

Title (en)
Container-handling machines with preliminary table

Title (de)
Behälterbehandlungsmaschinen mit Vortisch

Title (fr)
Machines de traitement de conteneurs avec avant-table

Publication
EP 1645537 A1 20060412 (DE)

Application
EP 05019615 A 20050909

Priority
DE 102004049330 A 20041009

Abstract (en)
Pre-table for treatment of containers e.g. bottles, plastic, cardboard packing has rinser (18), filling machine (19), locking machine (20) and associated transportation elements along with transportation star (15) interconnected using joining elements (13). The joining elements are used to connect two container treatment machines.

IPC 8 full level
B67C 7/00 (2006.01); **B67B 3/00** (2006.01); **B67C 3/00** (2006.01); **B31B 50/70** (2017.01)

CPC (source: EP US)
B67C 3/005 (2013.01 - EP US); **B67C 7/002** (2013.01 - EP US); **B67C 7/0046** (2013.01 - EP US)

Citation (applicant)
• DE 19814625 A1 19991007 - KHS MASCH & ANLAGENBAU AG [DE]
• DE 3327492 A1 19850214 - SEITZ ENZINGER NOLL MASCH [DE]
• FR 510526 A 19201206 - CHARLES BEDON [FR]
• US 5713403 A 19980203 - CLUESSERATH LUDWIG [DE], et al
• US 5261207 A 19931116 - BEDIN JEAN [FR]

Citation (search report)
• [X] DE 19814625 A1 19991007 - KHS MASCH & ANLAGENBAU AG [DE]
• [X] DE 3327492 A1 19850214 - SEITZ ENZINGER NOLL MASCH [DE]
• [X] DE 20019305 U1 20010621 - KRONES AG [DE]
• [A] DE 19512849 A1 19961010 - MAGDEBURG GETRAENKEMASCH [DE]
• [A] DE 20002483 U1 20010329 - KRONES AG [DE]
• [A] DE 1052844 B 19590312 - ENZINGER UNION WERKE AG
• [A] DE 3717338 A1 19880303 - SEITZ ENZINGER NOLL MASCH [DE]
• [A] DE 1209905 B 19660127 - HOLSTEIN & KAPPERT MASCHF

Citation (third parties)
Third party :
• US 2006086061 A1 20060427 - BERNHARD HERBERT [DE]
• US 5713403 A 19980203 - CLUESSERATH LUDWIG [DE], et al
• US 5261207 A 19931116 - BEDIN JEAN [FR]

Cited by
DE102015121530A1; CN103429496A; EP1714939A1; US7743907B2; US8500084B2; DE102012000881A1; WO2006087088A3; WO2017097538A1; US10246268B2; EP1851148A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1645537 A1 20060412; EP 1645537 B1 20130403; BR PI0504544 A 20060523; BR PI0504544 B1 20180214; CN 1837021 A 20060927; CN 1837021 B 20110323; DE 102004049330 A1 20060413; DE 102004049330 B4 20150521; ES 2402985 T3 20130513; JP 2006111353 A 20060427; JP 4660849 B2 20110330; PL 1645537 T3 20130830; RU 2005131131 A 20070420; RU 2308413 C2 20071020; SI 1645537 T1 20130628; US 2006086061 A1 20060427; US 8024909 B2 20110927

DOCDB simple family (application)
EP 05019615 A 20050909; BR PI0504544 A 20051003; CN 200510121659 A 20051009; DE 102004049330 A 20041009; ES 05019615 T 20050909; JP 2005294346 A 20051007; PL 05019615 T 20050909; RU 2005131131 A 20051007; SI 200531711 T 20050909; US 24594805 A 20051007