

Title (en)
MOULDING OF APERTURED ARTICLES

Title (de)
DAS FORMEN VON GELÖCHERTEN GEGENSTÄNDEN

Title (fr)
MOULAGE D'ARTICLES A TROUS

Publication
EP 0669860 B1 19970702 (EN)

Application
EP 93922016 A 19931005

Priority
• GB 9302069 W 19931005
• GB 9221750 A 19921016
• GB 9300812 A 19930115

Abstract (en)
[origin: WO9408743A1] An article (10) having side holes (11), e.g. a spacer (10) for a central heating radiator, is made of compacted loose particulate material in a die comprising a plate (1) having a vertical cavity (2), a top punch (7) and a bottom punch (4). An inner core rod (3) forms a central passageway (12) in the spacer (10) and side core rods (6) form the side holes (11). The density of the compacted material defining the side holes (11) is higher than in the remainder of the article (Figure 2).

IPC 1-7
B22F 5/00; **B22F 3/02**

IPC 8 full level
B22F 5/10 (2006.01); **B30B 11/04** (2006.01); **B30B 15/02** (2006.01); **F28F 9/26** (2006.01)

CPC (source: EP)
B22F 5/10 (2013.01); **B22F 5/106** (2013.01); **B30B 11/04** (2013.01); **B30B 15/022** (2013.01); **F28F 9/262** (2013.01); **B22F 2003/033** (2013.01); **B22F 2005/103** (2013.01); **B22F 2998/00** (2013.01); **F28F 2240/00** (2013.01)

C-Set (source: EP)
B22F 2998/00 + **B22F 5/106**

Cited by
CN109475935A

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 9408743 A1 19940428; AT E154904 T1 19970715; AU 5117093 A 19940509; CZ 291187 B6 20030115; CZ 95195 A3 19951018; DE 4303396 A1 19940421; DE 69311909 D1 19970807; DE 69311909 T2 19980212; DE 9302768 U1 19930519; EP 0669860 A1 19950906; EP 0669860 B1 19970702; ES 2062938 A2 19941216; ES 2062938 B1 19980701; ES 2062938 R 19980201; HU 218087 B 20000528; HU 9501090 D0 19950628; HU T70867 A 19951128; IT 1260870 B 19960429; IT TO930050 A0 19930129; IT TO930050 A1 19930430; NL 9300942 A 19940516; SK 283087 B6 20030204; SK 49895 A3 19960306

DOCDB simple family (application)
GB 9302069 W 19931005; AT 93922016 T 19931005; AU 5117093 A 19931005; CZ 95195 A 19931005; DE 4303396 A 19930205; DE 69311909 T 19931005; DE 9302768 U 19930205; EP 93922016 A 19931005; ES 9300277 A 19930212; HU 9501090 A 19931005; IT TO930050 A 19930129; NL 9300942 A 19930601; SK 49895 A 19931005