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PATENTS ONLY

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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
- License
- Merger
- Other: _____
- Security Agreement
- Change of Name

Conveying Party

Mark if additional names of conveying parties attached

Name (line 1): Igen, Inc.

Name (line 2): _____

Execution Date:
10/29/99

Second Party

Name (line 1): _____

Name (line 2): _____

Execution Date:

Receiving Party

Mark if additional names of conveying parties attached

Name (line 1): American Capital Strategies, Ltd.

Name (line 2): _____

Address (line 1): 2 Bethesda Metro Center

Address (line 2): 14th Floor

Address (line 3): Bethesda MD 20814

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.

Domestic Representative (for the first Receiving Party Only)

Name: _____

Address (line 1): _____

Address (line 2): _____

Address (line 3): _____

Address (line 4): _____

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05/16/2000 DNGUYEN 00000250 012510 09165436

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Mail documents to be recorded with required cover sheet(s) information to:
Commissioner of Patents and Trademarks, Box Assignments, Washington, DC. 20231

Correspondent Name and Address (for the first Receiving Party Only)

Name: Syreeta Anderson

Address (line 1): ARNOLD & PORTER

Address (line 2): 555 12th Street N.W.

Address (line 3): Suite 1226.4

Address (line 4): Washington, DC 20004-1202

Pages

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

25

Application Number(s) or Patent Number(s)

Mark if additional numbers attached

Application Number(s)

09/165436; 09/252546; 09/329608; 09/396535

Patent Number(s)

5776536; 5756014

Patent Cooperation Treaty (PCT)

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

PCT: US98/07451

PCT: _____

PCT: _____

PCT: _____

PCT: _____

PCT: _____

Number of Properties

Enter the total number of properties involved:

7

Fee Amount

Fee Amount for Properties Listed (37 C.F.R. 3.41):

\$190.00

Method of Payment

Enclosed

Deposit Account

Deposit Account Number:

01-2510

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.

James T. Walsh, Esq.

Name of Person Signing

Signature

Date Signed

SCHEDULE A

IGEN, INC. PATENTS

Docket No.	Inventor	Ctry	Status	App No	App Date	Pat No.	Grant Dt	Current Owner
IMH-0361	TREMBLAY, PAUL A.	USA	G	08/772354	23DE1996	5776536	07JL1998	IGEN, INC.
IMH-0374	MATHUR, RAJIV	USA	G	08/838633	11AP1997	5756014	26MY1998	IGEN, INC.
IMH-0374PC	MATHUR, RAJIV	PCT	F	PCT/US98/07451	10AP1998			IGEN, INC.
IMH-0386	MATHUR, RAJIV	USA	F	09/165436	02OC1998			IGEN, INC.
IMH-0386PC	MATHUR, RAJIV	PCT	F	NEW APPLICATION	27SE1999			IGEN, INC.
IMH-0390	MATHUR, RAJIV	USA	F	09/252546	19FE1999			IGEN, INC.
IMH-0392	RAJIV MATHUR	USA	F	09/329608	10JE1999			IGI, INC.
IMH-0395	MATHUR, RAJIV	USA	F	09/396535	15SE1999			IGEN, INC.

PATENT SECURITY AGREEMENT

(United States Patents)

This Patent Security Agreement ("Agreement") is made this ^{29th} day of October, 1999, by **IGEN, INC.**, a Delaware corporation having a mailing address at Wheat Road and Lincoln Avenue, Buena, NJ 08310 ("Grantor") and delivered to **AMERICAN CAPITAL STRATEGIES, LTD.**, a Delaware corporation having a mailing address at 2 Bethesda Metro Center, 14th Floor, Bethesda, Maryland 20814 ("Lender").

Background

A. Grantor has entered into that certain Note and Equity Purchase Agreement dated as of even date herewith among Grantor, IGI, Inc., ImmunoGenetics, Inc., and Blood Cells, Inc. (collectively, "Borrowers") and Lender (as it may hereafter be supplemented, restated, amended, superseded or replaced from time to time, the "Purchase Agreement"). Capitalized terms not defined herein shall have the meanings given to such terms in the Purchase Agreement.

B. This Agreement is being executed contemporaneously with that certain Security Agreement of even date herewith among Borrowers and Lender (as it may hereafter be supplemented, restated, amended, superseded or replaced from time to time, the "Security Agreement"), under which, inter alia, Grantor is granting Lender a lien on and security interest in certain assets of Grantor associated with or relating to products leased or sold or services provided under Grantor's patents and the goodwill associated therewith as security for the payment and performance of all the Obligations (as defined in the Security Agreement) of all the Borrowers, and under which Lender is entitled to foreclose or otherwise deal with such assets and patents under the terms and conditions set forth therein.

C. Pursuant to the Security Agreement, Lender is acquiring a lien on, and security interest in, and license to use (which license is conditioned upon the occurrence and continuance of an Event of Default), among other things, (i) the United States Letters Patent and the inventions described and claimed therein set forth on Schedule A hereto and (ii) the applications for Letters Patent and the inventions described and claimed therein set forth on Schedule A hereto and any United States Letters Patent which may be issued upon any of said applications, together with all the goodwill of Grantor associated therewith and represented thereby, as security for all of the Obligations, and desires to have its security interest in such letters patent and applications confirmed by a document identifying same and in such form that it may be recorded in the United States Patent and Trademark Office.

NOW THEREFORE, with the foregoing Background hereinafter deemed incorporated by reference and made a part hereof, and in consideration of the premises and mutual promises herein contained, the parties hereto, intending to be legally bound hereby, covenant and agree as follows:

1. In consideration of and pursuant to the terms of the Purchase Agreement, and for other good, valuable and sufficient consideration, the receipt of which is hereby acknowledged, and to secure the payment and performance of all the Obligations of all Borrowers under the Purchase Documents, Grantor grants to Lender a lien on and security interest in all patents and patent applications, including, without limitation, the inventions and improvements described and claimed therein, and those patents and patent applications listed on Schedule "A" attached hereto and made a part hereof, and the reissues, divisions, continuations, renewals, extensions and continuations-in-part thereof (collectively, the "Schedule A Patents"), all of Grantor's rights and obligations pursuant to any license agreements between Grantor and any other Person or Persons, whether Grantor is a licensor or licensee under any such license agreements, including, without limitation, the licenses listed on Schedule "C" attached hereto and made a part hereof with respect to the patents and patent applications listed on Schedule "B" attached hereto and made a part hereof (collectively the "Schedule B Patents" and, together with the Schedule A Patents, the "Patents"), and, subject to the terms of such licenses, the right to prepare for sale, sell and advertise for sale, all Inventory now or hereafter owned by such Assignor and now or hereafter covered by such licenses (collectively, the "Licenses", and together with the Patents, the "Patent Rights") and all proceeds thereof and all Grantor's right, title, interest, claims and demands that Grantor has or may have in profits and damages for past and future infringements of the Patent Rights (such rights, interest, claims and demand being herein called the "Claims") (the Patent Rights and Claims are collectively referred to as the "Patent Collateral").
2. Grantor hereby covenants and agrees to maintain the Patent Collateral in full force and effect until all of the Obligations are satisfied in full.
3. Grantor represents, warrants and covenants to Lender that:
 - (a) The Patent Collateral is subsisting and has not been adjudged invalid or unenforceable;
 - (b) All of the Patent Rights subsisting, and, to the best of Grantor's knowledge, valid and enforceable;
 - (c) Grantor is the sole and exclusive owner of the entire and unencumbered right, title and interest in and to the Patent Collateral (excepting the Schedule B Patents, but including the Grantor's rights under the Licenses). Except for Liens permitted under Section 7.2(b) of the Purchase Agreement, all of the Patent Collateral (other than the Schedule B Patents, but including Grantor's right under the Licenses) is free and clear of any liens, charges and encumbrances including, without limitation, pledges, assignments, options and covenants by Grantor not to sue third persons;
 - (d) Except for Liens permitted under Section 7.2(b) of the Purchase Agreement, the Grantor's rights under the Licenses are free and clear of any liens, claims,

