

Title (en)  
PLATE COOLER

Title (de)  
PLATTENKÜHLER

Title (fr)  
REFROIDISSEUR A PLAQUES

Publication  
**EP 1759157 A1 20070307 (DE)**

Application  
**EP 05747235 A 20050525**

Priority  
• AT 2005000178 W 20050525  
• AT 10012004 A 20040609

Abstract (en)  
[origin: WO2005121677A1] The invention relates to a plate cooler for liquids, especially hydraulic oil, comprising a parallelepiped stack (3) of interspaced plates (4) forming liquid channels (7). Air lamellae (10) are inserted between adjacent liquid channels, and the ends of the liquid channels are connected to liquid distribution channels (8, 8') in distribution boxes (13, 13') provided with supply lines and derivations (14, 14'). Bypass channels (16) extend in the stack, between the distribution boxes and parallel to the liquid channels, and the distribution box provided on the liquid supply side is fitted with a valve (15) in the region of the bypass channels, said valve connecting the distribution channel and the bypass channels when they are cold.

IPC 8 full level  
**F28D 1/03** (2006.01); **F28F 9/02** (2006.01); **F28F 27/02** (2006.01)

CPC (source: EP)  
**F28D 1/0366** (2013.01); **F28F 9/0202** (2013.01); **F28F 27/02** (2013.01); **F28D 2021/0049** (2013.01); **F28F 2250/06** (2013.01)

Citation (search report)  
See references of WO 2005121677A1

Citation (examination)  
• US 4653580 A 19870331 - STEELE LUTHER R [US]  
• EP 0881008 A2 19981202 - FORD MOTOR CO [US]  
• EP 1281923 A2 20030205 - MODINE MFG CO [US]  
• JP S61215804 A 19860925 - SEKITAN ROTENBORI KIKAI GIJUTS  
• US 2002021742 A1 20020221 - MASKELL BRUCE W [US], et al  
• US 3440833 A 19690429 - FERNANDES JOSEPH

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2005121677 A1 20051222**; AT 414042 B 20060815; AT A10012004 A 20051115; EP 1759157 A1 20070307

DOCDB simple family (application)  
**AT 2005000178 W 20050525**; AT 10012004 A 20040609; EP 05747235 A 20050525