

Title (en)

Device for forming a gap in a stream of overlapping articles.

Title (de)

Vorrichtung zum Bilden einer Lücke in einem Schuppenstrom.

Title (fr)

Dispositif de formation d'un intervalle dans un courant d'articles se chevauchant.

Publication

**EP 0497002 B1 19950524 (DE)**

Application

**EP 91122241 A 19911227**

Priority

CH 23691 A 19910125

Abstract (en)

[origin: EP0497002A1] The gap-forming device (12), by means of which a gap is formed in the stream of overlapping articles (S) and which feeds the stream of overlapping articles (S) to the second conveyor (14), is located downstream of a first conveyor. The gap-forming device (12) has a belt conveyor (24) with two transport belts (26) located adjacently with a gap in between, and an accelerating conveyor (30) disposed between these two. The conveyor belt (28) of the accelerating conveyor (30) has openings (42) over approximately half of its length, which connect with the suction trough (44) in the vicinity of the conveying strand (28'). In order to form the gap, the conveyor belt (28) is driven at a higher speed (v2) than the belt conveyor (24), and the suction trough (44) is connected to a vacuum source. The products (48) lying on the accelerating conveyor (30) at the beginning of the gap formation are thereby sucked onto the conveyor belt (28) and accelerated by this, whilst the subsequent products (48) are transported further by means of the belt conveyor (24) with the slower speed (v3). <IMAGE>

IPC 1-7

**B65H 33/12**

IPC 8 full level

**B65G 47/31** (2006.01); **B65H 5/24** (2006.01); **B65H 29/60** (2006.01); **B65H 29/66** (2006.01); **B65H 29/68** (2006.01); **B65H 33/12** (2006.01)

CPC (source: EP US)

**B65H 29/60** (2013.01 - EP US); **B65H 29/66** (2013.01 - EP US); **B65H 33/12** (2013.01 - EP US)

Cited by

EP1787933A1; DE102018133451A1; CN107073981A; EP0680913A1; DE19851371A1; US6189884B1; US7597325B2

Designated contracting state (EPC)

CH DE ES FR GB IT LI SE

DOCDB simple family (publication)

**EP 0497002 A1 19920805; EP 0497002 B1 19950524**; CA 2059247 A1 19920726; DE 59105589 D1 19950629; ES 2071903 T3 19950701; FI 920336 A0 19920124; FI 920336 A 19920726; JP 3082008 B2 20000828; JP H0577963 A 19930330; US 5158278 A 19921027

DOCDB simple family (application)

**EP 91122241 A 19911227**; CA 2059247 A 19920113; DE 59105589 T 19911227; ES 91122241 T 19911227; FI 920336 A 19920124; JP 3272792 A 19920123; US 82119192 A 19920116