FORM PTO-1595 (Rev. 6-93) OMB No. 0651-0011 (exp. 4/94) 03-27-2002



U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

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	Please	102032291	/ thereof.	
1.	Name of conveying party(ies): Thomas Wiggins; Madhushree Ghosh; Lawrence A. B. Salvatore Seminar; Zhiya Hu; Timothy Seeley and Selvatore Seminary Selvatore Selvatore Seminary Selvatore	Sottemley; Name: Protiveris, pastian Kossek Internal Address:		
3.	Additional name(s) of conveying party(ies) attached? Nature of conveyance: Assignment	9700 Great Senec Rockville, MD 20 of Name		
4.	4. Application number(s) or patent number(s): 10/054,760 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 corresponden Concerning document should be mailed:	ce 6. Total number o	f applications and patents involved:	
	Name: Sonia K. Guterman, Ph.D., J.D. Address: MINTZ, LEVIN, COHN, FERRIS GLOVSKY and POPEO, P.C. One Financial Center Boston, MA 02111		missioner is authorized to charge Deposit Account S11, Reference No. 24494-005	
	DO NOT USE THIS SPACE			
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. Sonia K. Guterman, Ph.D., Reg. No. 44,729 The Colombian Massela, J. Colombian Massela,				
	Name of Person Signing	Signature	Date	
Тс	Total number of pages including cover sheet, attachments, and document: 17			

Mail documents to be recorded with required cover sheet information to:

BOX ASSIGNMENT Commissioner of Patents and Trademarks Washington, D.C. 20231

03/27/2002 TDIAZ1 00000020 10054760

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TRA 1640519vI

Date of Deposit: March 7, 2002 Attorney Docket No. 24499-530

ASSIGNMENT

We, Thomas Wiggins of Columbia, MD, Madhushree Gosh of Rockville, MD, Lawrence A. Bottomley of Lawrenceville, GA, Salvatore Seminara of Chicago, IL, Zhiyu Hu of Bethesda, MD, Timothy Seeley of Bethesda, MD and Sebastian Kossek of Phoenix, AZ, the undersigned, for good and valuable consideration, the receipt of which is hereby acknowledged, hereby assign, sell and transfer to Protiveris, Inc., a Delaware corporation, with offices at 9700 Great Seneca Highway, Rockville, MD 20850 and its successors, assigns and legal representatives, all hereinafter referred to as the ASSIGNEE: (1) our entire right, title and interest for the United States and in all countries, in and to any and all inventions, discoveries and applications which are disclosed in the application for United States Letters Patent entitled:

MICROFLUIDICS APPARATUS AND METHODS FOR USE THEREOF

filed with the U.S. Patent and Trademark Office on November 13, 2001 and assigned Serial No 10/054,762 including any renewals, revivals, reissues, reexaminations, extensions, continuations and divisions thereof and any substitute applications therefor; (2) the full and complete right to file patent applications in the name of the ASSIGNEE, its designee, or in my/our names at the ASSIGNEE, or its designee's election, on the aforesaid inventions, discoveries and applications in all countries of the world; (3) the entire right, title and interest in and to any Letters Patent which may issue thereon in the United States or in any country, and any renewals, revivals, reissues, reexaminations and extensions thereof, and any patents of confirmation, registration and importation of the same; and (4) the entire right, title and interest in all Convention and Treaty Rights of all kinds thereon, including without limitation all rights of priority in any country of the world, in and to the above inventions, discoveries and applications.

We hereby authorize and request the competent authorities to grant and to issue any and all such Letters Patent in the United States and throughout the world to the ASSIGNEE of the entire right, title and interest therein, as fully and entirely as the same would have been held and enjoyed by me/us had this assignment, sale and transfer not been made.

We agree, at any time, upon the request of the ASSIGNEE, to execute and to deliver to the ASSIGNEE any additional applications for patents for said inventions and discoveries, or any part or parts thereof, and any applications for patents of confirmation, registration and importation based on any Letters Patent issuing on said inventions, discoveries, or applications and divisions, continuations, renewals, revivals, reissues, reexaminations and extensions thereof.

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PATENT REEL: 012709 FRAME: 0310

(2506/130)

We hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

We further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

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Date: FEB 12, 100 2	Thomas M	veg :
State of Maryland,	Thomas Wiggins	
Country of United States	_	
Subscribed and sworn to before me this Z	2 day of Jebruary	2,2002.
SEAL	Notary Public My commission expires	3/8/02
•	•	
Date: Fels 19, 2002	Madhushree Ghosh	Shook.
	Madhushree Ghosh	
State ofCountry of		
Subscribed and sworn to before me this	day of	_, 2002.
SEAL		
	Notary Public My commission expires	
	My commission expires	

Date:	
	Lawrence A. Bottomley
State ofCountry of	
Subscribed and sworn to before me this	day of, 2002.
SEAL	Notary Public My commission expires
Date: 2-19-2002	Salvatore Seminava
State of Country of	
Subscribed and sworn to before me this	day of, 2002.
SEAL	Notary Public My commission expires
Date:	Zhiyu Hu
State of	
Subscribed and sworn to before me this	day of, 2002.
SEAL	Notary Public My commission expires

Date: 2 · 18 · 02	Timothy Seeley
	Timothy Seeley
State of	
Subscribed and sworn to before me this	day of, 2002.
SEAL	Notary Public My commission expires
Date: <u>2 - 20 - 02</u>	Sebastian Kossek
State of Country of	·
Subscribed and sworn to before me this	day of, 2002.
SEAL	Notary Public My commission expires

