

Title (en)

High speed bottle washing machine and nozzle spray assembly

Title (de)

Hochgeschwindigkeits-Flaschenspülmaschine und Spritzdüsenzusammensetzung

Title (fr)

Machine pour le lavage des bouteilles à haute vitesse et dispositif de pulvérisation

Publication

EP 0634230 B1 19981223 (EN)

Application

EP 94110834 A 19940712

Priority

- US 9041393 A 19930712
- US 9041193 A 19930712
- US 9050193 A 19930713
- US 9050393 A 19930713

Abstract (en)

[origin: EP0634230A1] A high-speed bottle washing machine provides concurrent rotational motion to a workpiece as it is conveyed through a washing treatment zone for internal and external spray treatments. The machine comprises a plurality of moving bottle receiving stations for sequentially receiving and rotating inverted bottles received from a bottle infeed conveyor, a plurality of reciprocating spray nozzles, with at least one spray nozzle moving with each bottle receiving station, wherein each of the spray nozzles reciprocates from a first position below the inverted bottles, to a second position within the bottles, and a manifold assembly for sequentially supplying a caustic wash fluid under pressure to each of the plurality of spray nozzles to clean the bottles by impingement of the wash fluid in a predetermined pattern within the bottles as the bottles are rotated. The washed bottles are finally discharged at a bottle outfeed conveyor. <IMAGE>

IPC 1-7

B08B 9/32; B08B 9/34; B08B 9/20

IPC 8 full level

B08B 9/32 (2006.01); **B08B 9/34** (2006.01); **B08B 9/42** (2006.01)

CPC (source: EP)

B08B 9/32 (2013.01); **B08B 9/34** (2013.01); **B08B 9/426** (2013.01)

Cited by

CN113387595A; IT201900007860A1; CN112934887A; CN108971168A; CN114477723A; EP0894543A1; CN109131994A; US5467790A; CN114210681A; CN113828604A; EP4091728A1; IT202100012950A1; CN103801541A; EP3747561A1; IT201900007845A1; CN102612413A; CN109186218A; IT201900007866A1; US11090701B2; WO2010046072A1; WO03084685A1; WO2011027370A1; TWI563942B

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)

EP 0634230 A1 19950118; EP 0634230 B1 19981223; AT E174823 T1 19990115; DE 69415423 D1 19990204; DE 69415423 T2 19990610; DK 0634230 T3 19990823; ES 2126024 T3 19990316; GR 3029341 T3 19990528

DOCDB simple family (application)

EP 94110834 A 19940712; AT 94110834 T 19940712; DE 69415423 T 19940712; DK 94110834 T 19940712; ES 94110834 T 19940712; GR 990400427 T 19990210