MAINTAINING PATENCY OF SURGICALLY CREATED CHANNELS IN			
8,308,682	11/335,263	TISSUE	US	ISSUED	
0,000,002	1 1/1000,200	DEVICES FOR MAINTAINING PATENCY OF	100	ICCOLD	
	PCT/US04/23304	SURGICALLY CREATED CHANNELS IN			
	EP04778682	TISSUE	EP	PENDING	
		DEVICES FOR MAINTAINING PATENCY OF			
		SURGICALLY CREATED CHANNELS IN			
8,002,740	11/335,040	TISSUE	US	ISSUED	
		DEVICES FOR MAINTAINING PATENCY OF SURGICALLY CREATED CHANNELS IN			
	13/664,862	TISSUE	US	PENDING	
	10/00 1,002	DEVICES FOR MAINTAINING SURGICALLY	+ 55	T ENDING	
	12/939961	CREATED OPENINGS	US	PENDING	
	.2.555551	DEVICES FOR CREATING PASSAGES AND	1	1. 2.15.110	
	12/323,198	SENSING BLOOD VESSELS	US	PENDING	
	,	AIRWAY BYPASS SITE SELECTION AND		1	
7,517,320	11/772,807	TREATMENT PLANNING	US	ISSUED	
. ,	PCT/US07/72692	AIRWAY BYPASS SITE SELECTION AND			
	7799262.6	TREATMENT PLANNING			
		AIRWAY BYPASS SITE SELECTION AND			
	2009-518608	TREATMENT PLANNING	JP	PENDING	
		AIRWAY BYPASS SITE SELECTION AND			
7,985,187	12/350,785	TREATMENT PLANNING	US	ISSUED	

	12/856,268	AIRWAY BYPASS SITE SELECTION AND TREATMENT PLANNING	US	 PENDING
8,409,167	11/538,950	DEVICES FOR DELIVERING SUBSTANCES THROUGH AN EXTRA-ANATOMIC OPENING CREATED IN AN AIRWAY	US	ISSUED
	12/939,968	DEVICES FOR DELIVERING SUBSTANCES THROUGH AN EXTRA-ANATOMIC OPENING CREATED IN AN AIRWAY	US	PENDING
	12/469,614	DEVICES FOR CREATING PASSAGES AND SENSING FOR BLOOD VESSELS	US	PENDING
	EP 07864246.9	DEVICES FOR CREATING PASSAGES AND SENSING FOR BLOOD VESSELS	DE	ISSUED
	EP 07864246.9	DEVICES FOR CREATING PASSAGES AND SENSING FOR BLOOD VESSELS		
	EP 07864246.9	DEVICES FOR CREATING PASSAGES AND SENSING FOR BLOOD VESSELS	FR	ISSUED
	EP 07864246.9	DEVICES FOR CREATING PASSAGES AND SENSING FOR BLOOD VESSELS	GB	ISSUED
8,235,908	12/406,018	BLOOD VESSEL SENSING CATHETER HAVING WORKING LUMEN FOR MEDICAL APPLIANCES	US	ISSUED
	13/557,092	BLOOD VESSEL SENSING CATHETER HAVING WORKING LUMEN FOR MEDICAL APPLIANCES	US	PENDING
	13/660,958	METHODS FOR MAINTAINING THE PATENCY OF COLLATERAL CHANNELS IN THE LUNGS USING CRYO-ENERGY	US	PENDING
	12/027,795	PUNCTURE RESISTANT CATHETER FOR SENSING VESSELS AND FOR CREATING PASSAGES IN TISSUE	US	PENDING
		METHODS AND DEVICES FOR DIAGNOSING, MONITORING, OR TREATING MEDICAL CONDITIONS THROUGH AN OPENING THROUGH AN AIRWAY WALL		
	13/107720	METHODS AND DEVICES FOR DIAGNOSING, MONITORING, OR TREATING MEDICAL CONDITIONS THROUGH AN OPENING THROUGH AN AIRWAY WALL	US	PENDING
	13/107759	METHODS AND DEVICES FOR DIAGNOSING, MONITORING, OR TREATING MEDICAL CONDITIONS THROUGH AN OPENING THROUGH AN AIRWAY WALL	US	PENDING
	13/470,069	METHODS AND DEVICES FOR PERFORMING EXCISION OR ABLATION OF TISSUE	US	PENDING
		METHODS AND DEVICES FOR PERFORMING EXCISION OR ABLATION OF TISSUE		
	13/469,805	METHODS AND DEVICES FOR PERFORMING EXCISION OR ABLATION OF TISSUE	US	PENDING

