

Title (en)  
Packing machine

Title (de)  
Packmaschine

Title (fr)  
Machine d'emballage

Publication  
**EP 0604808 B1 19961106 (DE)**

Application  
**EP 93119971 A 19931210**

Priority  
DE 4243008 A 19921219

Abstract (en)  
[origin: DE4243008C1] The machine has at least one continuously circulating packing head (1) with at least one gripper (2) on a closed track (30), a carton or box carrier (7,8) continuously conveying a carton or box in a horizontal plane past the machine, a bottle conveyor (9,10) running parallel to the carton or box carrier which conveys the bottles (5,6) in the same direction as the carton or box (3,4), and a control device (101-106) for movement of the packing head relatively to the carton or box carrier (7,8) and the bottle conveyor (9,10). Through the bottle conveyor (9,10) and the carton or box carrier (7,8) bottles for packing and unpacking and also empty and full cartons or boxes for filling or unpacking are transported. Along the circulating track (30) of the packing head three successively spaced work points are located, at which the gripper (2) is controlled from a grippless position to one where it grips and vice versa. USE/ADVANTAGE - A high throughput packing machine for packing and unpacking bottles into and from cartons or boxes.

IPC 1-7  
**B65B 21/12**; **B65B 35/36**

IPC 8 full level  
**B65B 21/12** (2006.01); **B65B 21/18** (2006.01); **B65B 35/36** (2006.01); **B65G 47/86** (2006.01); **B65G 47/90** (2006.01)

CPC (source: EP KR US)  
**B65B 21/12** (2013.01 - KR); **B65B 21/183** (2013.01 - EP US)

Cited by  
CN103318462A

Designated contracting state (EPC)  
DE ES FR GB IT

DOCDB simple family (publication)  
**DE 4243008 C1 19940120**; BR 9305086 A 19940628; CN 1031182 C 19960306; CN 1091377 A 19940831; DE 59304420 D1 19961212; EP 0604808 A1 19940706; EP 0604808 B1 19961106; ES 2094993 T3 19970201; JP 3550174 B2 20040804; JP H0752917 A 19950228; KR 0157336 B1 19990218; KR 940014138 A 19940716; US 5487257 A 19960130

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**DE 4243008 A 19921219**; BR 9305086 A 19931216; CN 93121014 A 19931218; DE 59304420 T 19931210; EP 93119971 A 19931210; ES 93119971 T 19931210; JP 32040893 A 19931220; KR 930028517 A 19931218; US 16668993 A 19931214