



(51) International Patent Classification:
E21B 23/06 (2006.01) *E21B 33/134* (2006.01)

(21) International Application Number:
PCT/GB2012/051166

(22) International Filing Date:
24 May 2012 (24.05.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
1108724.4 24 May 2011 (24.05.2011) GB

(71) Applicant (for all designated States except US): **SMJM LIMITED** [GB/GB]; 3 West Craibstone Street, Bon Accord Square, Aberdeen AB11 6YW (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **FRASER, John Paul** [GB/GB]; 32 Mallard Drive, Montrose, Angus DD10 9ND (GB). **FONG, Jason Wing Hau** [GB/GB]; 3 Creel Gardens, Cove, Aberdeen AB12 3BW (GB). **MURRAY, John**

Kenneth Fraser [GB/GB]; Contlaw Mains, Milltimber, Aberdeen AB12 3AX (GB).

(74) Agent: **MURGITROYD & COMPANY**; Scotland House, 165-169 Scotland Street, Glasgow G5 8PL (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,

[Continued on next page]

(54) Title: SUPPORT DEVICE FOR USE IN A WELLBORE AND A METHOD FOR DEPLOYING A BARRIER IN A WELLBORE

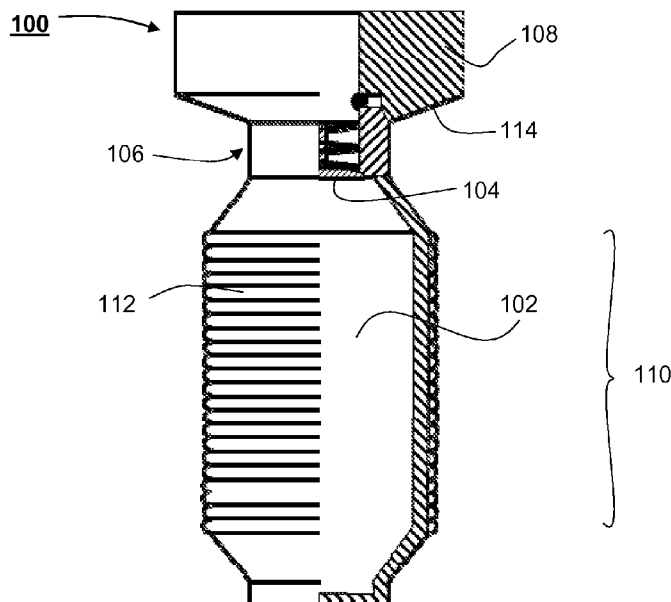


FIGURE 2

(57) Abstract: The present invention relates to a downhole support device (100) for use in a wellbore and which is adapted to be run into the wellbore through or run on an elongate member string (2) such as on a string of tubulars, a coiled tubing string or a slickline. The downhole support device comprises an inflatable element (102), which in use is adapted to be selectively connectable to the elongate member string and is further adapted to apply a biasing force in the direction of the wellbore walls. The inflatable element has an inlet (104) for receiving fluid and/or fluidized solids. The support device is further adapted to be selectively disconnectable from the elongate member string.



EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU,
LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,
SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

— *before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments (Rule 48.2(h))*

Published:

— *with international search report (Art. 21(3))*

(88) Date of publication of the international search report:

3 October 2013

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2012/051166

A. CLASSIFICATION OF SUBJECT MATTER
INV. E21B23/06 E21B33/134
ADD.

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)
E21B

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 practicable, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2 314 359 A (BAKER HUGHES INC [US]) 24 December 1997 (1997-12-24) page 4, lines 24-28 page 6, line 1 - page 8, line 20; figures 1-10	1-41
X	----- WO 96/37682 A1 (BAKER HUGHES INC [US]) 28 November 1996 (1996-11-28) page 13, line 16 - page 15, line 16; figures 1-111	1-33
X	----- US 2 831 540 A (HUBER THEODORE A) 22 April 1958 (1958-04-22) column 3, line 39 - column 4, line 62; figures 1, 2	1-33
	----- -/-	



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

15 July 2013

Date of mailing of the international search report

26/07/2013

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Manolache, Iustin

INTERNATIONAL SEARCH REPORT

International application No

PCT/GB2012/051166

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2008/190605 A1 (CLAPP TIMOTHY DALE [US] ET AL) 14 August 2008 (2008-08-14) the whole document -----	1,29
A	WO 2004/067905 A2 (BAKER HUGHES INC [US]) 12 August 2004 (2004-08-12) the whole document -----	1,29

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/GB2012/051166

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 2314359	A	24-12-1997	AU 7053896 A	15-05-1997
			CA 2189085 A1	10-05-1997
			GB 2314359 A	24-12-1997
			US 5749419 A	12-05-1998

WO 9637682	A1	28-11-1996	CA 2194438 A1	28-11-1996
			GB 2305684 A	16-04-1997
			NO 970270 A	21-03-1997
			US 5623993 A	29-04-1997
			WO 9637682 A1	28-11-1996

US 2831540	A	22-04-1958	NONE	

US 2008190605	A1	14-08-2008	CA 2677478 A1	21-08-2008
			CA 2799564 A1	21-08-2008
			EP 2122120 A1	25-11-2009
			US 2008190605 A1	14-08-2008
			US 2013092372 A1	18-04-2013
			WO 2008100964 A1	21-08-2008

WO 2004067905	A2	12-08-2004	AU 2004207265 A1	12-08-2004
			CA 2513629 A1	12-08-2004
			GB 2413140 A	19-10-2005
			GB 2419912 A	10-05-2006
			US 2004188954 A1	30-09-2004
			US 2006289161 A1	28-12-2006
			US 2008053664 A1	06-03-2008
			WO 2004067905 A2	12-08-2004
