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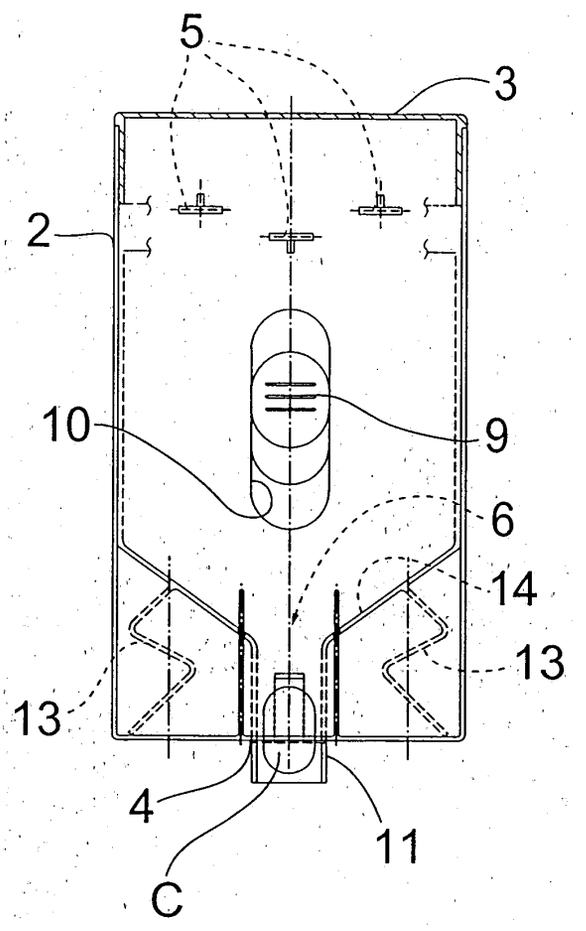
(54) Dispenser for sweets or tablets

(57) A container for sweets or tablets comprising a case (1) formed with dorsal appendages (5) for its anchoring for instance to a ventilation outlet of a motor vehicle and having a bottom opening (4) through which a dispensing member (6) is able to slide from a raised position to a lowered position by means of a control member (9) accessible on the front side (8) of the case (1) and against the action of elastic return members (13) to transfer a single sweet (C) below the bottom opening (4).

Fig. 4



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Description

[0001] The present invention relates to containers for sweets or tablets in the candy industry, with particular but not exclusive reference to the sweets having generally globoid shape produced by Ferrero S.p.A. under the trade name "Tic-Tac".

[0002] The aim of the present invention is to provide a container for such sweets that can be used in convenient, practical and safe fashion in a configuration of stationary application on a support, and more specifically on the dashboard of a motor vehicle.

[0003] According to the invention said aim is achieved thanks to the fact that the container comprises a case formed with dorsal appendages for its anchoring in suspended condition to a support structure, particularly to a ventilation outlet of a motor vehicle, said case having a bottom opening through which a slidable dispensing member is displaceable from a raised position to a lowered position by means of control member accessible on the front side of the case and against the action of elastic return means, said dispensing member and said bottom opening being shaped in such a way as to transfer below said bottom opening a single sweet each time the control member is operated.

[0004] Opportunely, the dispensing member consists of a body having a general hopper shape with lower end shaped substantially as a spoon and provided with an oscillating separator element.

[0005] According to an embodiment that is particularly advantageous from the construction point of view, the body is formed integrally with the control member, with a pair of sprung legs which define the aforesaid elastic return means, and with an elastically springing tab which defines the oscillating separator element.

[0006] The invention shall now be described in detail with reference to the accompanying drawings, provided purely by way of non limiting example, in which:

- Figure 1 is a schematic perspective view of a container for sweets or tablets according to the invention,
- Figure 2 is a vertical longitudinal section view of the container,
- Figure 3 is a vertical cross section view of the container, and
- Figures 4, 5 and 6, 7 are similar views to Figures 2 and 3 that exemplify the dispensing modes operated by the container.

