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- (71) Applicant (for all designated States except US): BEC-TON, DICKINSON AND COMPANY [US/US]; 1 Becton Drive, Franklin Lakes, New Jersey 07417 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): COLONNA, Robert [US/US]; 15 Mechanic Street, Newton, Massachusetts 02464 (US). TAYLOR, Todd [US/US]; 260 Sidney Street #3, Cambridge, Massachusetts 02139 (US).
- (74) Agents: MILES, Kirk, M. et al.; The Webb Law Firm, 700 Koppers Building, 436 Seventh Avenue, Pittsburgh, Pennsylvania 15219 (US).

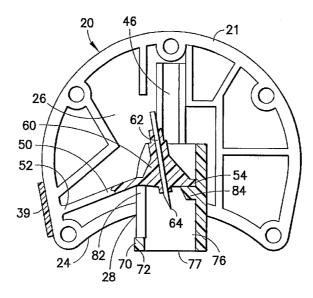
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(54) Title: FINGER ACTIVATED LANCET DEVICE



(57) Abstract: A lancet device includes a housing with a cantilever spring extending therein and defining a lancet having a puncturing end on the cantilever spring. An actuator extends within the housing through an opening at the forward end. The actuator includes an interfering engagement with the cantilever spring. Movement of the actuator into the housing through the forward end pivots the cantilever spring against its relaxed condition and then releases the engagement with the cantilever spring, thereby permitting the cantilever spring to pivot the lancet structure to an extended position with the puncturing end extending through the forward opening, and to return to the relaxed condition retracting the puncturing end back within the housing.



INTERNATIONAL SEARCH REPORT

International application No PCT/US2006/013143

Relevant to claim No.

A. CLASSIFICATION OF SUBJECT MATTER INV. A61B5/151

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) A61B

Category* Citation of document, with indication, where appropriate, of the relevant passages

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)

page 2, paragraph 3 - page 3, paragraph 1;

page 7, paragraph 5 - page 9, paragraph 1

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

figures 1-4

X	US 4 715 374 A (MAGGIO ET AL) 29 December 1987 (1987-12-29) column 1, line 6 - column 5, line 25; figures 3,5	1~26
A	US 5 314 441 A (CUSACK ET AL) 24 May 1994 (1994-05-24) column 3, line 16 - line 68; figures 1-9 column 7, line 67 - column 11, line 5	1-26
A	WO 03/049613 A (SHIN, BAG, SIG) 19 June 2003 (2003-06-19)	1,4-10, 14,15,

X Further documents are listed in the continuation of Box C.	X See patent family annex.			
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Date of the actual completion of the international search 1 September 2006	Date of mailing of the international search report $11/09/2006$			
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NIL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Authorized officer Neef, T			

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2006/013143

C(Continua	tion). DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	 Relevant to claim No.
A	US 4 844 095 A (CHIODO ET AL) 4 July 1989 (1989-07-04) column 1, line 5 - line 58; figures 4,5,11-13 column 8, line 36 - column 11, line 14	1-26
A	US 5 366 470 A (RAMEL ET AL) 22 November 1994 (1994-11-22)	1,4-10, 14,15, 17-20, 23-26
	column 1, line 36 - column 4, line 64; figures 1-9	23 20
A	US 2003/130597 A1 (MARSHALL JEREMY) 10 July 2003 (2003-07-10) paragraph [0002] - paragraph [0030]; figures 1-6	1,10,26
\	GB 2 352 403 A (* OWEN MUMFORD LIMITED) 31 January 2001 (2001-01-31) page 1, line 23 - page 2, line 26; figures 1-3	1,10,26
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INTERNATIONAL SEARCH REPORT Information on patent family members

International application No PCT/US2006/013143

Patent document cited in search report		Publication date	Patent family member(s)			Publication date
US 4715374	Α	29-12-1987	NONE			<u> </u>
US 5314441	A	24-05-1994	NONE			
WO 03049613	Α	19-06-2003	KR	2003042393	Α	28-05-2003
US 4844095	Α	04-07-1989	AU CA WO	2535088 1316429 8905610	C	19-07-1989 20-04-1993 29-06-1989
US 5366470	A	22-11-1994	AT AU CA DE DE EP JP WO	668533 3063392 2123400 69229180	A A1 D1 T2 A1 T	15-05-1999 09-05-1996 15-06-1993 27-05-1993 17-06-1999 14-10-1999 31-08-1994 02-02-1995 27-05-1993
US 2003130597	A1	10-07-2003	EP WO JP	1339322 0243591 2004514496	A2	03-09-2003 06-06-2002 20-05-2004
GB 2352403	 А	31-01-2001	NONE			