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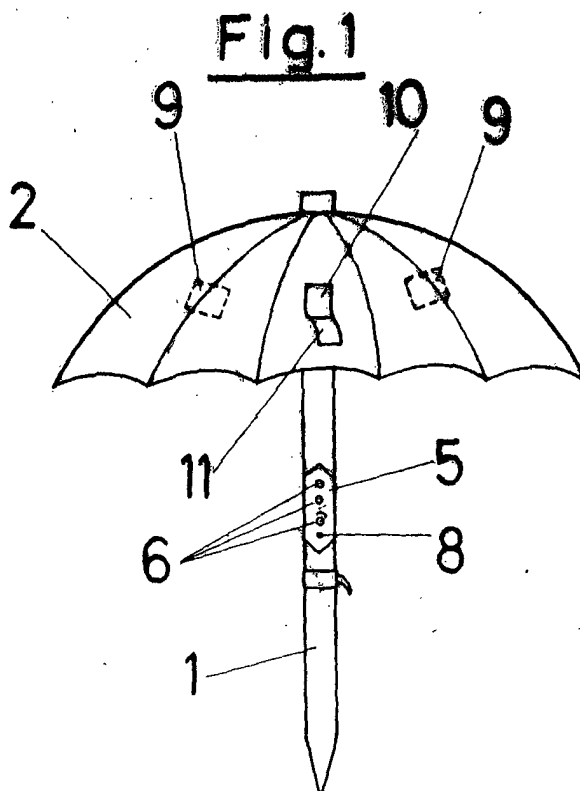
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(54) **Beach umbrella with an incorporated radio set**

(57) BEACH UMBRELLA WITH AN INCORPORATED RADIO SET, which comprises an integral radio set, a loudspeaker system (9) incorporated into it and which is supplied with power by means of a photovoltaic, power cell (10), allowing the completely conventional use of the umbrella with its folding and unfolding operation as a normal umbrella. The loudspeaker system (9) is dis-

posed under the textile cover (2) and the tubular body (1) of the umbrella presents incorporated inside the electronic circuit. On a side of the tubular body (1) are disposed command buttons (6), volume control and an earphone jack, allowing the sliding of the ring that folds and unfolds the structure. Outside of the textile cover (2) is set the photovoltaic cell (10), temporarily covered with a piece of cloth for protection when is unused.



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## Description

### AIM OF THE INVENTION

**[0001]** The aim of this present patent application is to register an umbrella with an incorporated radio set that has significant innovations and advantages over the present umbrellas and devices that have a radio incorporated into them and other similar devices.

**[0002]** More specifically the invention deals with an umbrella with an integral radio set which has a loud-speaker system incorporated into it and which is supplied with power by means of a photovoltaic power cell, allowing the completely conventional use of the umbrella with its folding and unfolding operation as a normal umbrella.

### BACKGROUND OF THE INVENTION

**[0003]** At the present moment, the applicant is not aware of umbrellas that have a radio incorporated into their structure. There are other items in daily use that incorporate radios as added value. For example, there are torches, caps and cool boxes that have radios incorporated into them. In addition, there are devices that have a more conventional radio, such as portable televisions and others.

### DESCRIPTION OF THE INVENTION

**[0004]** The aim of the present invention with a radio incorporated into the umbrella is to provide a means of being able to listen to radio broadcasts whilst being protected from the sun or relaxing in the open air both in the city and equally in the country or on the beach.

**[0005]** It is normal for people who go out for a walk or on an excursion to use an umbrella or some means to protect themselves from intense sunlight. The use of umbrellas is very common in areas where the amount of sun during the day is high, even reaching the point of producing sunburn to the skin. It is also usually quite normal that during these times of relaxation, the users want to listen to the radio, enjoying music, the news and different programmes that are broadcast by the commercial radio stations. In order to do this, they usually carry portable radios, which can become awkward in having to carry two objects at the same time.

