

Title (en)

Dosing pump for vehicle heating system

Title (de)

Dosierpumpeinrichtung für ein Fahrzeugheizgerät

Title (fr)

Pompe de dosage pour dispositif de chauffage pour véhicule

Publication

EP 1445485 A3 20050907 (DE)

Application

EP 04000552 A 20040113

Priority

DE 10301093 A 20030114

Abstract (en)

[origin: EP1445485A2] A dosing pump for a motor vehicle heater comprises inlet (40) and outlet (54) chambers with a valve (66) between them permitting fluid exchange from inlet to outlet. A displacement piston (12) minimizes the volume of the inlet chamber when in one position and minimizes the volume of the outlet chamber when in a second position.

IPC 1-7

F04B 5/02; **F04B 11/00**; **F04B 17/04**; **F04B 13/00**

IPC 8 full level

F04B 13/00 (2006.01); **F04B 17/04** (2006.01)

CPC (source: EP US)

F04B 13/00 (2013.01 - EP US); **F04B 17/046** (2013.01 - EP US)

Citation (search report)

- [XY] US 6186118 B1 20010213 - SPAKOWSKI JOSEPH GEORGE [US]
- [X] GB 2180302 A 19870325 - BRITISH SYPHON IND PLC
- [YA] US 6193477 B1 20010227 - FALK THEODORE J [US], et al
- [YA] US 3809507 A 19740507 - BAGLAI B
- [DA] DE 4205290 A1 19930826 - THOMAS TECHNIK KG GES FUER MAG [DE]
- [DA] DE 10103224 C1 20021205 - EBERSPAECHER J GMBH & CO [DE]

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1445485 A2 20040811; **EP 1445485 A3 20050907**; **EP 1445485 B1 20070606**; DE 10301093 A1 20040722; DE 502004004001 D1 20070719; US 2005047941 A1 20050303; US 7322804 B2 20080129

DOCDB simple family (application)

EP 04000552 A 20040113; DE 10301093 A 20030114; DE 502004004001 T 20040113; US 75715704 A 20040113