Title (en)

DYNAMIC DETECTION OF AMMONIA EXCESS BY MEANS OF A SOFTWARE ALGORITHM IN ORDER TO ELIMINATE THE AMMONIA SENSOR

Title (de)

DYNAMISCHE AMMONIAK-ÜBERSCHUSS DETEKTION MITTELS EINES SOFTWARE-ALGORITHMUS ZUR ELIMINIERUNG DES AMMONIAK-SENSORS

Title (fr)

DÉTECTION DYNAMIQUE D'EXCÈS D'AMMONIAQUE À L'AIDE D'UN ALGORITHME LOGICIEL POUR ÉLIMINER LE CAPTEUR D'AMMONIAQUE

Publication

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Application

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Abstract (en)

[origin: WO2020057768A1] The invention relates to an internal combustion engine having an exhaust gas aftertreatment system, the exhaust gas aftertreatment system comprising the following in the given order in the flow direction of the exhaust gas: a device for metering ammonia and/or a compound that can be decomposed to form ammonia into the exhaust gas to be cleaned, as a reducing agent; one or more SCR catalysts, which form a first SCR unit; one or more SCR catalysts and/or at least one ammonia oxidation catalyst and/or at least one ammonia slip catalyst (ASC), which form a second SCR unit; and a nitrogen oxide sensor (NOx sensor) for determining the concentration of the nitrogen oxides (NOx) in the exhaust gas tail pipe, wherein the amount, to be metered into the exhaust gas, of ammonia and/or of a compound that can be decomposed to form ammonia is set using the nitrogen oxide concentration in the exhaust gas tail pipe that is determined by means of the NOx sensor, characterized in that the occurrence or non-occurrence of an ammonia excess in the region of the NOx sensor can be determined from the sensor signal of the NOx sensor by evaluating said sensor signal.

IPC 8 full level

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