TRA 1614750v1

Date of Deposit: March 7, 2002

Attorney Docket No. 24499-530

(2506/130)

ASSIGNMENT

We, Thomas Wiggins of Columbia, MD, Madhushree Gosh of Rockville, MD, Lawrence A. Bottomley of Lawrenceville, GA, Salvatore Seminara of Chicago, IL, Zhiyu Hu of Bethesda, MD, Timothy Seeley of Bethesda, MD and Sebastian Kossek of Phoenix, AZ, the undersigned, for good and valuable consideration, the receipt of which is hereby acknowledged, hereby assign, sell and transfer to Protiveris, Inc., a Delaware corporation, with offices at 9700 Great Seneca Highway, Rockville, MD 20850 and its successors, assigns and legal representatives, all hereinafter referred to as the ASSIGNEE: (1) our entire right, title and interest for the United States and in all countries, in and to any and all inventions, discoveries and applications which are disclosed in the application for United States Letters Patent entitled:

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Date:	
	Thomas Wiggins
State ofCountry of	
Subscribed and sworn to before me this	
SEAL	Notary Public My commission expires
Date: Fels 19, 2002	Madhu Shree Ghosh
State of Maryand Country of Ville States	
Subscribed and sworn to before me this 19 SEAL	Notary Public My commission expires 3802

Date:	
	Lawrence A. Bottomley
State of	
Subscribed and sworn to before me this	day of, 2002.
SEAL	Notary Public My commission expires
Date: 2-19-2002	Salvatore Seminara
State of Maryland Country of United States	
Subscribed and sworn to before me this <u>l</u> SEAL	9 day of February, 2002. Notary Public My commission expires 3807
Date:	Zhiyu Hu
State of Country of	
Subscribed and sworn to before me this	day of, 2002.
SEAL	Notary Public My commission expires

Date: 2.18.02	Junolly Leeley
State of Maryland Country of United States	Timothy Seeley
Subscribed and sworn to before me this <u>lb</u>	day of February, 2002. Notary Public My commission expires 3802
Date: 2 - 20 - 62	Sebastian Kossek
State of Maryland Country of United States Subscribed and sworn to before me this 20	day of February, 2002.
SEAL	Notary Public My commission expires 3/8/02

TRA 1614750v1

Date of Deposit: March 7, 2002

Attorney Docket No. 24499-530

(2506/130)

ASSIGNMENT

We, Thomas Wiggins of Columbia, MD, Madhushree Gosh of Rockville, MD, Lawrence A. Bottomley of Lawrenceville, GA, Salvatore Seminara of Chicago, IL, Zhiyu Hu of Bethesda, MD, Timothy Seeley of Bethesda, MD and Sebastian Kossek of Phoenix, AZ, the undersigned, for good and valuable consideration, the receipt of which is hereby acknowledged, hereby assign, sell and transfer to Protiveris, Inc., a Delaware corporation, with offices at 9700 Great Seneca Highway, Rockville, MD 20850 and its successors, assigns and legal representatives, all hereinafter referred to as the ASSIGNEE: (1) our entire right, title and interest for the United States and in all countries, in and to any and all inventions, discoveries and applications which are disclosed in the application for United States Letters Patent entitled:

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Date: 2-22-02	Lawrence A. Bottomley
State of Manyland Country of Vintel States	
Subscribed and sworn to before me this Z	Notary Public My commission expires 3802
Date:	Salvatore Seminara
State ofCountry of	
Subscribed and sworn to before me this SEAL	day of, 2002.
	Notary Public My commission expires
Date:	Zhiyu Hu
State of	
Subscribed and sworn to before me this	day of, 2002.
SEAL	Notary Public
	My commission expires

Date of Deposit: March 7, 2002 Attorney Docket No. 24499-530 (2506/130)

ASSIGNMENT

We, Thomas Wiggins of Columbia, MD, Madhushree Gosh of Rockville, MD, Lawrence A. Bottomley of Lawrenceville, GA, Salvatore Seminara of Chicago, IL, Zhiyu Hu of Bethesda, MD, Timothy Seeley of Bethesda, MD and Sebastian Kossek of Phoenix, AZ, the undersigned, for good and valuable consideration, the receipt of which is hereby acknowledged, hereby assign, sell and transfer to Protiveris, Inc., a Delaware corporation, with offices at 9700 Great Seneca Highway, Rockville, MD 20850 and its successors, assigns and legal representatives, all hereinafter referred to as the ASSIGNEE: (1) our entire right, title and interest for the United States and in all countries, in and to any and all inventions, discoveries and applications which are disclosed in the application for United States Letters Patent entitled:

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Date:			
	Lawrence A. Bottomley		
State of			
Subscribed and sworn to before me this	_ day of	_, 2002.	
SEAL			
	Notary Public My commission expires _		
Date:			
	Salvatore Seminara		
State of Country of			
Subscribed and sworn to before me this	_ day of	_, 2002.	
SEAL	Notary Public My commission expires		
Date: 2/18/02	Zhiyu Hu	- 17	
State of Mary land Country of United States			
Subscribed and sworn to before me this 18	day of February	_, 2002.	
SEAL	Notary Public My commission expires	3/8/02	

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RECORDED: 03/07/2002