

Title (en)
METHOD AND DEVICE FOR INCREASING THE GLOBAL COMPRESSION RATIO OF AN INTERNAL COMBUSTION ENGINE IN THE CASE OF VARYING FUEL QUALITY

Title (de)
VERFAHREN UND VORRICHTUNG ZUM ERHÖHEN DES GLOBALEN VERDICHTUNGSVERHÄLTNISSES EINES VERBRENNUNGSMOTORS BEI VARIIERENDER KRAFTSTOFFQUALITÄT

Title (fr)
PROCÉDÉ ET DISPOSITIF POUR AUGMENTER LE TAUX GLOBAL DE COMPRESSION D'UN MOTEUR À COMBUSTION INTERNE DANS LE CAS D'UNE QUALITÉ VARIABLE DE CARBURANT

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Application
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Abstract (en)
[origin: WO2019015844A1] The invention relates to a method and to a device for increasing the possible compression ratio of internal combustion engines of motor vehicles in the case of varying fuel quality in an internal combustion engine having a combustion chamber (12) for burning the fuel, the device comprising an apparatus (21, 22) for determining the antiknock property of the fuel, an apparatus (40, 22, 23) for sensing the operating state of the internal combustion engine, a water tank (30), and a feeding apparatus (31, 32, 27, 28, 29) for the water. In the method, the antiknock property of the fuel is determined and the operating state of the internal combustion engine is sensed. A need for a feed of water to the fuel is determined therefrom.

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GHANAATI ALI ET AL: "Comparative analysis of different engine operating parameters for on-board fuel octane number classification", APPLIED THERMAL ENGINEERING, PERGAMON, OXFORD, GB, vol. 124, 21 June 2017 (2017-06-21), pages 327 - 336, XP085139633, ISSN: 1359-4311, DOI: 10.1016/J.APPLTHERMALENG.2017.06.013

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