(11) **EP 1 731 709 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 11.04.2007 Bulletin 2007/15

ion A3: (51) Int Cl.: alletin 2007/15 *E21B 47/00* (2006.01) *E21B 23/00* (2006.01)

E21B 47/09 (2006.01) E21B 47/12 (2006.01)

(43) Date of publication A2: 13.12.2006 Bulletin 2006/50

(21) Application number: 06076630.0

(22) Date of filing: 25.05.2001

(84) Designated Contracting States: **DK FR GB NL**

(30) Priority: 01.06.2000 US 586648

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC: 01941647.8 / 1 287 230

(71) Applicant: Marathan Oil Company Houston, TX 77070 (US)

(72) Inventors:

 Snider, Philip M. Houston, Texas 77070 (US)

Zierolf, Joseph A.
 Houma, Louisiana 70360 (US)

 (74) Representative: Mallalieu, Catherine Louise et al D Young & Co
 120 Holborn
 London EC1N 2DY (GB)

(54) Method and system for performing operations and for improving production in wells

(57) A method for performing operations and for improving production in a well includes the steps of: providing radio identification devices (72) at known locations in the well, and providing a reader device (70) configured to read the identification devices, and to control the operations responsive to signals from the identification devices. The method also includes the steps of providing a process tool (68), and transporting the process tool and the reader device through the well. The reader device is programmed to control the process tool upon reception of a response signal from a selected identification device. The method can be used to perform perforating processes, packer setting processes, bridge plug setting proc-

esses, logging processes, inspection processes, chemical treating processes, and cleaning processes. In addition, the method can be performed dynamically by controlling the tool as it moves through the well, or statically by stopping the tool at a particular location within the well. A system for performing the method includes the identification devices, the reader device, the process tool, and a computer or controller. In addition, the identification devices can be placed in casing collars of the well and can be configured as passive devices or as active devices.



EUROPEAN SEARCH REPORT

Application Number EP 06 07 6630

	DOCUMENTS CONSID	ERED TO BE RELEVANT		
Category	Citation of document with i of relevant pass	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Х	figure 1 *	3-04-13) - column 5, line 26;	1,19,34	INV. E21B47/00 E21B47/09 E21B23/00
Υ	* the whole documer	nt *	2-11, 14-18, 20-26, 28-33, 35-41, 44-48	E21B47/12
Υ	EP 0 730 083 A (HAL 4 September 1996 (1		2-18, 20-33, 35-48	
	* column 1, line 3 figure 1 *	- column 5, line 34;		
Υ	US 4 698 631 A (KEL 6 October 1987 (198		12,13, 27,28, 42,43	
	* column 5, line 16	5 - column 5, line 24 *	-, , ,	TECHNICAL FIELDS SEARCHED (IPC)
Α	US 3 426 850 A (JOH 11 February 1969 (1 * the whole documer	.969-02-11)	1-48	E21B G01V F16L
Α	EP 0 601 811 A (AKI INC; AKISHIMA LAB M 15 June 1994 (1994- * the whole documer	NITSUI ZOSEN INC) ∙06-15)	1-48	
	The man and a suit of the	han dan un fa all elemen		
	The present search report has	Date of completion of the search	1	Examiner
	Munich	6 March 2007	Mo	rrish, Susan
X : part Y : part docu A : tech O : non	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anotument of the same category inological background written disclosure rmediate document	L : document cited	ocument, but publ ate in the application for other reasons	ished on, or

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 06 07 6630

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

06-03-2007

US 5202680 A 13-04-1993 NONE EP 0730083 A 04-09-1996 AU 697762 B2 15-10-19	EP 0730083 A 04-09-1996 AU 697762 B2 15-10-19
AU 4553096 A 12-09-19 CA 2170711 A1 04-09-19 NO 960853 A 04-09-19 US 4698631 A 06-10-1987 CA 1291557 C 29-10-19 US 3426850 A 11-02-1969 NONE	AU 4553096 A 12-09-19 CA 2170711 A1 04-09-19 NO 960853 A 04-09-19 US 4698631 A 06-10-1987 CA 1291557 C 29-10-19 US 3426850 A 11-02-1969 NONE EP 0601811 A 15-06-1994 AT 158844 T 15-10-19
US 3426850 A 11-02-1969 NONE	US 3426850 A 11-02-1969 NONE EP 0601811 A 15-06-1994 AT 158844 T 15-10-19
	EP 0601811 A 15-06-1994 AT 158844 T 15-10-19
FD 0001011 A 1F 00 1004 AT 150044 T 15 10 10	
DE 69314289 D1 06-11-19 DE 69314289 T2 29-01-19 US 5495237 A 27-02-19	DE 69314289 T2 29-01-19

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82