

Title (en)

METHOD TO REDUCE EMISSIONS OF NITROGEN OXIDES FROM COMBUSTION ENGINES AND/OR TO INCREASE THE PERFORMANCE OF COMBUSTION ENGINES WHILE KEEPING THE EMISSIONS OF NITROGEN OXIDES FROM COMBUSTION ENGINES AT THE SAME LEVEL AND/OR TO INCREASE THE OVERALL PERFORMANCE OF AN ENGINE, AND A DEVICE TO PERFORM THIS METHOD

Title (de)

VERFAHREN ZUR REDUZIERUNG DER EMISSION VON STICKOXIDEN AUS VERBRENNUNGSMOTOREN UND/ODER ZUR ERHÖHUNG DER LEISTUNG VON VERBRENNUNGSMOTOREN WÄHREND DER AUFRECHTERHALTUNG DER EMISSION VON STICKOXIDEN AUS VERBRENNUNGSMOTOREN AUF DEMSELBEN NIVEAU UND/ODER ZUR ERHÖHUNG DER GESAMTLEISTUNG EINES MOTORS SOWIE VORRICHTUNG ZUR AUSFÜHRUNG DIESER VERFAHRENS

Title (fr)

PROCÉDÉ DE RÉDUCTION DES ÉMISSIONS D'OXYDES D'AZOTE DE MOTEURS À COMBUSTION ET/OU D'AUGMENTATION DES PERFORMANCES DE MOTEURS À COMBUSTION TOUT EN MAINTENANT LEURS ÉMISSIONS D'OXYDES D'AZOTE AU MÊME NIVEAU ET/OU D'AUGMENTATION DES PERFORMANCES GLOBALES D'UN MOTEUR, ET DISPOSITIF RÉALISANT CE PROCÉDÉ

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Abstract (en)

[origin: WO2011153970A2] A method to reduce emissions of nitrogen oxides from combustion engines and/or to increase the performance of combustion engines while keeping the emissions of nitrogen oxides from combustion engines at the same level and/or to increase the overall performance of an engine. Carbon dioxide is added to the fuel and/or air/fuel mixture at a rate of 1 to 90% by mass in the fuel/carbon dioxide mixture in the combustion area and, depending on its quantity, the air/fuel ratio and/or the pre-ignition fuel injection and/or the engine's compression rate and/or the feeding pressure in the engine's suction system is adjusted. The invention also relates to a device to perform this method, wherein the fuel system of the engine (2) and/or the suction system (1) of the engine (2) and/or the cylinder of the internal combustion engine (2) is complemented with carbon dioxide supply.

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