

Title (en)
INDUCTIVE ENERGY OPTIMIZED VACUUM SOLENOID VALVE

Title (de)
INDUKTIVES ENERGIEOPTIMIERTES VAKUUMMAGNETVENTIL

Title (fr)
ÉLECTROVALVE DE DÉPRESSION OPTIMISÉE PAR TRANSMISSION D'ÉNERGIE PAR INDUCTION

Publication
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Application
EP 13841757 A 20130924

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Abstract (en)
[origin: WO2014049608A2] The present invention provides a vacuum solenoid valve which minimizes the switch off or inductive energy to such an extent so that it prevents sudden damage of an electric control unit in a motor vehicle from increased inductive load. Inductive energy optimized vacuum solenoid valve is able to respond to the ON/OFF signal from the ECU at very low inductive load of 17.4mJ at 26V, RT and 24.7mJ at 26V, -400C. This optimized inductive load is almost insufficient to damage the ECU or other electrical components on sudden increase or decrease in temperature in a motor vehicle parts.

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Citation (search report)
• [Y] US 5720469 A 19980224 - MIYAZATO KAZUO [JP], et al
• [Y] US 2006243939 A1 20061102 - SEKO NAOHITO [JP]
• [A] CN 2898470 Y 20070509 - BIYADI CO LTD [CN]
• [A] US 2008290306 A1 20081127 - OKUDA HIDEKI [JP]
• See references of WO 2014049608A2

Designated contracting state (EPC)
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