



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

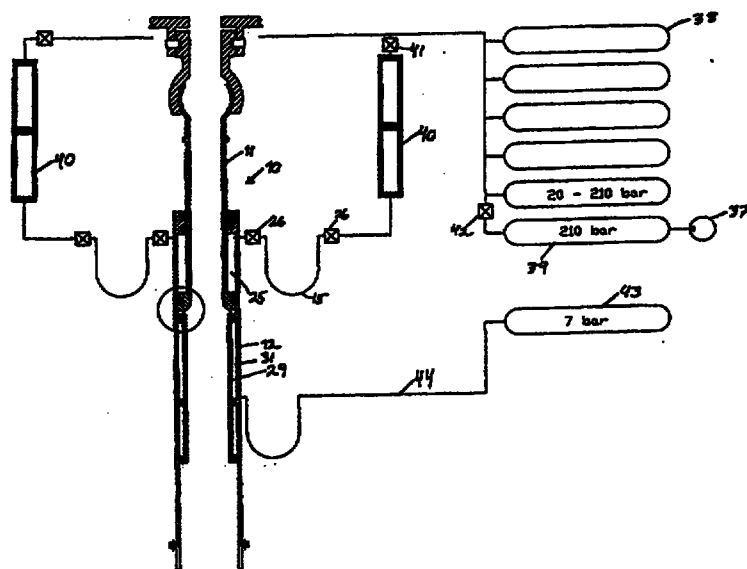
(51) International Patent Classification ⁶ : E21B 19/09, 17/01	A1	(11) International Publication Number: WO 97/43516 (43) International Publication Date: 20 November 1997 (20.11.97)
--	----	---

(21) International Application Number: ☒ PCT/NO97/00115(22) International Filing Date: ☒ 5 May 1997 (05.05.97)(30) Priority Data:
961945 13 May 1996 (13.05.96) ☒ NO(71) Applicant (for all designated States except US): MARITIME
HYDRAULICS A/S [NO/NO]; Dvergsnes, N-4604 Kris-
tiansand (NO).

(72) Inventor; and

(75) Inventor/Applicant (for US only): VATNE, Per [NO/NO];
Rabbersvik, N-4639 Kristiansand (NO).(74) Agent: TOFTING, Arild; Bryns Patentkontor A/S, P.O. Box
765, Sentrum, N-0106 Oslo (NO).(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR,
BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE,
HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG,
US, UZ, VN, YU, ARIPO patent (GH, KE, LS, MW, SD,
SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU,
TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI,
FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent
(BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD,
TG).**Published***With international search report.**In English translation (filed in Norwegian).*

(54) Title: SLIP JOINT



(57) Abstract

A slide joint (10) for a riser (16) between a well and a floating petroleum installation, e.g., an oil platform, comprising an outer pipe (12) and an inner pipe (11), which pipes are adapted to move telescopically relative to one another to compensate for changes in the distance between the sea bed and the platform. The inner pipe (11) is connected to a piston (27), which piston is responsive to actuation by hydraulic pressure in order to provide tractive force on the riser (16). The outer diameter of the inner pipe (11) is adapted to the diameter of the outer pipe (12) so as to form an annulus (25) between the pipes. The piston (27) is fixedly connected to the inner pipe (11) at or near the downward oriented end thereof, said annulus (25) above the piston (27) being subjected to hydraulic pressure. Below the piston (27) is provided a protective sleeve (29), which is slidably disposed within the outer pipe (12).