

Title (en)
HEATABLE CATALYTIC CONVERTER ARRANGEMENT HAVING A WATER TRAP LOCATED UPSTREAM

Title (de)
BEHEIZBARE KATALYSATORANORDNUNG MIT VORGESCHALTETER WASSERFALLE

Title (fr)
DISPOSITIF CATALYSEUR POUVANT ETRE CHAUFFE POURVU D'UN PIEGE A EAU PLACE EN AMONT

Publication
EP 1044059 A1 20001018 (DE)

Application
EP 99906104 A 19990107

Priority
• DE 19800654 A 19980109
• EP 9900046 W 19990107

Abstract (en)
[origin: DE19800654A1] The invention relates to an arrangement for purifying an exhaust gas stream of a combustion engine (1). The device contains a first water trap (5), an electrically heatable honeycomb (7) and a honeycomb (8) with a catalytic active coating, said coating promoting oxidation, which are successively arranged in a flow direction (S) of the exhaust gas. The electrically heatable honeycomb (7) and the honeycomb (8) with a catalytic active coating can completely or partially form a component. Such an assembly can be connected as a small supplemental system behind a lambda-probe equipped catalytic converter in order to guarantee exhaust gas purification during the cold-start phase. The supplemental system, with a larger dimension, can assume the entire exhaust gas purification. The dry honeycomb (7) which can be electrically heated by the water trap located upstream quickly reaches the temperature ranging from only 70 to 90 DEG C which is necessary for a catalytic conversion and, in addition, requires less electric energy than conventional systems. The arrangement enables the reduction of pollutants in exhaust gases of motor vehicles to extremely low amounts.

IPC 1-7
B01D 53/94; F01N 3/08; F01N 3/30

IPC 8 full level
B01D 53/94 (2006.01); **F01N 3/00** (2006.01); **F01N 3/02** (2006.01); **F01N 3/08** (2006.01); **F01N 3/20** (2006.01); **F01N 3/22** (2006.01); **F01N 3/30** (2006.01); **F01N 13/02** (2010.01)

CPC (source: EP KR)
B01D 53/94 (2013.01 - KR); **F01N 3/005** (2013.01 - EP); **F01N 3/02** (2013.01 - EP); **F01N 3/0807** (2013.01 - EP); **F01N 3/0835** (2013.01 - EP); **F01N 3/2013** (2013.01 - EP); **F01N 3/30** (2013.01 - EP); **F01N 13/009** (2014.06 - EP); **F01N 2240/02** (2013.01 - EP); **F01N 2260/14** (2013.01 - EP); **Y02A 50/20** (2017.12 - EP); **Y02T 10/12** (2013.01 - EP)

Citation (search report)
See references of WO 9934902A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
DE 19800654 A1 19990715; CN 1288395 A 20010321; EP 1044059 A1 20001018; JP 2002510004 A 20020402; KR 20010033964 A 20010425; RU 2212929 C2 20030927; WO 9934902 A1 19990715

DOCDB simple family (application)
DE 19800654 A 19980109; CN 99802082 A 19990107; EP 9900046 W 19990107; EP 99906104 A 19990107; JP 2000527340 A 19990107; KR 20007007549 A 20000707; RU 2000120923 A 19990107