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- (71) Applicant: PETROLEUM TECHNOLOGY COMPANY AS [NO/NO]; Slettestrandveien 13, 4032 Stavanger (NO).
- (72) Inventor: HARESTAD, Kristian; Harestadveien 4, 4070 Randaberg (NO).
- (74) Agent: ZACCO NORWAY AS; P.O.Box 2003 Vika, 0125 Oslo (NO).
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(54) Title: VALVE DEVICE AND METHOD

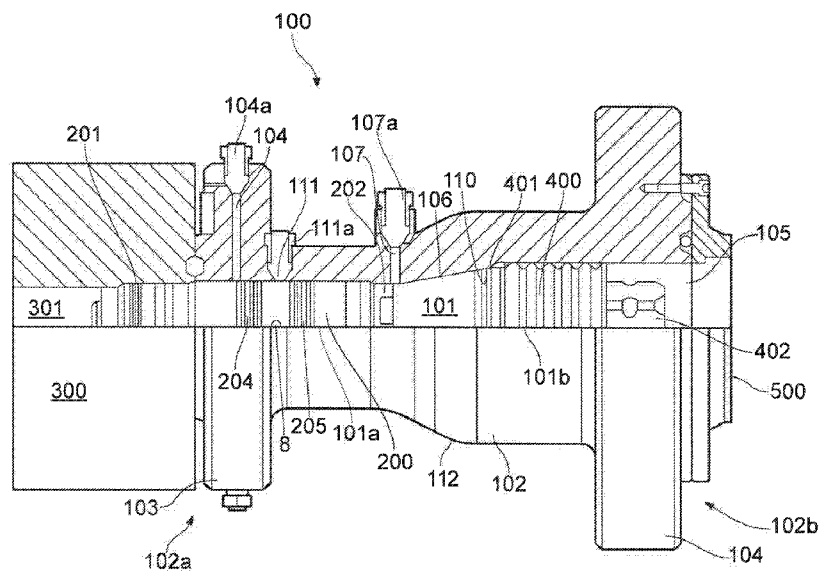


FIG. 3

(57) Abstract: A valve device (100) having a valve (200) with first connection elements (201) for mounting the valve (200) in a port (301) of a wellhead (300), a spool unit (102) having a through-channel (101), second connection elements (110) arranged in the through-channel (101), and a flange (103), the flange (103) configured for sealingly mounting the spool unit (102) to the wellhead (300), aligning the through-channel (101) with the port (301), and a plug (400) comprising third connection elements (401) configured for sealingly and removably engaging the second connection elements (110) and attach the plug (400) in the through-channel (101). A method for removing, replacing or arranging a valve (200) located in a port (301) of a wellhead (300) is also provided.



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,
KM, ML, MR, NE, SN, TD, TG).

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- *with international search report (Art. 21(3))*
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/N02017/050313

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-14

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-14

A valve mounted in a port of a wellhead; a spool unit with a through-channel extending between a first and a second end, second connection elements arranged in the through-channel, and a flange for mounting to the wellhead, aligning the through-channel with the port; and a plug comprising third connection elements configured for engaging the second connection elements and attach the plug in the through-channel.

2. claims: 15-23

A method for installing, removing or replacing a valve located in a port of a wellhead, comprising: mounting a valve unit and a placement and removal tool to the wellhead; inserting an arm of the placement and removal tool into the spool unit, operating the arm to disengage the plug from the spool unit, and withdrawing the arm and the plug out of the spool unit; detaching the placement and removal tool and the plug from the valve unit; reattaching the placement and removal tool to the valve unit; inserting the arm into the spool unit to install or remove the valve to/from the port, and withdrawing the arm out of the spool unit; and detaching the placement and removal tool from the valve unit.

INTERNATIONAL SEARCH REPORT

International application No
PCT/N02017/050313

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 01/57360 A1 (FMC CORP [US]) 9 August 2001 (2001-08-09) the whole document -----	1-14

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/N02017/050313

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