charges and encumbrances, including, without limitation, pledges, assignments, options, and covenants by Grantor not to sue third persons;

(e) Grantor has no notice of any suits or actions commenced or threatened against it, or notice of claims asserted or threatened against it, with reference to the Patent Collateral;

(f) Grantor has the unqualified right, power and authority to enter into this Agreement and perform its terms; and

(g) Grantor has complied with, and will continue for the duration of this Agreement to comply with the requirements set forth in 15 U.S.C. §1051-1127 and any other applicable statutes, rules and regulations in connection with its use of the Patent Collateral except where failure to comply would not have a material adverse effect on Grantor or its Property.

4. Grantor further covenants that:

(a) Until all of the Obligations have been satisfied in full, Grantor will not enter into any agreement which is inconsistent with Grantor's obligations under this Agreement, Grantor's obligations under the Purchase Agreement or which may restrict or impair Lender's rights or priorities hereunder.

(b) If Grantor acquires rights to any new owned Patent Collateral, the provisions of this Agreement shall automatically apply thereto and such Patent Collateral shall be deemed part of the Patent Collateral. Grantor shall give Lender prompt written notice thereof along with an amended Schedule "A." Furthermore, if Grantor acquires rights as a licensee to any new patents, the provisions of this Agreement shall automatically apply thereto and such patent shall be deemed part of the Schedule B Patents, and any license agreement pursuant to which Grantor acquires such rights shall be deemed to be included in the definition of "Licenses." Grantor shall give Lender written notice promptly upon its first use thereof along with an amended Schedule "B."

5. So long as this Agreement is in effect and so long as Grantor has not received notice from Lender that an Event of Default has occurred and is continuing under the Notes and the Purchase Agreement and that Lender has elected to exercise its rights hereunder (i) Grantor shall continue to have the exclusive right to use the Patent Collateral; and (ii) Lender shall have no right to use the Patent Collateral or issue any exclusive or non-exclusive license with respect thereto, or assign, pledge or otherwise transfer title in the Patent Collateral to anyone else.

6. Grantor agrees not to sell, license, grant any option, assign or further encumber its rights and interest in the Patent Collateral to any entity or person other than Grantor without the prior written consent of Lender or as may be expressly permitted under the Purchase Agreement. Notwithstanding the foregoing, and providing that no Default or Event of Default has occurred and is outstanding, Grantor shall be entitled to license any Patents in exchange for fair market consideration in the exercise of its reasonable business judgment.

7. Anything herein contained to the contrary notwithstanding, if and while Grantor shall be in default hereunder or an Event of Default exists under the Notes or the Purchase Agreement, Grantor hereby covenants and agrees that Lender as the holder of a security interest under the Uniform Commercial Code, as now or hereafter in effect in the State whose law governs the interpretation of the Purchase Documents, may take such action permitted under the Purchase Documents, hereunder or under any law, in its exclusive discretion, to foreclose upon the Patent Collateral covered hereby. For such purposes, Grantor hereby authorizes and empowers Lender, its successors and assigns to make, constitute and appoint any officer or agent of Lender as Lender may select, in its exclusive discretion, as Grantor's true and lawful attorney-in-fact, with the power to endorse Grantor's name on all applications, documents, papers and instruments necessary for Lender to use the Patent Collateral or to grant or issue any exclusive or non-exclusive license under the Patent Collateral to anyone else, or necessary for Lender to assign, pledge, convey or otherwise transfer title in or dispose of the Patent Collateral to anyone else including, without limitation, the power to execute a Patent Collateral assignment in the form attached hereto as Exhibit 1. Grantor hereby ratifies all that such attorney shall lawfully do or cause to be done by virtue hereof, except for the gross negligence or willful misconduct of such attorney. This power of attorney shall be irrevocable for the life of this Agreement, the Purchase Documents, and until all of the Obligations of all of the Borrowers are indefeasibly paid and satisfied in full.
8. This Agreement shall be subject to the terms, provisions, and conditions set forth in the Purchase Agreement and may not be modified without the written consent of the party against whom enforcement is being sought.
9. All rights and remedies herein granted to Lender shall be in addition to any rights and remedies granted to Lender under the Purchase Documents. In the event of an inconsistency between this Agreement and Purchase Agreement, the language of this Agreement shall control.
10. Upon Borrowers' performance of all of the Obligations under the Purchase Documents and full and unconditional satisfaction of all of the Borrowers' Obligations, Lender shall execute and deliver to Grantor all documents reasonably necessary to terminate Lender's security interest in the Patent Collateral.
11. Any and all reasonable fees, costs and expenses, of whatever kind or nature, including the reasonable attorneys' fees and legal expenses incurred by Lender in connection with the preparation of this Agreement and all other documents relating hereto and the consummation of this transaction, the filing or recording of any documents (including all taxes in connection therewith) in public offices, the payment or discharge of any taxes, reasonable counsel fees, maintenance fees, encumbrances or costs otherwise incurred in protecting, maintaining, preserving the Patent Collateral, or in defending or prosecuting any actions or proceedings arising out of or related to the Patent Collateral, in each case in accordance with the terms of this Agreement, shall be borne and paid by Grantor on demand by

Lender and until so paid shall be added to the principal amount of the Obligations to Lender and shall bear interest at the rate of interest determined in accordance with Section 8.2(c) of the Purchase Agreement.

