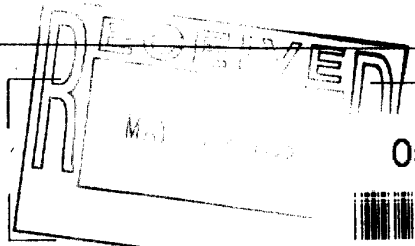


FORM PTO-1619A  
Expires 06/30/99  
OMB 0651-0027

Department of Commerce  
Patent Office  
T



05-18-1998



RECORDATION FORM CC 100712796  
**PATENTS ONLY**

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

**Submission Type**

New

Resubmission (Non-Recordation)  
Document ID#

Correction of PTO Error  
Reel #  Frame #

Corrective Document  
Reel #  Frame #

**Conveyance Type**

Assignment  Security Agreement

License  Change of Name

Merger  Other

**U.S. Government**  
(For Use ONLY by U.S. Government Agencies)

Departmental File  Secret File

**Conveying Party(ies)**

Mark if additional names of conveying parties attached

Name (line 1)  Execution Date  
Month Day Year

Name (line 2)

**Second Party**

Name (line 1)

Name (line 2)

Execution Date  
Month Day Year

**Receiving Party**

Mark if additional names of receiving parties attached

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)     
City State/Country Zip Code

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

**Domestic Representative Name and Address**

Enter for the first Receiving Party only.

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

FOR OFFICE USE ONLY

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mail documents to be recorded with required cover sheet(s) information to  
Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231  
REEL: 9162 FRAME: 0034

**Correspondent Name and Address**

Area Code and Telephone Number

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

**Pages**

Enter the total number of pages of the attached conveyance document including any attachments. #

**Application Number(s) or Patent Number(s)**

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

**Patent Application Number(s)**

**Patent Number(s)**

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If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor. Month Day Year

**Patent Cooperation Treaty (PCT)**

Enter PCT application number  PCT  PCT   
only if a U.S. Application Number  PCT  PCT   
has not been assigned.

**Number of Properties**

Enter the total number of properties involved. #

**Fee Amount**

Fee Amount for Properties Listed (37 CFR 3.41): \$

Method of Payment: Enclosed  Deposit Account

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number: #

Authorization to charge additional fees: Yes  No

**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. Charges to deposit account are authorized, as indicated herein.

NICOLE L RIVES  
Name of Person Signing

Nicole Rives  
Signature

5-9-95  
Date

# RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

## Conveying Party(ies)

Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1)

Execution Date  
Month Day Year

Name (line 2)

Execution Date  
Month Day Year

Name (line 1)

Name (line 2)

Execution Date  
Month Day Year

Name (line 1)

Name (line 2)

## Receiving Party(ies)

Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

City

State/Country

Zip Code

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

City

State/Country

Zip Code

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

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Patent Application Number(s)

Patent Number(s)

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RECORDATION FORM COVER SHEET  
CONTINUATION  
PATENTS ONLY

Conveying Party(ies)

Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Execution Date  
Month Day Year

Name (line 1)

Name (line 2)

Execution Date  
Month Day Year

Name (line 1)

Name (line 2)

Execution Date  
Month Day Year

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Name (line 2)

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Name (line 2)

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City

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Zip Code

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RECORDATION FORM COVER SHEET  
CONTINUATION  
PATENTS ONLY

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Execution Date  
Month Day Year

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Patent Application Number(s)

Patent Number(s)

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## AGREEMENT (PATENT)

This AGREEMENT (PATENT), dated as of January 9, 1998 (this "Agreement"), is made by Infigen, Inc., a Delaware corporation (the "Company"), and the institutional investors a party hereto (the "Purchasers") for the benefit of the registered holders from time to time (individually a "Holder" and collectively, the "Holders") of the 11.51% Junior Joint and Several Notes due August 12, 1999 issued by Protein Genetics, Inc. ("PGI"), ABS Global, Inc. ("ABS Global"), Ochoa Fertilizer Co., Inc. and Antilles Chemical Company (collectively, the "Borrowers") in the original principal amount of \$8,000,000 (the "Junior Notes").

