

Title (en)

PACKAGING SYSTEMS FOR INCREASED FOOD PRODUCT SHELF LIFE

Title (de)

VERPACKUNGSSYSTEM FÜR NAHRUNGSMITTEL MIT ERHÖHTER HALTBARKEIT

Title (fr)

SYSTEMES D'EMBALLAGE PERMETTANT UNE AUGMENTATION DE LA DUREE DE CONSERVATION DES DENREES ALIMENTAIRES

Publication

EP 0699157 A1 19960306 (EN)

Application

EP 94918018 A 19940516

Priority

- US 6470093 A 19930520
- US 9853093 A 19930728
- US 15475693 A 19931118
- US 22119494 A 19940331
- US 9405525 W 19940516

Abstract (en)

[origin: WO9427868A2] A tray having a peripheral flange with one or more raised ledges to secure a pair of membranes to enclose the tray. A lower membrane may be attached to a first ledge of the flange. An upper membrane may be attached to a second ledge or a recessed lip of the flange without connection to the lower membrane, except through the tray. The two attachment surfaces may be separated by a trough or by being positioned on different levels to facilitate trimming of the upper membrane in a continuous manufacturing process. A method and apparatus for modified atmosphere packaging uses a rotary conveyor to transport a plurality of trays to be packaged between a plurality of stations in a circular arrangement. The trays may be loaded onto a receiving platform by depositing them over movable beds which can reciprocate downwardly in order to permit the trays to be removably held inside slots in a removable platform. Since the platform is removable from the conveyor, it may be centered in any particular station by lifting the platform from the conveyor and guiding it into a precise alignment at a particular station. The package may then be filled, its atmosphere replaced with one lower in oxygen content, and then the desired atmosphere sealed within the package. This can be done in the continuous fashion so that the film is severed from a continuous web. A package, packaging method, and packaging apparatus for facilitating the packaging of large meat products and exchanging the ambient atmosphere to establish a desired gaseous atmosphere that extends the shelf life of the product. The package includes a pair of preformed relatively rigid plastic domed or cupped members which abut along a sealing surface. The upper (318) and lower (310) package portions include flanges (312, 336) which are adapted to facilitate not only the formation of the package but its subsequent opening. A reciprocatable filling tube (320) maintains the separation between the upper and lower package portions to permit gas exchange and then may be reciprocated downwardly to allow the upper package portion to abut atop the lower package portion for sealing connection.

IPC 1-7

B65B 31/02; B65B 25/06; B65D 77/20; B65D 77/30

IPC 8 full level

B65D 85/50 (2006.01); **A23L 3/00** (2006.01); **B65B 7/16** (2006.01); **B65B 25/06** (2006.01); **B65B 31/02** (2006.01); **B65D 51/18** (2006.01);
B65D 77/20 (2006.01); **B65D 77/30** (2006.01); **B65D 81/20** (2006.01); **B65D 81/24** (2006.01)

CPC (source: EP)

B65B 7/168 (2013.01); **B65B 25/067** (2013.01); **B65B 31/028** (2013.01); **B65D 51/185** (2013.01); **B65D 77/20** (2013.01); **B65D 77/30** (2013.01);
B65D 81/2076 (2013.01); **B65D 81/245** (2013.01); **B65D 2251/0031** (2013.01); **B65D 2251/0093** (2013.01); **B65D 2565/388** (2013.01)

Citation (search report)

See references of WO 9427868A2

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9427868 A2 19941208; WO 9427868 A3 19950209; AT E188660 T1 20000115; AT E247028 T1 20030815; AU 688329 B2 19980312;
AU 6952094 A 19941220; CA 2163230 A1 19941208; CA 2163230 C 19991102; DE 69422620 D1 20000217; DE 69422620 T2 20000531;
DE 69433041 D1 20030918; DE 69433041 T2 20040527; EP 0699157 A1 19960306; EP 0699157 B1 20000112; EP 0899209 A2 19990303;
EP 0899209 A3 19990414; EP 0899209 B1 20030813; EP 0949147 A1 19991013; JP 2001294278 A 20011023; JP H08510708 A 19961112;
KR 100320356 B1 20020115; NZ 267278 A 19971124

DOCDB simple family (application)

US 9405525 W 19940516; AT 94918018 T 19940516; AT 98122058 T 19940516; AU 6952094 A 19940516; CA 2163230 A 19940516;
DE 69422620 T 19940516; DE 69433041 T 19940516; EP 94918018 A 19940516; EP 98122058 A 19940516; EP 99109931 A 19940516;
JP 2001092107 A 20010328; JP 50076495 A 19940516; KR 19997001998 A 19990310; NZ 26727894 A 19940516