12. Subject to the terms of the Purchase Agreement and the Notes, Grantor shall have the duty to prosecute diligently any application with respect to the Patent Collateral (other than the Schedule B Patents or any applications or inventions relating thereto) pending as of the date of this Agreement or thereafter, until Borrowers' Obligations shall have been satisfied in full, to preserve and maintain all rights in the Patent Collateral (other than the Schedule B Patents or any application or inventions relating thereto), and upon reasonable request of Lender, Grantor shall make federal application on registrable but unregistered Patent Collateral (other than the Schedule B Patents or any applications, or inventions relating thereto) belonging to Grantor and licensed to Grantor. To the extent that Grantor has the duty or right to make any patent applications under any License, Grantor shall have the same duties with respect to the Schedule B Patents as stated in the previous sentence. Grantor shall not abandon any Patent Collateral without the prior written consent of the Lender, which consent shall not be unreasonably withheld.
13. Grantor shall have the right to bring suit in its own name to enforce the Patent Collateral, in which event Lender may, if Grantor reasonably deems it necessary, be joined as a nominal party to such suit if Lender shall have been satisfied, in its sole discretion, that it is not thereby incurring any risk of liability because of such joinder. Grantor shall promptly, upon demand, reimburse and indemnify Lender for all damages, costs and expenses, including attorneys' fees and costs, incurred by Lender in the fulfillment of the provisions of this paragraph.
14. Upon the occurrence of an Event of Default under the Purchase Agreement or hereunder, Lender may, without any obligation to do so, complete any obligation of Grantor hereunder, in Grantor's name or in Lender's name, but at the expense of Grantor, and Grantor hereby agrees to reimburse Lender in full for all expenses, including, without limitation, all attorneys' fees incurred by Lender in protecting, defending and maintaining the Patent Collateral.
15. No course of dealing between Grantor and Lender, nor any failure to exercise, nor any delay in exercising, on the part of Agent, any right, power or privilege hereunder, shall operate as a waiver thereof, and all of Lender's rights and remedies with respect to the Patent Collateral, whether established hereby or by the Purchase Documents, or by any other future agreements between Grantor and Lender or by law, shall be cumulative and may be exercised singularly or concurrently.
16. The provisions of this Agreement are severable and the invalidity or unenforceability of any provision herein shall not affect the remaining provisions which shall continue unimpaired and in full force and effect.

17. This Agreement shall inure to the benefit of and be binding upon the respective successors and permitted assigns of the parties.
18. This Agreement shall be governed by and construed in conformity with the laws of the State of Maryland, without regard to its otherwise applicable principles of conflicts of laws.
19. GRANTOR AND LENDER EACH WAIVES ANY AND ALL RIGHTS EITHER MAY HAVE TO A JURY TRIAL ARISING IN CONNECTION WITH ANY PROCEEDING OR CONTROVERSY RELATING TO THIS AGREEMENT OR ANY OTHER AGREEMENT BETWEEN GRANTOR AND LENDER.

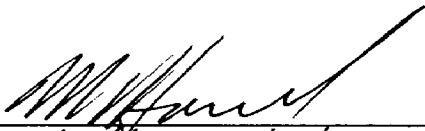
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20. GRANTOR AND LENDER EACH WAIVES ANY AND ALL RIGHTS EITHER MAY HAVE TO A JURY TRIAL ARISING IN CONNECTION WITH ANY PROCEEDING OR CONTROVERSY RELATING TO THIS AGREEMENT OR ANY OTHER AGREEMENT BETWEEN GRANTOR AND LENDER.

21. THE OBLIGATIONS SECURED HEREBY AND THE SECURITY INTERESTS GRANTED HEREUNDER ARE SUBORDINATE IN THE MANNER AND TO THE EXTENT SET FORTH IN THAT CERTAIN SUBORDINATION AGREEMENT (THE "SUBORDINATION AGREEMENT") DATED AS OF OCTOBER 29, 1999, AMONG FLEET CAPITAL CORPORATION, AS AGENT FOR THE SENIOR LENDERS, AMERICAN CAPITAL STRATEGIES, LTD., AND ASSIGNORS TO THE INDEBTEDNESS AND OTHER LIABILITIES OWED BY ASSIGNORS UNDER AND PURSUANT TO THE LOAN AND SECURITY AGREEMENT DATED AS OF OCTOBER 29, 1999, AND EACH RELATED "LOAN DOCUMENT" (AS DEFINED THEREIN), AND EACH ASSIGNEE HEREUNDER, BY ITS ACCEPTANCE HEREOF, ACKNOWLEDGES AND AGREES TO BE BOUND BY THE PROVISIONS OF THE SUBORDINATION AGREEMENT.

IN WITNESS WHEREOF, the parties hereto have executed this Patent Security Agreement, under seal, the day and year first above written.

IGEN, INC.

By: 
Name: M. Haruscheh
Title: CFO

CORPORATE ACKNOWLEDGMENT

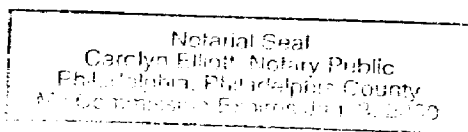
UNITED STATES OF AMERICA :
STATE OF : SS
COUNTY OF :

On this 29th of October, 1999, before me personally appeared to me known and being duly sworn, deposes and says that s/he is CFO of IGEN, INC.; that s/he signed the Agreement thereto as such officer pursuant to the authority vested in him by law; that the within Agreement is the voluntary act of such corporation; and s/he desires the same to be recorded as such.

Carolyn Elliott

Notary Public

My Commission Expires:



**SCHEDULES TO PATENT SECURITY AGREEMENT
BETWEEN IGEN, INC. AND AMERICAN CAPITAL**

SCHEDULE B

PATENTS LICENSED TO IGEN, INC. BY MICRO-PAK, INC.

