

Title (en)  
Viscous heater

Title (de)  
Wärmeerzeuger mit viskoser Flüssigkeit

Title (fr)  
Générateur de chaleur à fluide visqueux

Publication  
**EP 0811812 A3 19980520 (EN)**

Application  
**EP 97108847 A 19970603**

Priority  
JP 14193896 A 19960604

Abstract (en)  
[origin: EP0811812A2] A viscous heater capable of obtaining a quick warming up of a heating system for a vehicle. The viscous heater is provided with a heat generating chamber 7 and a rotor 12 arranged in the heat generating chamber 7 so that a heat generating gap, for holding therein a silicone oil as a viscous fluid, is formed between an inner surface of the heat generating chamber and an outer surface of the rotor. A width of the heat generating gap has, at least at one side of the rotor, a larger value (T) at a central area of the gap over that (t) at the peripheral area of the gap.  
<IMAGE>

IPC 1-7  
**F24J 3/00**

IPC 8 full level  
**B60H 1/08** (2006.01); **F24J 3/00** (2006.01)

CPC (source: EP)  
**F24V 40/00** (2018.04)

Citation (search report)

- [XAY] FR 2266122 A1 19751024 - ALFA LAVAL AB [SE]
- [Y] EP 0361053 A2 19900404 - BOSCH GMBH ROBERT [DE]
- [XA] DE 9418815 U1 19950713 - PLETZER FRANZ [AT]
- [A] US 4030406 A 19770621 - WANDER RAOUL, et al
- [A] US 4664068 A 19870512 - KRETCHMAR MONTE R [US], et al

Designated contracting state (EPC)  
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**EP 0811812 A2 19971210; EP 0811812 A3 19980520; EP 0811812 B1 20020320**; DE 69711119 D1 20020425; DE 69711119 T2 20020829;  
JP 3458989 B2 20031020; JP H09323530 A 19971216

DOCDB simple family (application)  
**EP 97108847 A 19970603**; DE 69711119 T 19970603; JP 14193896 A 19960604