

U.S. DEPARTMENT OF COMMERCE

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 Patent and Trademark Office
 Docket No. 558161

To the Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies): ARIZEKE PHARMACEUTICALS, INC. 6828 Nancy Ridge Drive, Suite 400 San Diego, CA 92121 Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies): Name: FORWARD VENTURES III., L.P. Street Address: 9393 Towne Centre Drive, Suite 200 City: San Diego State: California, ZIP: 92121 Additional name(s) & address(es) attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3. Nature of conveyance: <input type="checkbox"/> Assignment <input type="checkbox"/> Merger <input checked="" type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other: Execution Date: July 24, 2003	

4. Application number(s) or patent number(s): **See Schedule A**

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

A. Patent Application No.(s) B. Patent No.(s)

Additional numbers attached? ☐ Yes ☐ No

5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 30 7. Total fee (37 C.F.R. § 3.41): \$1,200.00 <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to be charged to deposit account, referencing Attorney Docket 55816-1 8. Deposit account number: 03-1952
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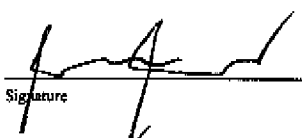
 The Commissioner is hereby authorized to charge any fees under 37 C.F.R. § 1.21 that may be required by this paper, or to credit any overpayment to Deposit Account No. 03-1952.

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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 copy of the original document.

Name: Bruce D. Grant
 Registration No: 47,608


 Signature

Date July 25, 2003

 Total number of pages comprising cover sheet, attachments and document: **13**

 Mail documents to be recorded with required cover sheet information to:
 Commissioner of Patents and Trademarks
 Box Assignments
 Alexandria, Virginia 22313-1450

SCHEDULE A
to the Patent and Trademark Security Agreement

Issued U.S. Patents of Grantor

Patent No.	Issue Date	Inventor	Title
Patent 6,042,833	3/28/2000	Keith E. Mostov; Janice Richman-Eisenstat	Cellular Internalization of PIGR Stalk and Associated Ligands
Divisional of (A) 6,340,743 B1 (09/475,088 - application #)	1/22/2002	Keith E. Mostov Janice Richman-Eisenstat	Cellular Internalization of PIGR Stalk and Associated Ligands

Pending U.S. Patent Applications of Grantor

Serial No.	Filing Date	Inventor	Title
09/839,746	4/19/2001 DONE	L.L. Houston	Compositions Comprising Carriers and Transportable Complexes
60/237,929	10/2/2000	L.L. Houston; Jacqueline M. Glynn; Philip L. Sheridan	Genetic Fusions of PIGR Ligands and Biologically Active Polypeptides for the Delivery of Therapeutic and Diagnostic Proteins
60/248,478	11/13/2000	L.L. Houston; Stephen Hawley	Protein Conjugates of PIGR Ligands for the Delivery of Therapeutic and Diagnostic Proteins
60/248,819	11/14/2000	L.L. Houston; Stephen Hawley	Protein Conjugates of PIGR Ligands for the Delivery of Therapeutic and Diagnostic Proteins
60/266,182	2/2/2001	L.L. Houston; Philip L. Sheridan	Compositions and Methods for Identifying, Characterizing, Optimizing and Using Ligands to Transcytotic Molecules
60/267,601	2/9/2001	L.L. Houston; Philip L. Sheridan	Polyspecific Binding Molecules Having a Polymeric Immunoglobulin Receptor Binding Region
60/281,275	4/3/2001	Philip L. Sheridan; L.L. Houston	Compositions And Methods for Transepithelial Transport of Membrane-Bounded Vesicles and Virions
09/898,503	Will convert to a provisional Papers filed 11/7/2001	Stephen Hawley; Steve J. Chapin; L.L. Houston	Compositions, Compounds and Methods for the Delivery of Monoclonal Antibodies
09/949,039	9/6/2001 DONE Part of "Mega Patent" filed 10/2/2001	Stephen Hawley; Steve J. Chapin; Philip Sheridan; L.L. Houston; Jackie Glynn	Compounds and Molecular Complexes Comprising Multiple Binding Regions Directed to Transcytotic Ligands
09/969,748	10/2/2001 DONE	L.L. Houston; Philip Sheridan; Stephen Hawley; Jacqueline Glynn; Steven Chapin; Amaresh Basu	Compositions and Methods for the Transport of Biologically Active Agents Across Cellular Barriers

