

Title (en)
HEAT EXCHANGER TURBULIZERS WITH INTERRUPTED CONVOLUTIONS

Title (de)
WÄRMETAUSCHERWIRBELERZEUGER MIT UNTERBROCHENEN WELLUNGEN

Title (fr)
DISPOSITIFS PRODUCTEURS DE TURBULENCES COMPORTANT DES ONDULATIONS DISCONTINUES, UTILES DANS UN ECHANGEUR THERMIQUE

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Application
EP 98941187 A 19980828

Priority
• CA 9800826 W 19980828
• CA 2214255 A 19970829

Abstract (en)
[origin: WO9911995A1] A heat exchanger (10) is disclosed of the type having stacked plate pairs or tubes (12) defining flow passages, with turbulizer (18, 30, 45, 50, 55, 60) located inside such flow passages. The turbulizers (18, 30, 45, 50, 55, 60) are of the expanded metal type having rows of convolutions (32, 34). The convolutions (32, 34) are interrupted periodically to form non-convoluted pressure recovery zones (40) located between or downstream of the convolutions (32, 34). Also, the rows of convolutions (32, 34) can be spaced apart to provide longitudinal neutral zones (56, 61) between the rows of convolutions. The pressure recovery zones (40, 56, 61) and longitudinal neutral channels (62) reduce pressure drop in the heat exchanger (10) without appreciably reducing heat transfer.

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F28F 13/12

IPC 8 full level
F28F 1/40 (2006.01); **F28F 3/02** (2006.01); **F28F 3/06** (2006.01); **F28F 13/12** (2006.01)

CPC (source: EP ES KR)
F28D 1/0333 (2013.01 - EP); **F28F 13/12** (2013.01 - EP ES KR); **F28F 2255/12** (2013.01 - EP)

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WO 9911995 A1 19990311; AT 411397 B 20031229; AT A911198 A 20030515; AT E257238 T1 20040115; AU 738890 B2 20010927; AU 8968898 A 19990322; BR 9811403 A 20000829; CA 2214255 A1 19990228; CA 2214255 C 20041102; DE 19882638 T1 20000803; DE 69820880 D1 20040205; DE 69820880 T2 20041118; EP 1007893 A1 20000614; EP 1007893 B1 20040102; ES 2191524 A1 20030901; ES 2212332 T3 20040716; GB 0003877 D0 20000405; GB 2345336 A 20000705; GB 2345336 B 20020605; JP 2001515196 A 20010918; JP 3749436 B2 20060301; KR 100370487 B1 20030205; KR 20010023338 A 20010326; SE 0000511 D0 20000217; SE 0000511 L 20000217; SE 517362 C2 20020528

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