

(11) Publication number: 0 523 951 A3

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: 92306422.4

(22) Date of filing: 14.07.92

(51) Int. CI.⁵: **E21B 34/08**, E21B 34/06,

E21B 41/00

(30) Priority: 15.07.91 US 730211

(43) Date of publication of application : 20.01.93 Bulletin 93/03

84) Designated Contracting States : **DE FR GB NL**

Bate of deferred publication of search report: 12.05.93 Bulletin 93/19

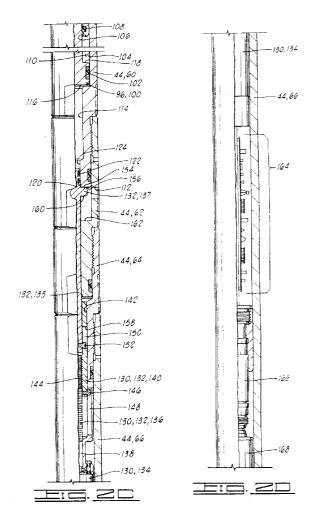
71 Applicant : HALLIBURTON COMPANY P.O. Drawer 1431 Duncan Oklahoma 73536 (US)

(7) Inventor: Schultz, Roger L. 1221 Nantucket Drive Richardson, Texas 75080 (US) Inventor: Zitterich, Craig L. 1725 Oak Hill Corinth, Texas 76205 (US)

(74) Representative: Wain, Christopher Paul et al A.A. THORNTON & CO. Northumberland House 303-306 High Holborn London WC1V 7LE (GB)

(54) Actuator for downhole tool.

An actuator apparatus for a downhole tool, such as a downhole shut-in tool, comprises mechanical actuator means (132) for actuating said tool; drive means (134), operably associated with said mechanical actuator means, for moving said mechanical actuator means: abutment means (156) for abutting said mechanical actuator means to limit movement thereof and thereby define at least one position of said mechanical actuator means; and control means (164) for controlling said drive means (134), said control means including and being responsive to a load sensing means for sensing an increased load on said drive means when said mechanical actuator means abuts said abutment means.





EUROPEAN SEARCH REPORT

Application Number

EP 92 30 6422

	DOCUMENTS CONSI	DERED TO BE REL	EVANT	
Category	Citation of document with i	ndication, where appropriate, ssages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X Y	US-A-5 029 597 (R.L * column 2, line 48 * column 5, line 57 * column 10, line 5	- column 3, line - column 6. line	10 * 6 * 2-4,10	E21B34/08 E21B34/06 E21B41/00
Y	US-A-4 094 359 (D.W * column 4, line 20 * column 7, line 1	- line 33 *	10	
4			1,6,7	
Y	FR-A-2 486 143 (FLO * page 4, line 30 -	PETROL) page 5, line 27 '	2-4	
٨	US-A-4 013 123 (N.L * column 6, line 55		2	
A	US-A-4 100 939 (R.E * column 2, line 38	-4 100 939 (R.E.MEYNIG) lumn 2, line 38 - line 42 *		TECHNICAL FIELDS SEARCHED (Int. Cl.5)
A	JS-A-4 572 288 (K.S.KINLEY) * column 4, line 56 - line 66 * * column 5, line 38 - line 45 *		4,5,9	
A	 JS-A-3 896 667 (J.D.JETER) * the whole document *		1-9	F16K
	The present search report has be	peen drawn up for all claims Date of completion of th		
		18 MARCH 1993		
X: par Y: par doc A: tec O: no	CATEGORY OF CITED DOCUME ticularly relevant if taken alone ticularly relevant if combined with an ument of the same category hnological background n-written disclosure ermediate document	E : earlie after other D : docu L : docu	y or principle underlying to or patent document, but put the filing date ment cited in the application nent cited for other reason ber of the same patent fan ment	blished on, or on is