Serial No.	Filing Date	Inventor	Title
PCT/USO1/30832	10/2/2001 DONE	L.L. Houston; Philip Sheridan; Stephen Hawley; Jacqueline Glynn; Steven Chapin; Amaresh Basu	Compositions and Methods for the Transport of Biologically Active Agents Across Cellular Barriers
60/331,342	7/2/2001	Stephen Hawley; Steve J. Chapin; L.L. Houston	Compositions, Compounds and Methods for the Delivery of Monoclonal Antibodies
PCT/USO2/03059	2/2/2002 DONE (PCT Filing)	L.L. Houston; Philip L. Sheridan	Compositions and Methods for Identifying, Characterizing, Optimizing and Using Ligands to Transcytotic Molecules
60/369,548	4/2/2002	L.L. Houston; Steve Hawley	Compositions and Methods for Targeted Biological Delivery of Molecular Carriers
60/439,372	1/9/2003	Philip L. Sheridan, Steve J. Chapin, Derrick Domingo	Compositions and Methods for Targeted Biological delivery or Molecular Carriers
			Z Domain Patent
PCT/USO2/10647	4/3/2002 DONE	Philip L. Sheridan; L.L. Houston	Compositions And Methods for Transepithelial Transport of Membrane-Bounded Vesicles and Virions
60/402,029	8/7/2002	L.L. Houston; Steve Hawley	Compositions and Methods for Targeted Biological Delivery of Molecular Carriers
60/439,373	1/9/2003	Dan Henderson	Methods of Treating Tumors
60/469,291	filed end of April	Paul Shabram	Compositions and Methods for Concentrating Polypeptides and Proteins
PCT/USO3/10233	4/1/2003 Combined 16 and 20	L.L. Houston; Steve Hawley	Compositions and Methods for Targeted Biological Delivery of Molecular Carriers
60/480,047	6/20/2004	Dan R. Henderson	Methods of Treating Infections
60/018,958	6/4/1996	Keith E. Mostov; Janice Richman-Eisenstat	Cellular Internalization of PIGR Stalk and Associated Ligands
08/856,383	5/14/1997	Keith E. Mostov; Janice Richman-Eisenstat	Cellular Internalization of PIGR Stalk and Associated Ligands
PCT/US97/07944 WO 97/46588	5/14/1997	Keith E. Mostov; Janice Richman-Eisenstat	Cellular Internalization of PIGR Stalk and Associated Ligands

Serial No.	Filing Date	Inventor	Title
60/192,197	3/27/2000	Keith L. Mostov; Steve J. Chapin	Ligands Directed to the Non-Secretory Component, Non-Stalk Region of plgR and Methods of Use Thereof
60-192,198	3/27/2000	Keith L. Mostov; Steven Chapin; Janice Richman-Eisenstat	Anti-plgR Antibodies With Improved Transcytosis
09/818,247	3/26/2001 DONE	Keith L. Mostov; Steven Chapin; Janice Richman-Eisenstat	Ligands Directed to the Non-Secretory Component, Non-Stalk Region of PIGR and Methods of Use Thereof
PCT PCT/US01/09699 WO 01/72846 A2	3/26/2001 DONE	Keith L. Mostov; Steven Chapin; Janice Richman-Eisenstat	Ligands Directed to the Non-Secretory Component, Non-Stalk Region of PIGR and Methods of Use Thereof

PATENT AND TRADEMARK SECURITY AGREEMENT

THIS PATENT AND TRADEMARK SECURITY AGREEMENT (this "Agreement"), dated as of July 24, 2003, is made between AriZeke Pharmaceuticals, Inc., a California corporation ("Grantor"), and the parties (each a "Secured Party" and, collectively, the "Secured Parties") named on the signature pages hereto.

