

Title (en)

Method and device for affecting thermoacoustic oscillations in combustion systems

Title (de)

Verfahren und Vorrichtung zur Beeinflussung thermoakustischer Schwingungen in Verbrennungssystemen

Title (fr)

Méthode et dispositif influençant les oscillations thermoacoustiques dans les systèmes de combustion

Publication

EP 1429002 A3 20050525 (DE)

Application

EP 03104404 A 20031127

Priority

DE 10257245 A 20021207

Abstract (en)

[origin: EP1429002A2] A flow of gas (FOG) near a burner (6) is subjected to acoustic stimulation. This modulates the injection of fuel. The acoustic stimulation of the FOG and the modulated fuel injection are tuned to the affects from the same interference frequency. A measured signal is subjected to a first phase shift to generate a first driver signal that triggers an acoustic source (3) to stimulate the FOG. An Independent claim is also included for a device for affecting thermoacoustic vibrations in a combustion system.

IPC 1-7

F02C 7/22; F02C 3/14; F23R 3/00

IPC 8 full level

F23R 3/28 (2006.01)

CPC (source: EP US)

F23N 5/082 (2013.01 - EP US); **F23R 3/28** (2013.01 - EP US); **F05B 2260/96** (2013.01 - EP US); **F23C 2205/10** (2013.01 - EP US);
F23R 2900/00014 (2013.01 - EP US)

Citation (search report)

- [XY] US 2002121080 A1 20020905 - JONES ALAN R [GB]
- [Y] WO 0005489 A1 20000203 - NAGEL FRIEDMUND [DE]
- [X] US 2002162334 A1 20021107 - WILSON KENNETH J [US], et al
- [X] WO 9310401 A1 19930527 - SIEMENS AG [DE]
- [A] US 6343927 B1 20020205 - EROGLU ADNAN [CH], et al
- [A] EP 0602942 A1 19940622 - AVCO CORP [US]
- [DA] EP 0985810 A1 20000315 - ABB RESEARCH LTD [CH]

Cited by

CN105840443A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1429002 A2 20040616; EP 1429002 A3 20050525; DE 10257245 A1 20040715; US 2005016181 A1 20050127

DOCDB simple family (application)

EP 03104404 A 20031127; DE 10257245 A 20021207; US 72556403 A 20031203