		METHODS AND DEVICES FOR PERFORMING EXCISION OR ABLATION OF			
		TISSUE METHODS AND DEVICES FOR			
		PERFORMING EXCISION OR ABLATION OF TISSUE			
	PCT/US2012/066119	METHODS AND DEVICES FOR DIAGNOSING, MONITORING, OR TREATING MEDICAL CONDITIONS THROUGH AN OPENING THROUGH AN AIRWAY WALL	PCT	PENDING	
8,517,955	12/776,978	TISSUE SAMPLING DEVICES, SYSTEMS AND METHODS	US	ISSUED	
5,957,919	13/965,886 08/887,206	TISSUE SAMPLING DEVICES, SYSTEMS AND METHODS BLEB REDUCER	US US	PENDING ISSUED	
7,889,905	11/437,230	A Fast 2D-3D Image Registration Method with Application to Continuously Guided Endoscopy	US	ISSUED	LICENSED
8,064,669	13/022,241	A Fast 2D-3D Image Registration Method with Application to Continuously Guided Endoscopy	US	ISSUED	LICENSED
	13/297,967	A Fast 2D-3D Image Registration Method with Application to Continuously Guided Endoscopy	US	PENDING	LICENSED
	PCT/US06/19927 EP 01889204	A Fast 2D-3D Image Registration Method with Application to Continuously Guided Endoscopy	EP	PENDING	LICENSED
	8103606.2	A Fast 2D-3D Image Registration Method with Application to Continuously Guided Endoscopy	НК	PENDING	LICENSED
	2008-541860	A Fast 2D-3D Image Registration Method with Application to Continuously Guided Endoscopy	JP	PENDING	LICENSED
7,756,563	11/437,229	Guidance Method Based on 3D-2D Pose Estimation and 3D-CT Registration with Application to Live Bronchoscopy	US	ISSUED	LICENSED
	12/834,076	Method Based on 3D-2D Pose Estimation and 3D-CT Registration with Application to Live Bronchoscopy	US	PENDING	LICENSED
	PCT/US06/19926 EP 01887931	Method Based on 3D-2D Pose Estimation and 3D-CT Registration with Application to Live Bronchoscopy	EP	PENDING	LICENSED
	8103607.1	3D-2D Pose Estimation and 3D-CT Registration with Application to Live Bronchoscopy Method Based on 3D-2D Pose Estimation and	НК	PENDING	LICENSED
	2008-541859	3D-CT Registration with Application to Live Bronchoscopy	JP	PENDING	LICENSED
	PCT/US08/52589 8728657.1 (EP2109391)	METHOD AND APPARATUS FOR CONTINUOUS GUIDANCE OF ENDOSCOPY	EP	PENDING	LICENSED
	2009-548443				LICENSED
	12/022,620	METHOD AND APPARATUS FOR CONTINUOUS GUIDANCE OF ENDOSCOPY METHODS AND APPARATUS FOR 3D	US	PENDING	LICENSED
	PCT/US08/52661 8714148.7	ROUTE PLANNING THROUGH HOLLOW ORGANS	EP	PENDING	LICENSED

2009-548448	METHODS AND APPARATUS FOR 3D ROUTE PLANNING THROUGH HOLLOW ORGANS	JP	PENDING	LICENSED
12/018,953	METHODS AND APPARATUS FOR 3D ROUTE PLANNING THROUGH HOLLOW ORGANS	US	PENDING	LICENSED
PCT/US09/34197 9795892	MEDICAL IMAGE REPORTING SYSTEM AND METHOD	EP	PENDING	LICENSED
12/866,758	MEDICAL IMAGE REPORTING SYSTEM AND METHOD	US	PENDING	LICENSED
12/344,040	PRECISE ENDOSCOPIC PLANNING AND VISUALIZATION	US	PENDING	LICENSED
13/362,123	Method and Device for Determining the Location of an Endoscope	US	PENDING	LICENSED
TBD	Method and Device for Determining the Location of an Endoscope	EP	PENDING	LICENSED
11737714.3	Image-based Global Registration System and Method Applicable to Bronchoscopy Guidance	EP	PENDING	LICENSED
13/016,093	Image-based Global Registration System and Method Applicable to Bronchoscopy Guidance	US	PENDING	LICENSED
2012-551312	Image-based Global Registration System and Method Applicable to Bronchoscopy Guidance	JP	PENDING	LICENSED
201180017623.4	Image-based Global Registration System and Method Applicable to Bronchoscopy Guidance	CN	PENDING	LICENSED
13/362,252	Global and semi-global Registration for image- based Bronchoscopy Guidance	US	PENDING	LICENSED
TBD	Global and semi-global Registration for image- based Bronchoscopy Guidance	EP	PENDING	LICENSED

Trademarks

Trademark	Number	Date	Location
EXHALE	2810885	2/3/2004	US
"B logo"	2833083	4/13/2004	US
BRONCUS	2845076	5/25/2004	US
LUNGPOINT	3724031	12/8/2009	US
FLEXNEEDLE	3955908	5/3/2011	US
LUNGPOINT	8494825	2/17/2010	EU
LUNGPOINT	5288947	12/18/2009	Japan
EXHALE	TMA653460	11/24/2005	Canada
ARCHIMEDES	86019848	7/25/2013	US

Domain Names
airwaybypass.com
bronchus.com
broncus.co
broncus.com
flexneedle.com
flexneedle.net
lungpoint.com
lungpoint.net
spnregistry.com
spnregistry.org
BRONCUS.CN

RECORDED: 01/09/2014

Licenses

License Agreement with The Penn State Research Foundation effective as of June 12, 2008, as amended