Docket No.	Inventor	Ctry	Status	App No	App Date	Pat No.	Grant Dt	Current Owner
NVR-0019CH	WALLACH DONALD FH	SWIT	G	88 90 4011.9	08MR1988	0349593	08MR1988	MICRO-PAK, INC.
METHOD OF PRODUCING HIGH AQUEOUS VOLUME		MULTILAMELLAR	VESICLES					
NVR-0019CP	WALLACH DONALD F H	USA	G	07/078658	28JL1987	4855090	08AU1989	MICRO-PAK, INC.
METHOD OF PRODUCING HIGH AQUEOUS VOLUME		MULTILAMELLAR	VESICLES					
NVR-0019CPCA	WALLACH DONALD F H	CANA	G	561288	11MR1988	1289420	24SE1991	MICRO-PAK, INC.
METHOD OF PRODUCING HIGH AQUEOUS VOLUME		MULTILAMELLAR	VESICLES					
NVR-0019CPJP	WALLACH DONALD	JAPA	G	63-503735	08MR1988	1876852	08MR1988	MICRO-PAK, INC.
METHOD OF PRODUCING HIGH AQUEOUS VOLUME		MULTILAMELLAR	VESICLES					
NVR-0019DE	WALLACH DONALD FH	GERW	G	88 90 4011.9	08MR1988	P3866544.1-08	08MR1988	MICRO-PAK, INC.
METHOD OF PRODUCING HIGH AQUEOUS VOLUME		MULTILAMELLAR	VESICLES					
NVR-0019FR	WALLACH DONALD FH	FRAN	G	88 90 4011.9	08MR1988	0349593	08MR1988	MICRO-PAK, INC.
METHOD OF PRODUCING HIGH AQUEOUS VOLUME		MULTILAMELLAR	VESICLES					
NVR-0019GB	WALLACH DONALD FH	GBRI	G	88 90 4011.9	08MR1988	4853228	01AU1989	MICRO-PAK, INC.
METHOD OF PRODUCING HIGH AQUEOUS VOLUME		MULTILAMELLAR	VESICLES					
NVR-0022	WALLACH DONALD F H	USA	G	07/078834	28JL1987	1330532	05JL1994	MICRO-PAK, INC.
METHOD OF MANUFACTURING UNILAMELLAR LIPID		VESICLES						
NVR-0022CA	WALLACH DONALD F H	CANA	G	572961	25JL1988	4895452	23JA1990	MICRO-PAK, INC.
METHOD OF MANUFACTURING UNILAMELLAR LIPID		VESICLES						
NVR-0023	YIOURNAS COSTAS	USA	G	07/163806	03MR1988	0406273	02MR1989	MICRO-PAK, INC.
METHOD AND APPARATUS FOR PRODUCING LIPID		VESICLES						
NVR-0023BE	YIOURNAS COSTAS	BELG	G	89 90 3640.4	02MR1989	0406273	02MR1989	MICRO-PAK, INC.
METHOD AND APPARATUS FOR PRODUCING LIPID		VESICLES						
NVR-0023BR	YIOURNAS COSTAS	BRAZ	G	PI8907293	02MR1989	PI8907293-6	25FE1997	MICRO-PAK, INC.
METHOD AND APPARATUS FOR PRODUCING LIPID		VESICLES						
NVR-0023CA	YIOURNAS COSTAS	CANA	G	592763	03MR1989	1320400	20JL1993	MICRO-PAK, INC.
METHOD AND APPARATUS FOR PRODUCING LIPID		VESICLES						
NVR-0023CH	YIOURNAS COSTAS	SWIT	G	89 90 3640.4	02MR1989	0406273	02MR1989	MICRO-PAK, INC.
METHOD AND APPARATUS FOR PRODUCING LIPID		VESICLES						
NVR-0023DE	YIOURNAS COSTAS	GERW	G	89 90 3640.4	02MR1989	P68910969.5-08	02MR1989	MICRO-PAK, INC.
METHOD AND APPARATUS FOR PRODUCING LIPID		VESICLES						
NVR-0023DV	YIOURNAS COSTAS	USA	G	07/430119	01NO1989	5013497	07MY1991	MICRO-PAK, INC.
METHOD AND APPARATUS FOR PRODUCING LIPID		VESICLES						
NVR-0023FR	YIOURNAS COSTAS	FRAN	G	89 90 3640.4	02MR1989	0406273	02MR1989	MICRO-PAK, INC.
METHOD AND APPARATUS FOR PRODUCING LIPID		VESICLES						
NVR-0023GB	YIOURNAS COSTAS	GBRI	G	89 90 3640.4	02MR1989	0406273	02MR1989	MICRO-PAK, INC.
METHOD AND APPARATUS FOR PRODUCING LIPID		VESICLES						
NVR-0023JP	YIOURNAS COSTAS	JAPA	G	01-503339	02MR1989	2542271	25JL1996	MICRO-PAK, INC.
METHOD AND APPARATUS FOR PRODUCING LIPID		VESICLES						
NVR-0028	WALLACH DONALD F H DR	USA	G	07/124824	24NO1987	4917951	17AP1990	MICRO-PAK, INC.
LIPID VESICLES FORMED OF SURFACTANTS AND		STERIODS						
NVR-0028CA	WALLACH DONALD F H	CANA	G	561289	11MR1988	1311415	15DE1992	MICRO-PAK, INC.
LIPID VESICLES FORMED OF SURFACTANTS AND		STERIODS						
NVR-0028JP	WALLACH, DONALD	JAPA	G	63-502979	08MR1988	2617346	11MR1997	MICRO-PAK, INC.
LIPID VESICLES FORMED OF SURFACTANTS AND		STERIODS						

Docket No.	Inventor	Ctry	Status	App No	App Date	Pat No.	Grant Dt	Current Owner
NVR-0031	WALLACH DONALD	USA	G	07/157571	03MR1988	4911928	27MR1990	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES								
NVR-0031AU	WALLACH DONALD	ASTL	G	15416/88	08MR1988	605581	08MR1988	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES								
NVR-0031BR	WALLACH DONALD	BRAZ	G	PI8807410-2	08MR1988	PI8807410-2	08MR1988	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES								
NVR-0031CA	WALLACH DONALD F H	CANA	G	561290	11MR1988	1289419	24SE1991	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES								
NVR-0031CH	WALLACH DONALD	SWIT	G	88 90 3062.3	08MR1988	0352282	08JA1992	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES								
NVR-0031CN	WALLACH DONALD	USA	G	07/443516	29NO1989	5147723	15SE1992	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES								
NVR-0031CN3	WALLACH DONALD F H	USA	G	08/200351	03FE1994	5474848	12DE1995	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES								
NVR-0031DE	WALLACH DONALD	GERW	G	88 90 3062.3	08MR1988	P3867637.0-08	08JA1992	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES								
NVR-0031FR	WALLACH DONALD	FRAN	G	88 90 3062.3	08MR1988	0352282	08JA1992	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES								
NVR-0031CB	WALLACH DONALD F H	GBRI	G	88 90 3062.3	08MR1988	0352282	08MR1988	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES								
NVR-0031JP	WALLACH DONALD	JAPA	G	63-502980	08MR1988	2589173	05DE1996	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES								
NVR-0031KR	WALLACH DONALD	KORS	G	701447/88	08MR1988	106114	15OC1996	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES								
NVR-0031NZ	WALLACH DONALD	NEWZ	G	223843	10MR1988	223843	10MR1988	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES								
NVR-0034CA	WALLACH DONALD F H	CANA	G	608638	17AU1989	1332153	27SE1994	MICRO-PAK, INC.
ENCAPSULATED HUMECTANT								
NVR-0035	WALLACH DONALD	USA	G	07/300079	19JA1989	5000960	19MR1991	MICRO-PAK, INC.
PROTEIN COUPLING TO LIPID VESICLES								
NVR-0035CA	WALLACH DONALD	CANA	F	2046893	10JA1990			MICRO-PAK, INC.
PROTEIN COUPLING OF LIPID VESICLES								
NVR-0036	WALLACH DONALD F H	USA	G	07/320944	09MR1989	4959341	25SE1990	MICRO VESICULAR SYSTEMS, INC.
BIODEGRADABLE SUPERABSORBING SPONGE								
NVR-0036DV	WALLACH DONALD	USA	G	07/552587	12JUL1990	5073202	17DE1991	MICRO VESICULAR SYSTEMS, INC.
METHOD OF USING BIODEGRADABLE SUPERABSORBING SPONGE								
NVR-0037	WALLACH DONALD F H	USA	G	07/287108	20DE1988	5023086	11JE1991	MICRO-PAK, INC.
ENCAPSULATION IONOPHORE GROWTH FACTORS								
NVR-0038	WALLACH DONALD F H	USA	G	07/286731	20DE1988	5019392	28MY1991	MICRO-PAK, INC.
ENCAPSULATION OF PARASITICIDES								
NVR-0041	WALLACH DONALD F H	USA	G	07/371738	26JE1989	5104736	14AP1992	MICRO-PAK, INC.
REINFORCED PAUCILAMELLAR LIPID VESICLES								
NVR-0046C2	WALLACH DONALD F.H.	USA	G	07/759732	12SE1991	5234767	10AU1993	MICRO-PAK, INC.
HYBRID PAUCILAMELLAR LIPID VESICLES								