Grantor and Secured Parties hereby agree as follows:

Section 1. Definitions; Interpretation.

(a) Terms Defined in Security Agreement. All capitalized terms used in this Agreement and not otherwise defined herein shall have the meanings assigned to them in the Security Agreement.

(b) Certain Defined Terms. As used in this Agreement, the following terms shall have the following meanings:

"Collateral" has the meaning set forth in Section 2.

"PTO" means the United States Patent and Trademark Office.

"Security Agreement" means the Security Agreement dated as of July 24, 2003 between Grantor and Secured Parties.

(c) Terms Defined in UCC. Where applicable and except as otherwise defined herein, terms used in this Agreement shall have the meanings assigned to them in the UCC.

(d) Interpretation. The rules of interpretation applicable to the Security Agreement shall also be applicable to this Agreement and are incorporated herein by this reference.

Section 2. Security Interest.

(a) Grant of Security Interest. As security for the payment and performance of the Obligations, including interest that accrues after the commencement by or against Grantor of any bankruptcy or insolvency proceeding naming such Person as the debtor in such proceeding, Grantor hereby assigns, transfers and conveys to Secured Parties, and grants a security interest in and mortgage to Secured Parties, all of Grantor's right, title and interest in, to and under the following property, in each case whether now or hereafter existing or arising or in which Grantor now has or hereafter owns, acquires or develops an interest and wherever located (collectively, the "Collateral"):

(i) all patents and patent applications, domestic or foreign, all licenses relating to any of the foregoing and all income and royalties with respect to any licenses (including such patents and patent applications as described in Schedule A), all rights to sue for past, present or future infringement thereof, all rights arising therefrom and pertaining thereto and all reissues, divisions, continuations, renewals, extensions and continuations-in-part thereof;

(ii) all state (including common law), federal and foreign trademarks, service marks and trade names, and applications for registration of such trademarks, service marks and trade names

(but excluding any application to register any trademark, service mark or other mark prior to the filing under applicable law of a verified statement of use (or the equivalent) for such trademark, service mark or other mark solely to the extent the creation of a security interest therein or the grant of a mortgage thereon would void or invalidate such trademark, service mark or other mark), all licenses relating to any of the foregoing and all income and royalties with respect to any licenses (including such marks, names and applications as described in Schedule B), whether registered or unregistered and wherever registered, all rights to sue for past, present or future infringement or unconsented use thereof, all rights arising therefrom and pertaining thereto and all reissues, extensions and renewals thereof;

(iii) the entire goodwill of or associated with the businesses now or hereafter conducted by Grantor connected with and symbolized by any of the aforementioned properties and assets;

(iv) all commercial tort claims associated with or arising out of any of the aforementioned properties and assets;

(v) all accounts, all intangible intellectual or other similar property and other general intangibles associated with or arising out of any of the aforementioned properties and assets and not otherwise described above, including all license payments and payments under insurance (whether or not any Secured Party or any Collateral Agent is the loss payee thereof) or any indemnity, warranty or guaranty payable by reason of loss or damage to or otherwise with respect to the foregoing Collateral; and

(vi) all products, proceeds and supporting obligations of or with respect to any and all of the foregoing Collateral.

(b) Continuing Security Interest. Grantor agrees that this Agreement shall create a continuing security interest in the Collateral which shall remain in effect until terminated in accordance with Section 12.

(c) Pari Passu Interests in the Collateral. Each Secured Party's interest in the Collateral shall be on a parity with the interests of all other Secured Parties, and the interest of each Secured Party in the Collateral shall be ratable in the proportion that the aggregate indebtedness then outstanding and unpaid under the Notes held by such Secured Party bears to the aggregate indebtedness then outstanding and unpaid under the Notes held by all Secured Parties.

