

DRIVE ASSEMBLY FOR ROTATING AND TRANSLATING A SHAFT

ABSTRACT

Disclosed is a drive unit operable to translate and rotate a shaft, the drive unit including: (i) a hollow electric motor (45) having a rotor (47) , (ii) a fluid cylinder (48) , (iii) means for connecting the shaft to the rotor (47) of the hollow electric motor (45) , (iv) means permitting the shaft to move lengthwise coupled with the fluid cylinder (48) , and (iv) means connecting the fluid cylinder (48) to the shaft , whereby the shaft may be rotated by the hollow electric motor (45) and moved lengthwise by the fluid cylinder (48), and wherein the fluid cylinder (48) has an outer wall coupled with the rotor (47) of the hollow electric motor (45).

Figure No. 2 is suggested for publication.