

Title (en)  
HEAT EXCHANGER DEVICE AND METHOD OF TRANSFERRING HEAT

Title (de)  
WÄRMETAUSCHER UND WÄRMEÜBERTRAGUNGSVERFAHREN

Title (fr)  
DISPOSITIF ECHANGEUR DE CHALEUR ET PROCEDE DE TRANSFERT THERMIQUE

Publication  
**EP 0680594 B1 20000927 (EN)**

Application  
**EP 94905894 A 19940124**

Priority  
• SE 9400048 W 19940124  
• SE 9300209 A 19930123

Abstract (en)  
[origin: WO9417355A1] A problem in connection with fluid operated solar collector systems is in a simple and non-expensive way to be able to separate the circulatory system of the solar collector from a fluid based energy storage system without any considerable part of the supplied energy being lost. This problem is solved by a heat exchanger (2, 2a, 2b) according to the invention which is provided between the systems. This includes at least two concentric layers (12-15) of helically wound tubes (12a-15e) in a space that is surrounded by mainly cylindric surfaces (10-11). A method according to the invention for transfer of heat between a first fluid that circulates through a tube system (2, 2a, 2b) and a second fluid that surrounds the tube system consists in that the first fluid is pumped through the tube system containing capillary tubes so that the pressure drop across the tube system is at least 100 times larger than the pressure drop across the tube system in the second fluid which is self-circulating.

IPC 1-7  
**F28F 13/00**; **F28D 1/047**

IPC 8 full level  
**F28D 7/02** (2006.01); **F28F 1/00** (2006.01); **F28F 13/12** (2006.01)

CPC (source: EP)  
**F28D 7/024** (2013.01); **F28F 1/00** (2013.01); **F28F 13/12** (2013.01)

Designated contracting state (EPC)  
AT BE CH DE DK IT LI LU NL SE

DOCDB simple family (publication)  
**WO 9417355 A1 19940804**; AT E196686 T1 20001015; AU 5981994 A 19940815; DE 69426016 D1 20001102; DE 69426016 T2 20010222; EP 0680594 A1 19951108; EP 0680594 B1 20000927; SE 9300209 D0 19930123; SE 9300209 L 19940724

DOCDB simple family (application)  
**SE 9400048 W 19940124**; AT 94905894 T 19940124; AU 5981994 A 19940124; DE 69426016 T 19940124; EP 94905894 A 19940124; SE 9300209 A 19930123