CLAIMS

1. A cap comprising:

a body (32),

an opening (34) passing through the cap (30) and adapted in turn to be passed through by at least one product transfer member (20), and

a membrane (40) which, at rest, covers the opening (34),

wherein the membrane (40) has a main portion that extends through the opening (34) and defines two inclined faces (45A, 45B), each inclined face having a distal edge (46A, 46B), and

wherein the two inclined faces (45A, 45B) form a dihedron when the membrane (40) is at rest, the distal edges (46A, 46B) of the two inclined faces coming together at the apex (47) of the dihedron,

said cap (30) being characterized in that it comprises at least two flaps (35A, 35B) extending through the opening (34), above the membrane (40), the two inclined faces (45A, 45B) of the membrane being respectively covered by the two flaps (35A, 35B), each flap having a free edge (36A, 36B) that extends along the distal edge of the corresponding inclined face, so that, when the transfer member (20) passes through the opening (34) and the membrane (40), the free edges (36A, 36B) of the two flaps respectively press along the distal edges (46A, 46B) of the two inclined faces.

2. The plug according to claim 1, wherein each flap (35A, 35B) has a lower surface facing the membrane (40) and an upper surface opposite the lower surface, and wherein each flap (35A, 35B) has, on its upper surface, an overthickness (37A, 37B) that extends along the free edge (36A, 36B) of the flap.

3. The plug according to claim 2, wherein the overthickness (37A, 37B) is formed by a rib or a bead.

4. The plug according to claim 2, wherein the overthickness (37A, 37B) is formed by a portion of the flap whereof the thickness increases continuously as one comes closer to the free edge (36A, 36B).

5. The plug according to any one of claims 1 to 4, wherein the opening (34) extends axially between an intake orifice (33) and the main membrane portion (40), and wherein the apex (47) of the dihedron has two opposite ends (47E), the cap (30) comprising two guide elements (50) respectively extending between the intake orifice (33) and the two ends (47E) of the apex, at the periphery of the opening (34).

6. The plug according to any one of claims 1 to 5, wherein each flap (35A, 35B) has a lower surface facing the membrane (40) and an upper surface opposite the lower surface, and wherein each flap (35A, 35B) has protuberances (51) or cavities on/in its lower surface, said protuberances (51) or cavities being housed in cavities (52) or protuberances with complementary shapes, provided in/on the inclined faces (45A, 45B) of the membrane (40).

7. The plug according to any one of claims 1 to 6, wherein the membrane (40) is made from a first material and the flaps (35A, 35B) from a second material that is more rigid than the first material.

8. The plug according to any one of claims 1 to 7, wherein the membrane (40) is made from a first material and the flaps (35A, 35B) from a second material, different from the first material and such that the coefficient of friction of the transfer member (20) on the second material is lower than the coefficient of friction of the transfer member (20) on the first material.

9. The plug according to any one of claims 1 to 8, wherein the membrane (40) is pierceable and/or tearable along the apex (47) of the dihedron.

10. The plug according to any one of claims 1 to 9, wherein the distal edges (46A, 46B) of the inclined faces and the free edges (36A, 36B) of the flaps are substantially parallel to one another.

11. The plug according to any one of claims 1 to 10, wherein the distal edges (46A, 46B) of the inclined faces and the free edges (36A, 36B) of the flaps are substantially rectilinear.

12. A system comprising a plug (30) according to any one of the preceding claims and a container (10), the plug closing the container.

13. The system according to claim 12, also comprising a product transfer member (20) configured to pass through the opening (34) and the membrane (40) and to transfer a product from the inside toward the outside of the container (10), or vice versa.

14. The system according to claim 13, wherein the transfer member (20) has a transverse section with a width (L1) smaller than the length (L3) of the distal edges of the inclined faces, and wherein the free edges (36A, 36B) of the flaps have a length (L2) comprised between the width (L1) of the transverse section and the length (L3) of the distal edges (37A, 37B).

