

Title (en)

Containment and densification of particulate material.

Title (de)

Verpackung und Verdichtung eines teilchenförmigen Materials.

Title (fr)

Emballage et densification d'un matériau particulaire.

Publication

EP 0102246 A1 19840307 (EN)

Application

EP 83304974 A 19830830

Priority

- AU PF567082 A 19820830
- AU 1816383 A 19820830

Abstract (en)

Particulate supply material such as a mixture of synthetic rock precursor (20) and radioactive waste (19) is formed in a rotary kiln (23) and poured into a bellows container (20) which, after sealing with a lid, is subjected to cold axial compression by hydraulic rams (30); the bellows containers in sequence are passed through an upright cylindrical induction preheater (31) and are then advanced in turn across a support table (36) to a hydraulic ram (37) which moves upwardly within an inverted metal cannister (38) having a refractory abutment (40) at its upper end and which is surrounded by an induction heating coil (41). Pressure is maintained at a working temperature of about 1200 DEG C to cause axial compression of the bellows container and slight outward radial expansion to jam the bellows container within the outer cannister. For safety, the induction heating coil (41) is embedded within a refractory block (46) having a slightly tapered bore which at its lower narrowest end is at most a sliding fit over the cannister whereby the cannister is restrained by the refractory block from excessive outward deformation during the hot upward pressing of the bellows container. A series of bellows containers are compressed in turn within the metal cannister which then can be sealed and removed.

IPC 1-7

G21F 9/34

IPC 8 full level

G21F 9/34 (2006.01)

CPC (source: EP)

G21F 9/34 (2013.01)

Citation (search report)

- [X] EP 0044692 A2 19820127 - ATOMIC ENERGY OF AUSTRALIA [AU], et al
- [X] EP 0044381 A1 19820127 - ASEA AB [SE]
- [XP] DE 3129852 A1 19830217 - NUKLEAR SERVICE GMBH GNS [DE]

Cited by

EP0211533A1; EP0228816A1; EP0209339A3; EP0230732A1; GB2163893A

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