CLAIMS

1. Equipment for the reduction of the radar marking of an aircraft (V), which can be applied to at least one hot portion of the aircraft (H) chosen from the following:

- a piloting cabin or cockpit, comprising at least one transparent portion;
- a first frame of the fuselage;
- a plurality of junction edges of components, including wings, tail veilings and engine air intakes;
- at least one motor face;

said equipment is characterized in that it comprises at least one device for dissipating incident radar waves, which can be removably applied to at least one hot portion of the aircraft (H) without affecting the aerodynamic characteristics of the aircraft (V).

2. Equipment according to claim 1, wherein, in order to reduce the radar marking coming from hot portions (H) of the aircraft such as the piloting cabin or cockpit, which comprise at least one transparent portion, said equipment comprises a metallization (1) applied to said transparent portions.

3. Equipment according to claim 2, wherein the metallization (1) is obtained by applying a plurality of coating layers onto the transparent portion of the piloting cabin, comprising: at least one first layer or base (11), for preparing the transparent portion to receive the metallization (1); at least one second layer (12), which is the actual metallizing conductive layer.

4. Equipment according to claim 1, wherein, in order to reduce the radar marking coming from hot portions (H) of the aircraft such as, for example, at least one junction edge of components such as wings, tail veilings and engine

air intakes, the equipment comprises at least one coating portion (2), which is positioned on the front edge of such components of the aircraft (V) without affecting the aerodynamic profile thereof.

5. Equipment according to claim 4, wherein said coating portion (2) comprises: a first structure (22) of metal material, fixed to the structure of the component of the aircraft (V), a second radar-absorbing coating (23), laid over said first structure (22) for absorbing incident electromagnetic waves.

6. Equipment according to claim 1, wherein, in order to reduce the radar marking coming from a hot portion (H) of the aircraft such as the first frame of the fuselage, the equipment comprises: at least one sheet of adhesive metal material (31), which covers the first frame of the fuselage of the aircraft (V); at least one layer of absorbing material (32), fixed to said sheets of metal material (31).

7. Equipment according to claim 1, wherein, in order to reduce the radar marking coming from hot portions of the aircraft (H) such as at least one motor face, the equipment comprises at least one grid (4) adapted to allow an air flow to come in towards the engine and to make the motor face of the aircraft (V) less visible to radar systems.

8. Equipment according to claim 7, wherein said grid (4) comprises: an inner structure with a plurality of openings (41); a support structure (42) for securing said grid (4) to the aircraft (V).

9. Equipment according to claim 8, wherein said grid (4), when no longer required, can be replaced, to preserve conduit continuity, with a substitutive structure (46), which essentially has the same shape as the support structure (42) of the grid (4).

10. Equipment according to claim 3, wherein said metallization (1) comprises a plurality of electric devices adapted to ensure the electric connection between the metallization (1) and the structure of the aircraft(V).

CLAIMS

1. Metallization for the reduction of the radar marking of an aircraft (V), applied to the transparent portion of a piloting cabin or cockpit, comprising a multi-layer coating adapted to dissipate incident radar waves, without affecting the aero-dynamic characteristics of the aircraft (V) wherein the multi-layer coating comprise at least two mutually contiguous different layers each of which completely overlie the transparent portion.

2.Equipment for the reduction of the radar marking of an aircraft (V), which can be applied to at least one hot portion of the fuselage of the aircraft (H) chosen from the following:

- a first frame of the fuselage;
- a plurality of junction edges of components, including wings, tail veilings and engine air intakes; and
- at least one motor face;

wherein the equipment comprises at least one device incorporating radar absorbing material for dissipating incident radar waves, which can be removably applied to at least one hot portion of the aircraft (H) without affecting the aerodynamic characteristics of the aircraft (V).

3.Metallization according to claim 1, wherein the metallization (1) is obtained by applying a plurality of coating layers onto the transparent portion of the piloting cabin, comprising:

at least one first layer or base (11), for preparing the transparent portion to receive the metallization (1); and

at least one second layer (12), which is the actual metallizing conductive layer.

4.Metallization according to claim 3, wherein said metallization (1) comprises a plurality of electric devices adapted to ensure the electric connection between the metallization (1) and the structure of the aircraft (V).

5.Metallization according to claim 4, wherein the electronic devices comprise at least one junction device (15).

6.Metallization according to claim 5, wherein the junction device consists of conductive foil.

7.Metallization according to claim 6, wherein the foil is made of silver and is in electrical contact with the second layer.

8.Metallization according to claim 3, wherein a third layer (13) is applied which is adapted to minimize the risk of damage to metallization caused by accidental shocks or atmospheric agents.

9.Equipment according to claim 2, wherein, in order to reduce the radar marking coming from hot portions (H) of the aircraft such as, for example, at least one junction edge of components such as wings, tail veilings and engine air intakes, the equipment comprises at least one coating portion (2), which is positioned on the front edge of such components of the aircraft (V) without affecting the aerodynamic profile thereof.

10.Equipment according to claim 9, wherein said coating portion (2) comprises:

a first structure (22) of metal material, fixed to the structure of the component of the aircraft (V); and

a second radar-absorbing coating (23), laid over said first structure (22) for absorbing incident electromagnetic waves.

11.Equipment according to claim 2, wherein, in order to reduce the radar marking coming from a hot portion (H) of the aircraft such as the first frame of the fuselage, the equipment comprises:

at least one sheet of adhesive metal material (31), which covers the first frame of the fuselage of the aircraft (V); and

at least one layer of absorbing material (32), fixed to said sheets of metal material (31).

12.Equipment according to claim 2, wherein, in order to reduce the radar marking coming from hot portions of the aircraft (H) such as at least one motor face, the equipment comprises at least one grid (4) adapted to allow an air flow to come in towards the engine and to make the-motor face of the aircraft (V) less visible to radar systems.

13.Equipment according to claim 12, wherein said grid (4) comprises:

an inner structure with a plurality of openings (41); and

a support structure (42) for securing said grid (4) to the aircraft (V).

14.Equipment according to claim 13, wherein said grid (4), when no longer required, can be replaced, to preserve conduit continuity, with a substitutive structure (46), which essentially has the same shape as the support structure (42) of the grid (4).