Docket No.	Inventor	Ctry	Status	App No	App Date	Pat No.	Grant Dt	Current Owner
NVR-0046CN4	WALLACH DONALD F. H.	USA	G	08/456283	31MY1995	5628936	13MY1997	MICRO-PAK, INC.
HYBRID PAUCILAMELLAR LIPID VESICLES	WALLACH DONALD	USA	G	07/410650	21SE1989	5019174	28MY1991	MICRO-PAK, INC.
NVR-0048	LIPOSOMAL CLEANER	USA	G	07/410608	21SE1989	5032457	16JL1991	MICRO-PAK, INC.
NVR-0049	WALLACH DONALD	USA	G	64098/90	18SE1990	633631	18SE1990	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES USING	WALLACH DONALD	ASTL	G	90 91 3925.5	18SE1990	0493441	18SE1990	MICRO-PAK, INC.
NVR-0049AU	WALLACH DONALD	BELG	G	P19007678-8	18SE1990	0493441	18SE1990	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES USING	WALLACH DONALD	CHARGE-LOCALIZED, SINGLE CHAIN,	F	2066617	18SE1990	2066617	14AF1998	MICRO-PAK, INC.
NVR-0049BE	WALLACH DONALD F H	CHARGE-LOCALIZED, SINGLE CHAIN,	G	90 91 3925.5	18SE1990	0493441	18SE1990	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES USING	WALLACH DONALD	CHARGE-LOCALIZED, SINGLE CHAIN,	F	P69015642.1-08	18SE1990	0493441	18SE1990	MICRO-PAK, INC.
NVR-0049BR	WALLACH DONALD	CHARGE-LOCALIZED, SINGLE CHAIN,	G	90 91 3925.5	18SE1990	0493441	18SE1990	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES USING	WALLACH DONALD	CHARGE-LOCALIZED, SINGLE CHAIN,	G	02-513089	18SE1990	5049395	17SE1991	MICRO-PAK, INC.
NVR-0049CA	WALLACH DONALD F H	CHARGE-LOCALIZED SINGLE CHAIN	G	07/521086	09MY1990	5049395	17SE1991	MICRO VESICULAR SYSTEMS, INC.
PAUCILAMELLAR LIPID VESICLES USING	WALLACH DONALD F H	CHARGE-LOCALIZED, SINGLE CHAIN,	G	2087176	16JL1991	2087176	01JL1997	MICRO VESICULAR SYSTEMS, INC.
NVR-0049CH	WALLACH DONALD F H	CHARGE-LOCALIZED, SINGLE CHAIN,	G	07/809230	17DE1991	5234621	10AU1993	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES USING	WALLACH DONALD F H	CHARGE-LOCALIZED, SINGLE CHAIN,	G	07/587240	24SE1990	5234915	10AU1993	MICRO-PAK, INC.
NVR-0049GB	WALLACH DONALD F H	CHARGE-LOCALIZED, SINGLE CHAIN,	G	07/598120	16OC1990	5160669	03NO1992	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES USING	WALLACH DONALD F H	CHARGE-LOCALIZED, SINGLE CHAIN,	G	91 92 0355.4	15OC1991	0558571	08JA1997	MICRO-PAK, INC.
NVR-0049JP	WALLACH DONALD FH	CHARGE-LOCALIZED SINGLE CHAIN	F	2093526	15OC1991	0558571	08JA1997	MICRO-PAK, INC.
PAUCILAMELLAR LIPID VESICLES USING	WALLACH DONALD F H	CHARGE-LOCALIZED SINGLE CHAIN	G	91 92 0355.4	15OC1991	0558571	08JA1997	MICRO-PAK, INC.
NVR-0055	CHANG AN-CHENG	USA	G	91 92 0355.4	15OC1991	691 24 108.2-0	08JA1997	MICRO-PAK, INC.
CONTROLLED RELEASE VEHICLE	WEINSTEIN BENJAMIN	CANA	G	91 92 0355.4	15OC1991	0558571	08JA1997	MICRO-PAK, INC.
NVR-0060CA	WEINSTEIN BENJAMIN	USA	G	07/809230	17DE1991	5234621	10AU1993	MICRO-PAK, INC.
RINSE-FREE SHAMPOO	WEINSTEIN BENJAMIN	USA	G	07/587240	24SE1990	5234915	10AU1993	MICRO-PAK, INC.
NVR-0060CN	WEINSTEIN BENJAMIN	USA	G	07/598120	16OC1990	5160669	03NO1992	MICRO-PAK, INC.
RINSE-FREE SHAMPOO	MATHUR RAJIV	USA	G	91 92 0355.4	15OC1991	0558571	08JA1997	MICRO-PAK, INC.
NVR-0071	WALLACH DONALD	USA	G	2093526	15OC1991	0558571	08JA1997	MICRO-PAK, INC.
BIODEGRADABLE GEL	WALLACH DONALD	USA	G	91 92 0355.4	15OC1991	691 24 108.2-0	08JA1997	MICRO-PAK, INC.
METHOD OF MAKING OIL FILLED PAUCILAMELLAR	WALLACH DONALD F H	LIPID VESICLES	G	2093526	15OC1991	0558571	08JA1997	MICRO-PAK, INC.
NVR-0078BE	WALLACH DONALD F H	LIPID VESICLES	G	91 92 0355.4	15OC1991	691 24 108.2-0	08JA1997	MICRO-PAK, INC.
METHOD OF MAKING OIL FILLED PAUCILAMELLAR	WALLACH DONALD F H	LIPID VESICLES	F	2093526	15OC1991	0558571	08JA1997	MICRO-PAK, INC.
NVR-0078CA	WALLACH DONALD F H	LIPID VESICLES	G	91 92 0355.4	15OC1991	691 24 108.2-0	08JA1997	MICRO-PAK, INC.
METHOD OF MAKING OIL FILLED PAUCILAMELLAR	WALLACH DONALD F H	LIPID VESICLES	G	91 92 0355.4	15OC1991	691 24 108.2-0	08JA1997	MICRO-PAK, INC.
NVR-0078CH	WALLACH DONALD F H	LIPID VESICLES	G	91 92 0355.4	15OC1991	691 24 108.2-0	08JA1997	MICRO-PAK, INC.
METHOD OF MAKING OIL FILLED PAUCILAMELLAR	WALLACH DONALD F H	LIPID VESICLES	G	91 92 0355.4	15OC1991	691 24 108.2-0	08JA1997	MICRO-PAK, INC.
NVR-0078DE	WALLACH DONALD F H	LIPID VESICLES	G	91 92 0355.4	15OC1991	691 24 108.2-0	08JA1997	MICRO-PAK, INC.
METHOD OF MAKING OIL FILLED PAUCILAMELLAR	WALLACH DONALD F H	LIPID VESICLES	G	91 92 0355.4	15OC1991	691 24 108.2-0	08JA1997	MICRO-PAK, INC.
NVR-0078FR	WALLACH DONALD F H	LIPID VESICLES	G	91 92 0355.4	15OC1991	691 24 108.2-0	08JA1997	MICRO-PAK, INC.
METHOD OF MAKING OIL FILLED PAUCILAMELLAR	WALLACH DONALD F H	LIPID VESICLES	G	91 92 0355.4	15OC1991	691 24 108.2-0	08JA1997	MICRO-PAK, INC.

