

Title (en)  
APPARATUS FOR MIXING AND DOSING SOLIDS

Publication  
**EP 0134945 A3 19850724 (DE)**

Application  
**EP 84107561 A 19840629**

Priority  
DE 3326247 A 19830721

Abstract (en)  
[origin: US4576483A] The centrally located outlet in the bottom portion of a silo for a flowable solid building material or fertilizer discharges directly into a first chamber of a mixing unit having a vertical shaft which is coaxial with the outlet and rotates one or more first tools in the first chamber to uniformly distribute the inflowing material and to reduce its tendency to become separated into two or more ingredients. The thus pretreated material descends into a second chamber and into the range of one or more rotating second tools which are driven by the shaft and intermix the material with one or more liquids before the finished product enters an evacuating pump which conveys it to one or more locations of use or to further processing units. The utilization of a vertical shaft and of parts which rotate about one or more vertical axes reduces the wear and prolongs the useful life of such moving parts. The housing of the mixing unit is attached directly to the silo and is pivotable to and from a position of register of its first chamber with the outlet.

IPC 1-7  
**B01F 15/02**; **B01F 5/26**; **B01F 3/12**; **B01F 3/18**; **B65D 88/68**; **B65G 65/48**; **B01F 7/16**

IPC 8 full level  
**B65D 88/68** (2006.01); **B65G 65/48** (2006.01)

CPC (source: EP KR US)  
**B01F 23/60** (2022.01 - KR); **B01F 27/074** (2022.01 - EP KR US); **B01F 33/82** (2022.01 - EP US); **B01F 35/71** (2022.01 - EP US); **B01F 35/712** (2022.01 - EP KR US); **B01F 35/71731** (2022.01 - EP KR US); **B01F 35/7547** (2022.01 - EP KR US)

Citation (search report)  
• [A] GB 1194373 A 19700610 - LEGRAIN MICHEL A J [FR]  
• [A] EP 0024719 A2 19810311 - WACHTER KG BAUSTOFFWERK [DE]  
• [A] DE 897836 C 19531123 - KARL KRANZ INH WILHELM HEIL &

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CN103418265A

Designated contracting state (EPC)  
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)  
**US 4576483 A 19860318**; AT E28583 T1 19870815; AU 3071884 A 19850124; AU 558783 B2 19870205; BR 8403643 A 19850702; CA 1235413 A 19880419; DE 3326247 A1 19850207; DE 3326247 C2 19850711; DE 3465026 D1 19870903; EP 0134945 A2 19850327; EP 0134945 A3 19850724; EP 0134945 B1 19870729; ES 534482 A0 19850801; ES 8506466 A1 19850801; FI 74651 B 19871130; FI 74651 C 19880310; FI 842867 A0 19840717; FI 842867 A 19850122; GR 82262 B 19841213; JP S6090031 A 19850521; KR 850001017 A 19850314; KR 870001560 B1 19870904; SU 1271364 A3 19861115; ZA 845501 B 19850327

DOCDB simple family (application)  
**US 63243184 A 19840719**; AT 84107561 T 19840629; AU 3071884 A 19840716; BR 8403643 A 19840720; CA 459421 A 19840720; DE 3326247 A 19830721; DE 3465026 T 19840629; EP 84107561 A 19840629; ES 534482 A 19840720; FI 842867 A 19840717; GR 840175250 A 19840710; JP 14975884 A 19840720; KR 840004304 A 19840720; SU 3773886 A 19840720; ZA 845501 A 19840717