

Title (en)
METHOD FOR MONITORING, CONTROLLING AND OPTIMISING FILLING SYSTEMS FOR FOODSTUFFS, IN PARTICULAR FOR BEVERAGE BOTTLES

Title (de)
VERFAHREN ZUR ÜBERWACHUNG, STEUERUNG UND OPTIMIERUNG VON ABFÜLLANLAGEN

Title (fr)
PROCÉDÉ DE SURVEILLANCE, DE COMMANDE ET D'OPTIMISATION D'INSTALLATIONS DE REMPLISSAGE POUR PRODUITS ALIMENTAIRES, NOTAMMENT POUR BOUTEILLES À BOISSONS

Publication
EP 2132129 B1 20170920 (DE)

Application
EP 08734591 A 20080306

Priority
• EP 2008001775 W 20080306
• DE 102007014802 A 20070328

Abstract (en)
[origin: WO2008116546A2] The invention relates to a method for monitoring, controlling and optimising filling systems for all product types, in particular for use in the beverage industry. According to said method, the information required to control or monitor the system is obtained by means of optoelectronic recognition systems and data processing systems associated with the latter. Image recording devices and image processing computers are used for this purpose.

IPC 8 full level
B67B 3/26 (2006.01); **B67C 3/00** (2006.01)

CPC (source: EP US)
B67B 3/26 (2013.01 - EP US); **B67C 3/007** (2013.01 - EP US)

Citation (examination)
• DE 29713701 U1 19980226 - KRONSEDER MASCHF KRONES [DE]
• EP 1754549 A2 20070221 - EISENMANN ANLAGENBAU GMBH & CO [DE]
• EP 0190090 A1 19860806 - GEBO SA [FR]
• JP 2000158527 A 20000613 - DAIWA CAN CO LTD
• DE 4239238 A1 19940526 - KHS MASCH & ANLAGENBAU AG [DE]
• CH 695940 A5 20061031 - MARCO CORVI [CH]
• DE 10245720 A1 20040401 - PILZ GMBH & CO [DE], et al
• EP 0344404 A1 19891206 - INVENTIO AG [CH]

Citation (opposition)
Opponent : KRONES AG
• EP 0512244 A1 19921111 - BOSCH GMBH ROBERT [DE]
• EP 0344404 A1 19891206 - INVENTIO AG [CH]
• CH 695940 A5 20061031 - MARCO CORVI [CH]
• DE 10245720 A1 20040401 - PILZ GMBH & CO [DE], et al
• JP 2000158527 A 20000613 - DAIWA CAN CO LTD
• EP 0190090 A1 19860806 - GEBO SA [FR]
• EP 1754549 A2 20070221 - EISENMANN ANLAGENBAU GMBH & CO [DE]
• DE 4239238 A1 19940526 - KHS MASCH & ANLAGENBAU AG [DE]
• DE 29713701 U1 19980226 - KRONSEDER MASCHF KRONES [DE]
• US 2001054540 A1 20011227 - STEEBER DORIAN F [US], et al
• US 6725998 B2 20040427 - STEEBER DORIAN F [US], et al
• DE 102006008123 A1 20070823 - KRONES AG [DE]
• DE 102007026213 A1 20081211 - SFT MANUMAT S A R L [FR]
• JP 2004026460 A 20040129 - SANYU KIKI KK
• JP H05286552 A 19931102 - MATSUSHITA ELECTRIC IND CO LTD
• US 3998319 A 19761221 - MERNOE ERIK CHRISTIAN
• DE 2639526 A1 19780309 - HAUNI WERKE KOERBER & CO KG
• DE 19609633 A1 19961114 - FERAG AG [CH]
• GB 2098568 A 19821124 - MAPATENT NV
• DE 20214153 U1 20030306 - HEUFT SYSTEMTECHNIK GMBH [DE]
• DE 202004016069 U1 20051201 - KRONES AG [DE]
• JP H03143823 A 19910619 - MITSUBISHI HEAVY IND LTD
• JP H05262423 A 19931012
• WO 0198187 A1 20011227 - SOGEM AGRO [FR], et al
• EP 1456101 A1 20040915 - AUTefa AUTOMATION GMBH [DE]
• US 4549647 A 19851029 - COSSE LIONEL [FR]
• DE 19530626 A1 19970227 - KRONSEDER MASCHF KRONES [DE]
• DE 2618905 A1 19771110 - SCHMERMUND MASCHF ALFRED
• EP 1295820 A1 20030326 - SIG SIMONAZZI SPA [IT]
• EP 1741633 A1 20070110 - KHS AG [DE]
• WO 2004088439 A1 20041014 - HENKEL KGAA [DE], et al
• DE 102006015689 A1 20071004 - SSI SCHAEFER PEEM GMBH [AT]
• DE 19522368 A1 19970102 - SCHUBERT GERHARD GMBH [DE]
• WO 0174693 A1 20011011 - SIEMENS ELECTROCOM LP [US]
• WO 03042078 A1 20030522 - CRISPLANT AS [DK], et al
• DE 3874093 T2 19930225 - HEINEKEN TECH SERVICES [NL]
• DE 102004029356 A1 20060202 - SIEMENS AG [DE]
• DE 4114798 A1 19921112 - BOSCH GMBH ROBERT [DE]
• DE 4207835 A1 19930916 - SEITZ ENZINGER NOLL MASCH [DE]

