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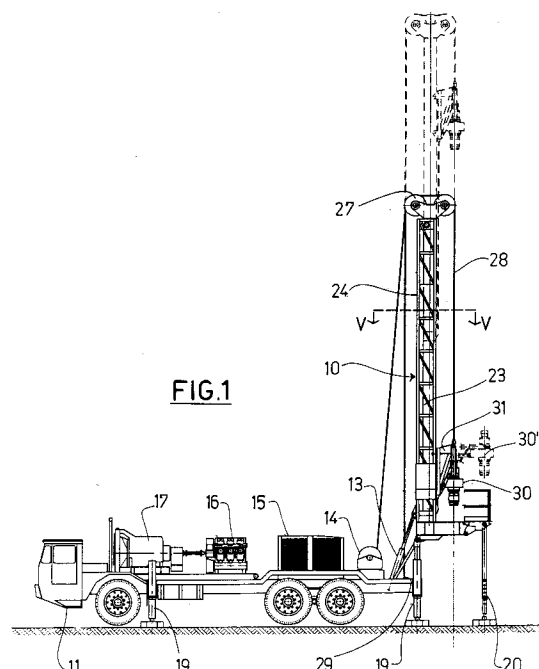
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Hydraulic drilling machine of telescopic tower type with a rod stowing and handling system.

A drilling machine of the type comprising a drilling tower (10) fixed in a reclinable manner on a transporting vehicle (11) and provided with motive power units (15) and a driving head (30) for driving the drill rods. The drilling tower is of telescopic type slidable along a fixed guide structure or lattice (24) by the action of a hydraulic piston (23), the telescopic tower (22) being provided at its ends with a series of pulleys (27, 35) to allow the movement of flexible transmission means (28, 34) having one end connected to said driving head (30) and the other end connected to a point on the fixed structure (24), so as to form a closed ring about the the tower (22).

The drilling machine is also provided with a system for stowing and handling the drilling rods.





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 92 12 1752

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X Y	US-A-4 020 909 (AIRAUDO) * column 4, line 21 - column 8, line 46; figures * ---	1,5,6,8 7	E21B15/00 E21B7/02 E21B19/14
Y A	US-A-4 434 860 (DEYO) * abstract; figures * ---	7 1	
A	CA-A-1 170 016 (CANADIAN DRILLING EQUIPMENT LTD.) * page 6, line 21 - page 7, line 22; figures * ---	1,5,6,8	
A	GB-A-2 079 817 (VARCO INTERNATIONAL INC.) * page 1, line 41 - line 87 * * page 3, line 60 - page 4, line 33; figures * ---	1-3	
A	US-A-4 036 508 (EDDY ET AL.) * abstract; figures * ---	1	
A	US-A-3 851 770 (JENKINS ET AL.) * column 2, line 3 - line 48; figures * ---	9,11,12	TECHNICAL FIELDS SEARCHED (Int. Cl.5)
A	US-A-3 443 647 (JENKINS ET AL.) * abstract; figures * ---	9	E21B
A	FR-A-2 092 611 (SOC. NAT. D'ETUDE ET DE CONSTRUCTION DE MOTEURS D'AVIATION) * page 1, line 22 - line 37; figures * -----	9	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 01 JULY 1993	Examiner LINGUA D.G.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			



CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claims:
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet -B-

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims 2-8 : Transportable telescopic drilling machine with a drilling unit movable transversely of the axis of the well to a laterally offset position.
2. Claims 9-15 : Rod stowing and handling system for a drilling machine.

MOTIVATION

A drilling machine according to claim 1 is known from US 4 020 909.

Therefore claims depending on claim 1 can be grouped into 2 subjects (as expressed above), having in common only the known features present in claim 1 (non unity "a posteriori").

The search has been carried out for claim 1 and the first invention (claims 2-8) mentioned in the claims.