(Rel.65-10/95 Pub.605)

I hereby certify that this (United States Postal Servic€ to: Assistant Commissioner 20231, on September 29, 2000

FORM 16-5

11-03-2000



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16-27 eposited with the an envelope addressed ents, Washington D.C.

(140.003)	ORM COVER SHEET U.S. DEPARTMENT OF COMMERCE Patent and Trademert Office
Tab settings □□□□▼ ▼ ▼	V V V
To the Honorable Commissioner of Patents and Trademarks:	Please record the attached original documents or copy thereof.
1. Name of conveying party(les): Emanuel M. Sachs,	
Won B. Bang and Michael J. Cima	Name: Massachusetts Institute
	ot Technology
Additional name(s) of conveying party(les) attached? Yee XX No	NE25-230
3. Nature of conveyance:	
☑KAssignment □ Merger	Street Address: 77 Massachusetts
☐ Security Agreement ☐ Change of Name	Avenue
□ Other	Chy: Cambridge State: MA ZIP: 02139
Execution Date: 8/25/00, 8/30/00 and 9/27/00 respectively	Additional name(s) & address(es) attached? (3 Yes (3) No
09/577,920 Additional numbers of	tached? □ Yee 49 No
Additional numbers at 5. Name and address of party to whom correspondence	teched? © Yee 2 No 6. Total number of applications and patents involved:
concerning document should be mailed:	o. Total hallow of approximate and parameters involved.
Name: Steven J. Weissburg	7. Total fee (37 CFR 3.41)
Internal Address: Suite 303	☐ Enclosed
	XX Authorized to be charged to deposit account
Street Address: 238 Main Street	8. Deposit account number:
	19-2553 (MIT)
City: Cambridge State: MA ZIP: 02142	(Attach duplicate copy of this page if paying by deposit account)
DO NOT US	E THIS SPACE
the original document.	nation is true and correct and any attached copy is a true copy of Sept. 29, 2000
Steven J. Weissburg Name of Person Signing	Signature Sept. 29, 2000
• •	cover sheet, attachments, and focument:

Mell documents to be recorded with required cover sheet information to: Commissioner of Patents & Trademarks, Box Assignments

(Form PTO-1595-Recordation Form Cover Sheet [16-5]-page 1 of 3)

ASSIGNMENT

- I, Emanuel M. Sachs, of 18 Moreland Ave., Newton, MA 02159;
- I, Won B. Bang, of 1341 Jonathan St. #1, Santa Clara, CA 95050; and
- I, Michael J. Cima, of 184 Mystic Valley Pkwy., Winchester, MA 01890, jointly and severally referred to below as an "ASSIGNOR", have certain rights in an invention entitled MOLDS FOR CASTING WITH CUSTOMIZED INTERNAL STRUCTURE TO COLLAPSE UPON COOLING AND TO FACILITATE CONTROL OF HEAT TRANSFER, and which is found in a U.S. Patent Application U.S.S.N. 09/577,920, filed on May 24, 2000, with the United States Patent and Trademark Office (the "INVENTION"). In consideration of One Dollar and other valuable consideration paid to me by THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY, a corporation of Massachusetts, having its principal place of business at 77 Massachusetts Avenue, Cambridge, Mass, 02139, ("ASSIGNEE") the receipt of which is hereby acknowledged, ASSIGNOR does hereby sell, assign and transfer unto said ASSIGNEE its successors and assigns, ASSIGNOR'S entire right, title and interest for the United States of America and all foreign countries including all rights of priority in said INVENTION or improvement(s) in the INVENTION, patent application(s) and patent(s) listed above and in all Letters Patent of the United States and all foreign countries which may or shall be granted on said INVENTION(s), or any parts thereof, or on said applications, or any divisional, continuing, reissue or other applications based thereon. And ASSIGNOR agrees, for ASSIGNOR and ASSIGNOR'S heirs, successors and assigns with said ASSIGNEE and its successors and assigns but at its expense and charges, hereafter to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said ASSIGNEE, with specifications and claims in such form as shall be approved by the counsel of said ASSIGNEE and to vest and confirm in said ASSIGNEE, its successors and assigns, the legal title to all such patents.

And ASSIGNOR does hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors and assigns.

WITNESS my hand and seal:

ASSIGNOR: Ex	ranvel.	M. Sac	4,-		
SIGNATURE	one	C_	DATE:_	8/25/	100
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Notary Public	Street		leigs)	

PATENT REEL: 011196 FRAME: 0584

ASSIGNMENT

- I, Emanuel M. Sachs, of 18 Moreland Ave., Newton, MA 02159;
- I, Won B. Bang, of 1341 Jonathan St. #1, Santa Clara, CA 95050; and
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And ASSIGNOR does hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors and assigns.

