

Title (en)
EXHAUST GAS TREATMENT

Title (de)
ABGASBEHANDLUNG

Title (fr)
TRAITEMENT DE GAZ D'ECHAPPEMENT

Publication
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Application
EP 06709783 A 20060216

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Abstract (en)
[origin: WO2006087541A1] A device (1) is disclosed for generating gaseous ammonia formed by the hydrolysis of an aqueous solution of urea at elevated temperature and pressure and for feeding the gaseous ammonia into the exhaust gas of an IC engine as it flows through the exhaust system of the engine. The device (1) is placed in the exhaust system and has an inlet (2) for the exhaust gas and an outlet (3) for the exhaust gas so that the exhaust gas will flow through the device (1) during use. The aqueous solution of urea is contained in a reaction vessel located between the inlet (2) and the outlet (3) such that, in use, the vessel and therefore the urea solution are heated by heat exchange with the exhaust gas as it flows from the inlet (2) to the outlet (3). A pump (32) is provided for pumping urea solution into the reaction vessel and a controller (33) controls the pump (32) in response to changing NOx output from the IC engine such that, in response to an increase in NOx output, the controller (33) controls the pump (32) to increase the level of urea solution in the reaction vessel, thereby increasing the surface area of urea solution available for heat exchange with the exhaust gas so as to increase the rate of production of gaseous ammonia in the reactor vessel.

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