

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) is 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 The gas generated thereby is withdrawn from the vessel (12, 14) below the grate (50) by means of a fan (72).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).

IPC 1-7
C10J 3/26; **C10J 3/32**

IPC 8 full level
C10J 3/00 (2006.01); **C10J 3/26** (2006.01); **C10J 3/32** (2006.01)

CPC (source: EP)
C10J 3/26 (2013.01); **C10J 3/32** (2013.01); **C10J 3/40** (2013.01); **C10J 2300/0916** (2013.01); **C10J 2300/092** (2013.01); **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

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)
EP 0101143 A2 19840222; **EP 0101143 A3 19841227**; AU 8961682 A 19840223; CA 1193437 A 19850917; JP S5938284 A 19840302; ZA 827785 B 19830928

DOCDB simple family (application)
EP 83300733 A 19830215; AU 8961682 A 19821020; CA 417422 A 19821210; JP 20593582 A 19821124; ZA 827785 A 19821025