

Title (en)  
Spiral heat exchanger

Title (de)  
Spiral-Wärmetauscher

Title (fr)  
Echangeur de chaleur spirale

Publication  
**EP 0798527 B1 19971008 (FR)**

Application  
**EP 96202200 A 19960805**

Priority  
EP 96202200 A 19960805

Abstract (en)  
[origin: EP0798527A1] The heat exchanger is constituted by a core (1) to which are fixed inlet and outlet air scoops. On one face of the core the air penetrates through regularly spaced angular sectors (5) and gas leaves through alternate angular sectors (6). On the core opposite face the air leaves through angularly spaced angular sectors (3) alternating with gas inlet angular sectors (4). The core is formed by winding a pair of sheets around an axis (z). One sheet is longitudinally rippled whilst the other sheet is transversely rippled. The first sheet has three axial ripple zones near the edges and a central zone. The other sheet is also rippled on these same three zones and also has inlet-outlet zones, with its edges alternately curved to form fluid inlet-outlet scoops.

Abstract (fr)  
Un échangeur de chaleur (1) est formé d'une paire de feuilles imprimées de reliefs et enroulées pour former un rouleau. Les fluides arrivent et débouchent sur les faces opposées du rouleau par des secteurs angulaires alternés (3), (4), (5), (6). Ces secteurs sont obtenus par le déport du bord d'une feuille sur l'autre à intervalles angulaires réguliers. <IMAGE>

IPC 1-7  
**F28D 9/00**; **F28D 9/04**

IPC 8 full level  
**F28D 9/00** (2006.01); **F28D 9/04** (2006.01)

CPC (source: EP US)  
**F28D 9/0018** (2013.01 - EP US); **F28D 9/04** (2013.01 - EP US); **Y10S 165/398** (2013.01 - EP US)

Cited by  
BE1011595A3; GB2372559A; GB2372559B; US6585034B2; US6289978B1; WO0028265A1; WO2005017435A1; WO0135042A1; US7600316B2; US7918268B2

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