WITNESS my hand and seal:

ASSIGNOR:	WON B. Bang	/20/
SIGNATURE	My .	DATE: 8/24/00
The	above named WON B. BANG	personally appeared and

The above named WON B. DITUG personally appeared and acknowledged the foregoing instrument to be his her free act and deed, before me, on the date indicated.

Notary Hiblic

OFFICIAL SEAL
KATHLEEN M. ITTEL
NOTARY PUBLIC - CALIFORNIA
COMMISSION # 1104498
SANTA CLARA COUNTY
My Commission Exp. November 17, 2000

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ASSIGNMENT

- I, Emanuel M. Sachs, of 18 Moreland Ave., Newton, MA 02159;
- I, Won B. Bang, of 1341 Jonathan St. #1, Santa Clara, CA 95050; and
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WITNESS my hard and seal:

ASSIGNOR:		-/					
SIGNATURE	Mulath	P	DATE:	9/27/00			
		$\mathcal{O}\mathcal{O}$					
The	above named _	Michael J.	Cima per	rsonally appe	ared ar	ıd	
acknowledg	ged the forego:	ing instrument	to be his/her	free act and	deed,	before	me,
	te indicated						

on the date indicated.

Frances Mage

Notary Public

PATENT REEL: 011196 FRAME: 0586

		FORM 16-5 16-27
hereby certify th	at this corresp	ondence is being deposited with trst class mail in an envelope add
. Accictant Comm	issioner for Pa	tents Box Assignments, Washingto
231, on September	29, 2000	stren J. Wessmir
	· · · · · · · · · · · · · · · · · · ·	Steven J. Weissburg
M PTO-1986 6-83)	RECORDATION FO	ORM COVER SHEET U.S. DEPARTMENT OF COMMER
No. 0851-0011 (esp. 4/94)	PATENT	rs only
To the Mesonble Commission	V V	Please record the attached original documents or copy thereof.
Name of conveying party(ies):	·	2. Name and address of receiving party(les) Massachusetts Institute
Won B. Bang and Mich	ael J. Cima	Name: Massachusetts Institute of Technology
ditional name(s) of conveying party(ies)	anadad G Var WVAL	Internal Address:
more name(s) or conveying purities)	amached? O 166 /Q/160	NE25-230
Nature of conveyance:		
EXAssignment	☐ Merger	Street Address: 77 Massachusetts
☐ Security Agreement	☐ Change of Name	Avenue
C) Other		Chy: Cambridge State: MA ZIP: 0213
ecution Date: $8/25/00$, $8/3$	<u>30/00 and 9/27/0</u> 0	Additional namedal & additional attacks on the Nov. At as
Application number(s) or patent		Additional name(s) & address(es) attached? © Yes © No n, the execution date of the application is:
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Application number(s) or patent	number(s): gether with a new applicatio	n, the execution date of the application is:
Application number(s) or patent If this document is being filed to A. Patent Application No.(s)	number(s): gether with a new applicatio Additional numbers at	n, the execution date of the application is: B. Patent No.(s)
Application number(s) or patent. If this document is being filed to A. Patent Application No.(s) 09/577,920 Name and address of party to we concerning document should be	number(s): gether with a new applicatio Additional numbers as horn correspondence mailed:	B. Patent No.(s) tached? © Yee 2 No 6. Total number of applications and patents involved:
Application number(s) or patent If this document is being filed to A. Patent Application No.(s) 09/577,920 Name and address of party to we concerning document should be Name: Steven J. We	Additional numbers as thom correspondence mailed:	n, the execution date of the application is: B. Patent No.(s) tached? □ Yes ☑ No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 3.41)
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Application number(s) or patent If this document is being filed to A. Patent Application No.(s) 09/577,920 Name and address of party to we concerning document should be share: Steven J. We internal Address: Suite	Additional numbers as thom correspondence mailed:	n, the execution date of the application is: B. Patent No.(s) tached? © Yee \$\frac{1}{2}\$ No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 3.41)\$\frac{40.00}{2}\$ © Enclosed XX Authorized to be charged to deposit account 8. Deposit account number:
Application number(s) or patent If this document is being filed to A. Patent Application No.(s) 09/577,920 Name and address of party to we concerning document should be share: Steven J. We internal Address: Suite	Additional numbers at hom correspondence mailed:	n, the execution date of the application is: B. Patent No.(s) tached? © Yee \$\frac{1}{2}\$ No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 3.41)

Mell documents to be recorded with required cover sheet information to: Commissioner of Patents & Trademarks, Box Assignments Weehlington, D.C. 20231

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

(Form PTO-1595-Recordation Form Cover Sheet [16-5]-page 1 of 3)

REEL: 011196 FRAME: 0587

Sept. 29, 2000

Steven J. Weissburg Name of Person Signing