

Title (en)  
System and method for heat transfer

Title (de)  
System und Verfahren zur Wärmeübertragung

Title (fr)  
Système et procédé de transfert de chaleur

Publication  
**EP 1498679 A2 20050119 (EN)**

Application  
**EP 04016584 A 20040714**

Priority  
US 48646703 P 20030714

Abstract (en)  
A system (100) includes a primary evaporator (115) facilitating heat transfer by evaporating liquid to obtain vapor. The primary evaporator (115) receives the liquid from a liquid line (125) and outputs the vapor to a vapor line (130). The primary evaporator (115) also outputs excess liquid received from the liquid line to an excess fluid line. A condensing system (120) receives the vapor from the vapor line (120), and outputs the liquid and excess liquid to the liquid line (125). The excess liquid is obtained at least partially from a reservoir (147). A primary loop (105) includes the condensing system (120), the primary evaporator (115), the liquid line (125), and the vapor line (130), and provides a heat transfer path. Similarly, a secondary loop (110) includes the condensing system (122), the secondary evaporator (150), the liquid line (160), the vapor line (130), and the excess fluid line. The secondary loop provides a venting path for removing undesired vapor within the liquid or excess liquid from the primary evaporator.

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**F28D 15/04**

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