

Title (en)

Gasification reactor for combustible solids.

Title (de)

Vergasungsreaktor für brennbare Feststoffe.

Title (fr)

Réacteur de gazéification pour des combustibles solides.

Publication

EP 0410363 B1 19931215 (DE)

Application

EP 90114120 A 19900724

Priority

DE 3924626 A 19890726

Abstract (en)

[origin: US5010828A] A gasification shaft in the reactor collects a loose heap of solid waste matter on a support at the bottom of the shaft in the form of a triangular hollow prism having longitudinal edges leaving gaps between it and the walls of the shaft. The support can be swung about its axis to open the gaps wider and shake the solid material. Oxygen containing gas is supplied at the top of the shaft and supports partial combustion of the solid material. Gas and partly burned solid material pass down through the variable gaps into a combination chamber below the shaft into which more oxygen containing gas is fed both from above through the prismatic support and from below through an ash chamber at the bottom of the combustion chamber after passing through lower gaps between an emptying device of triangular prism shape, below which is an ash removal chamber. The additional oxygen supplied from below into the combustion chamber assures the complete combustion of the solid material so that treatment of the ash outside of the reactor becomes unnecessary.

IPC 1-7

F23G 5/027; F23J 1/00; F23L 1/00; F23L 9/00; F23B 1/14

IPC 8 full level

C10J 3/02 (2006.01); **C10J 3/20** (2006.01); **C10J 3/22** (2006.01); **C10J 3/26** (2006.01); **F23G 5/027** (2006.01); **F23J 1/00** (2006.01); **F23L 1/00** (2006.01); **F23L 9/00** (2006.01)

CPC (source: EP US)

C10J 3/22 (2013.01 - EP US); **C10J 3/26** (2013.01 - EP US); **C10J 3/40** (2013.01 - EP US); **C10J 3/721** (2013.01 - EP US); **F23B 90/06** (2013.01 - EP US); **F23G 5/027** (2013.01 - EP US); **F23J 1/00** (2013.01 - EP US); **F23L 1/00** (2013.01 - EP US); **F23L 9/06** (2013.01 - EP US); **C10J 2300/0959** (2013.01 - EP US); **F23G 2201/40** (2013.01 - EP US)

Cited by

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Designated contracting state (EPC)

AT BE CH DE DK FR GB IT LI LU NL

DOCDB simple family (publication)

EP 0410363 A2 19910130; **EP 0410363 A3 19910731**; **EP 0410363 B1 19931215**; AT E98764 T1 19940115; BR 9003165 A 19910827; DE 3924626 A1 19910131; DE 3924626 C2 19910711; DE 59003856 D1 19940127; DK 0410363 T3 19940411; JP H0359092 A 19910314; US 5010828 A 19910430

DOCDB simple family (application)

EP 90114120 A 19900724; AT 90114120 T 19900724; BR 9003165 A 19900704; DE 3924626 A 19890726; DE 59003856 T 19900724; DK 90114120 T 19900724; JP 19508390 A 19900725; US 55682490 A 19900723