

Title (en)

METHOD FOR MANUFACTURING LARGE NUMBERS OF BALL-POINT PEN REFILLS

Publication

EP 0031092 B1 19850904 (DE)

Application

EP 80107824 A 19801211

Priority

DE 2951611 A 19791221

Abstract (en)

[origin: US4587999A] A ball point pen cartridge capable of being pressurized in a pressure vessel including an end stopper having an enlarged section shaped to seal the end of a cartridge tube, a narrower section connected to the enlarged portion and extending into the cartridge, an axial tube running completely through the enlarged section and partly through the narrower section, a radial tube in the narrower section that intersects the axial tube and a flexible, gas impervious tube surrounding the narrower section to form a check valve with the radial tube.

IPC 1-7

B43K 7/00; **B43K 11/04**

IPC 8 full level

B43K 7/00 (2006.01); **B43K 7/03** (2006.01); **B43K 7/04** (2006.01)

CPC (source: EP US)

B43K 7/03 (2013.01 - EP US); **B43K 7/04** (2013.01 - EP US)

Cited by

EP1028854A4; CN103085533A

Designated contracting state (EPC)

BE DE FR GB IT LU NL SE

DOCDB simple family (publication)

EP 0031092 A1 19810701; **EP 0031092 B1 19850904**; AU 542356 B2 19850221; AU 6566380 A 19810625; DE 3071063 D1 19851010; FI 70181 B 19860228; FI 70181 C 19860915; FI 803911 L 19810622; NO 152927 B 19850909; NO 152927 C 19851218; NO 803888 L 19810623; US 4587999 A 19860513

DOCDB simple family (application)

EP 80107824 A 19801211; AU 6566380 A 19801222; DE 3071063 T 19801211; FI 803911 A 19801215; NO 803888 A 19801219; US 21928480 A 19801222