

PATENT SPECIFICATION

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374,340

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COMPLETE SPECIFICATION.

Improvements in Selector Tuning Devices for Radio Receiving Sets.

We, FABBRICA ITALIANA MAGNETI MARCELLI, a Societa Anonima, organised in accordance with the Italian Laws, of 22, corso Venezia, Milan, Italy, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The present invention relates to radio receiving sets in which the several wave lengths which may be tuned in, are shown on a dial connected with the selector operating knob and readable through an opening of the case or cabinet containing the set, it being illuminated by transparency or by reflection, and more particularly to sets in which said dial has two or more scales a single one of which is made operative each time in connection with the conditions for which the set is tuned.

To this end it has already been proposed to arrange in front of the dial provided with the graduations, a movable opaque screen provided with an aperture and connected to the wave length commutator, so that the said aperture is caused to correspond with that graduation of the dial which must be visible for each position of the commutator.

According to the invention, there is arranged in front of the dial provided with the graduations and in front of the aperture which limits a sector of the dial, an opaque screen which is mounted so as to rotate about the axis of the dial and which comprises as many apertures or windows as there are graduations, the said apertures or windows being so constructed that only one of the graduations is visible for each position of the commutator.

This selection effected by the apertures of the screen may be secured either owing to their different distances from the axis of rotation or by the action of the different colours of transparent material fitted in the apertures in combination with different colours of the graduations.

In the annexed drawings, are illustrated, by way of example, two embodiments of this invention and

[Price 1/-]

Figure 1 is a side view of a selector device embodied in a radio-receiver,

Figure 2 being a front view of the parts of the device of this invention;

Figures 3 and 4 are views corresponding with Figures 1 and 2 of another embodiment.

In the construction of Figures 1 and 2, 1 is a knob intended to manipulate the parts of the receiving set to put them in a condition for receiving the desired wave length, and on the spindle 2 of the same a pinion 3 fixed fast, which pinion meshes with a toothed gear 4 secured to the drum 5 which has the scale carrying dial 6 fastened thereon.

Dial 6 which in the embodiment illustrated by way of example is illuminated by transparency by means of a lamp 7 located behind the opening 8 of the stationary frame 9, may be read from outside through an opening 20 which is, by way of example, provided in the wall 21 of the case or cabinet enclosing the set.

Intermediate the lamp 7 and dial 6 a screen 10 is loose on the drum 5, which screen has a link 12 pivoted thereon at 11; said link is connected by its opposite end with an arm 13 solid with a spindle 14 on which an outer manipulating key 15 is fastened.

The spindle 14 is intended to control a switch which puts the set in conditions for receiving different wave bands, as long waves and medium waves, and then the control key 15 may take two positions each corresponding with a different position of the screen 10.

In the portions of the screen 10 which are in front of the lamp 7 in the two different positions of said screen, this screen has two slots 16 and 17 which are able to clear entirely the opening 20 and in which transparent plates of different colours are located, said transparent plates having more particularly the same colour as the lines of the two scales 18 and 19 provided on the dial 6; for instance, the screen of the slot 16 may be red as are the lines of scale 18 and the screen of slot 17 may be blue as are the lines of scale 19.

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It is clear therefore that in each of the two positions the screen 10 may take up in respect of two operative positions of the key 15, a single one of the scales may be read from outside, and more particularly that one whose lines have a different colour with respect to the colour of the transparent plate.

The other scale, whose lines have the same colour as said transparent plate, blends with the coloured background afforded by the transparent plate. Therefore, according to the position which is imparted to the switch by the key 15, only the corresponding portion of the dial scale is in view.

Of course, instead of two slots as those 16 and 17, there may be a larger number thereof when the dial is divided in a larger number of scales, and then each slot must be in front of opening 20 when the key 15 is in corresponding position.

The device illustrated in Figures 3 and 4 differs from the one above described by the fact that the slots 16 and 17 of screen 10 each clear only a portion of the height of the opening 20 and therefore, according to position of the key 15, either of the scales 18 and 19 will be clear while the other one is concealed by the screen 10. Slots 16 and 17 may also be provided with coloured transparent plates for the best evidence of different scales.

In any case the manipulation of the key 15 which puts the set in conditions for reception of either of the wave bands traced on the several scales of the dial 6 has the further effect of carrying in view only the scale proper therefor, and thus any trouble about the scale to be read is removed.

