

Title (en)

Premixed secondary fuel nozzle with integral swirler

Title (de)

Sekundäre Vormischbrennstoffdüse mit integrierter Verwirbelungsvorrichtung

Title (fr)

Injecteur secondaire de carburant à prémélange avec dispositif de tourbillonnement incorporé

Publication

**EP 0488556 B1 19970716 (EN)**

Application

**EP 91310554 A 19911115**

Priority

US 61824690 A 19901127

Abstract (en)

[origin: EP0488556A1] A dual mode, dual stage low NO<sub>x</sub> combustor (16), includes a primary combustion chamber (24) and a secondary combustion chamber (26) separated by a throat region (28) of reduced diameter. Fuel is input into the primary combustors by an annular array of diffusion type nozzles (36) whereas in accordance with the invention, fuel is input into the secondary combustor by a central combination premix and diffusion nozzle (102). A premix swirler annulus (116) is located upstream of a plurality of fuel distribution tubes (110) of the combined premix and diffusion nozzle (102). <IMAGE>

IPC 1-7

**F23R 3/34**

IPC 8 full level

**F23D 14/02** (2006.01); **F23R 3/28** (2006.01); **F23R 3/32** (2006.01); **F23R 3/34** (2006.01)

CPC (source: EP)

**F23R 3/346** (2013.01); **F23D 2900/00008** (2013.01)

Cited by

DE102008026459A1; EP1239219A4; EP0800041A3; EP1400754A1; EP1193448A3; EP0564184A1; CN102052682A; FR2706588A1; US5437159A; US6848260B2; US7284378B2; WO9400718A1; WO9825084A1; US6684641B2; US6829897B2; US6832483B2; US6854258B2; US6951097B2

Designated contracting state (EPC)

CH DE FR GB IT LI NL

DOCDB simple family (publication)

**EP 0488556 A1 19920603; EP 0488556 B1 19970716**; DE 69126846 D1 19970821; DE 69126846 T2 19980212; JP 2651304 B2 19970910; JP H04283316 A 19921008; NO 300240 B1 19970428; NO 914632 D0 19911126; NO 914632 L 19920529; RU 2076276 C1 19970327

DOCDB simple family (application)

**EP 91310554 A 19911115**; DE 69126846 T 19911115; JP 33450191 A 19911125; NO 914632 A 19911126; SU 5010115 A 19911126