C l a i m s

1. A cap (100) for closing a container, the cap (100) comprising:

a spirally wound sleeve (101) comprising a first opening (105) and a second opening (104),

wherein the first opening (105) and the second opening (104) are opposed;

a head disk (102),

wherein the head disk (102) is arranged to close the first opening (105) of the sleeve (101),

wherein the sleeve (101) is made of paper,

wherein the second opening (104) of the sleeve (101) comprises a reinforcing element (106), and

wherein the reinforcing element (106) is a structure extending into the interior of the sleeve (101), wherein the sleeve (101) comprises at least an inner layer (502) and an outer layer (503) which are spirally wound.

wherein the reinforcing element (301) comprises a thickened area (A) at the second opening (104) of the sleeve (101),

wherein the thickened area (A) is provided by folding down the outer layer (503) into the interior of the sleeve (101) so that the outer layer (503) at least partially covers the at least one inner layer (502).

2. The cap (100) according to claim 1,

wherein the first opening (105) comprises a bead, in particular a flange (103),

wherein the bead extends into the interior of the sleeve (101), and

wherein the head disk (102) is coupled to the portion of the bead extending into the interior of the sleeve (101).

3. The cap (100) according to any preceding claim,

wherein an outer surface (107) of the sleeve (101) and/or an inner surface (108) of the sleeve (101) is provided with a synthetic or bio-based coating.

~~4. The cap (100) according to any one of the preceding claims,~~

~~wherein the sleeve (101) comprises at least an inner layer (502) and an outer layer (503) which are spirally wound.~~

~~5. The cap (100) according to any preceding claim,~~
~~wherein the reinforcing element (301) comprises a thickened area (A) at the second opening (104) of the sleeve (101), wherein the thickened area (A) is provided by flanging an end portion of the sleeve (101) into the interior of the sleeve (101),~~
~~wherein the flanged end portion of the sleeve (101) is compressed in a radial direction.~~

~~6. The cap (100) according to any one of claims 1 to 4,~~
~~wherein the reinforcing element (401) comprises a thickened area (A) at the second opening (104) of the sleeve (101), wherein the thickened area (A) is provided by means of applying an adhesive, in particular a recyclable adhesive.~~

~~7. The cap (100) according to claim 4,~~
~~wherein the reinforcing element (301) comprises a thickened area (A) at the second opening (104) of the sleeve (101),~~
~~wherein the thickened area (A) is provided by folding down the outer layer (503) into the interior of the sleeve (101) so that the outer layer (503) at least partially covers the at least one inner layer (502).~~

~~8~~4. A method of manufacturing a cap (100) for closing a container, the method comprising:

spiral winding a sleeve (101) comprising a first opening (105) and a second opening (104),

wherein the first opening (105) and the second opening (104) are opposed,

arranging a head disk (102) to close the first opening (105) of the sleeve (101),

wherein the sleeve (101) is made of paper,

providing a reinforcing element (106) at the second opening (104) of the

sleeve (101),

wherein the reinforcing element (106) is a structure extending into the interior of the sleeve (101), wherein providing a reinforcing element (106) at the second opening (104) of the sleeve (101) comprises a thickened area (A),

wherein the thickened area (A) is provided by means of one of:

flanging, in particular flanging with a round cross-section, of the second opening (104) and subsequently compressing the resulting flange in a radial direction;

arranging an adhesive, in particular a recyclable adhesive, at the second opening (104);

when the sleeve (101) comprises at least an inner layer (502) and an outer layer (503), folding down the outer layer (503) of the sleeve (101) so that the outer layer (503) at least partially covers the at least one inner layer (502), wherein the sleeve (101) comprises at least an inner layer (502) and an outer layer (503) which are spirally wound,

wherein the reinforcing element (301) comprises a thickened area (A) at the second opening (104) of the sleeve (101),

wherein the thickened area (A) is provided by folding down the outer layer (503) into the interior of the sleeve (101) so that the outer layer (503) at least partially covers the at least one inner layer (502).

~~9~~5. The method according to the previous claim,

wherein arranging a head disk (102) comprises:

flanging, in particular flanging with a round cross-section, of the first opening (105) of the sleeve (101),

feeding the head disk (102), and

coupling the head disk (102) to the flange (103) which extends into the interior of the sleeve (101), in particular to that part of the flange (103) which is arranged inside the sleeve (101).

~~10. The method according to any one of claims 8 and 9,~~

~~wherein providing a reinforcing element (106) at the second opening (104) of the~~

~~sleeve (101) comprises a thickened area (A),~~

~~wherein the thickened area (A) is provided by means of one of:~~

~~flanging, in particular flanging with a round cross-section, of the second opening (104) and subsequently compressing the resulting flange in a radial direction;~~

~~arranging an adhesive, in particular a recyclable adhesive, at the second opening (104);~~

~~when the sleeve (101) comprises at least an inner layer (502) and an outer layer (503), folding down the outer layer (503) of the sleeve (101) so that the outer layer (503) at least partially covers the at least one inner layer (502).~~