**[0006]** The present invention consists of a completely conventional umbrella that has a complete radio incorporated into its construction with the energy supplied by a solar panel that makes its working possible and in addition, makes the invention ecological.

**[0007]** In effect, the umbrella has a conventional structure with a tubular body or stem, with a point or peg at the bottom for its introduction into the ground and a piece of cloth assembled on a series of jointed ribs with a sliding device on the stem in order to open out the cloth and to fold it away.

**[0008]** Said umbrella has a radio incorporated into the inside of the tubular support body or stem. In order to do this, an integrated electronic circuit radio receiver is used. This circuit is controlled by means of simple push buttons and small revolving control knobs. Said circuit is housed on the inside of the hollow support tube of the umbrella. The push buttons are fitted at a suitable height in a recess on the side, in such a way that the movement of the ring that pushes the ribs does not constitute an obstacle in any way for the stated buttons. These knobs or push buttons are for the control of the tuning and the volume.

**[0009]** The umbrella ribs that extend the cloth when the umbrella is opened are fitted with two loudspeakers. These loudspeakers are of a size that is adequate to produce a clear and powerful sound, arranged in such a way that the umbrella can be folded up completely.

**[0010]** In turn, it has been envisaged that as the radio is used simultaneously with the umbrella, when there is a high degree of sunlight, the power supply will be by means of solar energy. In order to do this the umbrella will have a photovoltaic cell fitted to its upper surface. The cell will supply enough energy for the radio's needs and will be of a size that is suitable to allow the ribs to be folded down onto the support column. As these electronic elements are delicate, it has been planned that a piece of fabric can be placed over the cell as a cover. This piece is useful when the umbrella is folded down, avoiding any rough treatment to the cell. The piece of fabric can easily be placed over the cell and removed by means of a suitable and quick fastener, such as fasteners, a zip or Velcro.

**[0011]** The umbrella also has a connection for the use of earphones if it is required to use the radio in a more personal manner. This connection can be in the tubular column next to the controls.

**[0012]** In order to complete the description that is going to be made below and for the purpose of helping to give a better understanding of its characteristics, the present descriptive memorandum is accompanied by a set of drawings, which are illustrative and not limitative, where the most significant details of the invention are represented.

### BRIEF DESCRIPTION OF THE DRAWINGS

#### [0013]

Figure 1. Showing a perspective view of the umbrella opened up.

Figure 2. Showing a detail in elevation of the area of the control buttons.

Figure 3. Showing a detail in profile of the area of the control buttons.

Figure 4. Showing a sectioned view in elevation of the umbrella.

## DESCRIPTION OF THE PREFERRED METHOD FOR CARRYING OUT THE INVENTION

**[0014]** In light of the commented on figures and in accordance with the adopted numbering, a preferred method of carrying out of the invention can be seen in the same, however it is not by way of limitation on the invention, which consists of an umbrella with a conventional structure constituted by a long support stem or tube (1), at the top a series of jointed ribs (3) arranged radially with a fixing ring (4) that slides up and down on the tube (1). Arranged on the ribs (3) there is a piece of fabric (2) fitted onto the jointed ribs ends (3) in order to give maximum extension when the umbrella is opened. On the inside of the hollow support tube (1) there is complete radio receiver circuit (7), connected to two loudspeakers (9) fitted onto the ribs (3) of the umbrella and a photovoltaic cell (10) to provide the power. On the side of the support tube (1), there is a flattened recess (5) into which a series of buttons and controls (6) are fitted for the control of the radio circuit (7) and a connector socket (8) for external earphones. On the inner surface of the assembly next to the ribs (3) there are two loudspeakers (9) arranged in their respective protective housings connected to the radio circuit (7) by means of suitable wires (13). At the same time, there is a photovoltaic cell (10) fitted to the outside of the fabric (2) that is connected by means of a power supply wire (12) to the radio circuit (7) in order to provide the power. Fitted over this photovoltaic cell (10) there is a piece of protector fabric (11) joined by a quick fixing system.

