

Title (en)

Carbon-fiber based device for heating antennas, preferably for use in space.

Title (de)

Vorrichtung zum Heizen von Antennen auf der Basis von Kohlefasern, insbesondere zur Verwendung im Weltraum.

Title (fr)

Dispositif pour le chauffage d'antennes à base de fibres de carbone, notamment pour usage spatial.

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Application

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Priority

IT RM910047 A 19910123

Abstract (en)

Heating device for reflecting surfaces of antennas based on carbon fiber, which besides performing a structural function and reflecting electromagnetic waves also provides the heating of the same surfaces in order to melt ice or snow, and is also capable of controlling thermal deformations. This consists essentially of one or more layers of carbon fiber (5), immersed in a resin wherein the electrodes (A), (B) are located, which connected to a generator (G) allow the current to pass into the fabric of carbon fibers providing the heating to a desired temperature depending on the applied voltage, the characteristics of the fiber layer and the shape and arrangement of the electrodes (A), (B). The invention relates to the technical field of reflectors for microwave antennas and finds its preferred application in the field of satellite communications. <IMAGE>

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Cited by

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