Title (en)

OIL DRAIN PLUG OF ENGINE

Title (de

ÖLABLASSSCHRANKE

Title (fr)

BOUCHON DE VIDANGE D'HUILE DE MOTEUR

Publication

EP 1087112 B1 20050629 (EN)

Application

EP 99910844 A 19990405

Priority

- JP 9901790 W 19990405
- JP 9315698 A 19980406

Abstract (en

[origin: EP1087112A1] A new type of plug incorporating a normally closed valve for draining oil from an oil pan of a car engine, wherein the normally closed valve is incorporated in a through hole (113) provided as an oil draining path in a bolt type member (11) fixed to the oil pan (102), an oil draining dedicated jig (7) is assembled to the plug so as to open the normally closed valve in order to drain the oil contained in the oil pan (102) by sucking it with a negative pressure, a movable valve disc member (13) installed in the through hole (113) is installed so that it is engaged with a valve seat (121) provided near the outer end part of the through bole (113) by a coiled spring (14) so as to form the normally closed valve, and the tip end of the plug is made flush generally with the internal surface of the oil pan so as to prevent any structure from projecting toward the inside.

IPC 1-7

F01M 11/04

IPC 8 full level

F01M 11/04 (2006.01)

CPC (source: EP)

F01M 11/0408 (2013.01); F01M 11/045 (2013.01); F01M 2011/0425 (2013.01)

Cited by

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**EP 1087112 A1 20010328**; **EP 1087112 A4 20020102**; **EP 1087112 B1 20050629**; DE 69926000 D1 20050804; DE 69926000 T2 20051222; JP 4351747 B2 20091028; JP H11294135 A 19991026; WO 9951860 A1 19991014

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