

Title (en)
AGITATOR ARRANGEMENT

Title (de)
RÜHRERANORDNUNG

Title (fr)
AGENCEMENT D'AGITATEUR

Publication
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Application
EP 18177891 A 20180615

Priority
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Abstract (en)
[origin: EP3581263A1] The present disclosure relates to an agitator arrangement (2) for mixing a liquid within a mixing tank (1) and for cleaning the interior of the tank (1). The agitator arrangement (2) comprises a stationary outer pipe (22) extending in an axial direction (5) having an upper end region (14) configured for being fastened to the mixing tank (1) and a lower end region (23) configured to be located within the tank (1), a rotatable inner pipe (4) located partly within and extending coaxially with the stationary outer pipe (22) and forming a first flow channel (24) within the rotatable inner pipe (4) and a second flow channel (25) in a space between an interior surface (38) of the stationary outer pipe (22) and an exterior surface (55) of the rotatable inner pipe (4), a rotatable outer member (15) fastened to the rotatable inner pipe (4) and including a cleaning unit (28) having at least one opening (9) for spraying a pressurized cleaning liquid supplied through the second flow channel (25) on an interior surface (3) of the tank (1), and a seal (26) for sealing an axial gap (32) between an axial end surface (33) of the lower end region (23) of the stationary outer pipe (22) and an oppositely facing upper axial end surface (34) of the rotatable outer member (15). The seal (26) has a substantially cylindrically shaped portion (35) and a radially inwardly protruding rib (36) located in the axial gap (32). Furthermore, the seal (26) is configured to interact with the pressurized cleaning liquid, such that a lower sealing surface (37) of the seal (26), upon flow of the pressurized cleaning liquid in the second channel (25) to the cleaning unit (28), is arranged to sealingly abut the upper axial end surface (34) of the rotatable outer member (15) while allowing relative motion between the stationary outer pipe (22) and the rotatable outer member (15) in a radial direction (6).

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