12-29-2005



\_\_103146890

**VER SHEET** 

U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

To the Director of the U.S. Patent and Trademark Office: Please record the attached original assignment document.

- 1. Name of all Party(ies) conveying an interest/Execution Date(s):
  - 1. Baomin Xu
  - 2. Steven A. Buhler
  - 3. Stephen D. White
  - 4. Scott Jong Ho Limb

Assignment Execution Date(s):

2. Name and Address of receiving Party(ies):

Palo Alto Research Center Incorporated 3333 Coyote Hill Road Palo Alto, California 94304

11/312305

	1. 12-16-2005       3. 12-16-2005         2. 12-16-2005       4. 12-16-2005	90 130 130			
Addi	tional name(s) of conveying party(ies)attached? Yes	No Additional name(s) and address(es)attached? Yes No			
3.	Nature of Conveyance:  Assignment Merger  Security Agreement Change of Nam  Other	Title: MICROMACHINED FLUID EJECTORS USING PIEZOELECTRIC ACTUATION			
4.	Application number(s) or patent number(s):  If this document is being filed together with a new application, the execution date(s) of the application is/are:  1. 12-16-2005  3. 12-16-2005  4. 12-16-2005				
	A. Patent Application No.(s)	B. Patent No.(s)			
	<u>N/A</u>	N/A_ Additional numbers attached?			
5.	Name and Address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved = 1			
	Mark S. Svat	7. Total Fee (37 CFR 3.41): <b>\$ 40.00</b>			
	FAY, SHARPE, FAGAN, MINNICH & McKEE, LLP	Enclosed			
	1100 Superior Avenue – 7 <sup>th</sup> Floor Cleveland, OH 44114-2579 (216) 861-5582	Authorized to be charged to Deposit Account			
	CUSTOMER NUMBER: 027885	8. Deposit Account Number: 24-0037			
	DO NOT USE THIS SPACE				
9.	Statement and signature. To the best of my knowledge and belief, the true copy of the original document.  Name of Person Signing: Mark S. Svat, Reg. Ng. 34,261  Date 12 20 0 5	Signature Total number of pages comprising cover sheet:			
		Rev 09/2003			

2/28/2005	DBYRNE 00000141 240037	11312305
)1 FC:8021	( 40.00 BA )	

## **Certificate of Mailing**

Under 37 C.F.R. § 1.8, I certify that this Recordation Form Cover Sheet and accompanying document(s) are being

facsimile transmitted to Assignment Services Division, U.S. Patent and Trademark Office, at (703) 306-5995, on the date indicated below.

\_\_X deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated below and is addressed to US Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450, MAIL STOP Assignment Services Division.

Express Mail Label No. : EV 690735548 US	1/ 1/ 1/	
Signature: 12-20-05	aren Frought D	rate: 12 - 20 - 0.5
Karen M. Forsyth		

**PATENT** 

REEL: 017397 FRAME: 0188

## **ASSIGNMENT**

Attorney Docket No.: 20042098-US-NP

XERZ 2 01139

The undersigned is/are the named inventor(s) (the "Inventor(s)") on a United States patent application entitled MICROMACHINED FLUID EJECTORS USING PIEZOELECTRIC ACTUATION (the "Application") for inventions disclosed or claimed therein (the "Invention(s)"), which Application:

☑ is being executed concurrently herewith,			
was first executed on			
was filed on as Application Number .			
claims the benefit of U.S. Provisional Application(s) No(s).	1	filed	•
Palo Alto Research Center Incorporated, a Delaware Corporation, on			

Palo Alto Research Center Incorporated, a Delaware Corporation, on behalf of itself, its successors and assigns, and its legal representatives ("PARC"), is entitled to all rights in the Application and the Invention(s), and the full cooperation of the Inventor(s).

For valuable consideration, the receipt of which is hereby acknowledged, the Inventor(s) hereby sell(s), assign(s), and transfer(s) to PARC the entire and exclusive right, title and interest in the Application and the Invention(s), in and for the United States, its territories, and all foreign countries, including all applications, patents, design registrations and publications obtained or derived therefrom, world wide, and all priority rights under all present or future conventions and treaties, and any provisional applications for which priority is claimed in the Application; and

- (1) request the U.S. Commissioner of Patents to issue all U.S. Letters Patent granted thereon to PARC;
- (2) agree that PARC may apply for and receive all foreign Letters Patent thereon;
- (3) agree to execute all papers and take all actions necessary or desirable in connection therewith requested by PARC; and
- (4) authorize PARC to subsequently enter the Application Number on this Assignment, if not already entered above.

Recoming	Ku.
Baomin Xu	Date 12/16/2005
Stern a. Buhly	
Steven A. Buhler	Date 17/16/2005
Stephen Willat	,
Stephen D. White	Date 12/16/2005
Sort Gar Mu	mg
Scott Jong Hollimb	Date 12/16/2005

C:\Documents and Settings\bxu\My Documents\Baomin\Thinking\ISs & Patents\Piezo MEMS Jet\Patent application\Application files\KMF0006418V001\_Final.doc

PATENT REEL: 017397 FRAME: 0189