Section 3. Supplement to Security Agreement. This Agreement has been granted in conjunction with the security interests granted to Secured Parties under the Security Agreement. The rights and remedies of Secured Parties and any Collateral Agent with respect to the security interests granted herein are without prejudice to, and are in addition to those set forth in the Security Agreement, all terms and provisions of which are incorporated herein by reference.

Section 4. Representations and Warranties. Grantor represents and warrants to Secured Parties that:

(a) Patents. A true and correct list of all of the existing Collateral consisting of U.S. patents and patent applications and/or registrations owned by Grantor, in whole or in part, is set forth in Schedule A.

(b) Trademarks. A true and correct list of all of the existing Collateral consisting of U.S. trademarks, trademark registrations and/or applications owned by Grantor, in whole or in part, is set forth in Schedule B.

Section 5. Further Acts. On a continuing basis, Grantor shall make, execute, acknowledge and deliver, and file and record in the proper filing and recording places, all such instruments and documents, and take all such action as may be necessary or advisable or may be requested by any Secured Party or any Collateral Agent to carry out the intent and purposes of this Agreement, or for assuring, confirming or protecting the grant or perfection of the security interest granted or purported to be granted hereby, to ensure Grantor's compliance with this Agreement or to enable any Secured Party or any Collateral Agent to exercise and enforce its rights and remedies hereunder with respect to the Collateral, including any documents for filing with the PTO and/or any applicable state office. Any Secured Party or any Collateral Agent may record this Agreement, an abstract thereof, or any other document describing Secured Parties' interest in the Collateral with the PTO, at the expense of Grantor.

Section 6. Authorization to Supplement. If Grantor shall obtain rights to any new trademarks, any new patentable inventions or become entitled to the benefit of any patent application or patent for any reissue, division, or continuation, of any patent, the provisions of this Agreement shall automatically apply thereto. Grantor shall give prompt notice in writing to each Secured Party and any Collateral Agent with respect to any such new trademarks or patents, or renewal or extension of any trademark registration. Without limiting Grantor's obligations under this Section 6, Grantor authorizes any Secured Party or any Collateral Agent to modify this Agreement by amending Schedules A or B to include any such new patent or trademark rights. Notwithstanding the foregoing, no failure to so modify this Agreement or amend Schedules A or B shall in any way affect, invalidate or detract from Secured Parties' continuing security interest in all Collateral, whether or not listed on Schedule A or B.

Section 7. Binding Effect. This Agreement shall be binding upon, inure to the benefit of and be enforceable by Grantor, Secured Parties and their respective successors and assigns and shall bind any Person who becomes bound as a debtor to this Agreement. Any Collateral Agent is expressly designated as a third party beneficiary hereof, and this Agreement shall also inure to the benefit of any Collateral Agent. Grantor may not assign, transfer, hypothecate or otherwise convey its rights, benefits, obligations or duties hereunder except as specifically permitted by the Security Agreement.

Section 8. Notices. All notices or other communications hereunder shall be in writing (including by facsimile transmission or by email) and mailed, sent or delivered to the respective parties hereto (in the case of Grantor) at or to its address, facsimile number or email address set forth below on the signature pages hereof or (in the case of the Secured Parties) at or to their respective addresses, facsimile numbers or email addresses set forth in the Security Agreement, or at or to such other address, facsimile number or email address as shall be designated by any party in a written notice to the other parties hereto. All such notices and other communications shall be deemed to be delivered when a record (within the meaning of the UCC) has been (i) delivered by hand; (ii) sent by mail upon the earlier of the date of receipt or five business days after deposit in the mail, first class (or air mail as to communications sent to or from the United States); (iii) sent by facsimile transmission; or (iv) sent by email.

