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(74) Agents: STEINFL, Alessandro et al.; Ladas & Parry LLP,  
5670 Wilshire Boulevard, Ste. 2100, Los Angeles, CA  
90036 (US).

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(71) Applicant (for all designated States except US): CALI-  
FORNIA INSTITUTE OF TECHNOLOGY [US/US];  
1200 E. California Blvd, M/C 201-85, Pasadena, CA 91125  
(US).

(72) Inventors; and

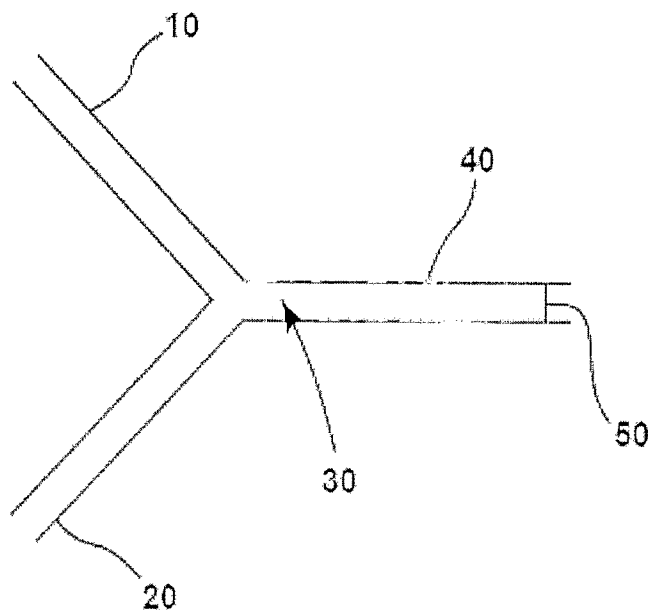
(75) Inventors/Applicants (for US only): MALTEZOS,  
George [US/US]; 33 Brookfield Road, Fort Salonga, NY  
11768 (US). RAJAGOPAL, Aditya [US/US]; 1200 E.  
California Blvd., M/C 201-85, Pasadena, CA 91125 (US).  
SCHERER, Axel [DE/US]; 1900 Catalina Street, Laguna  
Beach, CA 92651 (US).

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(54) Title: METHOD AND APPARATUS FOR EVAPORATIVE COOLING WITHIN MICROFLUIDIC SYSTEMS



(57) Abstract: Evaporative cooling is an effective  
and efficient method for rapidly removing heat from  
a system device. In accordance with the disclosure  
herein, a microfluidic Y-junction apparatus is pro-  
vided which can produce low temperatures and can  
be integrated into microdevices.



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**INTERNATIONAL SEARCH REPORT**

International application No  
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**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. H01L23/427 H01L23/473 B81C1/00 F28D15/04

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

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**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

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X	WO 2004/040645 A (STICHTING TECH WETENSCHAPP [NL]; GUIJT ROSANNE MARIEKE [AU]; DODGE ARA) 13 May 2004 (2004-05-13)	1-5,8-15
Y	page 5, line 7 - page 8, line 8; figures 1-4	16-23, 25-30, 32-37
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European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Edmeades, Michael

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
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A	US 2004/115861 A1 (WONG WILLIAM S [US] ET AL) 17 June 2004 (2004-06-17) the whole document	16-37
A	US 2003/062149 A1 (GOODSON KENNETH E [US] ET AL) 3 April 2003 (2003-04-03) paragraphs [0176] - [0178]	18, 29, 31
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Information on patent family members

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