

Title (en)

DEVICE AND METHOD FOR TREATING CONTAINERS

Title (de)

VORRICHTUNG SOWIE VERFAHREN ZUM BEHANDELN VON BEHÄLTERN

Title (fr)

DISPOSITIF ET PROCÉDÉ POUR TRAITER DES CONTENANTS

Publication

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Application

EP 09778759 A 20090929

Priority

- EP 2009006989 W 20090929
- DE 102008049937 A 20081002

Abstract (en)

[origin: WO2010037517A2] The invention relates to a device for treating containers, comprising a drive assembly having at least one electric drive motor for driving units and/or auxiliary units and/or other functional elements of the device, and comprising a means for adapting the rotational speed and/or the power of the at least one drive assembly and/or of the at least one drive motor to the respective operational state of the device and/or of a system comprising said device.

IPC 8 full level

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CPC (source: EP)

B08B 9/08 (2013.01); **B08B 9/20** (2013.01); **B08B 9/205** (2013.01)

Citation (opposition)

Opponent : Krones AG

- DE 4431052 A1 19960307 - ELEKTRO MASCHINEN UND APPARATE [DE]
- WO 2008055663 A1 20080515 - KHS AG [DE], et al
- DE 2122152 A1 19721116
- DE 19741476 A1 19990318 - KRONSEDER MASCHF KRONES [DE]
- DE 19608355 A1 19960829 - SCHROEDER WOLFGANG [DE]
- EP 1598308 A1 20051123 - SUNTORY LTD [JP]
- DE 102005026080 A1 20061228 - KHS AG [DE]
- EP 0221415 A1 19870513 - NESTLE SA [CH]
- DE 10300642 A1 20040722 - KRONES AG [DE]
- DE 1803332 A1 19700527 - KRONSEDER HERMANN
- DE 4304814 A1 19940818 - KRONSEDER MASCHF KRONES [DE]
- DE 2254972 A1 19740522 - WINTERWERB STRENG CO GMBH
- DE 20300142 U1 20031023 - KHS MASCH & ANLAGENBAU AG [DE]
- JP 2001205213 A 20010731 - SHIBUYA MACHINERY KK
- US 2007163622 A1 20070719 - AVELIS JULIAN P [US], et al
- R. SCHARRENBACH: "Macht keine Pause - Frequenzumrichter", ELEKTROTECHNIK FÜR DIE AUTOMATISIERUNG, August 1997 (1997-08-01), pages 70 - 73, XP055956014
- S. GÖGL: "Frequenzgeregelte Pumpen in der Brauerei", BRAUWELT, 1995, pages 1811 - 1814, XP055956019
- ANONYMOUS: "Technischer Katalog Frequenzumrichter FR - F 700 -Serie", MITSUBISHI ELECTRIC, October 2006 (2006-10-01), pages 1 - 52, XP055956023
- A. LINKE: "Energiesparende Antriebstechnik am Beispiel von Abfüll- und Transport- anlagen", ANTRIEBSTECHNIK, vol. 30, no. 5, 1994, pages 36,38 - 41,42, XP055956026
- ANONYMOUS: "Variable speed drives", CARBON TRUST, March 2007 (2007-03-01), pages 1 - 20, XP055956032

Cited by

EP2932336B1

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DOCDB simple family (publication)

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