BATTELLE

P.03

Form PTO-1595 (Rev. 03/05) OMB No. 0651-0027 (exp. 6/30/2005)	U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office
RECORDATION FO	ORM COVER SHEET
PATEN1	<u>rs only</u>
To the Director of the U.S. Patent and Trademark Office: Plea	se record the attached documents or the new address(es) below.
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)
Robert D. Litt; Elizabeth A. De Lucia	Name: Battelle Memorial Institute
	Internal Address;
Additional name(s) of conveying party(les) attached? Yes V No	
3. Nature of conveyance/Execution Date(s):	Street Address; 505 King Avenue
Execution Date(s) 03-30-2005; 04-07-2005	-
Assignment Merger	
Security Agreement Change of Name	City: Columbus
Joint Research Agreement	State: Onlo
Government Interest Assignment	Country 1104
Executive Order 9424, Confirmatory License	Country: <u>USA</u> Zip; <u>49201-2693</u>
Other	Additional name(s) & address(es) attached? Yes No
4. Application or patent number(s):	document is being filed together with a new application.
A. Patent Application No.(s) 11/077,849	B. Patent No.(s)
11/077,043	
Additional numbers at	l tached?
5. Name and address to whom correspondence	6. Total number of applications and patents
concerning document should be mailed:	involved: 1
Name: Patent Administrator	7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00
Internal Address: Battelle Memorial Institute	Authorized to be charged by credit card
	Authorized to be charged to deposit account
Street Address: 605 King Avenue	Enclosed
	None required (government interest not affecting title)
City: Columbus	8. Payment Information
State: Ohio Zip:43201-2693	a. Credit Card Last 4 Numbers 9877
Phone Number: 614-424-5612	Expiration Date 12/06
Fax Number: 614-424-3864	b. Deposit Account Number
Email Address: richardsw@battelle.org	Authorized User Name
9. Signature:	
Signature	
Willtam B. Richards	Total number of pages including cover
Name of Person Signing	sheet, attachments, and documents:

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5985, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

PATENT REEL: 016485 FRAME: 0986

ASSIGNMENT

Robert D. Litt
Elizabeth A. De Lucia
to
Battelle Memorial Institute

WHEREAS we, Robert D. Litt, of Westerville, in the County of Franklin, and State of Ohio and Elizabeth A. De Lucia, of Columbus, in the County of Franklin, and State of Ohio have made certain inventions in Control of Pressurized Microchannel Processes, the specification of which was filed on March 11, 2005 as application serial no. 11/077,849; and

WHEREAS, Battelle Memorial Institute, a corporation of Ohio, having a place of business at 505 King Avenue, Columbus, Ohio, herein called "ASSIGNEE", is desirous of acquiring our entire right, title, and interest in said invention and application therefor, and in any patent or patents to be obtained therefor;

NOW, THEREFORE, To All Whom It May Concern, be it known that, for and in consideration of the sum of One Dollar (\$1.00), and other good and valuable considerations, the receipt of which is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign, and transfer unto the said Assignee, our entire right, title, and interest in and to the invention shown, described, or claimed therein, and the full and exclusive right and title to the said application executed by us, preparatory to obtaining Letters Patent of the United States therefor; and in and to any extensions, reissues, divisions, or renewals thereof; and we do hereby authorize and request the Commissioner of Patents or other proper Officer, to issue such Letters Patent, or any of them, to the said Assignee, as the assignee of our entire right, title, and interest in and to the same for the sole use and behoof of the said Assignee, and its successors or assigns.

And we further covenant and agree that we will, at the request and expense of the said Assignee, execute such other and further assurances of title as may be necessary or proper to fully convey the interest herein sought to be conveyed; that we will, at the request and expense of the said Assignee, execute such application papers as may be desired by the said Assignee for the filing of any division or renewal of the application herein conveyed, or for the reissues or extensions of any Letters Patent that may be granted upon said application, and will execute such Supplemental Oaths and Preliminary Statements, or other papers as desired by the said Assignee.

And we further assign unto the said Assignee our whole right, title, and interest to the invention disclosed in the application throughout all countries foreign to the United States, and do hereby authorize the said Assignee to apply for patents therefor in its own name in countries where such procedure is proper and to claim the benefit of the International Convention and do agree to execute applications for the said invention in the several countries where it is necessary that the same be executed by the inventors, and to execute assignments of such applications and the patents to be obtained therefor to the said assignee, as well as all other necessary papers.

Page 1 of 2 PATENT

ASSIGNMENT

Robert D. Litt
Elizabeth A. De Lucia
to
Battelle Memorial Institute

IN TESTIMONY WHEREOF I have hereunto set my hand and affixed my seal at Plain City, Ohio this 36 H day of March, 2005.

Robert D. Litt

STATE OF OHIO)

.. COUNTY OF UNION

This <u>30</u> day of <u>March</u>, 2005, before me, a Notary Public in and for the County aforesaid, personally appeared Robert D. Litt, personally known to me and known to be the person described in and who executed the foregoing assignment and acknowledged the same to be his voluntary act and deed, and that he executed the same for the uses and purposes therein set forth.



