

**RECORDATION FORM COVER SHEET  
PATENTS ONLY**

TO THE HONORABLE COMMISSIONER OF PATENTS AND TRADEMARKS:  
PLEASE RECORD THE ATTACHED ORIGINAL DOCUMENT OR COPY THEREOF.

**1. NAME OF CONVEYING PARTY**

INFIGEN, INC.

(Delaware Corporation)

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

**2. NAME AND ADDRESS OF RECEIVING PARTIES**

JOHN HANCOCK LIFE INSURANCE COMPANY

200 CLARENDON STREET  
BOSTON, MASSACHUSETTS 02117

(Massachusetts Corporation)

Additional name(s) of receiving party(ies) attached? Yes

**3. NATURE OF CONVEYANCE**

Security Agreement

Execution Date: July 11, 2001

**4. APPLICATION NUMBER(S) OR PATENT NUMBER(S)**

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

A. Patent Application No(s):

B. Patent No(s):

4,847,081

Additional numbers attached? Yes

**5. NAME AND ADDRESS OF PARTY TO  
WHOM CORRESPONDENCE  
SHOULD BE DIRECTED:**Timothy H. Hiebert  
Samuels, Gauthier & Stevens LLP  
225 Franklin Street, Suite 3300  
Boston, Massachusetts 02110  
617-426-5553**6. TOTAL NUMBER OF APPLICATIONS  
AND PATENTS INVOLVED: 20****7. TOTAL FEE DUE: \$800.00**PLEASE CHARGE THIS FEE AND ANY ADDITIONAL  
FEES WHICH ARE DUE TO THE DEPOSIT ORDER  
ACCOUNT NOTED IN ITEM 8.**8. DEPOSIT ACCOUNT NUMBER:  
501427****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.

Timothy H. Hiebert  
Name of Person Signing  
SignatureSeptember 26, 2001  
Date

4884.01H

Total number of pages including cover sheet, attachments, and document: 6 **PATENT**

700007653

REEL: 012002 FRAME: 0341

**2. NAME AND ADDRESS OF RECEIVING PARTIES (continued):**

INVESTORS PARTNER LIFE INSURANCE COMPANY  
200 CLARENDON STREET  
BOSTON, MASSACHUSETTS 02117

(Delaware Corporation)

MASSACHUSETTS MUTUAL LIFE INSURANCE COMPANY  
1295 STATE STREET  
SPRINGFIELD, MASSACHUSETTS 01111

(Massachusetts Corporation)

MASSMUTUAL CORPORATE VALUE PARTNERS, LTD.  
1295 STATE STREET  
SPRINGFIELD, MASSACHUSETTS 01111

(Cayman Islands Limited Liability Company)

MASSMUTUAL PARTICIPATION INVESTORS  
1295 STATE STREET  
SPRINGFIELD, MASSACHUSETTS 01111

(Massachusetts Business Trust)

MASSMUTUAL CORPORATE INVESTORS  
1295 STATE STREET  
SPRINGFIELD, MASSACHUSETTS 01111

(Massachusetts Business Trust)

**4B. Patent No(s) (continued):**

4,994,384  
5,021,244  
5,057,420  
5,096,822  
5,160,312  
5,213,979  
5,320,952  
5,346,990  
5,347,544  
5,439,362  
5,453,366  
5,496,720  
5,660,997  
5,843,754  
6,011,197  
6,077,710  
6,107,543  
6,194,202  
6,258,998

## AGREEMENT (PATENT)

This AGREEMENT (PATENT), dated as of July 11, 2001 (this "Agreement"), is made by Infigen, Inc., a Delaware corporation (the "Company") for the benefit of John Hancock Life Insurance Company, Investors Partner Life Insurance Company, Massachusetts Mutual Life Insurance Company, MassMutual Corporate Value Partners, Ltd., MassMutual Participation Investors and MassMutual Corporate Investors (the "Purchasers") as the registered holders of the 11.67% Senior Joint and Several Notes due August 12, 2004 of which Protein Genetics, Inc., ACATT, Inc. and the Company (collectively, the "Borrowers") are co-makers.

## RECITAL

The Senior Notes were issued pursuant to a Note and Share Purchase Agreement dated as of August 12, 1994 (as amended through the date hereof, the "Note Agreement").

