

Title (en)

Method and assembly for hot consolidating materials.

Title (de)

Verfahren und Vorrichtung zum Heissverdichten von Material.

Title (fr)

Procédé et dispositif pour la consolidation à chaud d'un matériau.

Publication

**EP 0105653 A1 19840418 (EN)**

Application

**EP 83305446 A 19830916**

Priority

US 41943582 A 19820920

Abstract (en)

A quantity of material (10), which is at less than a predetermined density, is disposed within a sealed container (12) which is, in turn, disposed in a first thermal jacket (32) to retain the heat within the material (10) to be consolidated. The first thermal jacket (32) is placed within a second thermal jacket (34) which is, in turn, disposed in a cavity defined by two elastomeric components (22, 24) retained between a ram (16) and pot die (14) of a press whereby upon closure of the press, the ram (16) enters the cavity (26) of the pot die (14) to apply external pressure to the entire exterior of the elastomeric components (22, 24). A seal (36) of material harder than the elastomeric material (22, 24) is disposed within the cavity (26) of the pot die (14) for preventing the elastomeric medium (22, 24) from leaking between the sliding surfaces of the ram (16) and the pot die (14).

IPC 1-7

**B22F 3/14**

IPC 8 full level

**B22F 3/02** (2006.01); **B22F 3/12** (2006.01); **B22F 3/14** (2006.01); **B22F 3/15** (2006.01); **B28B 3/00** (2006.01)

CPC (source: EP)

**B22F 3/1216** (2013.01); **B22F 3/1241** (2013.01); **B22F 3/15** (2013.01)

Citation (search report)

- [Y] FR 2453701 A1 19801107 - INOUE JAPAX RES [JP], et al
- [Y] FR 2002433 A1 19691017 - TRW INC
- [A] FR 1338493 A 19630927 - DESMARQUEST & CIE L
- [A] FR 1420799 A 19651210 - SUPER TEMP CORP
- [A] EP 0039014 A1 19811104 - ASEA AB [SE]
- [A] EP 0014975 A1 19800903 - ASEA AB [SE]

Cited by

FR2609916A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

**EP 0105653 A1 19840418**; **EP 0105653 B1 19880113**; AR 231811 A1 19850329; AT E31886 T1 19880115; AU 1896983 A 19840419; AU 3982585 A 19850912; AU 3982685 A 19850912; AU 545852 B2 19850801; AU 561135 B2 19870430; AU 561136 B2 19870430; BR 8305054 A 19840508; CA 1222152 A 19870526; DE 3375286 D1 19880218; DK 160680 B 19910408; DK 160680 C 19910923; DK 400583 A 19840321; DK 400583 D0 19830902; JP S5980701 A 19840510; JP S6239201 B2 19870821; MX 156866 A 19881006; NO 164080 B 19900521; NO 164080 C 19900829; NO 833160 L 19840321

DOCDB simple family (application)

**EP 83305446 A 19830916**; AR 29426383 A 19830920; AT 83305446 T 19830916; AU 1896983 A 19830909; AU 3982585 A 19850313; AU 3982685 A 19850313; BR 8305054 A 19830916; CA 435812 A 19830831; DE 3375286 T 19830916; DK 400583 A 19830902; JP 17404183 A 19830920; MX 19871083 A 19830914; NO 833160 A 19830902