

Title (en)
CONVERSION OF BIOMASS INTO COMBUSTIBLE GAS

Publication
EP 0101143 A3 19841227 (EN)

Application
EP 83300733 A 19830215

Priority
US 40909982 A 19820818

Abstract (en)
[origin: EP0101143A2] A movable grate (50) is mounted on an upright pipe (36) disposed within and spaced above the bottom of an upright vessel (12, 14) of a gasifier. A layer (54) of loose, high heat resistant, ball-like elements is established on the grate (50). Biomass is continuously charged into the vessel (12, 14) above the grate (50) and combusted so as to form a char-bed of biomass immediately above the layer (54). Combustion-supporting gas is introduced into the char-bed and drawn downwardly through the char-bed, the layer (54) and the grate (50). The gas generated thereby is withdrawn from the vessel (12, 14) below the grate (50) by means of a fan (72). The grate (50) is moved so as to move the individual elements of the layer (54) and effect gravitational filtering of char-coal particles from the char-bed. The char-bed is agitated and combustion-supporting gas is introduced into the char-bed by the pipe (36) and the tubular branches (62, 64, 66).

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C10J 2300/0956 (2013.01)

Citation (search report)
• [Y] US 3746521 A 19730717 - GIDDINGS E
• [Y] FR 702664 A 19310414
• [A] DE 592608 C 19340210 - HUMBOLDT DEUTZMOTOREN AG
• [A] FR 664136 A 19290829

Cited by
EP2038075A4; EP2636721A1; EP3399007A4; EP2752478A1; CN106967460A; US9096807B2; US11034899B2; WO2012175657A1;
WO2004039924A1; WO2017077245A1; WO2008119859A1; US9228143B2; US9926500B2

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