Docket No.	Inventor	Ctry	Status	App No	App Date	Pat No.	Grant Dt	Current Owner
NVR-0078GB	WALLACH DONALD F H	GBRI	G	91 92 0355.4	15OC1991	0558571	08JA1997	MICRO-PAK, INC.
METHOD OF MAKING OIL FILLED PAUCILAMELLAR								
NVR-0078JP	WALLACH DONALD F H	JAPA	F	04-500743	15OC1991			MICRO-PAK, INC.
METHOD OF MAKING OIL FILLED PAUCILAMELLAR								
NVR-0082	WALLACH DONALD FH	USA	G	07/735645	25JL1991	5213805	25MY1993	MICRO-PAK, INC.
LIPID VESICLES HAVING N N-DIMETHYLAMIDE								
NVR-0082CA	WALLACH DONALD FH	CANA	F	2114836	21JL1992			MICRO-PAK, INC.
LIPID VESICLES HAVING N N-DIMETHYLAMIDE								
NVR-0083	TABIBI S ESMAIL	USA	G	07/654327	12FE1991	5164191	17NO1992	MICRO-PAK, INC.
LIPID VESICLES HAVING AN ALKYD AS A								
NVR-0086	HENDERSON SHERYL LYNN	USA	G	07/662850	01MR1991	5219538	16JE1993	MICRO-PAK, INC.
GAS AND OXYGEN CARRYING LIPID VESICLES								
NVR-0086JP	HENDERSON SHERYL LYNN	JAPA	F	04-507835	26FE1992			MICRO-PAK, INC.
GAS AND OXYGEN CARRYING LIPID VESICLES								
NVR-0091AU	ALBERT ELIZABETH C	ASTL	G	17940/92	25MR1992	654858	25MR1992	MICRO VESICULAR SYS
LIPID VESICLE CONTAINING WATER-IN-OIL								
NVR-0091CA	ALBERT ELIZABETH C	CANA	F	2108039	25MR1992			MICRO-PAK, INC.
LIPID VESICLE CONTAINING WATER-IN-OIL								
NVR-0091CH	ALBERT, ELIZABETH C.	SWIT	G	92 91 0447.9	25MR1992	0577751	11NO1998	MICRO-PAK, INC.
LIPID VESICLE CONTAINING WATER-IN-OIL								
NVR-0091CN	ALBERT ELIZABETH C	USA	G	07/909112	08JL1992	5256422	26OC1993	MICRO-PAK, INC.
LIPID VESICLE CONTAINING WATER-IN-OIL								
NVR-0091DE	ALBERT, ELIZABETH C.	GERM	G	69227580.0-08	25MR1992	0577751	11NO1998	MICRO-PAK, INC.
LIPID VESICLE CONTAINING WATER-IN-OIL								
NVR-0091FR	ALBERT, ELIZABETH C.	FRAN	G	92 91 0447.9	25MR1992	0577751	11NO1998	MICRO-PAK, INC.
LIPID VESICLE CONTAINING WATER-IN-OIL								
NVR-0091GB	ALBERT, ELIZABETH C.	GBRI	G	92 91 0447.9	25MR1992	0577751	11NO1998	MICRO-PAK, INC.
LIPID VESICLE CONTAINING WATER-IN-OIL								
NVR-0091IT	ALBERT, ELIZABETH C.	ITAL	G	92 91 0447.9	25MR1992	0577751	11NO1998	MICRO-PAK, INC.
LIPID VESICLE CONTAINING WATER-IN-OIL								
NVR-0091JP	ALBERT ELIZABETH C	JAPA	F	04-510613	25MR1992			MICRO-PAK, INC.
LIPID VESICLE CONTAINING WATER-IN-OIL								
NVR-0121	MATHUR RAJIV	USA	G	07/761253	17SE1991	5260065	09NO1993	MICRO-PAK, INC.
BLENDED LIPID VESICLES								
NVR-0121AU	RAJIV MATHUR	ASTL	G	24930/92	20AU1992	655072	23MR1995	MICRO-PAK, INC.
BLENDED LIPID VESICLES								
NVR-0121CA	RAJIV MATHUR	CANA	F	2119250	20AU1992			MICRO-PAK, INC.
BLENDED LIPID VESICLES								
NVR-0121EP	MATHUR, RAJIV	EPC	F	92 91 8622.9	20AU1992			MICRO-PAK, INC.
BLENDED LIPID VESICLES								
NVR-0127CA	VARANELLI CAROL	CANA	F	2153780	03JA1994			MICRO-PAK, INC.
METHOD AND INHIBITING VIRAL REPRODUCTION								
NVR-0127CN	VARANELLI, CAROL	USA	G	08/265506	24JE1994	5561062	01OC1996	MICRO-PAK, INC.
METHOD OF INHIBITING VIRAL REPRODUCTION								

