

Title (en)

Oxygen lance for the high-temperature gasification of waste and method of operation

Title (de)

Sauerstofflanze zur Hochtemperaturvergasung von Abfällen, sowie Verfahren zum Betreiben derselben

Title (fr)

Lance à oxygène pour la gazéification à haute température de déchets et procédé de fonctionnement

Publication

EP 1411296 A3 20060802 (DE)

Application

EP 03090302 A 20030918

Priority

DE 10248530 A 20021014

Abstract (en)

[origin: EP1411296A2] An oxygen lance for high temperature gasification of optionally thermally-pretreated waste has channels (I, II and III) for transport of reaction oxygen, introduction of fuel and introduction of oxygen fuel, channel (I) being identical to channel (II) and containing a device which controls the introduced oxygen in at least two flow-through conditions. An Independent claim is also included for operating the lance in a high temperature reactor by operating with a permanent flame and operating firstly with the fuel and oxygen for the flame in approximately stoichiometric ratio and secondly with the oxygen in a super-stoichiometric ratio to the fuel such that a fraction of the oxygen acts as reaction partner in the high temperature reactor, the oxygen pressure always being chosen such that it is higher than the partial pressure in the high temperature reactor.

IPC 8 full level

F23D 14/32 (2006.01); **F23N 3/06** (2006.01); **C10J 3/00** (2006.01); **C10J 3/20** (2006.01); **F23D 14/52** (2006.01); **F23G 5/027** (2006.01); **F23G 5/12** (2006.01); **F23L 7/00** (2006.01)

CPC (source: EP KR)

C10J 3/20 (2013.01 - EP); **F23D 14/32** (2013.01 - EP); **F23G 5/027** (2013.01 - KR); **C10J 2200/152** (2013.01 - EP); **C10J 2300/0959** (2013.01 - EP); **F23G 2201/40** (2013.01 - EP); **F23K 2900/05003** (2013.01 - EP)

Citation (search report)

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- [Y] US 6005149 A 19991221 - BISHOP NORMAN G [US]
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WO2006113229A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1411296 A2 20040421; **EP 1411296 A3 20060802**; **EP 1411296 B1 20110525**; AT E511063 T1 20110615; DE 10248530 A1 20040422; DE 10248530 B4 20040812; DK 1411296 T3 20110829; ES 2372001 T3 20120112; JP 2004132693 A 20040430; JP 4276041 B2 20090610; KR 101096316 B1 20111220; KR 20040034444 A 20040428; PT 1411296 E 20110811; SI 1411296 T1 20110930

DOCDB simple family (application)

EP 03090302 A 20030918; AT 03090302 T 20030918; DE 10248530 A 20021014; DK 03090302 T 20030918; ES 03090302 T 20030918; JP 2003347773 A 20031007; KR 20030071355 A 20031014; PT 03090302 T 20030918; SI 200332034 T 20030918