(19) World Intellectual Property **Organization**

International Bureau





(43) International Publication Date 3 July 2003 (03.07.2003)

PCT

(10) International Publication Number WO 2003/054338 A3

(51) International Patent Classification⁷:

E21B 19/16

(21) International Application Number:

PCT/US2002/034632

(22) International Filing Date: 28 October 2002 (28.10.2002)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

10/029,585

20 December 2001 (20.12.2001)

(71) Applicant: VARCO I/P, INC. [US/US]; One Briar Lake Plaza, 2000 West Sam Houston Parkway South, Suite 1700, Houston, TX 77042 (US).

(72) Inventors: JUHASZ, Daniel; 5351 Duncannon Avenue, Westminister, CA 92683 (US). BOYADJIEFF, George; 18772 Colany Circle, Villa Park, CA 92861 (US). EIDEM, Brian, L.; 19316 Demeter Avenue, Cerritos, CA 90703

(US). VAN RIJZINGEN, Hans; Nijverheidoweg 45, NL-4879 AP Etten-Leur (NL).

(74) Agent: PECK, John, W.; Christie, Parker & Hale, LLC, Post Office Box 7068, Pasadena, CA 91109-7068 (US).

(84) Designated States (regional): European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 5 August 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: OFFSET ELEVATOR FOR A PIPE RUNNING TOOL AND A METHOD OF USING A PIPE RUNNING TOOL

(57) Abstract: A pipe running tool (10) for use in an oil drilling system and the like comprises a lower drive shaft (14) adapted to engage a drive shaft (28) of a top drive assembly (24) for rotation therewith. The pipe running tool (10) further includes a lower pipe engagement assembly (16) which is driven to rotate by the lower drive shaft (14), and is designed to releasably engage a pipe segment (11) in such a manner to substantially prevent relative rotation between the two. Thus, when the lower pipe engagement assembly (16) is actuated to securely hold a pipe segment (11), the top drive assembly (24) may be actuated to rotate the top drive output shaft (28), which causes the lower drive shaft (14) and lower pipe engagement assembly (16) to rotate, which in turn rotates the pipe segment (11). The pipe running tool (10) having a greater slip back offset such that drill pipe and drill pipe tool joints (11) may be passed through the central passageway (76) of the tool (10) without interfering with the front of the slip.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/34632

A. CLASSIFICATION OF SUBJECT MATTER			
IPC(7) : E 21 B 19/16 US CL : 175/85, 162, 52 166/77.51, 77.52, 77.53,			
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) U.S.: 175/85, 162, 52 166/77.51, 77.52, 77.53,			
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)			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where ap		Relevant to claim No.
X, P,	US 6,443,241 B1 (JUHASZ et al.) 3 Sept. 2002 (03.09.2002), Figs. 1, 2, 5A, and 5B		1-19
A	US 4,605,077 (BOYADJIEFF) 12 August 1986 (12.08.1986)		1, 9, 14, 19
Α	US 4,529,045 (BOYADJIEFF) 16 July 1985 (16.07.1985)		1, 9, 14, 19
A	US 4,449,596 (BOYADJIEFF) 22 May 1984 (22.05.1984)		1, 9, 14, 19
—			
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		"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	
"E" earlier ap date	pplication or patent published on or after the international filing	"X" document of particular relevance; the considered novel or cannot be considered when the document is taken alor	lered to involve an inventive
"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)		"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	
"O" document referring to an oral disclosure, use, exhibition or other means		"&" document member of the same patent	family
"P" document published prior to the international filing date but later than the priority date claimed.		Data of mailing of the international see	rch report
Date of the actual completion of the international search		Date of mailing of the international search report 14 JUN 2004 Authorized officer David Bagnell J. V. J.	
27 May 2004 (27.05.2004) Name and mailing address of the ISA/US		Authorized officer	
Mail Stop PCT, Attn: ISA/US		7 1 2 " 1 1 X 1 X 1 X 1 X 1 X 1 X 1 X 1 X 1 X	
Commissioner for Patents		David Bagnell V. W. W.	
P.O. Box 1450 Alexandria, Virginia 22313-1450		Telephone No. (703) 306-4180	
	o. (703) 305-3230		

Form PCT/ISA/210 (second sheet) (July 1998)