Docket No.	Inventor	Ctry	Status	App No	App Date	Pat No.	Grant Dt	Current Owner
NVR-0127ZA	VARANELLI CAROL METHOD AND INHIBITING VIRAL REPRODUCTION	SAFR	G	94/0102	07JJA1994	94/0102	07JJA1994	MICRO-PAK, INC.
NVR-0146CN	ABATE KENNETH ENTRAPMENT VEHICLE AND METHOD	USA	G	08/335207	07NO1994	5510117	23AP1996	MICRO-PAK, INC.
NVR-0148CN	WALLACH DONALD F H EXTENDED DURATION ANTACID PRODUCT	USA	G	08/210645	18MR1994	5490985	13FE1996	MICRO-PAK, INC.
NVR-0209AU	MATHUR, Rajiv LIPID VESICLES CONTAINING AVOCADO OIL	ASTL	G	10418/95	25OC1994	693488	05NO1998	MICRO-PAK, INC.
NVR-0209C2	MATHUR, RAJIV LIPID VESICLES CONTAINING AVOCADO OIL	USA	G	08/583667	05JA1996	5643600	01JL1997	MICRO-PAK, INC.
NVR-0209CA	MATHUR, Rajiv LIPID VESICLES CONTAINING AVOCADO OIL	CANA	F	2177696	25OC1994			MICRO-PAK, INC.
NVR-0209EP	MATHUR, Rajiv LIPID VESICLES CONTAINING AVOCADO OIL	EPC	F	95 90 1030.7	25OC1994			MICRO-PAK, INC.
NVR-0209JP	MATHUR, Rajiv LIPID VESICLES CONTAINING AVOCADO OIL	JAPA	F	07-516744	25OC1994			MICRO-PAK, INC.
NVR-0213BR	WRIGHT CRAIG D. VACCINES CONTAINING PAUCILAMELLAR LIPID ADJUVANTS	BRAZ	F	PI9506885-6	11JA1995			MICRO-PAK, INC. VESICLES AS IMMUNOLOGICAL ADJUVANTS VACCINES CONTAINING PAUCILAMELLAR LIPID
NVR-0213CA	KUMAR SURENDRA VACCINES CONTAINING PAUCILAMELLAR LIPID	CANA	F	2183435	11JA1995			MICRO-PAK, INC.
NVR-0213CP	WRIGHT, D. CRAIG M.D. VACCINES CONTAINING PAUCILAMELLAR LIPID	USA	F	08/840034	24AP1997			NOVAVAX, INC.
NVR-0213EP	WRIGHT, CRAIG D. VACCINES CONTAINING PAUCILAMELLAR LIPID	EPC	F	95 90 7423.8	11JA1995			MICRO-PAK, INC.
NVR-0213JP	WRIGHT, CRAIG D. VACCINES CONTAINING PAUCILAMELLAR LIPID	JAPA	F	07-522336	11JA1995			MICRO-PAK, INC.
NVR-0213MX	WRIGHT, CRAIG D. VACCINES CONTAINING PAUCILAMELLAR LIPID	MEXI	F	9603547	11JA1995			MICRO-PAK, INC.
NVR-0214	RAJIV MATHUR PROPYLENE GLYCOL STEARATE VESICLES	USA	G	08/148952	08NO1993	5439967	08AU1995	MICRO-PAK, INC.
NVR-0214AU	RAJIV MATHUR PROPYLENE GLYCOL STEARATE VESICLES	ASTL	G	80881/94	25OC1994	697245	14JA1999	MICRO-PAK, INC.
NVR-0214CA	RAJIV MATHUR PROPYLENE GLYCOL STEARATE VESICLES	CANA	F	2175472	25OC1994			MICRO-PAK, INC.
NVR-0214EP	RAJIV MATHUR PROPYLENE GLYCOL STEARATE VESICLES	EPC	F	94 93 1998.2	25OC1994			MICRO-PAK, INC.
NVR-0214JP	RAJIV MATHUR PROPYLENE GLYCOL STEARATE VESICLES	JAPA	F	07-513849	25OC1994			MICRO-PAK, INC.
NVR-0215	MATHUR RAJIV SUCROSE DISTEARATE LIPID VESICLES	USA	G	08/148885	08NO1993	5405615	11AP1995	MICRO-PAK, INC.
NVR-0215CA	MATHUR RAJIV SUCROSE DISTEARATE LIPID VESICLES	CANA	F	2175471	25OC1994			MICRO-PAK, INC.
NVR-0215JP	MATHUR RAJIV SUCROSE DISTEARATE LIPID VESICLES	JAPA	F	07-513848	25OC1994			MICRO-PAK, INC.

Docket No.	Inventor	Ctry	Status	App No	App Date	Pat No.	Grant Dt	Current Owner
NVR-0216AU	WALLACH DONALD F.H.	ASTL	G	14383/95	15DE1994	680996	04DE1997	MICRO-PAK, INC.
METHOD OF TRANSMITTING A BIOLOGICALLY ACTIVE MATERIAL TO A CELL								
NVR-0216CA	WALLACH DONALD F.H.	CANA	F	2177695	15DE1994			MICRO-PAK, INC.
METHOD OF TRANSMITTING A BIOLOGICALLY ACTIVE MATERIAL TO A CELL								
NVR-0216CN	WALLACH, DONALD F.H.	USA	G	08/420324	11API1995	5665380	09SE1997	MICRO-PAK, INC.
LIPID VESICLE FUSION AS A METHOD OF TRANSMITTING A BIOLOGICALLY ACTIVE MATERIAL TO A CELL								
NVR-0216EP	WALLACH DONALD F.H.	EPC	F	95 90 5979.1	15DE1994			MICRO-PAK, INC.
METHOD OF TRANSMITTING A BIOLOGICALLY ACTIVE MATERIAL TO A CELL								
NVR-0216JP	WALLACH DONALD F.H.	JAPA	F	07-516980	15DE1994			MICRO-PAK, INC.
METHOD OF TRANSMITTING A BIOLOGICALLY ACTIVE MATERIAL TO A CELL								
NVR-0282	WRIGHT CRAIG	USA	G	08/246868	20MY1994	5547677	20AU1996	NOVAVAX, INC.
ANTIMICROBIAL OIL-IN-WATER EMULSIONS								
NVR-0300CA	WALLACH, DONALD F.H.	CANA	F	2204398	26OC1995			MICRO-PAK, INC.
EPOXY ESTER VESICLES AND PAINTS								
NVR-0303	WRIGHT M.D., D. CRAIG	USA	G	08/661051	07JEL1996	5700679	23DE1997	NOVAVAX, INC.
NONOXYNOL-CONTAINING LIPID VESICLES WITH ANTI-VIRAL AND SPERMICIDAL ACTIVITY								

Docket No.	Inventor	Ctry	Status	App No	App Date	Pat No.	Grant Dt	Current Owner
NVR-0308CA	WEINER, NORMAN STIMULATION OF HAIR FOLLICLES	CANA	F	2233961	30SE1996			REGENTS OF UNIVERSITY OF MICHIGAN
NVR-0308CPA	WEINER, NORMAN STIMULATION OF HAIR FOLLICLES	USA	G	08/539865	08JAL1998	5834014	10NO1998	REGENTS OF UNIVERSITY OF MICHIGAN
NVR-0308DV	WEINER, NORMAN STIMULATION OF HAIR FOLLICLES	USA	F	09/179639	27OC1998			REGENTS OF UNIVERSITY OF MICHIGAN
NVR-0308EP	WEINER, NORMAN STIMULATION OF HAIR FOLLICLES	EPC	F	96 93 6084.1	30SE1996			REGENTS OF UNIVERSITY OF MICHIGAN

SCHEDULE C

1. License Agreement between Micro-Pak, Inc. and Igen, Inc., dated December 13, 1995.

Exhibit I

PATENT ASSIGNMENT

WHEREAS, IGEN, INC., a Delaware corporation ("Grantor") is the registered owner of: (i) the United States Letters Patent and the inventions described and claimed therein set forth on Schedule A hereto (hereinafter referred to collectively as the "Patents"); (ii) the applications for Letters Patent and the inventions described and claimed therein set forth on Schedule A hereto and any United States Letters Patent which may be issued upon any of said applications (hereinafter referred to collectively as the "Applications"), which are registered with the United States Patent and Trademark Office.