[0007] With initial reference to Figures 1 through 3, the number 1 generically designates in its totality a container for sweets or tablets in the candy industry, in particular for sweets of generally globoid shape produced by Ferrero S.p.A. with the name "Tic-Tac". One of such sweets is designated as C in Figures 2 and 3 (as well as 4-7): the container 1 is obviously such as to contain a plurality thereof.

[0008] The container 1 comprises a case made of plastic material, with generally parallelepiped shaped, formed by a body 2 provided superiorly to a lid 3. Inferiorly, the body 2 has a bottom opening 4 through which the sweets C can be dispensed and extracted on each occasion in the manners clarified below.

[0009] The dorsal wall of the body 2 is formed with a series (three, in the example illustrated) of flexible integral tabs 5 through which the container 1 can be anchored in.suspended condition to a support structure, and in particular to a ventilation grid or outlet of a motor car.

[0010] Inside the body 2 of the container 1 is housed a dispensing member generically designated as 6, also made of moulded plastic material.

[0011] The dispensing member 6 comprises, in a single piece, a front part 7 positioned against the front wall 8 of the body 2 and formed with a projection 9 which constitutes a manual control member and is able to slide within a slot 10 of said front wall 8. Inferiorly, the dispensing member 6 has an inclined and tapered rear part in the shape of a hopper 14 which joins a lower end part 11, substantially spoon shaped. This end part 11 can be moved through the bottom wall 4 in the ways clarified below, and centrally bears an integral, elastically springing tab 12 which, as shall also be shown below, constitutes an oscillating separator element.

[0012] Between the hopper-like part 14 and the bottom wall of the body 2 opposite to the lid 3 are interposed two elastically deformable elements 13, substantially Z shaped, which are situated at opposite parties to the end part 11 and serve as elastic return members. Opportunely, said elastic elements 13 are also formed integrally to the dispensing member 6.

[0013] The operation of the container according to the invention is as follows.

[0014] Figures 1 through 3 show a resting configuration, in which the elastic elements 13 maintain the dispensing member 6 in a raised position in which the control member 9 is positioned in the upper part of the slot 10 and the end part 11 is recessed in the body 2, immediately above the bottom opening 4. A sweet C is maintained between the end part 11 and the base of the front wall 8 of the body 2.

[0015] Starting from said condition, to dispense the sweet C it is sufficient for the user to position the palm of his/her hand below the bottom opening 4 and to command, for instance with his/her thumb, the downward sliding of the control member 9.

[0016] During the first phase of the downward travel, shown in Figures 4 and 5, the end part 11 starts to move through the bottom opening 4 transporting the sweet C downwards. When the end part 11 projects from the opening 4, the springing tab 12 is free to oscillate rotating slightly towards the front wall 8 of the body in such a way as to hold an underlying sweet C, thereby preventing its exit through the bottom wall 4. Simultaneously, the two elastic elements 13 are compressed.

[0017] Proceeding with the lowering of the control member 9, the sweet C transported by the end part 11 completely exits from the bottom opening 4 in the manner shown in Figures 6 and 7, and is therefore able to reach the palm of the user's hand by gravity.

[0018] The control member 9 can thus be released, allowing the return of the dispensing member 6 to the starting position thanks to the return force exerted by the two elastic elements 13.

[0019] The same operations can then be repeated for the dispensing of the next sweet C.

[0020] Naturally, the construction details and the embodiments may be widely varied from what is described and illustrated herein purely by way of example, without thereby departing from the scope of the present invention as defined in the claims that follow.

Claims

1. Container for sweets (C) or tablets, **characterised in that** it consists of a case (1) formed with dorsal appendages (5) for its anchoring in suspended condition to a support structure, particularly to a ventilation outlet of a motor vehicle, said. case (1) having a bottom opening (4) through which a slidable dispensing member (6) is displaceable from a raised position to a lowered position by means of a control member (9) accessible on the front side (8) of the case (1) and against the action of elastic return means (13), said dispensing member (6) and said bottom opening (4) being shaped in such a way as to transfer below said bottom opening (4) a single sweet (C) each time said control member (9) is operated.

