

Title (en)
CONICAL SCREW MIXER

Publication
EP 0111067 B1 19861210 (DE)

Application
EP 83109054 A 19830914

Priority
DE 3245935 A 19821211

Abstract (en)
[origin: EP0111067A1] 1. Conical screw mixer with a vertical axis and a mixing vessel (88) tapering towards the bottom for the acceptance of material to be mixed, in which a rotationally driven mixing screw (70) is arranged on a shaft (110) which is moved along the inner wall of the mixing vessel (88) by means of a guide arm (71) engaging with its upper end and a universal joint (27) on its lower end, in which the rotational drive of the shaft (110) is achieved by a drive motor (65) arranged below the mixing vessel (88) which is connected with the universal joint (27) beneath and outside of the mixing vessel (88), and the seal between the shaft (110) and the floor of the mixing vessel (88) is achieved by a spherical-segment shaped sealing bell (4) which is rotatably mounted on the shaft the flanged spherical outer circumference of said sealing bell engaging sealingly with a circular seal arrangement secured to the mixing vessel, characterized as : that the sealing arrangement, which consists of a gasket flange (14) spherically curved on its inner circumference which abuts the outer circumference of the sealing bell (4), the outer circumference of said gasket flange being set against the inner circumference of a setting flange (15), which, presses the gasket flange (14) against the sealing surfaces of the sealing bell (4) by means of spring-loaded adjusting screws (22) (23) (24).

IPC 1-7
B01F 7/30

IPC 8 full level
B01F 7/30 (2006.01); **B01F 15/00** (2006.01); **B01F 7/00** (2006.01); **B01F 7/02** (2006.01)

CPC (source: EP)
B01F 27/953 (2022.01); **B01F 35/4121** (2022.01); **B01F 27/1143** (2022.01); **B01F 27/2324** (2022.01); **B01F 27/61** (2022.01); **B01F 2035/352** (2022.01)

Cited by
EP0197182A1; EP0392149A3; EP0192179A3; EP0222933A1; EP0403951A1; CN101902092A; US6451614B1; EP0192179A2

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