

ABSTRACTWASHING MACHINE WITH IMPROVED DRIVE STRUCTURE
FOR ROTATABLE TUB AND AGITATOR

5 A washing machine includes an outer tub (2), a rotatable tub (4) rotatably mounted in the outer tub (2), an agitator (5) mounted in the rotatable tub (4), a hollow tub shaft (12) transmitting a rotating force to the rotatable tub (4), an agitator shaft (14) inserted in the tub shaft
10 (12) for transmitting a rotating force to the agitator (5) and having a lower end, an electric motor (17) including a stator (18) concentric with the agitator shaft (14) and a rotor (25) mounted on the lower end of the agitator shaft (14), a clutch (30) for changing between a first mode in
15 which the tub shaft (12) is operatively coupled to the agitator shaft (14) in a dehydration step so that the motor rotor (25), the agitator shaft (14) and the tub shaft (12) are rotated together and a second mode in which the tub shaft (12) is decoupled from the agitator shaft (14) in a
20 wash step so that the tub shaft (12) is prevented from being rotated with the motor rotor (25) and the agitator shaft (14), and a mechanism housing (10) mounted on an outer bottom of the outer tub (2). The tub shaft (12), the agitator shaft (14), the motor (17) and the clutch (30) are
25 mounted on the mechanism housing (10) to be composed into an integral mechanism unit (41).

Designated figure: FIG. 1