



(12) **CORRECTED EUROPEAN PATENT APPLICATION**
published in accordance with Art. 153(4) EPC

(15) Correction information:
Corrected version no 1 (W1 A1)
Corrections, see
Bibliography INID code(s) 71

(48) Corrigendum issued on:
09.08.2023 Bulletin 2023/32

(43) Date of publication:
07.06.2023 Bulletin 2023/23

(21) Application number: **21954417.8**

(22) Date of filing: **30.09.2021**

(51) International Patent Classification (IPC):
F01N 3/08 (2006.01)

(52) Cooperative Patent Classification (CPC):
B01J 23/63; B01D 53/944; B01D 53/945;
B01D 53/9477; B01J 35/0006; B01J 37/0215;
F01N 3/101; F01N 3/28; B01D 2255/1021;
B01D 2255/1023; B01D 2255/1025;
B01D 2255/2063; B01D 2255/2092;
B01D 2255/407; B01D 2255/904; (Cont.)

(86) International application number:
PCT/CN2021/122422

(87) International publication number:
WO 2023/050409 (06.04.2023 Gazette 2023/14)

(84) Designated Contracting States:
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 States:
BA ME
Designated Validation States:
KH MA MD TN

(71) Applicants:
• **Ningbo Geely Royal Engine Components Co., Ltd.**
Ningbo City, Zhejiang 315336 (CN)
• **Aurobay Technology Co., Ltd.**
Ningbo, Zhejiang 315899 (CN)
• **Zhejiang Geely Holding Group Co., Ltd.**
Hangzhou, Zhejiang 310051 (CN)

(72) Inventors:
• **XU, Lifeng**
Ningbo
Zhejiang 315336 (CN)

- **WANG, Ruiping**
Ningbo
Zhejiang 315336 (CN)
- **SHEN, Yuan**
Ningbo
Zhejiang 315336 (CN)
- **WEI, Hong**
Ningbo
Zhejiang 315336 (CN)
- **ZHANG, Miao**
Ningbo
Zhejiang 315336 (CN)
- **MA, Jinqiang**
Ningbo
Zhejiang 315336 (CN)
- **SCHOLTEN, Ingo**
Ningbo
Zhejiang 315336 (CN)

(74) Representative: **Boult Wade Tennant LLP**
Salisbury Square House
8 Salisbury Square
London EC4Y 8AP (GB)

(54) **THREE-WAY CATALYTIC CONVERSION SYSTEM FOR ENGINE EXHAUST PURIFICATION TREATMENT AND APPLICATION THEREOF**

(57) The present invention provides a three-way catalytic conversion system for purification treatment of an engine exhaust gas and use thereof, including an oxidation segment containing an oxidation catalyst and a three-way conversion segment containing a three-way catalyst, where the oxidation catalyst is used to catalyze an oxidation reaction of reductive components in the en-

gine exhaust gas with oxygen, the oxidation segment is located downstream of an engine, and the three-way conversion segment is located downstream of the oxidation segment. In the present invention, the oxidation catalyst tolerant to ultra-high temperature is provided upstream of the three-way catalyst, so that the engine exhaust gas is first treated by the oxidation catalyst and then treated

by the three-way catalyst, which can reduce attenuation of performance of the three-way catalyst caused by combustion in the treatment process of the three-way catalyst, and avoid adverse effects of high temperature caused by combustion on three-way conversion reaction and structure and performance of the three-way catalyst, thereby ensuring exertion of the function of three-way conversion of the system and improving the purification efficiency of the engine exhaust gas.

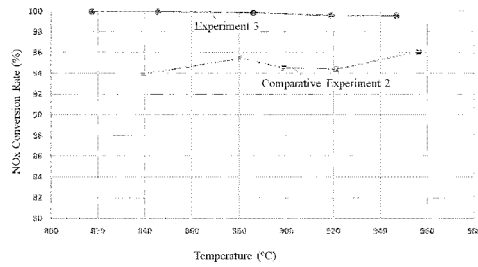


FIG. 6

(52) Cooperative Patent Classification (CPC): (Cont.)
 B01D 2255/908; B01D 2255/9202;
 B01D 2255/9207; B01D 2258/014; Y02T 10/12