

Title (en)
APPARATUS FOR LOADING BOTTOM-LOADING BASKET-STYLE CARRIER

Title (de)
VORRICHTUNG ZUM BODENSEITIGEN EINBRINGEN VON BEHÄLTERN IN KORBARTIGE TRAGBRHÄLTER

Title (fr)
PROCEDE ET APPAREIL DE REMPLISSAGE DE STRUCTURES PORTEUSES DE TYPE PANIER SE CHARGEANT PAR LE FOND

Publication
EP 0820403 A4 19990630 (EN)

Application
EP 96912762 A 19960415

Priority
• US 9605176 W 19960415
• US 42111395 A 19950413
• US 45032395 A 19950525

Abstract (en)
[origin: WO9632322A1] An apparatus (10) for loading containers into basket-style bottom-loading carriers (3) has a container infeed mechanism; a carrier infeed supplier (30); a carrier feeder mechanism (50) for removing carriers from the carrier infeed supplier; a carrier timer-transport assembly (60 or 260) for receiving carriers (3) from the carrier infeed supplier and initiating transport of the carriers in synchronous parallel motion above the containers; a gripper (82) assembly for opening the carriers (3); a declination belt assembly (90) forming a pathway for receiving transversely extending bottom panels of said carriers and transporting said carriers downwardly over the groupings of containers; a seating assembling (120) for engaging tops of handles of carriers such that as the seating members rotate the bottommost seating member engages the respective tops of the handles of the carriers; and bottom-panel closure mechanisms (130, 140, 182) for placing the bottom panels together in locking relationship with respect to one another.

IPC 1-7
B65B 21/14; B65B 21/22; B65B 43/26

IPC 8 full level
B65B 17/02 (2006.01); **B65B 21/02** (2006.01); **B65B 21/14** (2006.01); **B65B 21/06** (2006.01); **B65B 21/22** (2006.01); **B65B 21/24** (2006.01); **B65B 35/30** (2006.01); **B65B 43/18** (2006.01); **B65B 43/26** (2006.01); **B65B 43/46** (2006.01)

CPC (source: EP KR)
B65B 21/24 (2013.01 - KR); **B65B 21/242** (2013.01 - EP); **B65B 43/185** (2013.01 - EP)

Citation (search report)
No further relevant documents disclosed

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IE IT LI NL PT SE

DOCDB simple family (publication)
WO 9632322 A1 19961017; AR 001625 A1 19971126; AR 001626 A1 19971126; AR 001627 A1 19971126; AT E189655 T1 20000215; AT E189793 T1 20000315; AT E189794 T1 20000315; AT E220628 T1 20020815; AT E221016 T1 20020815; AT E221488 T1 20020815; AU 5485796 A 19961030; AU 5545096 A 19961030; AU 5546196 A 19961030; AU 5546296 A 19961030; AU 5548196 A 19961030; AU 5664496 A 19961030; AU 706228 B2 19990610; BR 9604939 A 19980609; BR 9604962 A 19980714; BR 9604963 A 19980714; BR 9604964 A 19980714; BR 9605000 A 19990202; CA 2218035 A1 19961017; CA 2218035 C 20070626; CA 2218041 A1 19961017; CA 2218041 C 20051122; CA 2218046 A1 19961017; CA 2218046 C 20060124; CA 2218065 A1 19961017; CA 2218065 C 20051129; CA 2218071 A1 19961017; CA 2218071 C 20010731; CN 1073526 C 20011024; CN 1073527 C 20011024; CN 1082005 C 20020403; CN 1186469 A 19980701; CN 1186470 A 19980701; CN 1186471 A 19980701; CZ 294073 B6 20040915; CZ 322297 A3 19980513; DE 69606629 D1 20000316; DE 69606629 T2 20000621; DE 69606702 D1 20000323; DE 69606702 T2 20000621; DE 69606704 D1 20000323; DE 69606704 T2 20000621; DE 69622388 D1 20020822; DE 69622388 T2 20030220; DE 69622549 D1 20020829; DE 69622549 T2 20030306; DE 69622699 D1 20020905; DE 69622699 T2 20030612; DK 0817745 T3 20021118; DK 0817746 T3 20000515; DK 0817747 T3 20000605; DK 0817748 T3 20000605; DK 0820403 T3 20020902; DK 0820404 T3 20021028; EP 0817745 A1 19980114; EP 0817745 A4 19990707; EP 0817745 B1 20020731; EP 0817746 A1 19980114; EP 0817746 B1 20000209; EP 0817747 A1 19980114; EP 0817747 B1 20000216; EP 0817748 A2 19980114; EP 0817748 B1 20000216; EP 0820403 A1 19980128; EP 0820403 A4 19990630; EP 0820403 B1 20020717; EP 0820404 A1 19980128; EP 0820404 A4 19990707; EP 0820404 B1 20020724; ES 2143192 T3 20000501; ES 2143195 T3 20000501; ES 2143196 T3 20000501; ES 2180762 T3 20030216; ES 2180763 T3 20030216; ES 2180766 T3 20030216; GR 3032869 T3 20000731; GR 3033202 T3 20000831; GR 3033378 T3 20000929; HK 1008200 A1 19990507; HU P9900893 A2 19990728; HU P9900893 A3 20000128; IL 117897 A0 19960804; IL 117897 A 20000217; IL 117898 A0 19960804; IL 117899 A0 19960804; IL 117899 A 20000217; JP 3830516 B2 20061004; JP 3830517 B2 20061004; JP 3917180 B2 20070523; JP 3923522 B2 20070606; JP 3923523 B2 20070606; JP H11503693 A 19990330; JP H11503694 A 19990330; JP H11503695 A 19990330; JP H11503696 A 19990330; JP H11503697 A 19990330; KR 100454351 B1 20041217; KR 100454352 B1 20041217; KR 100454353 B1 20041217; KR 100454354 B1 20041217; KR 100493786 B1 20050915; KR 19980703751 A 19981205; KR 19980703752 A 19981205; KR 19980703753 A 19981205; KR 19980703754 A 19981205; KR 19980703755 A 19981205; MX 9707467 A 19971129; MX 9707468 A 19971129; MX 9707469 A 19971129; MX 9707470 A 19971129; MX 9707471 A 19971129; MY 123046 A 20060531; NZ 306815 A 19990128; PL 179609 B1 20001031; PL 322762 A1 19980216; PT 817745 E 20021031; PT 817746 E 20000531; PT 817747 E 20000630; PT 817748 E 20000630; PT 820403 E 20021129; PT 820404 E 20021129; TR 199701089 T1 19980321; TW 307730 B 19970611; TW 315353 B 19970911; TW 325450 B 19980121; WO 9632320 A1 19961017; WO 9632321 A1 19961017; WO 9632324 A1 19961017; WO 9632325 A1 19961017; WO 9632327 A2 19961017; WO 9632327 A3 19970227