The Company is jointly and severally liable on all obligations of the Borrowers under the Note Agreement, the Senior Notes and certain other notes and agreements executed in connection therewith and to secure such obligations has granted to the Purchasers a first priority security interest in certain of its assets pursuant to a Security Agreement dated January 9, 1998 (the "Security Agreement") and 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 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) through (c).

2. 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.

3. 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.

4. 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.

5. 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.

IN WITNESS WHEREOF, the Company has caused this Agreement to be duly executed and delivered by its duly authorized officer as of the day and year first written above.

The Company:

INFIGEN, INC.

By:   
Chief Financial Officer

ATTACHMENT 1  
to Patent Agreement  
(Page 1)  
Patents Issued

<u>LL Docket</u>	<u>FL Docket</u>	<u>Country ID</u>	<u>Type</u>	<u>Date Filed</u>	<u>Issue Date</u>	<u>Patent No.</u>	<u>Serial No.</u>
<b>Bovine Embryo Medium</b>							
231/034		US	NEW	7/26/90	3/17/92	5,096,822	07/558,969
<b>Bovine Nuclear Transplantation</b>							
228/219		US	R62	10/16/90	10/15/91	5,057,420	07/599,256
<b>Cryopreservation Process for Direct Transfer of Embryos</b>							
229/001		US	CIP	2/6/91	11/30/92	5,160,312	07/651,458
<b>Culture of Totipotent Embryonic Inner Mass Cells and Production of Bovine Animals</b>							
228/215		US	R62	12/2/94	8/22/00	6,107,543	08/348,769
<b>Enhanced Gene Expression In Response to Lactation Signals</b>							
229/034		US	R62	6/2/93	6/14/94	5,320,952	08/071,594
<b>In Vitro Culture of Bovine Embryos</b>							
228/228		US	NEW	12/30/87	5/25/93	5,213,979	07/139,887
<b>Method of Cloning Bovine Embryos</b>							
229/038		US	CIP	3/15/93	9/26/95	5,453,366	08/031,815
<b>Method of Cloning Bovines Using Reprogrammed Non-Embryonic Bovine Cells (as amended)</b>							
239/302		US	NEW	1/28/99	1/4/00	6,011,197	09/239,922
<b>Methods of Determining Antibodies Specific for Sex Associated Sperm Membrane Proteins</b>							
228/342		US	CIP	6/7/95	8/26/97	5,660,997	08/486,593
<b>Multiplying Bovine Embryos</b>							
228/216		US	CIP	10/27/87	2/19/91	4,994,384	07/113,791
<b>Mutated Skeletal Actin Promoter</b>							
229/045		US	R62	1/15/92	12/20/94	5,347,544	07/823,024
<b>Parthenogenic Bovine Oocyte Activation</b>							
229/032		US	CON	6/6/95	12/1/98	5,843,754	08/473,794
<b>Parthenogenic Oocyte Activation</b>							
229/196		US	NEW	2/10/93	3/5/96	5,496,720	08/016,703
230/240		US	DIV	3/4/96	2/27/01	6,194,202 B1	08/610,744
237/011		US	CON	10/21/98	6/20/00	6,077,710	09/176,395
<b>Sex Associated Membrane Antibodies and Their Use for Increasing the Probability that Offspring will be of a Desired Sex</b>							
230/242		US	R62	5/12/89	6/4/91	5,021,244	07/351,642
<b>Sex Associated Membrane Proteins and Methods for Increasing the Probability that Offspring will be of a Desired Sex</b>							
231/002		US	DIV	7/25/94	8/8/95	5,439,362	08/280,637
230/243		US	DIV	3/12/91	9/13/94	5,346,990	07/667,974
<b>Synthetic Bovine Parinfluenza Viral Proteins</b>							
228/223		US	DIV	3/30/87	7/11/89	4,847,081	07/014,499

T:\Corp\nlr\JOHAM91\2001\attach\_1.patents issued.doc

ATTACHMENT 1  
to Patent Agreement  
(Page 2)

<u>LL Docket</u>	<u>FL Docket</u>	<u>Country</u>	<u>Type</u>	<u>Date Filed</u>	<u>Issue Date</u>	<u>Patent No.</u>	<u>Serial Date</u>
<b>Method of Cloning Porcine Animals</b>							
237/033	028040-0100	US	NEW	11/24/98	7/10/01	6,258,998	09/199,138