

Title (en)

Process for operating a high-temperature reactor for the treatment of waste products

Title (de)

Verfahren zum Betreiben eines Hochtemperaturreaktors zur Behandlung von Entsorgungsgütern

Title (fr)

Procédé de fonctionnement d'un réacteur à haute température pour le traitement de déchets

Publication

EP 0790291 A3 19971105 (DE)

Application

EP 97101505 A 19970131

Priority

- DE 19605810 A 19960216
- DE 19637195 A 19960912

Abstract (en)

[origin: EP0790291A2] Process for operating a high temp. reactor for treating disposable material, e.g. industrial and household waste, comprises thermally treating the material, and passing via a charging point into the reactor. A loose gasifying bed is formed, in which the inorganic and organic components are melted and gasified and then homogenised. Above the charging site, the gaseous products are then subjected to high temp. treatment with addition of oxygen to form and stabilise the synthesis gas. The novelty is that water-cooled oxygen lances are used in the high temp. treatment, in which at least two lances are arranged below the charging sites so that they promote the flow direction of the material to be charged. At least two water-cooled lances are arranged above the charging site so that the flow of the increasing gaseous products is limited.

IPC 1-7

C10J 3/08; C10J 3/57

IPC 8 full level

F23L 7/00 (2006.01); **B09B 3/00** (2006.01); **C10J 3/08** (2006.01); **C10J 3/57** (2006.01); **F23G 5/14** (2006.01)

CPC (source: EP)

C10J 3/08 (2013.01); **C10J 3/57** (2013.01); **C10K 3/001** (2013.01); **C10J 2200/152** (2013.01); **C10J 2300/0946** (2013.01); **C10J 2300/0959** (2013.01); **C10J 2300/1223** (2013.01); **C10J 2300/1606** (2013.01)

Citation (search report)

- [DA] DE 19512249 A1 19951214 - THERMOSELECT AG [LI]
- [A] WO 9528371 A1 19951026 - PLASMA ENERGY APPLIED TECHNOLO [US]
- [A] EP 0210613 A2 19870204 - SUMITOMO METAL IND [JP], et al
- [A] GB 2082624 A 19820310 - KLOECKNER WERKE AG
- [A] DE 1287724 B 19690123 - RUMMEL ROMAN

Cited by

EP1365003A1; IT201600100814A1; DE102006040770A1; US8198339B2; WO2018066013A1; WO0127222A1; WO200912225A2; US8445548B2; EP2620426A1

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0790291 A2 19970820; EP 0790291 A3 19971105; EP 0790291 B1 20010718; AT E203267 T1 20010815; BR 9700982 A 19980811; CA 2196649 A1 19970817; CA 2196649 C 20070529; CN 1143982 C 20040331; CN 1161424 A 19971008; JP 3121555 B2 20010109; JP H09314100 A 19971209

DOCDB simple family (application)

EP 97101505 A 19970131; AT 97101505 T 19970131; BR 9700982 A 19970214; CA 2196649 A 19970203; CN 97100722 A 19970214; JP 3173697 A 19970217