

Title (en)

Engine brake for heavy goods vehicle 4 stroke engine

Title (de)

Motorbremse bei einer 4-Takt-Brennkraftmaschine eines Nutzfahrzeuges

Title (fr)

Frein moteur pour moteur 4 temps de véhicule utilitaire

Publication

**EP 0608520 B1 19960710 (DE)**

Application

**EP 93119698 A 19931207**

Priority

AT 10793 A 19930125

Abstract (en)

[origin: EP0608520A1] The invention relates to an engine brake in a 4-stroke internal combustion engine of a commercial vehicle. For this purpose a control hydraulics system is provided with a control pump (2) designed in the nature of an injection pump, the number of delivery outlets of which, corresponding to the number of engine cylinders (Z1 - Zn), are each successively connected by way of a control pressure line (S1 - Sn) to a hydromechanical actuating device (3), bringing about the opening, for braking, of the connected exhaust valve (A1 - An) of that engine cylinder (Z1 - Zn) which within the given firing order is staggered in relation to the start of injection by at least one angular ignition interval. In addition the control pump (2), with its delivery elements and in regard to the delivery pressure, is designed so that during braking and making full use of a delivery stroke, the pressure medium delivered opens the respectively actuated exhaust valve (A1 - An) prior to compression close to bottom dead centre in the 4-stroke engine cycle, keeps it open during the subsequent compression cycle almost to ignition tdc and then closes it again. <IMAGE>

IPC 1-7

**F01L 13/06**

IPC 8 full level

**F01L 13/06** (2006.01)

CPC (source: EP)

**F01L 13/06** (2013.01); **F01L 13/065** (2013.01)

Citation (examination)

EP 0407842 A1 19910116 - MAN NUTZFAHRZEUGE AG [DE]

Cited by

DE19746428A1; DE19654449C1; GB2312245A; DE19615739A1; FR2747733A1; GB2312245B; DE19615739C2; US5794590A

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