

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
Avecia Biotechnology Inc.	08/26/2004

RECEIVING PARTY DATA

Name:	J.P. Morgan Europe Limited, as Security Agent
Street Address:	125 London Wall
City:	London
State/Country:	UNITED KINGDOM
Postal Code:	EC2Y5AJ

PROPERTY NUMBERS Total: 23

Property Type	Number
Patent Number:	5403709
Patent Number:	5652103
Patent Number:	6087491
Patent Number:	6310198
Patent Number:	5554744
Patent Number:	5639875
Patent Number:	5808042
Patent Number:	5705629
Patent Number:	5627277
Patent Number:	5525470
Patent Number:	5420265
Patent Number:	5643717
Patent Number:	5668268
Patent Number:	6392031
Patent Number:	6340749

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Patent Number:	6384209
Patent Number:	5739314
Patent Number:	6096881
Patent Number:	6500944
Patent Number:	6538128
Application Number:	09879859
Application Number:	10385193
Application Number:	10482441

CORRESPONDENCE DATA

Fax Number: (212)455-2502
Correspondence will be sent via US Mail when the fax attempt is unsuccessful.
Phone: (212) 455-2254
Email: ksolomon@stblaw.com
Correspondent Name: Robyn Rahbar, Esq.
Address Line 1: Simpson Thacher & Bartlett LLP
Address Line 2: 425 Lexington Avenue
Address Line 4: New York, NEW YORK 10017

NAME OF SUBMITTER:	Robyn Rahbar
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Total Attachments: 8
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GRANT OF
SECURITY INTEREST IN PATENT RIGHTS

THIS GRANT OF SECURITY INTEREST IN PATENT RIGHTS (“Agreement”), dated as of August 26, 2004 is made by Avecia Biotechnology Inc., a Delaware corporation (the “Grantor”), in favor of J.P. Morgan Europe Limited, as Security Agent (the “Agent”) for the several banks and other financial institutions (the “Lenders”), parties to the Amended and Restated Agreement, dated as of April 30, 2004 (as amended, supplemented or otherwise modified from time to time, the “Credit Agreement”), among Avecia Investments Limited, that is incorporated under the laws of England and Wales and parent of Grantor (“Borrower”), the Lenders, the Agent, Chase Manhattan PLC and J.P. Morgan Securities Ltd. as arrangers, JPMorgan Chase Bank and J.P. Morgan Securities Ltd. as underwriters. Capitalized terms not defined herein shall have the meanings ascribed to them in the Credit Agreement.

W I T N E S S E T H:

WHEREAS, pursuant to the Credit Agreement, the Lenders have severally agreed to make Loans and other extensions of credit to the Borrower upon the terms and subject to the conditions set forth therein; and

WHEREAS, in connection with the Credit Agreement, the Grantor and certain other subsidiaries of the Borrower have executed and delivered a Guarantee and Collateral Agreement, dated as of June 30, 1999, in favor of the Agent (together with all amendments and modifications, if any, from time to time thereafter made thereto, the “Guarantee and Collateral Agreement”);

WHEREAS, pursuant to the Guarantee and Collateral Agreement, Grantor pledged and granted to the Agent for the benefit of the Agent and the Lenders a continuing security interest in all Intellectual Property, including the Patents; and

WHEREAS, Grantor has duly authorized the execution, delivery and performance of this Agreement;

NOW THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, and in order to induce the Lenders to make Loans and other financial accommodations to the Borrower pursuant to the Credit Agreement, Grantor agrees, for the benefit of the Agent and the Lenders, as follows:

SECTION 1. Definitions. Unless otherwise defined herein or the context otherwise requires, terms used in this Agreement, including its preamble and recitals, have the meanings provided or provided by reference in the Credit Agreement and the Guarantee and Collateral Agreement.

SECTION 2. Grant of Security Interest. Grantor hereby pledges and grants a continuing security interest in, and a right of setoff against, and effective upon demand made upon the occurrence and during the continuance of an Event of Default assigns, transfers and conveys, the Patents (including, without limitation, those items listed on Schedule A hereto), to the Agent for the benefit of the Agent and the Lenders to secure payment, performance and observance of the Obligations.

SECTION 3. Purpose. This Agreement has been executed and delivered by Grantor for the purpose of recording the grant of security interest herein with the United States Patent and Trademark Office. The security interest granted hereby has been granted to the Lenders in connection with the Guarantee and Collateral Agreement and is expressly subject to the terms and conditions thereof. The Guarantee and Collateral Agreement (and all rights and remedies of the Lenders thereunder) shall remain in full force and effect in accordance with its terms.

SECTION 4. Acknowledgment. Grantor does hereby further acknowledge and affirm that the rights and remedies of the Lenders with respect to the security interest in the Patents granted hereby are more fully set forth in the Credit Agreement and the Guarantee and Collateral Agreement, the terms and provisions of which (including the remedies provided for therein) are incorporated by reference herein as if fully set forth herein.

