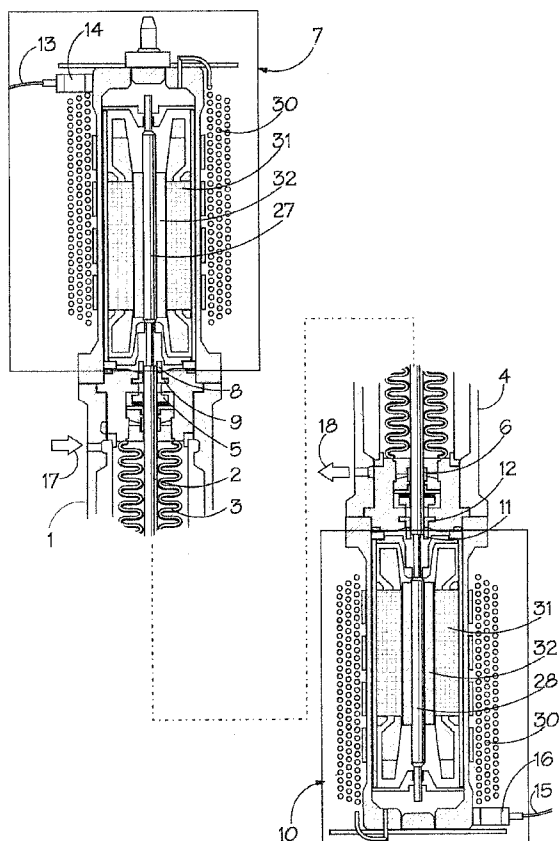




- (51) International Patent Classification:
F04D 13/08 (2006.01) *H02K 16/00* (2006.01)
- (21) International Application Number:
PCT/EP2012/066043
- (22) International Filing Date:
16 August 2012 (16.08.2012)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
1114594.3 23 August 2011 (23.08.2011) GB
- (71) Applicant (for all designated States except US): **FRAMO ENGINEERING AS** [NO/NO]; P.O. Box 174, Sandsli, N-5862 Bergen (NO).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **DALE, Helge** [NO/NO]; Framo Engineering AS, P.O. Box 174, Sandsli, N-5862 Bergen (NO).
- (74) Agents: **FORD, Michael F.** et al.; Schlumberger Cambridge Research Limited, High Cross, Madingley Road, Cambridge Cambridgeshire CB3 0EL (GB).
- (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, IS, JP, KE, KG, KM, 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, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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,

[Continued on next page]

(54) Title: DUAL MOTOR PUMP FOR SUBSEA APPLICATION



(57) Abstract: Apparatus comprising: a pump (1) having a pump drive shaft (2) for operating the pump, a first motor (7) connected via a first flexible coupling (8) to drive one end of the shaft and a second motor (10) connected via a second flexible coupling (11) to drive the opposite end of the shaft; and a variable speed drive connecting each of the first and second motors electrically to drive the pump drive shaft.



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, 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))*

Published:

— *with international search report (Art. 21(3))*