Section 9. Governing Law. This Agreement shall be governed by, and construed in accordance with, the law of the State of California, except as required by mandatory provisions of law

and to the extent the validity or perfection of the security interests hereunder, or the remedies hereunder, in respect of any Collateral are governed by the law of a jurisdiction other than California.

Section 10. Amendment; Conflict. Except as provided in Section 2.2 of the Purchase Agreement, no amendment to this Agreement, or any waiver of any provision hereof, shall be effective unless it is in writing and signed by the Majority Secured Parties and (in the case of any amendment) the Debtor; provided, however, that without the consent of all Secured Parties, no amendment, waiver or consent shall do any of the following: (i) change the definition of "Majority Secured Parties" or any definition or provision of this Agreement requiring the approval of the Secured Parties or some other specified amount of Secured Parties; or (ii) amend the provisions of this Section 10; and provided, further, that no amendment, waiver or consent shall, unless in writing and signed by the Collateral Agent, affect the rights, duties or obligations of the Collateral Agent under or in respect of this Agreement. To the extent that any provision of this Agreement conflicts with any provision of the Security Agreement, the provision giving Secured Parties greater rights or remedies shall govern, it being understood that the purpose of this Agreement is to add to, and not detract from, the rights granted to Secured Parties under the Security Agreement.

Section 11. Counterparts. This Agreement may be executed in any number of counterparts and by different parties hereto in separate counterparts and by facsimile, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute but one and the same agreement.

Section 12. Termination. Upon payment and performance in full of all Obligations, the security interests created by this Agreement, and all representations, warranties and covenants of Debtor contained herein, shall terminate and Secured Parties shall promptly execute and deliver to Grantor such documents and instruments reasonably requested by Grantor as shall be necessary to evidence termination of all such security interests given by Grantor to Secured Parties hereunder, including cancellation of the security interests created by this Agreement by written notice from Secured Parties to the PTO.

[Signature pages to follow]

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement,
e first above written.

GRANTOR

AriZeke Pharmaceuticals, Inc.

By: D. R. Henderson
Title: PRESIDENT AND CEO

Address:

6828 NANCY RIDGE DRIVE
STE 400
SAN DIEGO, CA 92121

Attn.: D. R. HENDERSON

Fax: 858-455-6908

Email: dhENDERSON@arizeke.com

SECURED PARTIES:

FORWARD VENTURES III, L.P.

By: Forward III Associates, LLC

Its: General Partner

By: 

Standish M Fleming,
Managing Member

Address:

9393 Towne Centre Drive, Suite 200
San Diego, CA 92121

Facsimile: (858) 677-6077

**FORWARD VENTURES III INSTITUTIONAL
PARTNERS, L.P.**

By: Forward III Associates, LLC

Its: General Partner

By: 

Standish M Fleming,
Managing Member

Address:

9393 Towne Centre Drive, Suite 200
San Diego, CA 92121


Facsimile: (858) 677-6077

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FORWARD VENTURES IV, L.P.

By: Forward IV Associates, LLC

Its: General Partner

By: 
Standish M Fleming,
Managing Member

Address:

9393 Towne Centre Drive, Suite 200
San Diego, CA 92121

Facsimile: (858) 677-6077

FORWARD VENTURES IV B, L.P.

By: Forward IV Associates, LLC

Its: General Partner

By: 
Standish M Fleming,
Managing Member

Address:

9393 Towne Centre Drive, Suite 200
San Diego, CA 92121

Facsimile: (858) 677-6077

NOVARTIS BIOVENTURES LTD.

By: 

Name: Emil Bock

Title: Member of the Board of Directors

Address:

Hurst Holme, 12 Trott Road
P.O. Box HM 2899
Hamilton, HM LX
Bermuda

Facsimile: 1 441 296 5083

[SIGNATURE PAGE TO PATENT AND TRADEMARK SECURITY AGREEMENT]

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RECORDED: 07/25/2003

PATENT
REEL: 013828 FRAME: 0650