

Title (en)

Heat exchange apparatus for dryer by refrigeration in compressed air plants

Title (de)

Wärmetauscher-Vorrichtung für Kältetrockner an Druckluftanlagen

Title (fr)

Dispositif d'échange de chaleur pour séchoir par réfrigération dans les installations d'air comprimé

Publication

EP 0521298 B1 19991208 (DE)

Application

EP 92108919 A 19920527

Priority

- DE 4118289 A 19910604
- DE 9204952 U 19920409

Abstract (en)

[origin: US5299633A] A heat exchanger device for refrigeration driers in compressed-air installations is described. Such heat exchanger devices have an air/air heat exchanger (1) and a refrigerant/air heat exchanger (2). According to the invention, the air/air heat exchanger is produced as a plate heat exchanger and the refrigerant/air heat exchanger is produced as a combined tube/plate heat exchanger. The tube/plate heat exchanger has at least one unit containing a tube coil being coiled in a meandering manner and forming two spaced broad sides, and two plates, each plate being fastened at one of the two broad sides (FIG. 1).

IPC 1-7

F28D 9/00; **F28D 7/08**; **F04B 39/16**; **B01D 53/26**

IPC 8 full level

B01D 53/26 (2006.01); **D06F 58/20** (2006.01); **F04B 39/16** (2006.01); **F26B 21/08** (2006.01); **F28B 1/02** (2006.01); **F28D 7/00** (2006.01); **F28D 7/08** (2006.01); **F28D 9/00** (2006.01); **F28F 1/00** (2006.01); **F28F 3/08** (2006.01); **F28F 21/08** (2006.01)

CPC (source: EP US)

D06F 58/206 (2013.01 - EP US); **F26B 21/086** (2013.01 - EP US); **F28B 1/02** (2013.01 - EP US); **F28D 7/0008** (2013.01 - EP US); **F28D 7/0041** (2013.01 - EP US); **F28D 7/08** (2013.01 - EP US); **F28D 7/082** (2013.01 - EP US); **F28D 7/087** (2013.01 - EP US); **F28D 9/0062** (2013.01 - EP US); **F28F 1/02** (2013.01 - EP US); **F28D 2021/0038** (2013.01 - EP US); **F28F 2250/102** (2013.01 - EP US)

Cited by

EP2407587A1; CN112964079A; DE19709601C5; DE10311602A1; EP1304536A2; US6901996B2

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IT LI LU MC NL PT SE

DOCDB simple family (publication)

US 5299633 A 19940405; AT E187547 T1 19991215; DE 59209774 D1 20000113; DE 9204952 U1 19920716; DK 0521298 T3 20000529; EP 0521298 A2 19930107; EP 0521298 A3 19930414; EP 0521298 B1 19991208; ES 2142310 T3 20000416; JP 3273633 B2 20020408; JP H05223474 A 19930831

DOCDB simple family (application)

US 89176692 A 19920601; AT 92108919 T 19920527; DE 59209774 T 19920527; DE 9204952 U 19920409; DK 92108919 T 19920527; EP 92108919 A 19920527; ES 92108919 T 19920527; JP 16841792 A 19920603