

Title (en)
FEED NOZZLE ASSEMBLY AND BURNER APPARATUS FOR GAS/LIQUID REACTIONS

Title (de)
ZUFÜHRDÜSENANORDNUNG UND BRENNERVORRICHTUNG FÜR GAS-FLÜSSIGKEITS-REAKTIONEN

Title (fr)
ENSEMBLE DE BUSE D'ALIMENTATION ET APPAREIL BRULEUR POUR REACTION GAZ-LIQUIDE

Publication
EP 1835992 A1 20070926 (EN)

Application
EP 05854080 A 20051214

Priority
• US 2005045293 W 20051214
• US 3092505 A 20050106

Abstract (en)
[origin: US2006147853A1] A feed nozzle assembly suitable for use in synthesis and combustion reactions involving gas/liquid reaction systems comprises a plurality of nozzles positioned such that their sprays impinge upon one another to obtain improved, or maintain acceptable, drop size, measured as Sauter mean diameter, by suitably balancing impact destruction and coalescence of drops. This feed nozzle assembly can be incorporated into a burner apparatus combining annular areas with stepped extended barriers for feeding oxygen and moderator gas, e.g., steam, all preferably within an exterior annular cooling means such as a water jacket.

IPC 8 full level
B01J 19/26 (2006.01); **F23D 14/22** (2006.01); **F23D 14/32** (2006.01)

CPC (source: EP US)
B01J 4/002 (2013.01 - EP US); **B01J 19/26** (2013.01 - EP US); **F23G 7/008** (2013.01 - EP US); **B01J 2219/00119** (2013.01 - EP US); **F23D 2900/11001** (2013.01 - EP US)

Citation (search report)
See references of WO 2006073713A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
US 2006147853 A1 20060706; AU 2005323240 A1 20060713; AU 2005323240 B2 20100527; BR PI0518090 A 20081028; CA 2592775 A1 20060713; CN 101098750 A 20080102; CN 101098750 B 20110615; EP 1835992 A1 20070926; JP 2008526490 A 20080724; MX 2007008241 A 20070817; WO 2006073713 A1 20060713

DOCDB simple family (application)
US 3092505 A 20050106; AU 2005323240 A 20051214; BR PI0518090 A 20051214; CA 2592775 A 20051214; CN 200580045972 A 20051214; EP 05854080 A 20051214; JP 2007550377 A 20051214; MX 2007008241 A 20051214; US 2005045293 W 20051214