

Title (en)  
Heat-exchanger.

Title (de)  
Wärmetauscher.

Title (fr)  
Echangeur.

Publication  
**EP 0228581 A1 19870715 (DE)**

Application  
**EP 86116618 A 19861129**

Priority  
DE 3543893 A 19851212

Abstract (en)  
[origin: US4809774A] A heat exchanger having first and second ducts respectively for the supply of compressed air to be heated and for the discharge of heated compressed air. A tube matrix includes first and second branches respectively connected to the first and second ducts for conveying compressed air from the first duct to the second duct. The tube matrix is exposed to the flow of hot gases therearound to heat the compressed air conveyed in the tube matrix. A plate heat exchanger connects the first and second branches of the tube matrix to convey the compressed air from the first branch to the second. The plate heat exchanger is formed by spaced plates between which the hot gases flow, each plate being connected to rows of tubes of the matrix in the first and second branches and forming a flow chamber in which the compressed air can be conveyed.

Abstract (de)  
Die vorliegende Erfindung behandelt einen Wärmetauscher mit zwei im wesentlichen parallel nebeneinander angeordneten Sammelleitungen (1,2) und einer heißgasumströmten Kreuz-Gegenstrom-Profilrohr-Matrix (3), in die über die eine Sammelleitung aufzuheizende Druckluft eingespeist und über einen Matrixumlenkabschnitt der anderen Sammelleitung zugeführt wird, wobei der Matrixumlenkabschnitt (4) als Plattenwärmetauscher ausgebildet ist.

IPC 1-7  
**F28F 9/26**; **F28D 7/08**; **F28F 3/04**

IPC 8 full level  
**F28D 1/03** (2006.01); **F28D 7/06** (2006.01); **F28D 7/08** (2006.01); **F28D 9/00** (2006.01); **F28F 3/04** (2006.01); **F28F 9/26** (2006.01)

CPC (source: EP US)  
**F28D 7/08** (2013.01 - EP US); **F28F 1/02** (2013.01 - EP US); **F28F 3/04** (2013.01 - EP US); **F28F 9/26** (2013.01 - EP US); **F28F 2265/26** (2013.01 - EP US); **Y10S 165/436** (2013.01 - EP US)

Citation (search report)  
• [YD] GB 2130355 A 19840531 - MTU MUENCHEN GMBH [DE]  
• [Y] US 2819883 A 19580114 - RIEPPEL PERRY J, et al  
• [A] GB 537421 A 19410623 - CHERRY BURRELL CORP  
• [A] US 3112793 A 19631203 - GEORG SASS HANS

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EP0383173A1; EP2384837A3

Designated contracting state (EPC)  
BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)  
**EP 0228581 A1 19870715**; **EP 0228581 B1 19890503**; DE 3543893 A1 19870625; DE 3543893 C2 19880128; JP H0697144 B2 19941130; JP S62142989 A 19870626; US 4809774 A 19890307

DOCDB simple family (application)  
**EP 86116618 A 19861129**; DE 3543893 A 19851212; JP 29513086 A 19861212; US 93858186 A 19861205