Title (en)

## SEPARATION ELEMENT FOR PACKING BOTTLES INTO BOXES

Publication

EP 0543660 A3 19930728 (EN)

## Application

EP 92310619 A 19921120

Priority

ZA 919258 A 19911122

Abstract (en)

[origin: EP0543660A2] Dividers for enabling articles such as bottles and bunches of grapes to be shipped in a manner which utilizes space economically comprise blanks of cardboard or like material which have a series of crease lines across them. Some crease lines form valleys when the blanks are folded and others form ridges. In some forms the crease lines converge and diverge in such manner that generally triangular shipping spaces are provided between adjacent ridges. When bottles are to be shipped, the bottles can be arranged in two oppositely arranged series with the necks intermeshed along the centre zone of the box. In another form each of a number of parallel crease lines has a first part which forms a ridge and a second part which forms a valley. A zig-zag crease line (24) which forms a ridge extends transversely of the blank (10). The parallel crease lines change from ridge (16,22) to valley (18,20) at an apex of the zig-zag crease line, and, on each side of the zig-zag crease line, crease lines which form valleys alternate with crease lines that form ridges.

IPC 1-7

B65D 5/48

IPC 8 full level

B65D 5/49 (2006.01)

CPC (source: EP)

## B65D 5/48042 (2013.01)

Citation (search report)

- [X] FR 1521839 A 19680419 EMBALLAGE IND
- [Y] FR 1253303 A 19610210 CASSARD G
- [Y] DE 9106244 U1 19911002
- [A] DE 2818888 A1 19791108 LAFARGE EMBALLAGE S A CALUIRE
- [A] FR 1539148 A 19680913 BROUSSE FILS S A R

Cited by

CN109018693A; DE29716702U1; US9604751B2

Designated contracting state (EPC) DE ES FR IT NL PT

DOCDB simple family (publication)

EP 0543660 A2 19930526; EP 0543660 A3 19930728; AU 2856592 A 19930527; ZA 929012 B 19930517

DOCDB simple family (application)

EP 92310619 Á 19921120; ÁU 2856592 A 19921123; ZA 929012 A 19921120