

Title (en)
CIRCUMFERENTIAL INJECTION BURNER

Title (de)
BRENNER MIT UMLAUFENDER EINSPRITZUNG

Title (fr)
BRÛLEUR À INJECTION CIRCONFÉRENTIEL

Publication
EP 3055614 A4 20170607 (EN)

Application
EP 14865805 A 20141118

Priority
• US 201361910214 P 20131129
• CA 2014051102 W 20141118

Abstract (en)
[origin: WO2015077875A1] A burner for delivering pulverous feed material and reaction gas to a reaction vessel comprises an outer, elongate tubular member having a peripheral wall. An upper end of the outer tubular member defines a gas supply channel for receiving the reaction gas; a lower end defines a mixing chamber for the reaction gas and the feed material; and an intermediate portion located between the upper and lower ends may have at least one aperture through its outer peripheral wall for receiving the feed material. The burner may comprise an adjustable disperser located inside the outer tubular member and extending from the upper end to the lower end of the outer tubular member. An inner tubular member may be located inside the outer tubular member to define an outer annular passageway, and a valve may be provided for controlling an area of an annular opening of the outer passageway.

IPC 8 full level
F23D 1/04 (2006.01); **B01J 6/00** (2006.01); **B01J 8/00** (2006.01); **C22B 9/05** (2006.01); **F23D 1/00** (2006.01); **F23D 99/00** (2010.01); **F27D 3/18** (2006.01)

CPC (source: EP)
F23D 1/00 (2013.01); **F23D 91/02** (2015.07); **F27D 99/0033** (2013.01); **F27D 2003/185** (2013.01)

Citation (search report)
• [XA] US 4373994 A 19830215 - LEE CHANG-KUEI
• [E] EP 3011244 A1 20160427 - HATCH LTD [CA] & WO 2014201556 A1 20141224 - HATCH LTD [CA]
• [A] US 4163693 A 19790807 - GREEN NORMAN W [US]
• See references of WO 2015077875A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2015077875 A1 20150604; CN 105793648 A 20160720; CN 105793648 B 20180105; EP 3055614 A1 20160817; EP 3055614 A4 20170607

DOCDB simple family (application)
CA 2014051102 W 20141118; CN 201480064930 A 20141118; EP 14865805 A 20141118