

Title (en)
Device for defibring stalk, stem and/or leaf type renewable raw materials

Title (de)
Vorrichtung zur Zerkaserung von stengel-, helm- und/oder blattartigen, nachwachsenden Rohstoffen

Title (fr)
Dispositif de défibrage de matières premières renouvelables du type tige et/ou feuille

Publication
EP 1184490 B1 20051102 (DE)

Application
EP 01120047 A 20010821

Priority
DE 10042195 A 20000828

Abstract (en)
[origin: EP1184490A1] The assembly to break down vegetable matter into fibers, from stems or grass blades and straw or leaves, has a stator (2) and a rotor (3) fitted with grinders. The stator is a sieve drum (2.2), with grinders as teeth (8) projecting radially inwards from its inner wall. Arms (5.1) are fitted to the rotor hub (5a), extending radially outwards, with axial carrier bars (5.2) at their ends fitted with grinders (10) aligned outwards. The assembly to break vegetable matter down into fibers has radially inward arms (2.3) at the free edge of the sieve drum, with a length which is less than half the drum radius. They have axial carrier bars (2.4) in the sieve drum. The rotor carrier bars have inwards grinders (11). The grinders have a sawblade structure. The grinders at the carrier bars have a radial adjustment. The grinders at the inner wall of the sieve drum have a scraping action, as a kitchen scraper with pointed and/or sharp projections or teeth, or they can be replaceable scraper bars. The grinders at the inner wall of the sieve drum can act as stopper bars. The sieve drum is a cylinder or cone drum, with the bars pitched to match the cone angle. The drum axis can be pitched against the vertical by 0-90 degrees . The sieve drum is within a housing, with an outlet for removal of the fibers from grinding, together with a dust extractor preferably as a centrifugal separator.

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D01B 1/24

IPC 8 full level
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CPC (source: EP US)
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