

Title (en)
CAN SHELL AND DOUBLE-SEAMED CAN END

Title (de)
DOSENHÜLLE UND DOPPELT GEFALZTES DOSENENDE

Title (fr)
ENVELOPPE DE CANETTE ET EXTREMITÉ DE CANETTE À SERTISSAGE DOUBLE

Publication
EP 1434894 A4 20090429 (EN)

Application
EP 02752312 A 20020701

Priority
• US 0222287 W 20020701
• US 89880201 A 20010703
• US 7815202 A 20020219

Abstract (en)
[origin: WO03004716A2] A drawn aluminum can shell has a peripheral crown which is double-seamed with an end portion of an aluminum can body to provide a can end having a generally flat center panel connected by a curved panel wall to an inner wall of an annular U-shaped countersink. The countersink has a generally cylindrical outer wall and an inner width less than the radius of the panel wall. The outer wall of the countersink connects with a lower wall portion of a frustoconical chuckwall at a junction below the center panel, and an upper wall portion of the chuckwall extends to an inner wall of the crown at an angle of at least 16 DEG with the center axis. In one embodiment, the chuckwall has an intermediate generally vertical short riser portion connecting the wall portions, and the inner bottom width of the countersink is less than .040 inch.

IPC 8 full level
B21D 51/44 (2006.01); **C22F 1/00** (2006.01); **B21D 51/30** (2006.01); **B21D 51/32** (2006.01); **B21D 51/38** (2006.01); **B65D 8/12** (2006.01); **B65D 8/20** (2006.01)

CPC (source: EP US)
B21D 51/32 (2013.01 - EP US); **B21D 51/38** (2013.01 - EP US); **B65D 7/12** (2013.01 - EP US); **B65D 7/36** (2013.01 - EP US); **B65D 7/44** (2013.01 - EP US)

Citation (search report)
• [DXA] US 4093102 A 19780606 - KRASKA JOHN L
• [X] US 4809861 A 19890307 - WILKINSON HARLEN E [US], et al
• [A] GB 1588014 A 19810415 - METAL BOX CO LTD
• See references of WO 03004716A2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)
WO 03004716 A2 20030116; WO 03004716 A3 20040429; AU 2002354810 B2 20080103; BR 0211033 A 20050104; BR 0211033 B1 20130416; CA 2451453 A1 20030116; CA 2451453 C 20100126; CN 1321862 C 20070620; CN 1524049 A 20040825; EP 1434894 A2 20040707; EP 1434894 A4 20090429; EP 1434894 B1 20110302; IL 159505 A0 20040601; JP 2004533933 A 20041111; JP 4647207 B2 20110309; MX PA03012003 A 20050701; NZ 530353 A 20060331; RU 2003137570 A 20050527; RU 2323796 C2 20080510; US 2003121924 A1 20030703

DOCDB simple family (application)
US 0222287 W 20020701; AU 2002354810 A 20020701; BR 0211033 A 20020701; CA 2451453 A 20020701; CN 02813549 A 20020701; EP 02752312 A 20020701; IL 15950502 A 20020701; JP 2003510471 A 20020701; MX PA03012003 A 20020701; NZ 53035302 A 20020701; RU 2003137570 A 20020701; US 36124503 A 20030210