

Title (en)  
CAPPING AND CAP SORTING DEVICE AND METHOD

Title (de)  
VERSCHLUSS- UND VERSCHLUSSSORTIERVORRICHTUNG UND -VERFAHREN

Title (fr)  
DISPOSITIF ET PROCÉDÉ DE TRI DE CAPUCHONS ET DE CAPSULAGE

Publication  
**EP 3626677 A1 20200325 (EN)**

Application  
**EP 18460057 A 20180921**

Priority  
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Abstract (en)  
Capping and cap sorting device comprising a capping machine, a cap transporter, a transporter and a sorter, characterised in that it comprises a robotic manipulator 27 located in the sorter 5, with a separation system 6 and a transporter 4 with platforms 38 coupled with the sorter 5, wherein all the elements of the device are coupled with each other with releasable or permanent couplings, wherein the sorter 5 comprises a primary transporter 19 belt mounted on a separate base or sharing a common base with a cap transporter 10 and/or the separation system 6, preferably with an illuminator 28 located under the primary transporter 19 or inside it, preferably with a second upper illuminator 29 above the primary transporter 19, whereas the transporter 4 with platforms 38 further comprises cells 36 with releasably-installed platforms 38 with container sockets 43, wherein the distance between the sockets 43 is uniform and corresponding to the distance between jaws 33 with vacuum grabs 34 on a grab 32 of a hexaxial robotic manipulator 44, and corresponding to the distance between capping heads 30, and equal to the length of a "puck"-type carrier, wherein a bottle 8 is transported to the packing line, wherein the shape of the sockets 43 corresponds to the shape of a cap 12 inserted into the device, preferably a trigger, atomiser or pump type cap, preferably with a dip tube 40, wherein the shape corresponds to the shape profile of the cap 12 inserted into the device, the cap 12 lying on its side, horizontally should it comprise a dip tube 40, with the dip tube 40 oriented perpendicularly to the direction of motion, towards the sorting manipulator, preferably for a trigger, atomiser, pump, flip top, cylindrical, press on, snap on or asymmetric type cap 12, preferably with a dip tube 40, preferably horizontally should it comprise a dip tube 40, with the dip tube 40 oriented perpendicularly to the direction of motion, towards the sorting manipulator.

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