



(51) International Patent Classification:

E21B 15/02 (2006.01) E21B 19/14 (2006.01)
E21B 19/15 (2006.01) E21B 19/084 (2006.01)

(21) International Application Number:

PCT/EP2014/055307

(22) International Filing Date:

17 March 2014 (17.03.2014)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/787,984 15 March 2013 (15.03.2013) US
PA 2013 00303 20 May 2013 (20.05.2013) DK
PA 2013 70604 22 October 2013 (22.10.2013) DK

(71) Applicant: **A.P. Møller - Mærsk A/S** [DK/DK];
Esplanaden 50, DK-1098 Copenhagen K (DK).

(72) Inventor; and

(71) Applicant: **HOLCK, Jesper** [DK/DK]; Kullabergvej 4,
DK-3050 Humlebæk (DK).

(72) Inventors: **KANNEGAARD, Michael**; Kildemosevej 20
A, DK-3060 Espergårde (DK). **MCCOLL, Allan**; 8,
Boclair Road, Bearsden, Glasgow (GB).

(74) Agent: **SCHWARZE, Holm**; Guardian IP Consulting I/S,
Diplomvej, Building 381, DK-2800 Kgs. Lyngby (DK).

(81) Designated States (unless otherwise indicated, for every

kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every

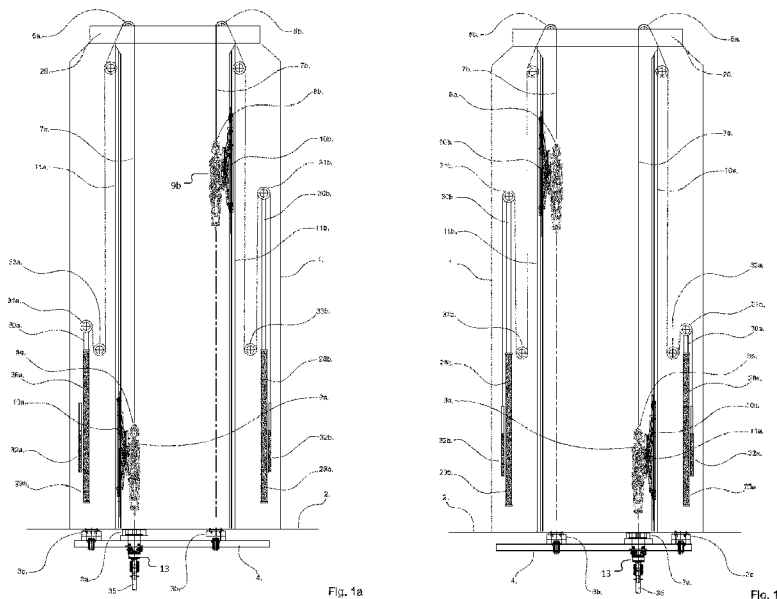
kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- 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))

[Continued on next page]

(54) Title: AN OFFSHORE DRILLING RIG AND A METHOD OF OPERATING THE SAME



(57) Abstract: An offshore drilling rig comprising a drill deck (2), at least one primary well center (3a) and a diverter system (13) arranged below the primary well center, a drilling support structure (1) extending upwardly from the drill deck and above the primary well center and the other work center and a first and a second hoisting system (5a, 5b) supported by the drilling support structure and being adapted for raising or lowering a first and a second load carrier (8a, 8b), respectively, and where the offshore drilling rig comprises a positioning system (10a, 10b) adapted for selectively positioning at least the first load carrier in at least a first or a second horizontal position different from the first horizontal position, where the first load carrier in the first horizontal position is positioned above the primary well center, and in the second horizontal position is positioned above the other work center.

WO 2014/140367 A3

(88) Date of publication of the international search report:
9 April 2015

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2014/055307

A. CLASSIFICATION OF SUBJECT MATTER
 INV. E21B15/02 E21B19/15 E21B19/14 E21B19/084
 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, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 762 279 A (HORTON III EDWARD E [US]) 9 June 1998 (1998-06-09) column 1, line 11 - column 2, line 10; figures 1,2	1-6,8, 16,21-23 7,12-14, 17
Y	-----	
X	US 4 423 994 A (SCHEFERS CORBY J [US] ET AL) 3 January 1984 (1984-01-03) column 5, line 58 - column 7, line 63; figure 1	1,2,6, 18,21,22
X	WO 87/02915 A1 (DANSK IND SYNDIKAT [DK]) 21 May 1987 (1987-05-21) figures 1,2,9-16	1,6, 9-11,15, 18,21
	----- -/--	

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 application or patent but published on or after the international filing date	"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
"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	

Date of the actual completion of the international search 10 February 2015	Date of mailing of the international search report 19/02/2015
---	--

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 Dantine, Patrick
--	--

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2014/055307

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2012/087119 A1 (ITREC BV [NL]; ROODENBURG JOOP [NL]; WIJNING DIEDERICK BERNARDUS [NL]) 28 June 2012 (2012-06-28) page 7, line 26 - line 29; figure 3 -----	1,9,11, 15,18, 21,22
Y	US 4 341 373 A (MOUTON JR WILLIAM J) 27 July 1982 (1982-07-27) figures 1,6 -----	7
Y	WO 2004/035985 A1 (ITREC BV [NL]; ROODENBURG JOOP [NL]; VAN DUIVENDIJK PIETER DIRK MEL [U]) 29 April 2004 (2004-04-29) figures 1,2,10,11,15,187 -----	12,17
Y	US 2008/000685 A1 (HUMPHREYS GAVIN [GB]) 3 January 2008 (2008-01-03) claims 1,10; figures 1-6 -----	13,14
A	WO 2007/148977 A1 (NAT OILWELL NORWAY AS [NO]; TARALDRUD PAAL [NO]) 27 December 2007 (2007-12-27) abstract; figures 1-3 -----	1-23

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/EP2014/055307

Patent document cited in search report	Publication date	Publication date	Patent family member(s)	Publication date
US 5762279	A	09-06-1998	NONE	

US 4423994	A	03-01-1984	NONE	

WO 8702915	A1	21-05-1987	EP 0245394 A1	19-11-1987
			JP H0715234 B2	22-02-1995
			JP S63501651 A	23-06-1988
			NO 872817 A	06-07-1987
			US 4850439 A	25-07-1989
			WO 8702915 A1	21-05-1987

WO 2012087119	A1	28-06-2012	EP 2655785 A1	30-10-2013
			NL 2005912 C	27-06-2012
			US 2013284450 A1	31-10-2013
			WO 2012087119 A1	28-06-2012

US 4341373	A	27-07-1982	NONE	

WO 2004035985	A1	29-04-2004	AU 2003301331 A1	04-05-2004
			CN 1705814 A	07-12-2005
			EP 1583884 A1	12-10-2005
			US 2004151549 A1	05-08-2004
			WO 2004035985 A1	29-04-2004

US 2008000685	A1	03-01-2008	AT 495340 T	15-01-2011
			AU 2007270876 A1	10-01-2008
			BR PI0713770 A2	30-10-2012
			CA 2654901 A1	01-10-2008
			EP 2035650 A1	18-03-2009
			US 2008000685 A1	03-01-2008
			WO 2008004068 A1	10-01-2008

WO 2007148977	A1	27-12-2007	BR PI0713602 A2	30-10-2012
			CA 2654932 A1	27-12-2007
			EP 2029857 A1	04-03-2009
			NO 326329 B1	10-11-2008
			US 2010294568 A1	25-11-2010
			WO 2007148977 A1	27-12-2007
