

Title (en)

APPARATUS FOR BRIQUETTING PLANT MATERIAL, IN PARTICULAR STALKS AND THE LIKE

Publication

EP 0359285 A3 19901122 (DE)

Application

EP 89117142 A 19890915

Priority

DE 3831528 A 19880916

Abstract (en)

[origin: EP0359285A2] The apparatus for briquetting plant material, especially stalks, comprises a conical worm compactor (27) of which the worm (29) driveable in rotation possesses, at least at its end at the front in the conveying direction, a conically tapering outer contour defined by a plurality of turns of at least one worm helix (51) projecting from a conical worm core (49) and projects a cone-shaped compactor (33) of a worm housing (35). Ribs (53) project from the inner cone surface (55) of the conical space (33) towards the worm (29) and surround the worm (29) in the form of a conical helix with a turn direction opposite the turn direction of the worm (29). The rib (53) in the form of a conical helix appropriately extends as far as an outlet orifice (41) and screws the compacted stalks, co-rotating with the worm (29) at least to a limited extent, towards the outlet orifice (41). The apparatus possesses a press die (45), the outlet cross-section of which can be varied via a wedge mechanism (73, 79, 81). Inserted between the press die (45) and the conical worm compactor (27) is an annular part (43) which on its inner circumference (57) has a plurality of capillary degassing slots (63) open to the environment. <IMAGE>

IPC 1-7

B30B 11/24; B30B 11/00

IPC 8 full level

B30B 11/00 (2006.01); **B30B 11/22** (2006.01); **B30B 11/24** (2006.01); **B30B 15/00** (2006.01); **B30B 15/30** (2006.01)

CPC (source: EP)

B30B 11/00 (2013.01); **B30B 11/224** (2013.01); **B30B 11/225** (2013.01); **B30B 11/24** (2013.01); **B30B 15/0017** (2013.01); **B30B 15/308** (2013.01)

Citation (search report)

- US 1353917 A 19200928 - LAMBERT FRANK B
- US 3956981 A 19760518 - PITT NORMAN
- DE 80010 C
- DE 1517064 A1 19690904 - KELL DOT IND INC
- GB 1100236 A 19680124 - BRUCE WINSTON MCCOMB, et al
- GB 287019 A 19280315 - ALBERT WILLIAM SIZER
- GB 191226713 A 19140101 - SIZER ALBERT WILLIAM
- DE 1122462 B 19620125 - ADAMS CORP
- DE 3422658 A1 19851219 - HAIMER FRANZ GMBH [DE]
- [X] DE 2030784 A1 19711230
- [Y] FR 879670 A 19430302 - P DUCLOS ETS, et al
- [Y] DE 490892 C 19300203 - JAN GERHARDUS LODDER
- [Y] GB 505231 A 19390508 - GEORGE PORTEUS
- [Y] DE 1180188 B 19641022 - DEERE & CO
- [A] DE 42963 C
- [A] DE 3220916 A1 19831208 - ALEXANDERWERK AG [DE]
- [A] CA 910712 A 19720926 - BRITISH COLUMBIA RES COUNCIL
- [A] GB 1081614 A 19670831 - COAL INDUSTRY PATENTS LTD
- [A] US 2984173 A 19610516 - ROCHE JAMES B, et al
- [A] WO 8401125 A1 19840329 - PFEIFER OSKAR [AT], et al
- [A] WO 8403661 A1 19840927 - PFEIFER OSKAR [AT], et al
- [A] WO 8403252 A1 19840830 - SPAENEX SANDER GMBH & CO KG [DE]
- [X] EP 0129856 A2 19850102 - RIES WALTER
- [X] DE 627048 C 19360307 - WOOD BRIQUETTES INC
- [X] US 3323444 A 19670606 - MARK ALEXANDER H, et al
- [X] US 2026439 A 19351231 - EUGENE SANIAL
- [X] GB 191117789 A 19111102 - PENKALA LADISLAS [FR]
- PATENT ABSTRACTS OF JAPAN, Band 6, Nr. 210 (M-166)[1088], 22. Oktober 1982; & JP-A-57 116 000 (ORION KOORU K.K.) 19-07-1982.

Cited by

CN112903523A; US5716440A; EP0846553A3; CN107471714A; EP1385694A4; GB2331725A; RU185861U1; RU178075U1; US5302102A; RU178074U1; RU2504473C2; RU187933U1; CN111616320A; US6247662B1; WO9809801A3; WO0018572A1; WO9104150A1

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI NL SE

DOCDB simple family (publication)

EP 0359285 A2 19900321; EP 0359285 A3 19901122; EP 0359285 B1 19940622; AT E107576 T1 19940715; DE 3831528 A1 19900329; DE 58907939 D1 19940728

DOCDB simple family (application)

EP 89117142 A 19890915; AT 89117142 T 19890915; DE 3831528 A 19880916; DE 58907939 T 19890915