

Title (en)
Combustion equipment and combustion method

Title (de)
Brenngerät und Brennverfahren

Title (fr)
Équipement de combustion et procédé de combustion

Publication
EP 1985926 A3 20160413 (EN)

Application
EP 08007934 A 20080424

Priority
• JP 2007116304 A 20070426
• JP 2008089152 A 20080331

Abstract (en)
[origin: EP1985926A2] Combustion equipment of a coaxial jet combustion scheme is provided that includes: a burner plate (11) in which fuel and air are mixed with each other while the fuel and air pass through an air hole (12); a burner plate extension which is a portion of the burner plate (11) and extends toward a combustion chamber side spaced apart from the air hole (12); and a protrusion (1) disposed on the combustion chamber side of the burner plate extension so as to protrude in a direction where flow of the fuel moves. In the combustion equipment, a gap between opposite portions of the protrusion (1) is greater than a diameter of the air hole (12) and a flame source forming area is defined between the burner plate (11), the burner plate extension and the protrusion (1). The combustion equipment of a coaxial jet combustion scheme can achieve a further reduction in NOx emissions.

IPC 8 full level
F23R 3/28 (2006.01)

CPC (source: EP US)
F23R 3/286 (2013.01 - EP US); **F23R 2900/00015** (2013.01 - EP US); **F23R 2900/03343** (2013.01 - EP US)

Citation (search report)
• [Y] JP 2005106305 A 20050421 - HITACHI LTD
• [Y] JP H0828871 A 19960202 - HITACHI LTD
• [Y] US 2006000218 A1 20060105 - DINU CONSTANTIN A [US], et al
• [Y] JP 2006105534 A 20060420 - NIIGATA POWER SYSTEMS CO LTD
• [Y] JP H0828872 A 19960202 - HITACHI LTD
• [YA] EP 1288575 A2 20030305 - HITACHI LTD [JP]
• [A] US 5836164 A 19981117 - TSUKAHARA SATOSHI [JP], et al
• [A] US 5343693 A 19940906 - KOMATSU YASUTAKA [JP], et al
• [A] JP S59129330 A 19840725 - HITACHI LTD

Cited by
CN101832558A; EP2711628A1; EP2484975A3; EP2587157A3; EP2345847A3; CN103225822A; DE102012216080A1; EP2620708A3; US9982891B2; US10041678B2; EP2885582B1

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

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
EP 1985926 A2 20081029; EP 1985926 A3 20160413; EP 1985926 B1 20180905; US 2008268387 A1 20081030

DOCDB simple family (application)
EP 08007934 A 20080424; US 10859508 A 20080424