- DE 4332645 C2 19950921 - ORTMANN & HERBST MASCH GMBH [DE]
- DE 4343750 A1 19940901 - ORTHMANN & HERBST [DE]
- DE 10033652 A1 20020124 - MESSER GRIESHEIM GMBH [DE]
- DE 19856067 B4 20050407 - BOSCH GMBH ROBERT [DE]
- DE 20120700 U1 20030430 - AUTEFA AUTOMATION GMBH [DE]
- DE 20203287 U1 20020620 - WITRON LOGISTIK & INF GMBH [DE]
- DE 102004029359 B4 20060803 - SIEMENS AG [DE]
- DE 102005020020 A1 20061109 - STROEER OUT OF HOME MEDIA AG [DE]
- EP 0982696 A2 20000301 - COPPERHEAD PATENTMARKETING GMB [DE]
- EP 1026079 A2 20000809 - FOCKE & CO [DE]
- DE 4232413 A1 19940331 - KHS MASCH & ANLAGENBAU AG [DE]
- DE 071955 C
- "Projektierung von Flaschenabfüllanlagen", H&K JOURNAL, vol. 101, pages 15 - 21
- H &K JOURNAL, vol. 103
- H&K JOURNAL, vol. 104
- "Krones Anlagendokumentation", KRONES ANLAGENREGELUNG MUSTERANLAGE, 10 September 1997 (1997-09-10), XP055502975

Cited by

CN105404200A; WO2018108782A1; US10882701B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2008116546 A2 20081002; WO 2008116546 A3 20090402; WO 2008116546 A9 20090522; BR PI0806110 A2 20110830;
BR PI0806110 A8 20190625; BR PI0806110 B1 20210302; CN 101641280 A 20100203; DE 102007014802 A1 20081009;
EP 2132129 A2 20091216; EP 2132129 B1 20170920; ES 2642717 T3 20171117; JP 2010522390 A 20100701; MX 2009005424 A 20090603;
PL 2132129 T3 20180330; RU 2009139670 A 20110510; RU 2432314 C2 20111027; US 2010082149 A1 20100401; US 9434591 B2 20160906

DOCDB simple family (application)

EP 2008001775 W 20080306; BR PI0806110 A 20080306; CN 200880003426 A 20080306; DE 102007014802 A 20070328;
EP 08734591 A 20080306; ES 08734591 T 20080306; JP 2010500101 A 20080306; MX 2009005424 A 20080306; PL 08734591 T 20080306;
RU 2009139670 A 20080306; US 56737109 A 20090925