## R E C I T A L

Pursuant to the Note and Share Purchase Agreement dated as of August 12, 1994 (the "Note Agreement"), the Borrowers issued to the Purchasers the Junior Notes and granted to the Purchasers a first priority security interest in certain of their assets. ABS and PGI now desire to transfer a portion of such assets to the Company.

In order to induce the Purchasers to consent to such transfers, and in consideration thereof, the Company has agreed (x) to become a party to the Note Agreement and assume, jointly and severally, with the Borrowers, all obligations of the Borrowers under the Note Agreement, the Junior Notes and certain other notes and agreements executed in connection therewith; (y) to grant to the Holders a first priority security interest in certain of its assets including the assets to be transferred to it from PGI and ABS pursuant to a Security Agreement of even date (the "Security Agreement"); and (z) to enter into this Agreement.

1. Definitions. Unless otherwise defined herein, terms used in this Agreement, have the meanings given therefor in the Security Agreement.

2. Security Interest. To secure the payment and performance of the Secured Obligations, the Company does hereby grant to the Purchasers, for their benefit and the benefit of the Holders from time to time of the Senior Notes, a continuing security interest in and Lien on, all of the Company's right, title and interest in, to and under the following property, which constitutes a portion of the Intellectual Property, whether presently existing or hereafter acquired or existing:

(a) all patents and patent applications (including each patent and patent application described on Attachment I hereto), including without limitation, the inventions and improvements described therein, together with the reissues, divisions, continuations, renewals, extensions, and continuations in part thereof (the "Patents");

(b) all agreements, whether written or oral, providing for the grant by the Company of any right to manufacture, use or sell any invention covered by a Patent, including, without limitation, any thereof referred to in Attachment I hereto (the "Patent Licenses");

(c) all proceeds and products of each Patent and Patent License, including without limitation, all income, royalties, damages and payments now or hereafter due and/or payable with respect to any Patent or Patent License, including damages and payments for past or future infringements thereof, the right to sue for past, present and future infringements thereof, and all rights corresponding thereto throughout the world (clauses (a) through (c), collectively the "Patent Collateral"); and

(d) all reissues, extensions or renewals of any of the items described in clauses (a) and (c).

3. Security Agreement. This Agreement has been executed and delivered by the Company for the purpose of registering the security interest of the Purchasers in the Patent Collateral with the United States Patent and Trademark Office and corresponding offices in other countries of the world. The security interest granted hereby has been granted as a supplement to, and not in limitation of, the security interest granted to the Purchasers under the Security Agreement. The Security Agreement (and all rights and remedies available to the Purchasers thereunder) shall remain in full force and effect in accordance with its terms.

4. Release of Security Interest. Upon payment in of all of the Secured Obligations, the Purchasers shall, at the Company's expense, execute and deliver to the Company all instruments and other documents as may be necessary or proper to release the lien on and security interest in the Patent Collateral which has been granted hereunder.

5. Acknowledgment. The Company does hereby further acknowledge and affirm that the rights and remedies of the Purchasers with respect to the security interest in the Patent Collateral granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which (including the remedies provided for therein) are incorporated by this reference.

6. Counterparts. This Agreement may be executed by the parties hereto in several counterparts, each of which shall be deemed to be an original and all of which shall constitute together but one and the same agreement.

[Remainder of Page Intentionally Left Blank]

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

The Company:

INFIGEN, INC.

By: [Signature]  
Title: Asst Secretary & VP

The Purchasers:

JOHN HANCOCK MUTUAL LIFE  
INSURANCE COMPANY

By: \_\_\_\_\_  
Title: \_\_\_\_\_

JOHN HANCOCK LIFE INSURANCE  
COMPANY OF AMERICA

By: \_\_\_\_\_  
Title: \_\_\_\_\_

MASSACHUSETTS MUTUAL LIFE  
INSURANCE COMPANY

By: \_\_\_\_\_  
Title: \_\_\_\_\_

MASSMUTUAL CORPORATE INVESTORS

By: \_\_\_\_\_  
Title: \_\_\_\_\_

MASSMUTUAL PARTICIPATION INVESTORS

By: \_\_\_\_\_  
Title: \_\_\_\_\_

MASSMUTUAL CORPORATE VALUE  
PARTNERS, LTD.