SECTION 5. Counterparts. This Agreement may be executed in counterparts, each of which will be deemed an original, but all of which together constitute one and the same original.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and delivered by their respective officers thereunto duly authorized as of the day and year first above written.

AVECIA BIOTECHNOLOGY INC.

By: Gregory S. Kurey
Name: Gregory S. Kurey
Title: Authorized Signatory

J.P. MORGAN EUROPE LIMITED
as Administrative Agent for the Lenders

By: _____
Name:
Title:

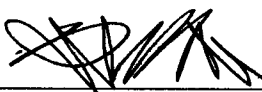
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AVECIA BIOTECHNOLOGY INC.

By: _____
Name:
Title:

J.P. MORGAN EUROPE LIMITED
as Administrative Agent for the Lenders

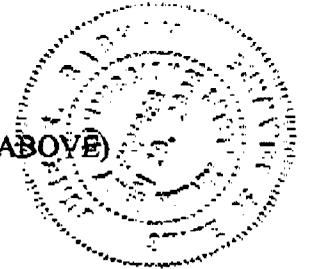
By:  _____
Name: **ROGER KEAN**
Title: **VICE PRESIDENT**

STATE OF DELAWARE)
) ss
COUNTY OF NEW CASTLE)

On the 11 day of AUGUST, 2004, before me personally came Gregory S. Kurey, who is personally known to me to be an Authorized Signatory of Avecia Biotechnology Inc., a Delaware corporation; who, being duly sworn, did depose and say that he is an Authorized Signatory of such corporation, the corporation described in and which executed the foregoing instrument; that he executed and delivered said instrument pursuant to authority given by the Board of Directors of such corporation; and that he acknowledged said instrument to be the free act and deed of said corporation.

June K. Basham
Notary Public

(PLACE STAMP AND SEAL ABOVE)



SAVILLE & CO

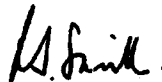
NOTARIES

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www.savillenotaries.com
mail@savillenotaries.com

Richard Saville
Ian Campbell
Sophie Jenkins
Mark Thomson (ASSOCIATE)

KINGDOM OF ENGLAND)
CITY OF LONDON) s.s.

On this twenty fifth day of August in the year two thousand and four before me RICHARD JOHN SAVILLE of the City of London NOTARY PUBLIC by royal authority duly admitted and sworn personally came and appeared ROGER KEAN who is personally known to me to be the vice president of **J.P. MORGAN EUROPE LIMITED** of London, England, who being duly sworn, did depose and say that he is the vice president in such Company, the Company described in and which executed the annexed instrument; that he executed and delivered the said instrument pursuant to an authority given by the Board of Directors of such Company; and that he acknowledged the said instrument to be the free act and deed of the said Company.



My Commission expires at Death

PATENT

REEL: 015056 FRAME: 0909

SCHEDULE A

U.S. Patents Registrations and Applications

<u>Patent</u>	<u>Patent or Application Number</u>
Method for sequencing synthetic oligonucleotides containing non-phosphodiester internucleotide linkages	5403709
Method for sequencing synthetic oligonucleotides containing non-phosphodiester internucleotide linkages	5652103
Extremely high purity oligonucleotides and methods of synthesizing them using dimer blocks	6087491
Extremely high purity oligonucleotides and methods of synthesizing them using dimer blocks	6310198
Method for loading solid supports for nucleic acid synthesis	5554744
Methods for H-phosphonate synthesis of oligonucleotides using triphosgene	5639875
Detritylation of DMT-oligonucleotides using cationic ion-exchange resin	5808042
Methods for H-phosphonate synthesis of mono- and oligonucleotides	5705629
Method for analyzing oligonucleotide analogs	5627277
Method of sequencing [short] oligonucleotides	5525470
Separation of phosphorothioate oligonucleotides by capillary gel electrophoresis	5420265
Substrate useful for separating modified oligonucleotides	5643717
Passivated polymer supports for nucleic acid synthesis	5668268
Polymer supports for nucleic acid synthesis	6392031
Preparation of nucleoside phosphoramidites and oligonucleotide synthesis	6340749
Sulfur transfer reagents for oligonucleotide synthesis	6384209
Method for synthesizing 2'-O-substituted pyrimidine nucleosides	5739314

Sulfur transfer reagents for oligonucleotide synthesis	6096881
Sulfurizing reagent: 3-aryl-1,2,4-dithiazoline-5-ones	6500944
Detritylation solvents for nucleic acid synthesis	6538128
Method of preventing modification of synthetic oligonucleotides	09/879859
Synthons for oligonucleotide synthesis	10/385193
	10/482441

080597-0005-08723-NY03.2367319.2

RECORDED: 09/01/2004

PATENT
REEL: 015056 FRAME: 0911