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(71) Applicant: **FIRST SUBSEA LIMITED** [GB/GB]; Engineering House, Lune Industrial Estate, New Quay Road, Lancaster LA1 5QP (GB).

(72) Inventor: **CAMPBELL-SMITH, Gregory**; 8 Masefield Close, Bockhall Village, Old Langho, Blackburn BB6 8HS (GB).

(74) Agent: **HARRISON GODDARD FOOTE**; 4th Floor, Merchant Exchange, 17-19 Whitworth Street West, Manchester M1 5WG (GB).

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[Continued on next page]

(54) Title: MOVEABLE JOINT

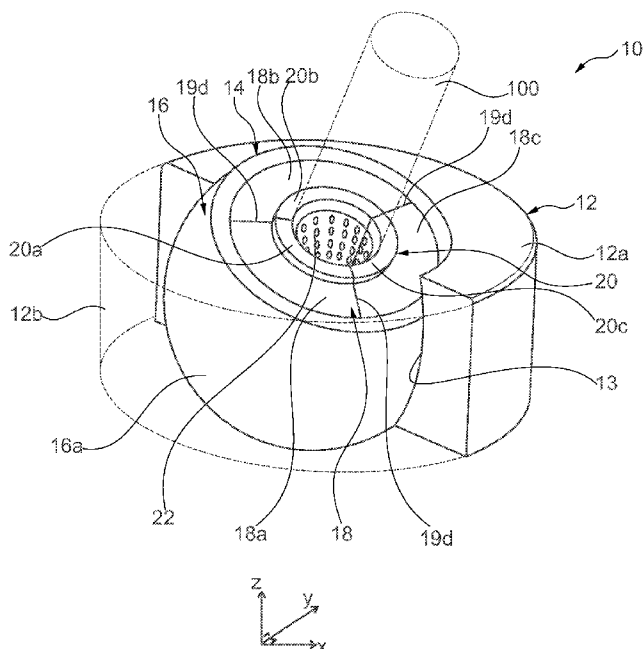


Fig. 1

(57) Abstract: A moveable joint (10) suitable for connection with a tubular member (100), comprising a socket member (12) having an inner surface (13) defining a cavity, and a rotation member (14) having an outer surface (16a) corresponding to said cavity, said rotation member being journaled for rotation in said cavity. Said rotation member has an inner surface (22) defining a cylindrical bore through said rotation member and centered on a longitudinal axis of said rotation member, the cylindrical bore being configured to receive a tubular member. Said moveable joint further comprises a releasable locking mechanism for releasably locking a tubular member in said cylindrical bore. Said locking mechanism comprises a cage (28) connected to the rotation member and having a plurality of windows partially closing recesses (24) in the inner surface of said rotation member, which recesses are elongate in a longitudinal direction parallel the longitudinal axis, house a roller (26) and have a base inclined in said longitudinal direction so that at a lower end of each recess the roller protrudes through said window and at an upper end thereof the roller protrudes less or not at all.





TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

— before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments (Rule 48.2(h))

Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

(88) Date of publication of the international search report:

12 September 2014

Published:

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INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2013/051032

A. CLASSIFICATION OF SUBJECT MATTER
 INV. E21B17/01 E21B43/01 E21B19/00 E21B19/02
 ADD.
 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)
 E21B

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)
 EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2 336 382 A (COFLEXIP [FR]; COFLEXIP STENA OFFSHORE LTD [GB]) 20 October 1999 (1999-10-20)	17,18,20
Y	page 2, lines 21-30; figure 2 page 5, line 31 - page 6, line 33 page 9, line 26 - line 30	1-4, 13-16,19
Y	----- US 2011/266792 A1 (JANON FRANCK [FR] ET AL) 3 November 2011 (2011-11-03) paragraphs [0008], [0013], [0019]; figures 1-3	1-4, 13-16,19
A	----- US 4 039 208 A (PERNET JACQUES M ET AL) 2 August 1977 (1977-08-02) column 1, lines 64-68; figure 1	1-20

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
- "E" earlier application or patent but published on or after the international filing date
- "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)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "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
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "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
- "&" document member of the same patent family

Date of the actual completion of the international search
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 15/07/2014

Name and mailing address of the ISA/
 European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040,
 Fax: (+31-70) 340-3016

Authorized officer
 Simunec, Duro

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2013/051032

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.: 21
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:
see FURTHER INFORMATION sheet PCT/ISA/210

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:

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.:

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

Continuation of Box II.2

Claims Nos.: 21

Claim 21 contains a reference to drawings. According to Rule 6.2(a) PCT, claims should not contain such references except where absolutely necessary, which is not the case here.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guidelines C-IV, 7.2), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/GB2013/051032

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
GB 2336382	A	20-10-1999	NONE
US 2011266792	A1	03-11-2011	FR 2932840 A1 25-12-2009
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