

Title (en)
Exhaust system of an internal combustion engine

Title (de)
Abgassystem eines Verbrennungsmotors

Title (fr)
Système d'échappement d'un moteur à combustion interne

Publication
EP 2098697 B1 20100901 (EN)

Application
EP 08425083 A 20080212

Priority
EP 08425083 A 20080212

Abstract (en)
[origin: EP2098697A1] Exhaust system (1) of an internal combustion engine (2); the exhaust system (1) is provided with: an exhaust duct (3) which originates from an exhaust manifold (4) of the internal combustion engine (2); at least one catalytic system (7; 5) arranged on the exhaust duct (3); a feeder device (8) which is connected to the exhaust duct (3) immediately upstream of the catalytic system (7; 5) to feed an additive into said exhaust duct (3); and at least one static mixer (9), which is arranged on the exhaust duct (3) in correspondence with the feeder device (8) and comprises a tubular body (10) which has a central axis of symmetry (11) and has two opposing annular edges (12); the static mixer (9) has at least one group (13) of tabs (14), which extend towards the outside of the tubular body (10) starting from a respective annular edge (12) of said tubular body (10), are arranged at a distance from one another so as to leave an empty space (15) between two successive tabs (14), and slope towards the central axis of symmetry (11) so as to converge towards said central axis of symmetry (11).

IPC 8 full level
F01N 3/20 (2006.01); **B01F 3/04** (2006.01); **B01F 5/04** (2006.01); **B01F 5/06** (2006.01); **F01N 3/28** (2006.01)

CPC (source: EP US)
B01F 23/2132 (2022.01 - EP); **B01F 25/3141** (2022.01 - EP); **B01F 25/4315** (2022.01 - EP US); **B01F 25/431974** (2022.01 - EP);
F01N 3/206 (2013.01 - EP); **F01N 3/2892** (2013.01 - EP); **F01N 2240/20** (2013.01 - EP); **F01N 2570/14** (2013.01 - EP);
F01N 2610/02 (2013.01 - EP)

Cited by
EP2910301A1; JP2014163232A; JP2013511653A; GB2491777A; FR2956155A1; EP3015672A1; ITBO20110533A1; EP2921220A1;
JP2021071054A; US9403133B2; US8359832B2; US9765679B2; WO2014099567A1; WO2011126930A3; WO2011095734A1; WO2012095623A1;
US9464552B2; JP2015178831A

Designated contracting state (EPC)
DE ES FR GB IT

DOCDB simple family (publication)
EP 2098697 A1 20090909; **EP 2098697 B1 20100901**; **EP 2098697 B2 20150520**; DE 602008002403 D1 20101014

DOCDB simple family (application)
EP 08425083 A 20080212; DE 602008002403 T 20080212