2. A container as claimed in claim 1, **characterised in that** said dispensing member (6) has a general hopper-like shape (14) with its lower end (11) substantially spoon shape and provided with an oscillating separator element (12).

3. A container as claimed in claim 2, **characterised in that** said operating member (9) is formed integrally with said dispensing member (6).

4. A container as claimed in claim 2 or claim 3, **characterised in that** said elastic return means consist of a pair of springing legs (13) located opposite to said spoon-shaped end (11) and formed integrally with said dispensing member (6).

5. A container as claimed in the claims from 2 through 4, **characterised in that** said separator element consists of an elastically springing tab (12) formed integrally with said lower spoon-shaped end (11) of the dispensing member (6).

6. A container as claimed in one or more of the previous claims, **characterised in that** said case has generally parallelepiped shape.

7. A container as claimed in one or more of the claims from 1 to 6, **characterised in that** said dorsal appendages (5) are formed in a single piece with said case (1).

8. A container as claimed in one or more of the previous claims, **characterised in that** said case (1) and said dispensing member (6) are made of moulded plastic material.

Fig. 1

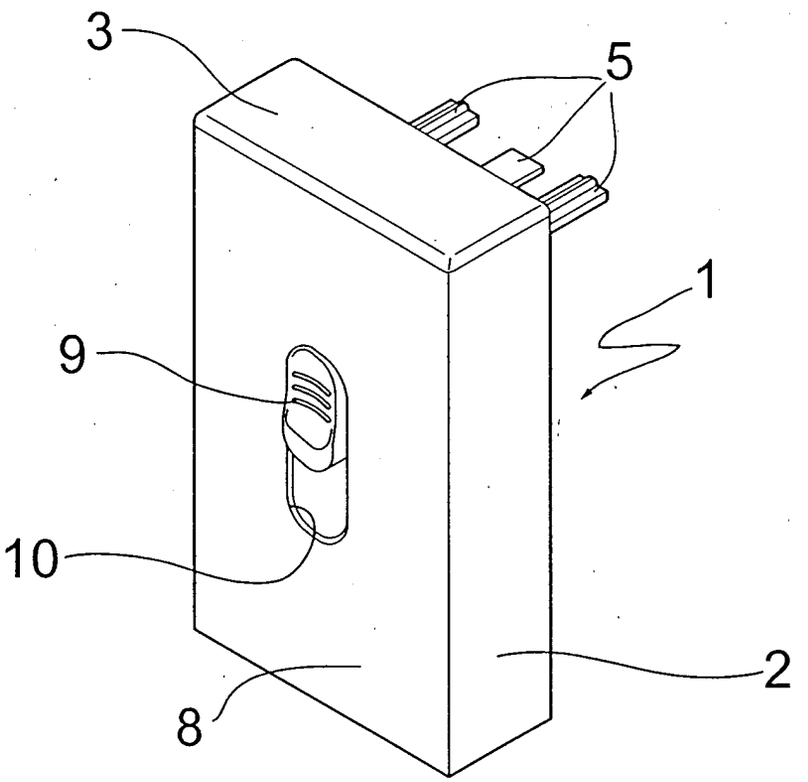


Fig. 2

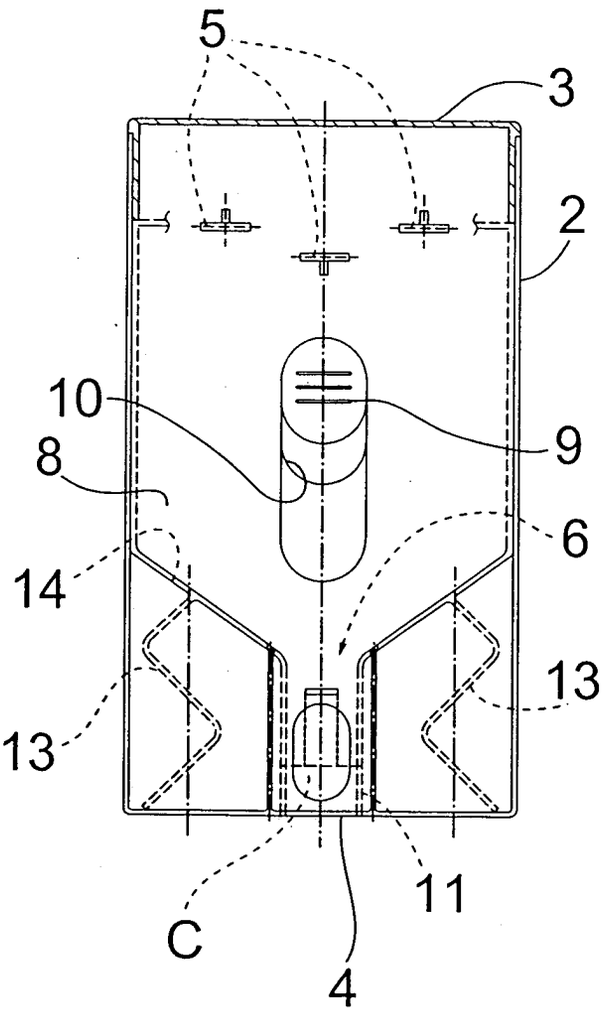


Fig. 3

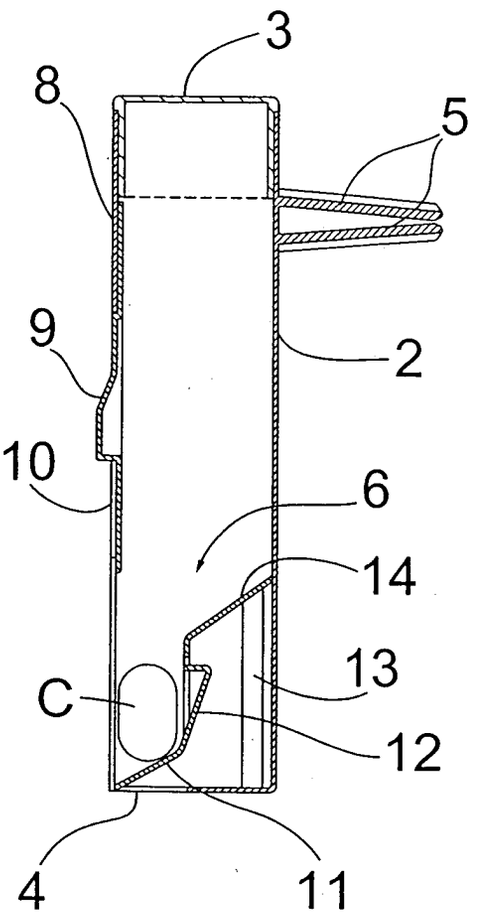


Fig. 4

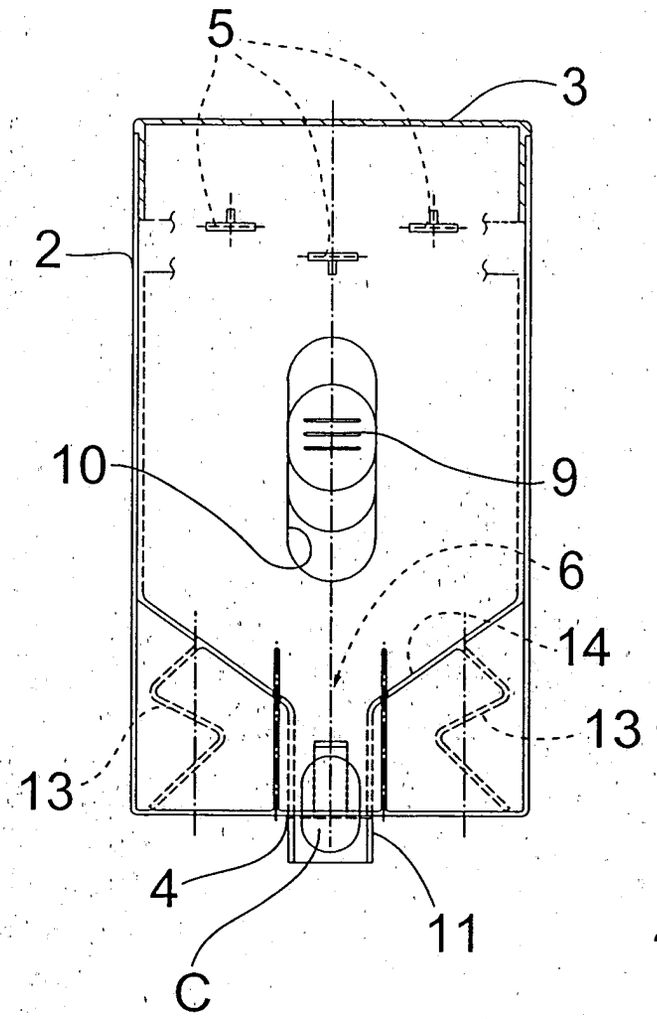


Fig. 5

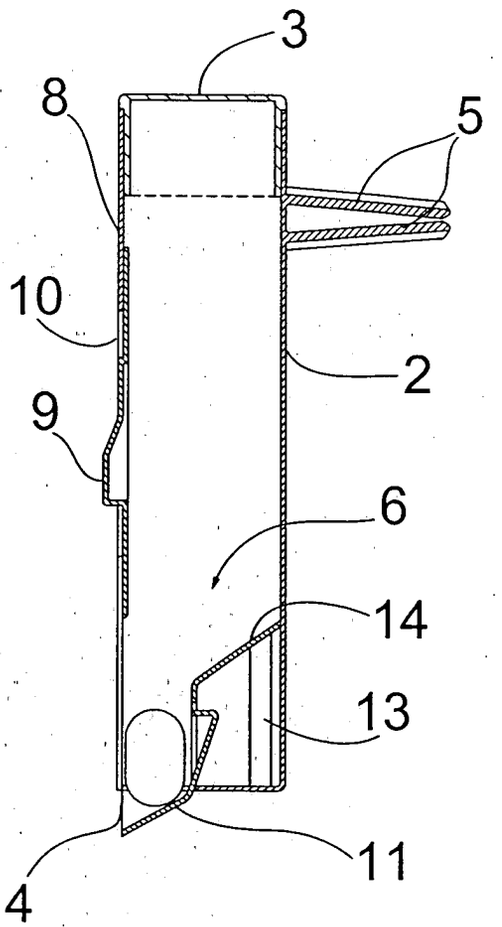


Fig. 6

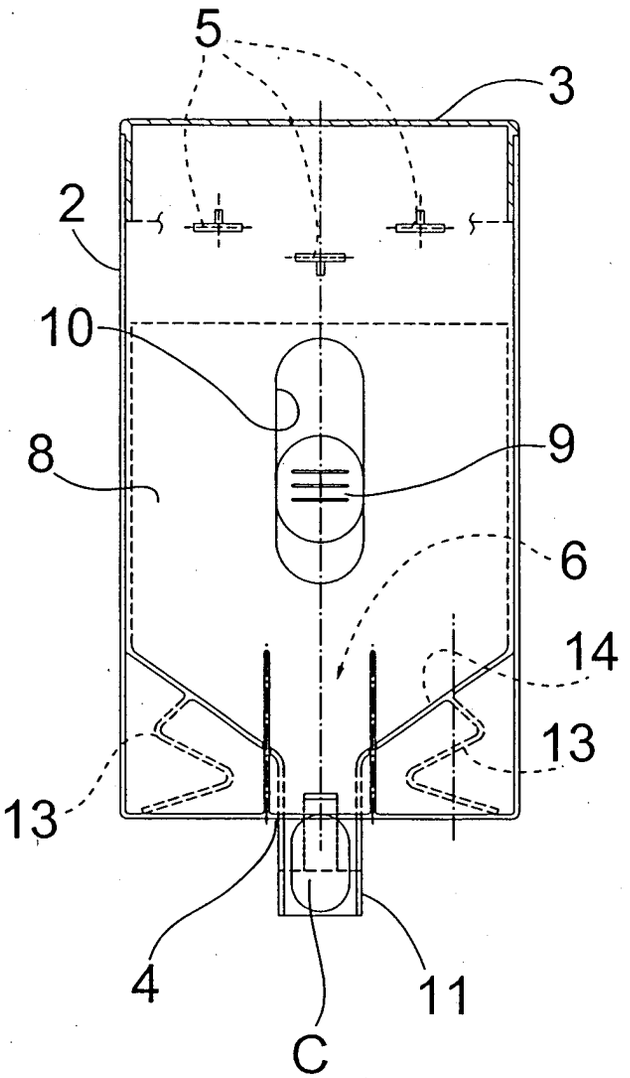