NELDA M. HARBOUR Notary Public, State of Ohio My Commission Expires 11/26/2007

Notary Public

IN TESTIMONY WHEREOF I have hereunto set my hand and affixed my seal at Columbus, Ohio this _______, day of __Apr. | ______, 2005.

Elizabeth A. De Lucia

STATE OF OHIO)

İSS

COUNTY OF FRANKLIN)

Notary Public



BRENDA BLOCK KOONE NOTARY PUBLIC, STATE OF OHIO MY COMMISSION EXPIRES MAY 18, 2008

PATENT

REEL: 016485 FRAME: 0988

PTO/SB/17 (12-04v2)
Approved for use through 07/31/2006, OMB 0851-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to reapped to a collection of information unless it displays a valid OMB control number

Econ aumurant to t	Effective on 12	2/08/2004.	2005 (41 (2) 404 (6)	Complete if Known					
Fees pursuant to the Consolidated Appropriations Act. 2005 (H.R. 4818).		Application Nu	mber	11/077,84	849				
FEE TRANSMITTAL		Filing Date		03-11-2005		_			
	For FY	2005		First Named In	ventor	Weil et al	l <u> </u>		
Applicant of	Applicant claims small online stoken. Son 27 CED 4-27			Examiner Nam	ie				
Applicant claims small entity status. See 37 CFR 1.27			Art Unil 1744		1744				
TOTAL AMOUN	OF PAYMENT	(\$)	40.00	Attorney Docket No. 03-04		03-041	041		
METHOD OF PAYMENT (check all that apply)									
☐ Check ✓	Credit Card	Money	Order Nor	ne Other (please ide	entify).			
	Check ✓ Credit Card Money Order None Other (please identify): Deposit Account Deposit Account Number: Deposit Account Name:								
			the Director is her						
Cha	arge fee(s) indicat	ed below		Char	ne fee(s)	indicated b	nelow axc o	opt for the filing fee	
Ch:	arge any additiona	il fee(s) or un	derpayments of fe					special end ming for	
Under 37 CFR 1.16 and 1.17 WARNING: Information and authorization on PTO-2038. Information and authorization on PTO-2038.									
FEE CALCULA			1 (81 80						
1. BAŞIÇ FILIN	G, SEARCH, A	ND EXAMI	NATION FEES						
		NG FEES	SEAR	CH FEES	EXAN	MOITAMEN			
Application 7	<u>Vpe Fee</u>	<u> </u>		Small Entity Fee (\$)	Fee	<u>Small</u> (\$) Fee		Fees Paid (\$)	
Utility	300		500	250	200				
Design	200	100	100	50	130		_		
Plant	200	100	300	150	160			•	
Reissue	300		500	250	600				
Provisional	200		0	0	0		0		
2. EXCESS CL	AIM FEES	100	Ū	Ū		`\	_	mall Entity	ŀ
Fee Description	<u>n</u>					<u>F</u>	<u>ee (\$)</u>	Fee (\$)	
Each claim over 20 (including Reissues)						50	25		
Each independent claim over 3 (including Reissues) Multiple dependent claims							200	100	
Total Claims		Claims	Fee (\$) Fee	Paid (\$)			360 ultiple Deni	180 <u>emdent Claims</u>	
	D or HP =			F EIG (3)			<u>ee (2)</u> iiiibie nebi	Fee Paid (\$)	- 1
HP = highest nun	tber of total claims p	aid for, if greate	ar than 20.			_	1111	1 00 1 212 (4)	
<u>Indep. Claims</u> - 3		<u>Claims</u>		Paid (\$)					
HP = highest num	or HP = ber of independent o	laims paid for.	if greater than 3.						
3. APPLICATION SIZE FEE									
If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50									
sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).									
<u>Total Sheets </u>									
4. OTHER FEE(S) Non-English Specification, \$130 fee (no small entity discount) Fees Paid (\$)									
Other (e.g., late filing surcharge): Assignment Recordation Fee 40.00									
SUBMITTED BY									
ignature	TALE	1.15		Registration No.	N 204	Ţ.	Telephone	C14 ana coan	
ame (Print/Type) William B. Richards (Attorney/Agent) 44,301						Telephone 614-424-5612 Date 07-09-2005			
(1 mile 1 466) (Ambiri D. Michald	ð	•••				บลเล ก <i>\-ก</i> ม	-2005	

This collection of Information is required by 37 CFR 1.136. The Information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commitssioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



PTÖ/SB/17 (12-04v2)

