

Title (en)

WATER INJECTION DEVICE OF AN INTERNAL COMBUSTION ENGINE AND METHOD FOR OPERATING SUCH A WATER INJECTION DEVICE

Title (de)

WASSEREINSPRITZVORRICHTUNG EINER BRENNKRAFTMASCHINE UND VERFAHREN ZUM BETREIBEN EINER SOLCHEN WASSEREINSPRITZVORRICHTUNG

Title (fr)

DISPOSITIF D'INJECTION D'EAU D'UN MOTEUR À COMBUSTION INTERNE ET PROCÉDÉ PERMETTANT DE FAIRE FONCTIONNER UN TEL DISPOSITIF D'INJECTION D'EAU

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Application

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Abstract (en)

[origin: WO2016177557A1] The invention relates to a water injection device of an internal combustion engine (2), comprising a water tank (5) for storage of water, at least one water injector (6), a conveying element (3) for conveying the water, which element is connected by means of an intake line (7) and a return line (13) to the water tank (3), and a first heating element (19a) which is arranged at least partially on the intake line (7). According to the invention the first heating element (19a) is configured to defrost water which is located in the water tank (5) and/or in the intake line (7) and is frozen. Furthermore the conveying element (3) is configured according to the invention to convey the defrosted water in the intake line (7) back into the water tank (5) via the return line (13). A further feature of the invention relates to an internal combustion engine having a water injection device (1) according to the invention and to a method for operating the water injection device (1).

IPC 8 full level

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