DOCDB simple family (application)
US 9605267 W 19960415; AR 33617196 A 19960415; AR 33617296 A 19960415; AR 33617396 A 19960415; AT 96911779 T 19960415; AT 96912750 T 19960415; AT 96912761 T 19960415; AT 96912762 T 19960415; AT 96912786 T 19960415; AT 96913797 T 19960415; AU 5485796 A 19960415; AU 5545096 A 19960415; AU 5546196 A 19960415; AU 5546296 A 19960415; AU 5548196 A 19960415; AU 5664496 A 19960415; BR 9604939 A 19960415; BR 9604962 A 19960415; BR 9604963 A 19960415; BR 9604964 A 19960415; BR 9605000 A 19960415; CA 2218035 A 19960415; CA 2218035 A 19960415; CA 2218041 A 19960415; CA 2218046 A 19960415; CA 2218065 A 19960415; CA 2218071 A 19960415; CN 96194417 A 19960415; CN 96194419 A 19960415; CN 96194420 A 19960415; CZ 322297 A 19960415; DE 69606629 T 19960415; DE 69606702 T 19960415; DE 69606704 T 19960415; DE 69622388 T 19960415; DE 69622549 T 19960415;

DE 69622699 T 19960415; DK 96911779 T 19960415; DK 96912750 T 19960415; DK 96912761 T 19960415; DK 96912762 T 19960415;
DK 96912786 T 19960415; DK 96913797 T 19960415; EP 96911779 A 19960415; EP 96912750 A 19960415; EP 96912761 A 19960415;
EP 96912762 A 19960415; EP 96912786 A 19960415; EP 96913797 A 19960415; ES 96911779 T 19960415; ES 96912750 T 19960415;
ES 96912761 T 19960415; ES 96912762 T 19960415; ES 96912786 T 19960415; ES 96913797 T 19960415; GR 20000400561 T 20000303;
GR 20000400896 T 20000412; GR 20000401063 T 20000505; HK 98109080 A 19980711; HU P9900893 A 19960415;
IL 11789796 A 19960414; IL 11789896 A 19960414; IL 11789996 A 19960414; JP 53125596 A 19960415; JP 53125996 A 19960415;
JP 53126096 A 19960415; JP 53126696 A 19960415; JP 53127196 A 19960415; KR 19970707151 A 19971010; KR 19970707152 A 19971010;
KR 19970707153 A 19971010; KR 19970707154 A 19971010; KR 19970707155 A 19971010; MX 9707467 A 19960415;
MX 9707468 A 19960415; MX 9707469 A 19960415; MX 9707470 A 19960415; MX 9707471 A 19960415; MY PI9601422 A 19960413;
NZ 30681596 A 19960415; PL 32276296 A 19960415; PT 96911779 T 19960415; PT 96912750 T 19960415; PT 96912761 T 19960415;
PT 96912762 T 19960415; PT 96912786 T 19960415; PT 96913797 T 19960415; TR 9701089 T 19960415; TW 85105530 A 19960510;
TW 85105531 A 19960510; TW 85106763 A 19960606; US 9605158 W 19960415; US 9605175 W 19960415; US 9605176 W 19960415;
US 9605221 W 19960415; US 9605233 W 19960415