

Title (en)  
Heat exchangers for fluids.

Title (de)  
Wärmetauscher für Flüssigkeiten.

Title (fr)  
Echangeurs de chaleur pour fluides.

Publication  
**EP 0504990 A1 19920923 (EN)**

Application  
**EP 92200714 A 19920312**

Priority  
IT MI910731 A 19910319

Abstract (en)  
A heat exchanger device (10) comprises bundles (12, 12') of parallel tubes traversed by a first fluid and contained in a casing (11) through which flows a second fluid. The tubes in the bundles (12, 12') open out into end chambers (15, 17, 23) of the casing, which constitute series connections between the bundles and inlet and outlet pipes of the first fluid from the exchanger (10). The tubes in the bundles are disposed within the casing (11) closely adjacent to one another and to the walls of the casing and have end portions with a smaller sectional area of flow to create manifolds (18, 19, 27, 28) in the casing for the second fluid, which constitute the interconnection of the spaces between the tubes and connections for the inlets (25) and outlets (29) for the circulation of said second fluid. <IMAGE>

IPC 1-7  
**F28D 7/16; F28F 13/08**

IPC 8 full level  
**F28D 7/00** (2006.01); **F28D 7/16** (2006.01); **F28F 13/08** (2006.01)

CPC (source: EP)  
**F28D 7/0041** (2013.01); **F28D 7/1638** (2013.01); **F28F 13/08** (2013.01)

Citation (search report)  
• [X] US 1946234 A 19340206 - JOSEPH PRICE  
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