

Title (en)
MEMBRANE PACKING

Publication
EP 0403514 A4 19910327 (EN)

Application
EP 89902913 A 19890221

Priority
• US 16221588 A 19880229
• US 28544988 A 19881216
• US 29305989 A 19890103

Abstract (en)
[origin: WO8908064A1] An improved packing device which holds an article being shipped between membranes. The membranes provide shock adsorption through their own resiliency and by allowing motion when forces in excess of the frictional limit are applied. A pair of rigid frames (3) and (9) having central openings covered by an attached pliable material (7), form spacers which are forced in intimate contact with a fragile article (6) within its shipping container (2) to absorb shocks, flexion and torsion of the container due to shipping and handling loads. The spacers can be a box-like structure with at least one open face covered with a flexible membrane. The contour of the other faces of the structure are shaped and dimensioned to match the internal geometry of the container. In some applications, the spacer structure is a wedge that fits in one corner of the container. Two to four such wedges are typically used to support the object. The framed membranes offer a versatile substitute for a variety of common packing inserts.

IPC 1-7
B65D 85/30; **B65D 81/10**

IPC 8 full level
B65D 85/30 (2006.01); **B65D 81/07** (2006.01)

CPC (source: EP)
B65D 81/075 (2013.01)

Citation (search report)
• [X] US 2134908 A 19381101 - COPEMAN LLOYD G
• [A] DE 2654231 A1 19780601 - BECKMANNSHAGEN EWALD
• [A] DE 3440169 A1 19860507 - SIEMENS AG [DE]
• See references of WO 8908064A1

Cited by
DE102004047052B3; US10252135B1; WO0053499A2; WO2015152950A1; US9126743B2; US9150343B2; EP1035019A1; EP2241516A1; US11938372B1

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)
WO 8908064 A1 19890908; AU 3194589 A 19890922; AU 624126 B2 19920604; DE 68912318 D1 19940224; DE 68912318 T2 19940526; EP 0403514 A1 19901227; EP 0403514 A4 19910327; EP 0403514 B1 19940112; HK 1006697 A1 19990312; JP H03503995 A 19910905

DOCDB simple family (application)
US 8900675 W 19890221; AU 3194589 A 19890221; DE 68912318 T 19890221; EP 89902913 A 19890221; HK 98105862 A 19980622; JP 50270589 A 19890221