CLAIMS

1. A cap comprising:

a body (32),

an opening (34) passing through the cap (30) and adapted in turn to be passed through by at least one product transfer member (20), and

a membrane (40) which, at rest, covers the opening (34),

wherein the membrane (40) has a main portion that extends through the opening (34) and defines two inclined faces (45A, 45B), each inclined face having a distal edge (46A, 46B), and

wherein the two inclined faces (45A, 45B) form a dihedron when the membrane (40) is at rest, the distal edges (46A, 46B) of the two inclined faces coming together at the apex (47) of the dihedron,

said cap (30) being characterized in that it comprises at least two flaps (35A, 35B) extending through the opening (34), above the membrane (40), the two inclined faces (45A, 45B) of the membrane being respectively covered by the two flaps (35A, 35B), each flap having a free edge (36A, 36B) that extends along the distal edge of the corresponding inclined face, so that, when the transfer member (20) passes through the opening (34) and the membrane (40), the free edges (36A, 36B) of the two flaps respectively press along the distal edges (46A, 46B) of the two inclined faces.

2. The cap according to claim 1, wherein each flap (35A, 35B) has a lower surface facing the membrane (40) and an upper surface opposite the lower surface, and wherein each flap (35A, 35B) has, on its upper surface, an overthickness (37A, 37B) that extends along the free edge (36A, 36B) of the flap.

3. The cap according to claim 2, wherein the overthickness (37A, 37B) is formed by a rib or a bead.

4. The cap according to claim 2, wherein the overthickness (37A, 37B) is formed by a portion of the flap whereof the thickness increases continuously as one comes closer to the free edge (36A, 36B).

5. The cap according to any one of claims 1 to 4, wherein the opening (34) extends axially between an intake orifice (33) and the main membrane portion (40), and wherein the apex (47) of the dihedron has two opposite ends (47E), the cap (30) comprising two guide elements (50) respectively extending between the intake orifice (33) and the two ends (47E) of the apex, at the periphery of the opening (34).

6. The cap according to any one of claims 1 to 5, wherein each flap (35A, 35B) has a lower surface facing the membrane (40) and an upper surface opposite the lower surface, and wherein each flap (35A, 35B) has protuberances (51) or cavities on/in its lower surface, said protuberances (51) or cavities being housed in cavities (52) or protuberances with complementary shapes, provided in/on the inclined faces (45A, 45B) of the membrane (40).

7. The cap according to any one of claims 1 to 6, wherein the membrane (40) is made from a first material and the flaps (35A, 35B) from a second material that is more rigid than the first material.

8. The cap according to any one of claims 1 to 7, wherein the membrane (40) is made from a first material and the flaps (35A, 35B) from a second material, different from the first material and such that the coefficient of friction of the transfer member (20) on the second material is lower than the coefficient of friction of the transfer member (20) on the first material.

9. The cap according to any one of claims 1 to 8, wherein the membrane (40) is pierceable and/or tearable along the apex (47) of the dihedron.

10. The cap according to any one of claims 1 to 9, wherein the distal edges (46A, 46B) of the inclined faces and the free edges (36A, 36B) of the flaps are substantially parallel to one another.

11. The cap according to any one of claims 1 to 10, wherein the distal edges (46A, 46B) of the inclined faces and the free edges (36A, 36B) of the flaps are substantially rectilinear.

12. A system comprising a cap (30) according to any one of claims 1 to 11 and a container (10), the cap closing the container.

13. The system according to claim 12, also comprising a product transfer member (20) configured to pass through the opening (34) and the membrane (40) and to transfer a product from the inside toward the outside of the container (10), or vice versa.

14. The system according to claim 13, wherein the transfer member (20) has a transverse section with a width (L1) smaller than the length (L3) of the distal edges of the inclined faces, and wherein the free edges (36A, 36B) of the flaps have a length (L2) comprised between the width (L1) of the transverse section and the length (L3) of the distal edges (37A, 37B).