

Title (en)
Co-current shaft reactor

Title (de)
Gleichstrom-Schacht-Reaktor

Title (fr)
Réacteur en lit descendant à co-courant

Publication
EP 1325950 A3 20040102 (DE)

Application
EP 02028816 A 20021221

Priority
DE 20200095 U 20020104

Abstract (en)
[origin: EP1325950A2] Co-current flow shaft reactor comprises: a vertical shaft body (10) for drying, heating and gasifying feed material; a receiving body (20) connected to the shaft body for receiving molten feed material; and a gas removal unit (26) having removal lines (56) connected to the shaft body and/or the receiving body for removing gases produced. Preferred Features: The shaft body and/or the receiving body has an annular gas collection chamber (24) connected to the gas removal lines and partially surrounds the shaft body in the region of the gasification zone (18). A cooling device (62) is provided in the gasifying zone for cooling feed material and gas accumulating in the gas collecting chamber.

IPC 1-7
C10J 3/26; C10J 3/22; F23G 5/24

IPC 8 full level
C10J 3/08 (2006.01); C10J 3/26 (2006.01); C10J 3/82 (2006.01); C21B 11/02 (2006.01); C21B 13/02 (2006.01); F23G 5/027 (2006.01); F23G 5/04 (2006.01); F23G 5/24 (2006.01); F23G 5/46 (2006.01); F27B 1/02 (2006.01); F27B 1/16 (2006.01); F27B 3/20 (2006.01); F27B 3/22 (2006.01); F27D 1/00 (2006.01); F27D 3/00 (2006.01); F27D 17/00 (2006.01); F27B 1/20 (2006.01); F27B 1/21 (2006.01); F27D 3/15 (2006.01); F27D 3/16 (2006.01); F27D 99/00 (2010.01)

CPC (source: EP)
C10J 3/08 (2013.01); C10J 3/26 (2013.01); C10J 3/82 (2013.01); C21B 11/02 (2013.01); C21B 13/023 (2013.01); F23G 5/0276 (2013.01); F23G 5/04 (2013.01); F23G 5/24 (2013.01); F23G 5/46 (2013.01); F27B 1/025 (2013.01); F27B 1/16 (2013.01); F27B 3/205 (2013.01); F27B 3/225 (2013.01); F27D 1/0043 (2013.01); F27D 3/0032 (2013.01); F27D 17/001 (2013.01); C10J 2200/156 (2013.01); C10J 2300/0956 (2013.01); C10J 2300/0959 (2013.01); C10J 2300/0989 (2013.01); C10J 2300/1223 (2013.01); C10J 2300/1861 (2013.01); C10J 2300/1884 (2013.01); F23G 2202/20 (2013.01); F23G 2205/18 (2013.01); F23G 2900/7004 (2013.01); F27B 1/20 (2013.01); F27B 1/21 (2013.01); F27D 3/1509 (2013.01); F27D 2003/162 (2013.01); F27D 2099/0051 (2013.01)

Citation (search report)
• [X] DE 2747571 A1 19780427 - UNION STEEL SOUTH AFRICA
• [X] US 4813179 A 19890321 - RIBESSE JACQUES [BE]
• [A] DE 19816864 A1 19991007 - FEUSTEL HANS ULRICH [DE], et al
• [A] DE 261048 C

Cited by
EP2213971A1; US8071013B2

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