

Title (en)

Dehydrating screw press with two or more helical elements with intermeshing profiles.

Title (de)

Entwässerungsschneckenpresse mit zwei oder mehr schraubenförmigen Elementen mit ineinandergreifenden Profilen.

Title (fr)

Presse de déshydratation à vis à deux ou plusieurs éléments hélicoïdaux à profils s'emboîtant.

Publication

EP 0358837 A1 19900321 (EN)

Application

EP 88830372 A 19880914

Priority

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Abstract (en)

A dehydrating screw press by which an advancing product to be deshydrated is pressed, by the rotating movement of one or more screw elements with a conical shaft (1) and a conical spiral (2) operating in a corresponding space up to the wall of a filtering cage (3). As the increasing diameter of the spiral (2) conforms to the like reduction of the shaft section (4), the use of the helical elements fitted side by side allows each spiral to operate with a profile extending up to the other helical element wall. Therefore, non-intermeshing zones are avoided during the dehydrating phase in the intermediate space. As the two pressing elements are rotated in opposite directions, rotation of the pressed material is avoided, thus advancing the product in an axial direction. The filtering cage used for a press with two helical elements shows a conformity with two components (5 and 6) interconnected on lines (7 and 8) at the intermeshing area of the two spirals.

IPC 1-7

B30B 9/16

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [X] GB 677794 A 19520820 - HANS ANDREAS HARTNER
- [X] US 2567219 A 19510911 - LESNIAK FRANK G
- [X] GB 1140237 A 19690115 - STORD BARTZ INDUSTRI AS
- [A] GB 904328 A 19620829 - STORD MARIN IND AS
- [A] DE 883338 C 19560308 - LAVORAZIONE MAT PLAST

Cited by

US10919249B2; US10596577B2; CN1064899C; CN106427021A; CN113181836A; DE19940742A1; EP3417223A4; EP0773100A1; US5743178A; FR2925533A1; US7267049B2; US9643110B2; US9352253B2; WO2005025846A1; WO2009095549A1; US8623175B2; US8940131B2; US10786763B2; WO2021136796A1; US10555547B2

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