

Title (en)

Apparatus for supplying circular cross-section articles in longitudinally moving rows in a packaging apparatus.

Title (de)

Vorrichtung zum Zuführen von im Durchschnitt kreisförmigen Artikeln in longitudinal bewegenden Reihen in einem Verpackungsapparat.

Title (fr)

Appareil pour l'alimentation d'articles à section circulaire qui se déplacent en rangées longitudinales dans un appareil d'emballage.

Publication

**EP 0049377 A1 19820414 (EN)**

Application

**EP 81107023 A 19790328**

Priority

US 89237778 A 19780331

Abstract (en)

A packaging apparatus is disclosed having an apparatus for supplying articles of a circular cross-section in longitudinally moving transversely aligned rows. The supplying apparatus includes means (10) for arranging the articles in internested columns wherein transversely adjacent articles are longitudinally offset, and an aligning device (14) for moving adjacent articles into transverse rows. The aligning device includes guide means (18) defining a separate path (22) for each column of articles, the paths varying in length in accordance with the longitudinal offsetting of the transversely adjacent articles when internested.

IPC 1-7

**B65G 47/28**; **B65B 11/10**

IPC 8 full level

**B65B 17/00** (2006.01); **B65B 11/10** (2006.01); **B65B 11/16** (2006.01); **B65B 35/10** (2006.01); **B65B 49/00** (2006.01)

CPC (source: EP)

**B65B 11/10** (2013.01)

Citation (search report)

- US 3481107 A 19691202 - ANDBLAD KJELL INGEMAR, et al
- US RE28535 E 19750902

Cited by

EP1923314A1; EP3064440A1; CN107249986A; EP0629551A1; US5463846A; EP0581747A1; US10106280B2; US12017810B2; WO2016139139A1; WO2021018557A1; WO2021018558A1

Designated contracting state (EPC)

BE CH DE FR GB IT NL SE

DOCDB simple family (publication)

**EP 0049377 A1 19820414**; AU 4541979 A 19791004; AU 532583 B2 19831006; CA 1107632 A 19810825; EP 0004744 A2 19791017; EP 0004744 A3 19791031; EP 0004744 B1 19830216; JP S555380 A 19800116; MX 149750 A 19831215; ZA 791322 B 19800430

DOCDB simple family (application)

**EP 81107023 A 19790328**; AU 4541979 A 19790322; CA 323934 A 19790321; EP 79300505 A 19790328; JP 3631879 A 19790329; MX 17713879 A 19790330; ZA 791322 A 19790320