

Title (en)

Device for screwing to containers caps or plugs provided with outer knurling by a predetermined, constant driving torque.

Title (de)

Vorrichtung zum drehmomentbegrenzenden Aufschrauben von mit Aussenkehlungen versehenen Drehverschlusskappen auf Behältnissen.

Title (fr)

Dispositif de vissage sur récipients de bouchons filetés avec des stries extérieurs par un prédéterminé, constante moment de torsion.

Publication

EP 0536460 A1 19930414 (EN)

Application

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Priority

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Abstract (en)

A device for screwing to containers pre- threaded caps or plugs provided with outer knurling by a predetermined, constant driving torque, even of extremely limited amount, comprising a main body 1 which is made integral with the machine spindle and in which a "spline" shaft 4 rotating together with the main body is supported, said body being able to axially shift and being held in the advanced position by two springs; a "socket" 15 of very little mass supported by two bearings 9 and then "idle" with respect to the rotation of the spline shaft is provided at the opposite end of the motor shaft within said spline shaft, said socket being internally provided with a toothing steadily engaging the cap inserted therein; a set clutch system acting on the socket and connected to the spline shaft so as to rotate together with the latter, said clutch being formed of a magnetic friction 13,14 of very little mass so that, when the cap rotating along with the socket is completely screwed, the opposed resistance causes the friction to slide and the main body of the device together with the spline shaft can rotate while the socket with the cap stops after having provided a driving torque depending on the calibration of the clutch system. <IMAGE>

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B67B 3/20

IPC 8 full level

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CPC (source: EP)

B67B 3/2073 (2013.01)

Citation (search report)

- [X] WO 8602917 A1 19860522 - WIEDMER ERNST
- [X] GB 2111964 A 19830713 - OWENS ILLINOIS INC
- [X] GB 948351 A 19640129 - METAL CLOSURES LTD
- [X] FR 2166796 A7 19730817 - HOHENZOLLERN HUETTENVERWALT
- [A] DE 3912324 A1 19901025 - ALCOA GMBH VERPACKWERKE [DE]

Cited by

CN102707615A; CN109573925A; ES2195699A1; DE102011003074A1; DE102009042147A1; US2015217982A1; US9845230B2; FR2724430A1; CN109455651A; CN113501479A; EP0876991A1; US5983596A; US7846395B2; US9221663B2; WO9607611A1; WO2011029616A3

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