WHEREAS, in conjunction with the Patents and Applications, Grantor may use or adopt any reissues, extensions, divisions or continuations of the Patents or Applications (such reissues, extension, divisions and continuations being herein referred to collectively as the "Reissued Patents"); may be entitled to all future royalties or other fees paid or payments made to Grantor in respect of the Patents (hereinafter referred to collectively as the "Royalties"), (the Patents, Applications and the Reissued Patents and the Royalties being herein referred to collectively as the "Patent Rights") and may be entitled to profits and damages for past and future infringements of the Patent Rights (such rights, interest, claims and demand being herein called the "Claims") (the Patent Rights and Claims are collectively referred to as the "Patent Collateral").

WHEREAS, _____, ("Grantee") having a place of business at _____ is desirous of acquiring said Patent Collateral;

NOW THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound hereby, Grantor, its successors and assigns, does hereby transfer, assign and set over unto Grantee, its successors, transferees and assigns, all of its present and future right, title and interest in and to the Patent Collateral and all proceeds thereof and all goodwill associated therewith. No rights or duties of any kind are intended to be granted or conferred upon Grantee unless and until this Patent Assignment is recorded with the United States Patent and Trademark Office.

IN WITNESS WHEREOF, the undersigned has caused this Patent Assignment to be executed as of the ____ day of _____, _____.

IGEN, INC.

By: _____
As Attorney-in-fact

STATE OF :
 : S.S.
COUNTY OF :

On this __ day of _____, ___ before me, a Notary Public for the said County and State, personally appeared known to me or satisfactorily proven to me to be attorney-in-fact on behalf of IGEN, INC. ("Grantor") and s/he acknowledged to me that s/he executed the foregoing Patent Assignment on behalf of Grantor, and as the act and deed of Grantor for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.


Notary Public

My Commission Expires:

CORPORATE ACKNOWLEDGMENT

UNITED STATES OF AMERICA :
STATE OF : SS
COUNTY OF :

On this 29th of October, 1999 personally appeared, to me known and being duly sworn, deposes and says that ~~s~~he is CFO of IGEN, INC., the Grantor corporation described in the foregoing Power of Attorney; that s/he signed the Power of Attorney as such officer pursuant to the authority vested in ~~him~~/him by law; that the within Power of Attorney is the voluntary act of such corporation; and ~~s~~he desires the same to be recorded as such.



Notary Public

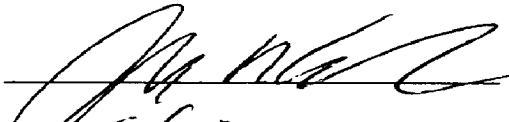
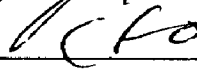
My Commission Expires:

Notarial Seal
Carolyn Elliott, Notary Public
Philadelphia, Philadelphia County
My Commission Expires: 10/31/2000

ACCEPTANCE

The undersigned, AMERICAN CAPITAL STRATEGIES, LTD., as aforesaid, accepts the foregoing Agreement as of the ~~21~~²⁹ day of October, 1999 in Bethesda, Maryland.

**AMERICAN CAPITAL
STRATEGIES, LTD.**

By: 
Title: 

ARNOLD & PORTER

555 TWELFTH STREET, N.W.
WASHINGTON, D.C. 20004-1206

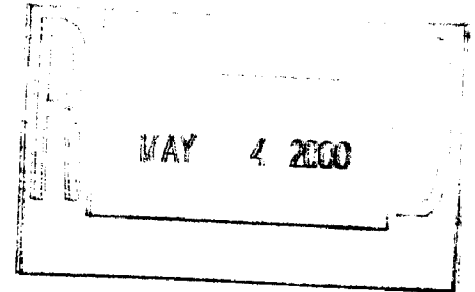
(202) 942-5000
FACSIMILE: (202) 942-5999

NEW YORK
DENVER
LOS ANGELES
LONDON

May 1, 2000

By First Class Mail

Commissioner for Patents and Trademarks
2900 Crystal Drive
Third Floor Finance Window
Arlington, Virginia 22202-3513
Box ASSIGNMENTS FEE



Dear Sir or Madam:

On behalf of American Capital Strategies, Ltd., I enclose the following documents for filing:

- 1) Recordation Form cover sheet assigning security interests in certain patents from Igen, Inc. to American Capital Strategies, Ltd.
- 2) Supporting Patent Security Agreement
- 3) Stamped return-receipt post-card.

If there are any additional fees due in connection with the filing of these assignment documents, please charge them to Arnold & Porter's deposit account, number 01-2510.

If there are any questions concerning the filing of these documents, please contact the undersigned at 202-942-5957.

Sincerely,

A handwritten signature in cursive script that reads "Syreeta Anderson". The signature is written in black ink and is positioned above the printed name.

Syreeta Anderson

Enclosure

I hereby certify that this correspondence is being deposited with the U. S. Postal Service as First Class Mail with sufficient postage in an envelope addressed to the following address on May 1, 2000:

U.S. Patent and Trademark Office
Commissioner for Patents and Trademarks
2900 Crystal Drive
Arlington, VA 22202-3513
Box ASSIGNMENT FEE

A handwritten signature in cursive script that reads "Syreeta Anderson". The signature is written in black ink and is positioned above the printed name.

Syreeta Anderson

PATENT
REEL: 010776 FRAME: 0879

POWER OF ATTORNEY

IGEN, INC., a Delaware corporation, ("Grantor"), hereby authorizes AMERICAN CAPITAL STRATEGIES, LTD., its successors and assigns, and any officer or agent thereof (collectively, "Lender") as Grantor's true and lawful attorney-in-fact, with the power to endorse Grantor's name on all applications, assignments, documents, papers and instruments necessary for Lender to enforce and effectuate its rights under a certain Patent Security Agreement (United States Patents) between Grantor and Lender dated the date hereof (as it may hereafter be supplemented, restated, superseded, amended or replaced, the "Patent Agreement"), including, without limitation, the power to use the Patent Collateral (as defined in the Patent Agreement), to grant or issue any exclusive or nonexclusive license under the Patent Collateral to anyone else, or to assign, pledge, convey or otherwise transfer title in or dispose of the Patent Collateral.

This Power of Attorney is given and any action taken pursuant hereto is intended to be so given or taken pursuant to a certain Loan and Security agreement bearing even date herewith between Grantor and Lender as it may be hereinafter supplemented, restated, superseded, amended or replaced.

Grantor hereby unconditionally ratifies all that such attorney shall law fully do or cause to be done by virtue hereof.

This Power of Attorney shall be irrevocable for the life of the Patent Agreement.

IN WITNESS WHEREOF, the Grantor has executed this Power of Attorney, under seal, this 21st day of October, 1999.

IGEN, INC.

By: _____

Name: *M. Hanuschek*

Title: *CEO*