

Title (en)

Method for actuating an exhaust valve tappet during braking of an internal combustion engine.

Title (de)

Verfahren zum Betätigen eines Auslassventilstößels im Bremsbetrieb einer Brennkraftmaschine.

Title (fr)

Procédé pour actionner un poussoir de soupape d'échappement d'un moteur en mode frein moteur.

Publication

**EP 0497194 B1 19950405 (DE)**

Application

**EP 92100960 A 19920122**

Priority

DE 4102537 A 19910129

Abstract (en)

[origin: EP0497194A1] The invention relates to an outlet valve tappet for an internal combustion engine. To increase the braking power of engines, it is necessary to open the outlet valve 4 also in the compression cycle. Use is advantageously made of a hydraulically operating outlet valve tappet 1 which operates with hydraulic pressure from an external pressure source 11. Due to the pressure of the compressed air shortly before ignition upper dead centre, great forces act on the outlet valve 4 and, from the latter, on the outlet valve tappet 1. These forces retroact via the inner part 8 as hydraulic pressure on the pressure source 11 and may damage the latter (Figure 1). According to Figure 2, the outlet valve tappet 1 has an inner part 8, which is raised by the lift 9 by impinging with pressure via the second pressure space 22, as a result of which the outlet valve 4 opens. If the pressure then rises in the second pressure space 22 as a function of the force of the outlet valve 4 via the pressure of the pressure source 11, according to the invention the ball 24 (Figure 3) closes, as a result of which the second pressure space 22 is hermetically sealed and the hydraulic pressure building up therein cannot propagate to the pressure source 11.

IPC 1-7

**F01L 13/06**; **F01L 1/24**

IPC 8 full level

**F01L 1/24** (2006.01); **F01L 1/245** (2006.01); **F01L 13/06** (2006.01)

CPC (source: EP US)

**F01L 1/245** (2013.01 - EP US); **F01L 13/06** (2013.01 - EP US)

Cited by

WO9634183A1; WO2011134790A3

Designated contracting state (EPC)

DE FR GB IT NL SE

DOCDB simple family (publication)

**EP 0497194 A1 19920805**; **EP 0497194 B1 19950405**; DE 4102537 A1 19920730; DE 59201799 D1 19950511; JP H04311615 A 19921104; US 5161500 A 19921110; ZA 92569 B 19921028

DOCDB simple family (application)

**EP 92100960 A 19920122**; DE 4102537 A 19910129; DE 59201799 T 19920122; JP 1296092 A 19920128; US 82779992 A 19920129; ZA 92569 A 19920128