By: Massachusetts Mutual Life Insurance  
Company, Investment Advisors

By: \_\_\_\_\_  
Title: \_\_\_\_\_



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

The Company:

INFIGEN, INC.

By: \_\_\_\_\_  
Title:

The Purchasers:

JOHN HANCOCK MUTUAL LIFE  
INSURANCE COMPANY

By:   
Title: Investment Officer

JOHN HANCOCK LIFE INSURANCE  
COMPANY OF AMERICA

By:   
Title: Investment Officer

MASSACHUSETTS MUTUAL LIFE  
INSURANCE COMPANY

By: \_\_\_\_\_  
Title:

MASSMUTUAL CORPORATE INVESTORS

By: \_\_\_\_\_  
Title:

MASSMUTUAL PARTICIPATION INVESTORS

By: \_\_\_\_\_  
Title:

MASSMUTUAL CORPORATE VALUE  
PARTNERS, LTD.

By: Massachusetts Mutual Life Insurance  
Company, Investment Advisors

By: \_\_\_\_\_  
Title:

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The Company:

INFIGEN, INC.

By: \_\_\_\_\_  
Title:

The Purchasers:

JOHN HANCOCK MUTUAL LIFE  
INSURANCE COMPANY

By: \_\_\_\_\_  
Title:

JOHN HANCOCK LIFE INSURANCE  
COMPANY OF AMERICA

By: \_\_\_\_\_  
Title:

MASSACHUSETTS MUTUAL LIFE  
INSURANCE COMPANY

By: John B. Joyce  
Title: **Managing Director**  
MASSMUTUAL CORPORATE INVESTORS

The foregoing is executed on behalf of MassMutual Corporate Investors, organized under a Declaration of Trust, dated September 13, 1985, as amended from time to time. The obligations of such Trust are not personally binding upon, nor shall resort be had to the property of, any of the Trustees, shareholders, officers, employees or agents of such Trust, but the Trust's property only shall be bound.

By: John B. Joyce  
Title: **VICE PRESIDENT**  
MASSMUTUAL PARTICIPATION INVESTORS

The foregoing is executed on behalf of MassMutual Participation Investors, organized under a Declaration of Trust, dated April 7, 1988, as amended from time to time. The obligations of such Trust are not binding upon, nor shall resort be had to the property of, any of the Trustees, shareholders, officers, employees or agents of such Trust individually, but the Trust's assets and property only shall be bound.

By: John B. Joyce  
Title: **VICE PRESIDENT**  
MASSMUTUAL CORPORATE VALUE  
PARTNERS, LTD.

By: Massachusetts Mutual Life Insurance  
Company, Investment Advisors

By: John B. Joyce  
Title: **Managing Director**

Item A. Patents

<u>TITLE</u>	<u>SERIAL NO./FILING DATE</u>	<u>PATENT NO./FILING DATE</u>
BOVINE EMBRYO MEDIUM	07/558,969 07/26/90	5,096,822 03/17/92
BOVINE NUCLEAR TRANSPLANTATION	07/599,256 10/16/90	5,057,420 10/15/91
ENHANCED GENE EXPRESSION IN RESPONSE TO LACTATION SIGNALS	08/071,594 06/02/93	5,320,952 06/14/94
IN VITRO MATURATION OF BOVINE EMBRYOS	07/139,887 12/30/87	5,213,979 05/23/93
METHOD OF CLONING MAMMALIAN EMBRYOS	08/031,815 03/15/93	5,453,366 09/26/95
METHODS FOR DETERMINING ANTIBODIES SPECIFIC FOR SEX ASSOCIATED SPERM MEMBRANE PROTEINS	08/486,593 06/07/95	5,660,997 08/26/97
MULTIPLYING BOVINE EMBRYOS	07/113,791 10/27/87	4,994,384 02/19/91
PARTHENOGENIC OOCYTE ACTIVITY	08/016,703 02/10/93	5,496,720 03/05/96
CRYOPRESERVATION PROCESS FOR DIRECT TRANSFER OF EMBRYOS		5,160,312

Item B. Patent Applications

<u>TITLE</u>	<u>SERIAL NO./FILING DATE</u>
PARTHENOGENIC OOCYTE ACTIVITY	08/473,794 06/06/95

Item C. Patent Licenses

Not applicable