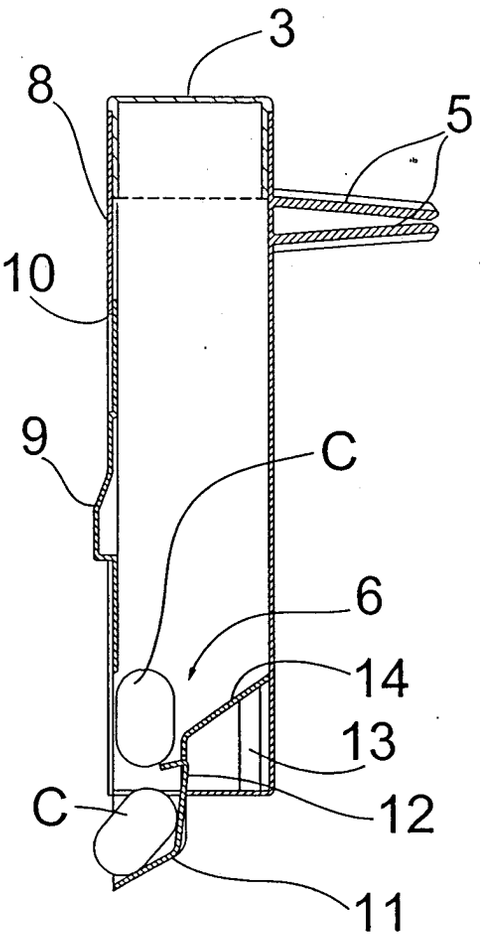


Fig. 7



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EUROPEAN SEARCH REPORT

Application Number
EP 03 01 5268

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	US 3 968 902 A (BACHMANN) 13 July 1976 (1976-07-13) * figures 1-5 *	1	B65D83/04
A	EP 1 052 189 A (RPC BRAMLAGE) 15 November 2000 (2000-11-15) * column 5, line 1 - line 46; figures *	1	
A	US 4 405 060 A (HSEI) 20 September 1983 (1983-09-20) * column 8, line 1 - line 13; figures 1,2 *	1	
A	US 6 029 384 A (MCLAUGHLIN) 29 February 2000 (2000-02-29) * abstract; figures 1-3,6 *	1	
A	US 4 474 294 A (KOPPELMANS) 2 October 1984 (1984-10-02) * claims; figures *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7) B65D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	26 February 2004	Newell, P

CATEGORY OF CITED DOCUMENTS

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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26-02-2004

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 3968902 A	13-07-1976	NONE	
EP 1052189 A	15-11-2000	DE 29907991 U1	15-07-1999
		EP 1052189 A2	15-11-2000
US 4405060 A	20-09-1983	AT 22266 T	15-10-1986
		AU 546955 B2	26-09-1985
		AU 8824082 A	17-03-1983
		CA 1187846 A1	28-05-1985
		DE 3273345 D1	23-10-1986
		DK 126383 A	18-03-1983
		EP 0083649 A1	20-07-1983
		ES 8400330 A1	16-01-1984
		JP 3001220 B	10-01-1991
		JP 58501115 T	14-07-1983
		NO 830989 A	21-03-1983
		WO 8300319 A1	03-02-1983
US 6029384 A	29-02-2000	US 6125566 A	03-10-2000
US 4474294 A	02-10-1984	NL 8201605 A	16-11-1983
		EP 0092281 A1	26-10-1983

EPO FORM P0459

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