CLAIMS

1. System (1) for starting the flight of power wing airfoils (7), in particular for a wind generator (5), comprising:

- at least one wing profile (7), operatively connected through control tie-rods (9), to winches or other control mechanisms of a flight of said wing profile (7);

- at least one autonomous transporting flying vector (11) adapted to be connected through disengageable connecting means (13) to at least one wing profile (7) and to transport in flight said wing profile (7), said disengageable connecting means (13) being composed of at least one dragging cable (15) having a first end connected to said autonomous transporting flying vector (11) and a second opposite end connected to said first end equipped with at least one actuatable engaging/disengaging device (17) adapted to be engaged/disengaged to and from a respective engagement point arranged on said wing profile (7), characterized in that said actuatable engaging/disengaging device (17) is at least one electromagnetic hook and said engagement point arranged on said wing profile (7) is a related

element made of metallic material adapted to be magnetically connected to said electromagnetic hook;

and in that said wing profile (7) comprises at least one measuring system (19), preferably of an ultrasound type (21), adapted to high frequency triangulate the relative positions of said autonomous transporting flying vectors (11) and of said wing profile (7).

2. System (1) according to the previous claim, characterized in that said engagement point of said actuatable engaging/disengaging device (17) is arranged along an outlet edge (18) of said wing profile (7).

3. System (1) according to claim 1, characterized in that said starting the flight of said wing profile (7) is assisted by a combined action of two or more of said autonomous transporting flying vectors (11).

4. System (1) according to any one of the previous claims, characterized in that said autonomous transporting flying vector (11) is a helicopter with one or more propellers, and preferably a quadricopter, an octocopter or a multicopter.

5. System (1) according to any one of the previous claims, characterized in that said autonomous transporting flying vector (11) is with electric supply.

6. System (1) according to any one of the previous claims, characterized in that it comprises at least one landing, storing and energy recharging station of at least one of said autonomous transporting flying vectors (11).

7. Process for starting the flight of power wing airfoils (7), in particular for wind generator (5), through a system (1) comprising at least one wing profile (7) operatively connected through control tie-rods (9) to winches or other control mechanisms of a flight of said wing profile (7), and at least one autonomous transporting flying vector (11) adapted to be connected through disengageable connecting means (13) to at least one wing profile (7) and to transport in flight said wing profile (7), characterized in that it comprises the steps of:

- starting from a stalling position of said power wing profile (7), taking at least one autonomous transporting flying vector (11) next to said power wing profile (7);

- engaging said power wing profile (7) to said autonomous transporting flying vector (11) through said disengageable connecting means (13);
- transport in flight said power wing profile (7) through a traction by said autonomous transporting flying vector (11), possibly taking care to perform a suitable unwinding of said control tie-rods (9);
- once having reached by said power wing profile (7) a height in which there is enough wind for supporting in flight and/or a flight of said profile (7), disengage said autonomous transporting flying vector (11) from said power wing profile (7).

8. Process according to the previous claim, characterized in that it comprises the step of taking back said autonomous transporting flying vector (11) to a landing, storing and energy recharging station.

9. Computer program comprising program code means which, when run on a computer, perform all or part of the steps of the process according to claim 7 or 8.

CLAIMS

1. System (1) for starting the flight of power wing airfoils (7), in particular for a wind generator (5), comprising:

- at least one wing profile (7), operatively connected through control tie-rods (9), to winches or other control mechanisms of a flight of said wing profile (7);

- at least one autonomous transporting flying vector, namely carrier (11), adapted to be connected through disengageable connecting means (13) to at least one wing profile (7) and to transport in flight said wing profile (7), said disengageable connecting means (13) being composed of at least one dragging cable (15) having a first end connected to said autonomous transporting flying carrier (11) and a second opposite end connected to said first end equipped with at least one actuatable engaging/disengaging device (17) adapted to be engaged/disengaged to and from a respective engagement point arranged on said wing profile (7),

characterized in that said actuatable engaging/disengaging device (17) is at least one electromagnetic hook and said engagement point

arranged on said wing profile (7) is a related element made of metallic material adapted to be magnetically connected to said electromagnetic hook;

and in that said wing profile (7) comprises at least one measuring system (19), preferably of an ultrasound type (21), adapted to high frequency triangulate the relative positions of said autonomous transporting flying carriers (11) and of said wing profile (7).

2. System (1) according to the previous claim, characterized in that said engagement point of said actuatable engaging/disengaging device (17) is arranged along an outlet, namely leading, edge (18) of said wing profile (7).

3. System (1) according to claim 1, characterized in that said starting the flight of said wing profile (7) is assisted by a combined action of two or more of said autonomous transporting flying carriers (11).

4. System (1) according to any one of the previous claims, characterized in that said autonomous transporting flying carrier (11) is a helicopter with one or more propellers, and preferably a quadricopter, an octocopter or a multicopter.

5. System (1) according to any one of the previous claims, characterized in that said autonomous transporting flying carrier (11) is with electric supply.

6. System (1) according to any one of the previous claims, characterized in that it comprises at least one landing, storing and energy recharging station of at least one of said autonomous transporting flying carriers (11).

7. Process for starting the flight of power wing airfoils (7), in particular for wind generator (5), through a system (1) according to Claim 1, comprising the steps of:

- starting from a stalling position of said power wing profile (7), taking at least one autonomous transporting flying carrier (11) next to said power wing profile (7);
- engaging said power wing profile (7) to said autonomous transporting flying carrier (11) through said disengageable connecting means (13);
- transport in flight said power wing profile (7) through a traction by said autonomous transporting flying carrier (11), possibly taking care to perform a suitable unwinding of said control tie-rods (9);

- once having reached by said power wing profile (7) a height in which there is enough wind for supporting in flight and/or a flight of said profile (7), disengage said autonomous transporting flying carrier (11) from said power wing profile (7).

8. Process according to the previous claim, characterized in that it comprises the step of taking back said autonomous transporting flying carrier (11) to a landing, storing and energy recharging station.

9. Computer program comprising program code means which, when run on a computer, perform the steps of the process according to claim 7 or 8.