

Title (en)
EXHAUST PIPE, INTERNAL COMBUSTION ENGINE, AND MOTOR VEHICLE

Title (de)
ABGASROHR, BRENNKRAFTMASCHINE UND KRAFTFAHRZEUG

Title (fr)
TUYAU D'ÉCHAPPEMENT, MOTEUR À COMBUSTION INTERNE ET VÉHICULE AUTOMOBILE

Publication
EP 3642462 B1 20220810 (DE)

Application
EP 18729935 A 20180605

Priority
• DE 102017113357 A 20170619
• EP 2018064708 W 20180605

Abstract (en)
[origin: WO2018234027A1] The invention relates to an exhaust pipe (30) for the exhaust tract of an internal combustion engine, which has an inlet opening (40) for an air connection (42). Said exhaust pipe is characterized by an inner pipe section (56) which is surrounded by an outer pipe section (58) in order to form an annular channel (30), which is closed at one end and at the other end is designed to be open toward the inner volume of the exhaust pipe (30), wherein the inlet opening (40) for the air connection (42) opens into the outer pipe section (58). By means of such an exhaust pipe (30), advantageous mixing of air (68) fed in via the air connection (42) into the exhaust gas (62) flowing within the exhaust pipe (30) can be achieved in a constructionally simple way, which can be attributed in particular to the complete introduction of the air in combination with the flow direction present along the longitudinal axis (50) of the annular channel (60) and the exhaust pipe (30).

IPC 8 full level
F01N 3/34 (2006.01); **F01N 3/05** (2006.01)

CPC (source: EP US)
F01N 3/023 (2013.01 - US); **F01N 3/05** (2013.01 - EP US); **F01N 3/2892** (2013.01 - US); **F01N 3/34** (2013.01 - US); **F01N 13/08** (2013.01 - US); **F01N 13/143** (2013.01 - US); **F01N 13/1805** (2013.01 - US); **F01N 13/1838** (2013.01 - US); **F01N 3/2892** (2013.01 - EP); **F01N 3/34** (2013.01 - EP); **F01N 13/009** (2014.06 - EP); **F01N 13/143** (2013.01 - EP); **F01N 2240/20** (2013.01 - EP US); **F01N 2250/02** (2013.01 - EP); **F01N 2270/04** (2013.01 - EP); **F01N 2470/08** (2013.01 - EP US); **F01N 2470/24** (2013.01 - EP US); **F01N 2610/08** (2013.01 - EP US)

Citation (examination)
• US 2007119433 A1 20070531 - POPIK JANUSZ [CA], et al
• US 3947544 A 19760330 - YAMADA MITSUMASA, et al

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

DOCDB simple family (publication)
DE 102017113357 A1 20181220; CN 110741143 A 20200131; CN 110741143 B 20220715; EP 3642462 A1 20200429; EP 3642462 B1 20220810; US 11149605 B2 20211019; US 2020173322 A1 20200604; WO 2018234027 A1 20181227

DOCDB simple family (application)
DE 102017113357 A 20170619; CN 201880041151 A 20180605; EP 18729935 A 20180605; EP 2018064708 W 20180605; US 201816623938 A 20180605