Approved for use through 07/31/2006, OMB 0851-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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Effective on 12/08/2004. Complete If Known			If Known					
FEE TRANSMITTAL For FY 2005		I An	Application Number 11/077,849		9			
		■ Fili	Filing Date 03-11-		005			
		Fin	First Named Inventor Weil et al		·			
Applicant claims small entity status. See 37 CFR 1.27			— Ex	Examiner Name				
			- Art	Unit	1744	744		
TOTAL AMOUNT OF PAY	VIENT (\$)) 40.00	Atl	lomey Docket N	lo. 03-041			
METHOD OF PAYMENT (check all that apply)								
Check ✓ Credit Card Money Order None Other (please identify)!								
	Deposit Account Deposit Account Number: Deposit Account Name:							
		account, the Director Is					ļ	
Charge fee(s)	indicated b	elow		Charge	fee(s) indicated i	below, except f	or the filing fee	
Charge any a under 37 CFF		e(s) or underpayments o	of fee(s)	Credit a	nny overpayment	S		
WARNING: Information on this information and authorization	form may b	ecome public. Credit care	d Informa	stion should not	be included on th	la form. Provide	credit card	
FEE CALCULATION	011110-2001							
1. BASIC FILING, SEAF	CH AND	EXAMINATION FEE	-s					
ii brois i iziitoj çerti	FILING	FEES SE	EARCH	FEES	EXAMINATION	N FEES		
Application Type	Fee (\$)	<u>Small Entity</u> Fee (\$) <u>Fe</u>		nall Entity Fee (\$)		Entity (\$)	Fees Paid (\$)	
Utility	300		00	250	200 10			
Design	200		00	50		· i5		
Plant	200		00	150	-	0 _		
Reissue	300		00	250	600 30	-		
Provisional	200	100	0	0	0	0 –		
2. EXCESS CLAIM FES		100	ŭ	•	Ť	•	li_Entity	
Fee Description					£	ee (\$) Fe	90 (\$)	
Each claim over 20 (including Reissues) 50 25 Each independent claim over 3 (including Reissues) 200 100						25 100		
Multiple dependent ca		(including Reissues)	,				180	
Total Claims	Extra Clai	ims <u>Fee (\$)</u>	Fee Pal	ld (\$)	м	<u>ultiple Depend</u>		
20 or HP =		<u> </u>				Fee (\$)	Fee Pald (\$)	
HP = highest number of tota Indep. Claims	l claims paid f Extra Clai	_	Fee Pal	id (\$)				
3 or HP =		x=_					ŀ	
HP = highest number of independent daims paid for, if greater than 3. 3. APPLICATION SIZE FEE								
If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50								
sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).								
<u>Total Sheets </u>								
100 = / 50 = (round up to a whole number) x = 4. OTHER FEE(S) Fees Paid (\$)								
Non-English Specification, \$130 fee (no small entity discount)								
Other (e.g., late filing surcharge): Assignment Recordation Fee 40.00								
\$UBMITTED_BY /								
Signature 1	r k L	utiand-	Reg	istration No. may/Agent) 44	,301	Telephone 614	1-424-5612	
Name (Print/Type) William B	Richards			-11-12-114		Date 07-0 7 -20)05	

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Battelle

The Business of Innovation

Intellectual Property Legal Department 505 King Avenue Columbus, OH 43201 Date: July 7, 2005

Fax

To: Assignment Recordation

Services

Fax No: 703-306-5995

Phone No:

Company: USPTO

From: Judy Readman

Fax No: 614-424-3864

Phone No: 614-424-5329

Total Pages: 8 (Including Lead Sheet)

Comments: Documents for assignment recordation.

RE:

Application Serial No.: 11/077,849

Filed: 03-11-2005

Title: Control of Pressurized Microchannel Processes

Inventor: Weil et al.

Fax Lead Sheet
Transmittal Form
Recordation Cover Sheet
Assignment
Fee Transmittal (in duplicate)
PTO-2038

PATENT REEL: 016485 FRAME: 0991

PTO/SB/21 (09-04) Approved for use through 07/31/2006, OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Application Number 11/077.849 TRANSMITTAL Filing Date 03-11-2005 **FORM** First Named Inventor Well et al. Art Unit 1744 Examiner Name (to be used for all correspondence after Initial filing) Attorney Docket Number 03-041 Total Number of Pages in This Submission **ENCLOSURES** (Check all that apply) After Allowance Communication to TC ✓ Fee Transmittal Form Drawing(s) Appeal Communication to Board Fee Attached Licensing-related Papers of Appeals and Interferences Appeal Communication to TC Petition Amendment/Reply (Appeal Notice, Brief, Reply Brief) Petition to Convert to a Provisional Application After Final Proprietary Information Power of Attorney, Revocation Affidavits/declaration(s) Change of Correspondence Address Status Letter Other Enclosure(s) (please identify Terminal Disclaimer Extension of Time Request below): Fax Cover Sheet; Assignment; Recordation Request for Refund Express Abandonment Request Cover Sheet; Duplicate Fee Transmittal Form: PTO-2038 CD, Number of CD(\$) Information Disclosure Statement Landscape Table on CD Certifled Copy of Priority Remarks Document(s) Reply to Missing Parts/ Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Name Battelle Memorial Institute Signature Printed name Willaim B. Richards Date 07-07-2005 Reg. No. 44,301 CERTIFICATE OF TRANSMISSION/MAILING I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below: Signature oudy Readman Typed or printed name Date 07-07-2005

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RECORDED: 07/07/2005

PATENT

REEL: 016485 FRAME: 0992