

Title (en)

A device for separation of cups from stack of cups, e.g. in a vending machine, designed to serve beverages

Title (de)

Einrichtung zur Trennung von Bechern eines Becherstapels, z.B. in einem Verkaufsautomaten, entworfen zum Servieren von Getränken

Title (fr)

Un appareil pour séparer des gobelets d'une pile de gobelets, p.e. dans une machine de vente, dessiné à servir des boissons

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Application

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Priority

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Abstract (en)

The invention relates to a device (1) provided to separate cups (5) from a stack of cups. The device comprises a shell (3), which is stationarily mounted in the vending machine and which is provided to receive a stack of cups, a separator (4) for individual cups as well as a driving device (6) and a feed device (25) for separated cups, the shell (3) being telescopically and concentrically respectively mounted in a sleeve-like holder (2), which is provided to be driven by said driving device (6) and be displaced during the separation phase in relation to the shell (3), with activation of said feed device (25). According to the invention, said feed device (25) is provided to be actuated by spring power during said relative movements between said stationary shell (3) and said moveable holder (2) and separator (4) to pivot into and out of, respectively, a recess (17) in said holder (2) and at the same time penetrate with a projection (45) into the region between flanges of the two lowermost cups, whereby bearing surfaces (43) on the feed devices being designed to be tilted downwards and release the flange of the lowermost cup. <IMAGE> <IMAGE>

IPC 1-7

G07F 13/10

IPC 8 full level

G07F 13/10 (2006.01)

CPC (source: EP)

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Citation (applicant)

- GB 2145071 A 19850320 - JONES PETER DIXON
- GB 2221672 A 19900214 - JONES PETER DIXON
- EP 0339946 A2 19891102 - GEN FOODS LTD [GB]

Citation (search report)

- [XA] US 3951303 A 19760420 - HOBDEN NIGEL MARK, et al
- [XA] FR 728408 A 19320705 - TULIPIA
- [A] DE 917879 C 19540913 - KARL HEINZ KREISSLER
- [A] DE 2318721 A1 19741024 - SCHMITZ ERICH
- [A] GB 2218971 A 19891129 - LYME REGIS VENDING MACHINES LI [GB]

Cited by

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