(19) INDIA

(22) Date of filing of Application :09/02/2017 (43) Publication Date : 24/02/2017

(54) Title of the invention: EXOMISTER - A DEVICE FOR TREATMENT OF COMBUSTION EXHAUST GASES.

 (51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date 	:F01N3/20, B01D53/94, :NA :NA :NA :NA :NA	(71)Name of Applicant: 1)JAVID RASUL SAYYED Address of Applicant: FLAT NO.104, F-3/WING-1, "JAI GANESH SAMRAJYA", PANJARPOL, BHOSARI, PUNE-411039, MAHARASHTRA, INDIA. Maharashtra India (72)Name of Inventor:
 (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date 	: NA :NA :NA :NA :NA	1)JAVID RASUL SAYYED

(57) Abstract:

The present invention pertains to treatment of combustion exhaust gases. The present invention more specifically reduces the contaminants of the exhaust gases by performing a chemical reaction of exhaust gases along with vaporised alkaline solution. Said contaminants of the exhaust gases are predominantly particulate matter, oxides of nitrogen, oxides of carbon, oxides of sulphur, unburnt hydrocarbons and any other solid particle pollutants whose emission levels are reduced. The said invention makes use of 10% caustic soda aqueous solution as an alkaline medium. The said invention discourages usage of ammonia for the said alkaline solution. The present invention also details about a device exomister which is illustrated in the said invention and validated through physical testing on a commercial vehicle exhaust gas. The vaporisation of the said alkaline solution is made effective by not limited to ultrasonic mist maker, electro-thermal vaporiser, thermal vaporiser and any other vaporising or mist generating device. The scope of present invention also includes ways to introduce vaporised alkaline solution into the stream of exhaust gases. Said invention also mentions to make the mixture of vaporised alkaline solution and exhaust gases to pass through a series of baffles and screens so as to maximise the reaction efficiency. The present invention through physical testing claims to reduce the exhaust gas contaminants by 60-70% and release cleaner air into atmosphere. The device explained in the said invention, the said exomister is a ready to install device for all newer or older fuel combustion vehicles and fuel combusting units. The said device helps in reduction of smog formation and greenhouse gases. The said invention shows distinct and unique benefits towards creating a cleaner environment by reducing the air pollution, and shows a patronage towards Climate Change

No. of Pages : 28 No. of Claims : 8