

Title (en)
COMPRESSED FUEL COMPOSED OF RENEWABLE ORGANIC RESIDUES AND/OR RAW MATERIALS AND PRODUCTION THEREOF

Title (de)
VERPRESSTER BRENNSTOFF AUS NACHWACHSENDEN ORGANISCHEN REST- UND/ODER ROHSTOFFEN UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)
COMBUSTIBLE PRESSÉ À BASE DE RÉSIDUS ORGANIQUES RÉGÉNÉRÉS ET/OU MATÉRIAUX BRUTS ET SON PROCÉDÉ DE FABRICATION

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Application
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Abstract (en)
[origin: WO2008034437A1] The invention relates to a compressed fuel composed of organic residues and/or raw materials having at least one additive for increasing the calorific value and for decreasing slag formation, which fuel consists of a fuel mixture which contains a) 72 to 83% by weight combustible organic residues and/or raw materials having a moisture of 8 to 20%, b) 15 to 25% by weight natural organic oils and/or fats for increasing the calorific value and c) 2 to 3% by weight sodium perborate for increasing the ash melting point and as oxygen supplier. As organic residues and/or raw materials, use is made of comminuted and naturally aged or artificially aged (by UV irradiation or by the addition of 0.1-0.3% by weight of age-promoting UV additives or UV absorbers) cereal straw of all types, sugar cane, bamboo, cotton plants, jute, sisal, hemp, ramie, rice straw, rice husks, Chinese silver grass, elephant grass, flax, coconut, kenaf, or esparto grass, into which, for improving penetrability, the oil and/or fat fraction with admixed surfactant fraction of 1-5% by weight based on the oil/fat fraction is added. In addition, the fuel mixture can contain 0.4-0.6% by weight of hexamethylenetetramine for supporting ignition and burning acceleration and soot reduction, and also 1.0-1.5 lignin for solidification. This fuel has scarcely any tendency to slag formation, has good burn-up behaviour and a calorific value of 6.8 kWh/kg, wherein the exhaust gas is free of fine dust and contains scarcely any measurable pollutants.

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