CLAIMS

1. Wing with bi-mode operation passing from an arc shape to an undistorted plane shape and vice versa, characterized in that it is composed of three or more power wing airfoils (1-1, 1-2, 1-3) connected in series and mutually articulated through at least one articular joint (2, 3) interposed between at least one pair of said adjacent power wing airfoils (1-1, 1-2, 1-3).

2. Wing according to the previous claim, characterized in that each one of said power wing airfoils (1-1, 1-2, 1-3) is composed of at least one rigid quoin.

3. Wing according to claim 1, characterized in that it comprises at least one wing surface (4) connected to one or more parallel bumps (5) along a rope direction of said power wing airfoils (1-1, 1-2, 1-3).

4. Wing according to claim 3, characterized in that at least one said joint (2, 3) is composed of external cloth edges (6, 7), respectively connected to a pair of said external bumps (5-1, 5-2) and to a pair of internal cloth edges (8, 9), said joint (2, 3) symmetrically converging with respect to a rope (10) belonging to said power wing airfoils (1-

1, 1-2, 1-3).

5. Wing according to any one of the previous claims, characterized in that a configuration in said undistorted plane shape corresponds to one of said joints (2, 3) in a widespread position, said internal cloth edges (8, 9) being stretched and tangent to said wing surface (4).

6. Wing according to any one of the previous claims, characterized in that a configuration a said arc shape corresponds to one of said joints (2, 3) in a contracted position, said internal cloth edges (8, 9) being bent inside said wing profile (1-1, 1-2, 1-3).

7. Wing according to any one of the previous claims, characterized in that said one or more bumps (5) are external to said wing surface (4), performing an exoskeleton function.

8. Wing according to any one of the previous claims, characterized in that said one or more bumps (5) are placed along a concave area of said wing surface (4).

9. Wing according to any one of the previous claims, characterized in that at least two terminal end ones of said power wing airfoils (1-1, 1-3), and in particular said rigid quoins composing said

profiles, to which control bridles of said wing are connected, are equipped with a reinforcing structure adapted to distribute loads induced by said bridles at least on said two power wing airfoils (1-1, 1-3).

10. Wing according to any one of the previous claims, characterized in that said wing surface (4) is made of a cloth coated with thermoplastic or thermosetting resins.

11. Wing according to any one of the previous claims, characterized in that it has an asymmetrical shape.

CLAIMS

1. Wing with bi-mode operation passing from an arc shape to an undistorted plane shape and vice versa, characterized in that:

- it is composed of three or more power wing airfoils (1-1, 1-2, 1-3) connected in series and mutually articulated through at least one articulated joint (2, 3) interposed between at least one pair of said adjacent power wing airfoils (1-1, 1-2, 1-3);
- it comprises at least one wing surface (4) connected to one or more parallel bumps (5) along a rope direction of said power wing airfoils (1-1, 1-2, 1-3); and
- at least one of said joints (2, 3) is composed of external cloth edges (6, 7), respectively connected to a pair of said external bumps (5-1, 5-2) and to a pair of internal cloth edges (8, 9), said joint (2, 3) symmetrically converging with respect to a rope (10) belonging to said power wing airfoils (1-1, 1-2, 1-3).

2. Wing according to Claim 1, characterized in that each one of said power wing airfoils (1-1, 1-2, 1-3) is composed of at least one rigid quoin, namely corner.

3. Wing according to Claim 1, characterized in that a configuration in said undistorted plane shape corresponds to one of said joints (2, 3) in a widespread position, said internal cloth edges (8, 9) being stretched and tangent to

said wing surface (4).

4. Wing according to Claim 1, characterized in that a configuration in said arc shape corresponds to one of said joints (2, 3) in a contracted position, said internal cloth edges (8, 9) being bent inside said wing profile (1-1, 1-2, 1-3).

5. Wing according to Claim 1, characterized in that said one or more bumps (5) are external to said wing surface (4), performing an exoskeleton function.

6. Wing according to Claim 1, characterized in that said one or more bumps (5) are placed along a concave area of said wing surface (4).

7. Wing according to Claim 1, characterized in that at least two terminal end ones of said power wing airfoils (1-1, 1-3), and in particular said rigid corners composing said profiles, to which control bridles of said wing are connected, are equipped with a reinforcing structure adapted to distribute loads induced by said bridles at least on said two power wing airfoils (1-1, 1-3).

8. Wing according to Claim 1, characterized in that said wing surface (4) is made of a cloth coated with thermoplastic or thermosetting resins.

9. Wing according to Claim 1, characterized in that it has an asymmetrical shape.