

Title (en)
METHOD AND DEVICE FOR ADDITIONAL THERMAL HEATING FOR MOTOR VEHICLE EQUIPPED WITH POLLUTION-FREE ENGINE WITH
ADDITIONAL COMPRESSED AIR INJECTION

Title (de)
VERFAHREN UND VORRICHTUNG ZUR ZUSÄTZLICHEN AUFWÄRMUNG VON FAHRZEUGEN MIT UMWELTFREUNDLICHER
BRENNKRAFTMASCHINE MIT ZUSÄTZLICHER LUFTEINSPRITZUNG

Title (fr)
PROCEDE ET DISPOSITIF DE RECHAUFFAGE THERMIQUE ADDITIONNEL POUR VEHICULE EQUIPE DE MOTEUR DEPOLLUE A
INJECTION D'AIR COMPRI ME ADDITIONNEL

Publication
EP 1049855 B1 20030827 (FR)

Application
EP 99902587 A 19990122

Priority
• FR 9900126 W 19990122
• FR 9800877 A 19980122

Abstract (en)
[origin: US6305171B1] The invention concerns a method for additional thermal heating for motor vehicle equipped with pollution-free engine operating with additional compressed air injection into the combustion chamber (2) and having high pressure compressed air storage reservoir (23). The high pressure compressed air contained in the reservoir is previously to its final use at a lower pressure, directed towards a thermal heater (56) to increase its pressure and/or volume before it is injected into the combustion or expansion chamber (2). The invention is applicable to all engines equipped with compressed air injection.

IPC 1-7
F01B 17/02; **F02G 3/02**

IPC 8 full level
F01B 17/02 (2006.01); **F01B 29/08** (2006.01); **F02G 3/02** (2006.01)

CPC (source: EP KR US)
F01B 17/02 (2013.01 - KR); **F01B 17/025** (2013.01 - EP US); **F02G 3/02** (2013.01 - EP US)

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU NL PT SE

DOCDB simple family (publication)
US 6305171 B1 20011023; AP 2000001858 A0 20000930; AT E248289 T1 20030915; AU 2283199 A 19990809; AU 741894 B2 20011213; BR 9907213 A 20001024; CA 2319268 A1 19990729; CN 1099523 C 20030122; CN 1288500 A 20010321; DE 69910731 D1 20031002; DE 69910731 T2 20040708; DK 1049855 T3 20031222; EA 200000761 A1 20010423; EP 1049855 A1 20001108; EP 1049855 B1 20030827; ES 2207170 T3 20040516; FR 2773849 A1 19990723; FR 2773849 B1 20000225; HK 1032807 A1 20010803; HU P0100722 A2 20010828; HU P0100722 A3 20011228; IL 137020 A0 20010614; JP 2002501136 A 20020115; KR 100699602 B1 20070323; KR 20010034212 A 20010425; NO 20003746 D0 20000721; NO 20003746 L 20000904; NZ 506407 A 20030926; OA 11767 A 20050719; PL 197327 B1 20080331; PL 342041 A1 20010521; PT 1049855 E 20040130; SK 10102000 A3 20010409; TR 200002165 T2 20001221; WO 9937885 A1 19990729

DOCDB simple family (application)
US 58222000 A 20000720; AP 2000001858 A 19990122; AT 99902587 T 19990122; AU 2283199 A 19990122; BR 9907213 A 19990122; CA 2319268 A 19990122; CN 99802311 A 19990122; DE 69910731 T 19990122; DK 99902587 T 19990122; EA 200000761 A 19990122; EP 99902587 A 19990122; ES 99902587 T 19990122; FR 9800877 A 19980122; FR 9900126 W 19990122; HK 01103344 A 20010515; HU P0100722 A 19990122; IL 13702099 A 19990122; JP 2000528776 A 19990122; KR 20007007866 A 20000718; NO 20003746 A 20000721; NZ 50640799 A 19990122; OA 1200000210 A 19990122; PL 34204199 A 19990122; PT 99902587 T 19990122; SK 10102000 A 19990122; TR 200002165 T 19990122