Of course the described arrangement is adapted for use also in dials which are illuminated by reflection, the screen 10 being then located in front of dial 6, and also in dials moving in a rectilinear path.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. A selector tuning device for radio receiving apparatus having a dial provided with several graduations and an opaque screen, which is connected to the wave length commutator, for rendering only one of the graduations visible, characterised in that the said opaque screen is mounted so as to rotate about the axis of the graduated dial and is provided with as many apertures or windows as there are graduations, which apertures or windows are so constructed as to render visible only one of the graduations for each position of the commutator.

2. A device as claimed in claim 1, characterised in that the apertures or windows of the movable screen occupy positions at different distances from the axis of rotation of the screen in accordance with the positions of the different graduations.

3. A device as claimed in claim 1, characterised in that the screen comprises two windows, each of which extends over two graduations and is fitted with a transparent material of a colour differing from that of the other window and of the same colour as that of one of the graduations of the dial.

4. The selector device for radio receiving sets, substantially as described or substantially as shown in Figures 1 and 2 or Figures 3 and 4 of the accompanying drawings.

Dated this 4th day of September, 1931.
 FABBRICA ITALIANA MAGNETI
 MARELLI,
 per Boulton, Wade & Tennant,
 111 & 112, Hatton Garden, London,
 E.C.1,
 Chartered Patent Agents.

[This Drawing is a reproduction of the Original on a reduced scale.]

Fig. 2

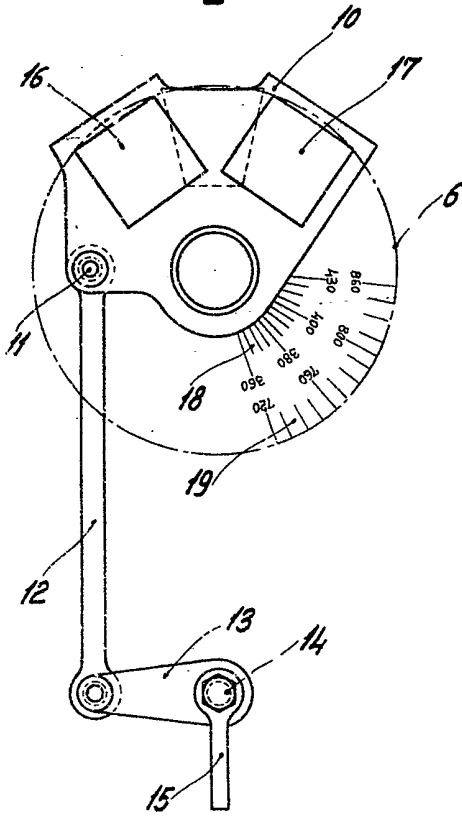


Fig. 1

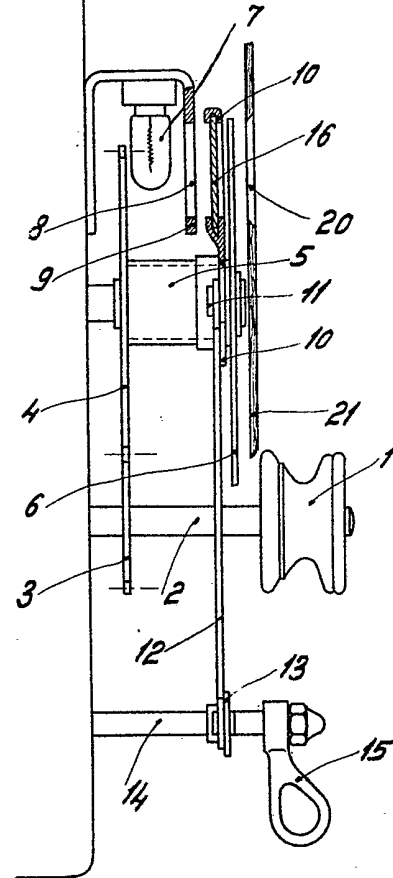


Fig. 4

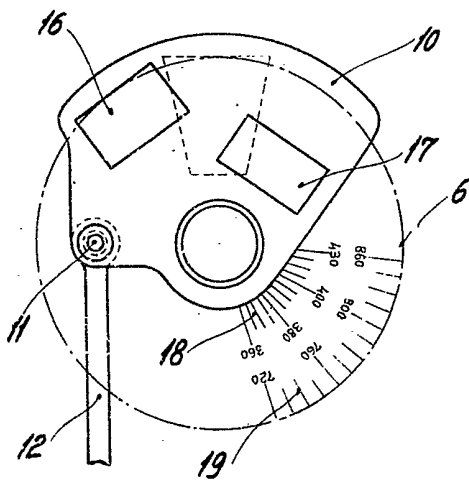


Fig. 3

