

Title (en)

BONE CEMENT MIXER AND DISPENSER

Title (de)

KNOCHENZEMENT-MISCHER UND -SPENDER

Title (fr)

MELANGEUR ET DISTRIBUTEUR DE CIMENT OSSEUX

Publication

EP 1011547 A1 20000628 (EN)

Application

EP 99904152 A 19990120

Priority

- US 9901185 W 19990120
- US 1008398 A 19980121

Abstract (en)

[origin: WO9937256A1] A cap includes an intermediate cap (60) and a cover cap (62) permanently secured together forming a cap chamber (10) and enclose the top of a housing (4) bone cement mixing chamber (5). A ribbed (84) contoured camming surface (86) is in the cap chamber (10) against which a received glass vial (9) is forced during insertion, breaking the vial head (11) and emptying the vial contents into the cap chamber (10) and then into the mixing chamber (5) through a fragment filter (92). The filter (92) and the ribbed (84) camming surface (86) traps glass fragments and vial head (11) in the cap chamber (10). The mixing chamber (5) is selectively coupled to an axially displaceable discharge tubular sleeve conduit (38) containing a feed auger (46). The discharge conduit (38) is axially opened to the mixing chamber (5) after completion of the cement liquid-powder mixing by rotating a collar (48) having a helix groove (54) connected to the sleeve (40). Various vial breaking cap embodiments are disclosed.

IPC 1-7

A61F 2/46; B01F 13/00; B01F 15/02; A61J 1/00

IPC 8 full level

A61F 2/46 (2006.01); **B01F 13/00** (2006.01); **B01F 15/02** (2006.01); **A61B 19/02** (2006.01); **A61F 2/00** (2006.01); **B01F 3/12** (2006.01); **B01F 7/00** (2006.01)

CPC (source: EP)

B01F 23/565 (2022.01); **B01F 33/5011** (2022.01); **B01F 35/713** (2022.01); **B01F 35/7131** (2022.01); **B01F 35/7173** (2022.01); **B01F 35/7511** (2022.01); **B01F 35/754551** (2022.01); **A61B 17/8805** (2013.01); **A61B 2050/0064** (2016.02); **A61B 2050/0066** (2016.02); **A61F 2002/30065** (2013.01); **A61F 2002/30289** (2013.01); **A61F 2002/30561** (2013.01); **A61F 2002/4685** (2013.01); **A61F 2210/0071** (2013.01); **A61F 2230/0091** (2013.01); **A61F 2250/0071** (2013.01); **B01F 27/1145** (2022.01); **B01F 35/75** (2022.01); **B01F 2101/20** (2022.01)

Citation (search report)

See references of WO 9937256A1

Designated contracting state (EPC)

DE GB

DOCDB simple family (publication)

WO 9937256 A1 19990729; AU 2460999 A 19990809; EP 1011547 A1 20000628

DOCDB simple family (application)

US 9901185 W 19990120; AU 2460999 A 19990120; EP 99904152 A 19990120