

Title (en)

AIR INTAKE RING FOR TURBO MACHINE COMBUSTION CHAMBER INJECTION SYSTEM AND METHOD OF ATOMIZING FUEL IN AN INJECTION SYSTEM COMPRISING SAID AIR INTAKE RING

Title (de)

LUFTEINLASSRING FÜR TURBOMASCHINENBRENNKAMMERKRAFTSTOFFEINSPIRITSYSTEM UND VERFAHREN ZUR VERNEBELUNG VON KRAFTSTOFF IN EINEM EINSPIRITSYSTEM MIT SOLCH EINEM LUFTEINLASSRING

Title (fr)

COURONNE D'ADMISSION D'AIR POUR SYSTÈME D'INJECTION DE CHAMBRE DE COMBUSTION DE TURBOMACHINE ET PROCÉDÉ D'ATOMISATION DE CARBURANT DANS UN SYSTÈME D'INJECTION COMPRENANT LADITE COURONNE D'ADMISSION D'AIR

Publication

EP 3227612 A1 20171011 (FR)

Application

EP 15817462 A 20151202

Priority

- FR 1461862 A 20141203
- FR 2015053296 W 20151202

Abstract (en)

[origin: WO2016087780A1] In order to improve the mixing of oxidizing air within an injection system (42) with which a turbo machine combustion chamber (18) is equipped, there is proposed an air intake ring (56) the annular deflection wall (66) or venturi of which has an internal profile (68) provided with a discontinuity (90) that induces an increase in the radius (φ) of the internal profile downstream of the discontinuity. There is also proposed a method of atomizing fuel, in which fuel (82) trickling over the internal profile (68) of the annular deflection wall (66) separates from this internal profile at the discontinuity (90) so as to form droplets within a flow (76) of air, coming from an air circulation space (62) upstream of the air intake ring (56).

IPC 8 full level

F23R 3/10 (2006.01); **F23R 3/14** (2006.01); **F23R 3/28** (2006.01)

CPC (source: CN EP US)

F23R 3/10 (2013.01 - CN EP US); **F23R 3/14** (2013.01 - CN EP US); **F23R 3/28** (2013.01 - US); **F23R 3/286** (2013.01 - CN EP US);
F23R 3/42 (2013.01 - US)

Citation (search report)

See references of WO 2016087780A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2016087780 A1 20160609; CN 107003003 A 20170801; CN 107003003 B 20190712; EP 3227612 A1 20171011; EP 3227612 B1 20180905;
FR 3029608 A1 20160610; FR 3029608 B1 20170113; US 10677463 B2 20200609; US 2017363290 A1 20171221

DOCDB simple family (application)

FR 2015053296 W 20151202; CN 201580065955 A 20151202; EP 15817462 A 20151202; FR 1461862 A 20141203;
US 201515529570 A 20151202