## Claims

1. Beach umbrella with an incorporated radio set, that comprises of an umbrella constituted by an elongated tubular stem or tube support (1) and at its upper end a series of jointed ribs (3) onto which a covering fabric (2) is fitted joined at their ends, being a sliding ring (4) on the support tube (1) fixed to the above-mentioned ribs (3) for its opening and closing, **characterised in that** comprises a radio set (7) on the inside of the hollow tube (1), connected to at least one loudspeaker (9) and to a power source.
2. Beach umbrella with an incorporated radio set, according to claim 1, **characterised in that** the umbrella has a photovoltaic cell (10) for its power supply, connected by means of a wire (12) to the radio (7); and **in that** said photovoltaic cell (10) is placed on the external covering fabric (2); and **in that** the photovoltaic cell (10) has a piece of protective fabric (11) that is immovable and fixed by some quick means of fastening, fasteners, zip or similar.
3. Beach umbrella with an incorporated radio set, according to claim 1 **characterised in that** comprises

two loudspeakers (9) positioned below the ribs (3), housed in respective protective casings and connected by means of electric wires (13) to the radio set (7).

4. Beach umbrella with an incorporated radio set, according to claim 1 **characterised in that** the radio set (7) is of the integrated type; and **in that** the push buttons and controls (6) of the radio circuit (7) are located into a flattened recess (5) under the space where the sliding ring (4) moves for the opening and closing of the umbrella.
5. Beach umbrella with an incorporated radio set, according to claims 1 and 4 **characterised in that** the radio set (7) comprises a connector (8) for earphones.

Fig. 1

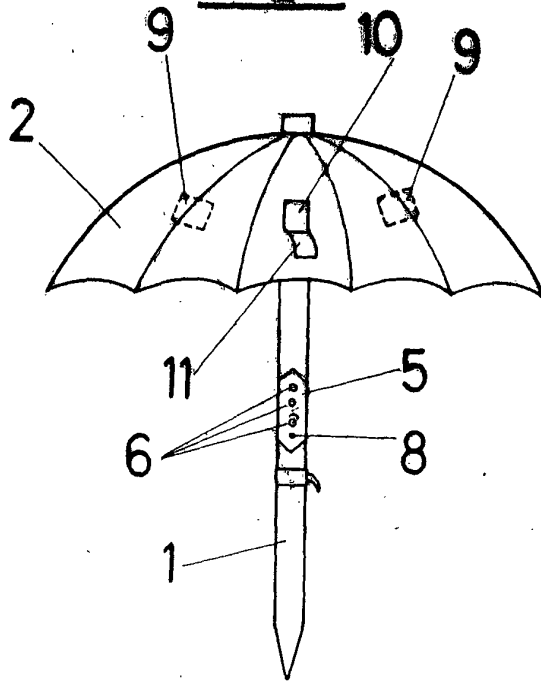


Fig. 2

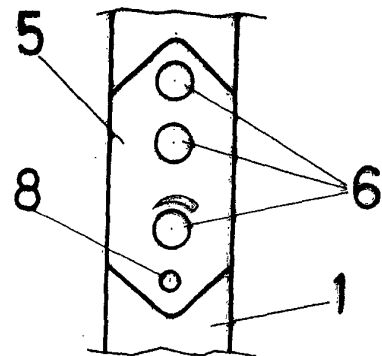


Fig. 3

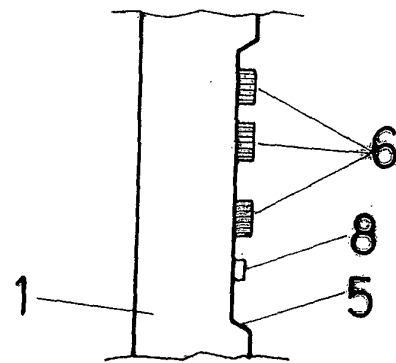


Fig. 4

