

PATENT SPECIFICATION



Convention Date (Italy) : Feb. 6, 1935.

458,059

Application Date (in United Kingdom) : Feb. 6, 1936.

No. 3687/36.

Complete Specification Accepted : Dec. 11, 1936.

COMPLETE SPECIFICATION

Improvements in Station-Indicators for Radio Receivers

We, FABBRICA ITALIANA MAGNETI MARILLI, a body corporate organised under 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 invention relates to geographical indicators for radio-receiving apparatus, that is to say, an indicating device by which the transmitting station to which the apparatus is tuned is shown by a sign appearing in the position which the said station occupies on a geographical map drawn on the screen with which the window of the apparatus is furnished.

It is known to this end to perforate the indicator dial on which is drawn the geographical map of the district under consideration and to mount between this dial and a source of light, a perforated diaphragm which is movably mounted and connected with the control of the variable condensers in such a manner that one of the holes of the said diaphragms corresponds with the hole in the dial which indicates the transmitting station to which the apparatus is tuned.

It is also known to use for the diaphragm a disc of translucent material.

The invention consists in interposing between the dial and the source of light a shutter constituted by two or more opaque diaphragms provided with perforations intended to correspond together, these diaphragms being superposed and mounted movable independently of one another and connected to the control of the variable condensers under such conditions as to be displaced in a different manner one with respect to the other, for example, in different directions or senses.

In this way it is very easy to distribute over the diaphragms the perforations intended to correspond, whatever may be the position of the stations on the dial, and in view of the operation of the shutter being independent of the dial it is possible to use for the dial comprising the geographical map an unperforated translucent plate or sheet.

The accompanying drawing shows by

way of example in diagrammatic perspective one embodiment of this indicating device for radio-receiving apparatus. 55

In this drawing, 1 indicates the window of a radio-receiving apparatus in which is mounted an opaque screen 2 on which is drawn a geographical map, the position of the different transmitting stations being indicated thereon for example by small holes 3. 60

Behind the screen 2 is mounted movable transversely to the window 1, a diaphragm 4 which is connected to the control mechanism (not shown) of the variable condensers in such manner as to move for example towards the left from a position of rest which corresponds to an initial position of the condensers. 65 70

Behind the diaphragm 4 there is another diaphragm 5, this also connected to the control mechanism of the variable condensers in such manner as to be moved for example towards the right. 75

Although in the drawing the diaphragms 4, 5 and the screen 2 are shown separated from each other, actually they will be mounted as closely as possible to each other. 80

The diaphragms 4 and 5 are opaque and are provided with holes 6 and 7 respectively, the positions of which are fixed in the following manner. 85

The manipulating knob of the mechanism to actuate the variable condensers and to which are also connected the diaphragms 4 and 5, is moved until the apparatus is in tune with a particular station, for example, Rome and then at the position which Rome occupies on the geographical map of the screen 2 there is made in the superposed diaphragms 4 and 5, exactly corresponding holes 6 and 7. The same procedure is adopted for all the other stations shown on the geographical map of the screen 2. 90 95

When the indicating device is ready to work and the source of light behind the diaphragm 5 is lit up, every time the radio-receiving apparatus is brought into tune with a particular station the point of the map which corresponds to the position of the said station is made luminous and clearly visible by the light 100 105

[Price 1/-]

which passes through the superposed holes 6 and 7 of the diaphragms 4 and 5.

The diaphragms could if necessary be of greater number than two and they can be all movable or some of them may be stationary. In any case, it is advantageous for the movable diaphragms to be displaced in opposite directions relatively to one another.

10 The mounting of the diaphragms 4 and 5 may be carried out in any suitable manner by means of guides and the diaphragms may be connected in any suitable manner with the control
15 mechanism.

In the example described it is assumed that the diaphragms 4 and 5 are constituted by rigid plates. They could also be constituted by opaque ribbons mounted on rotating drums which are connected with the control members in order to obtain the rotation upon which depends the necessary displacements of the ribbons.

25 Finally the screen 2 instead of being opaque and perforated at the positions corresponding to the stations could be constituted by a translucent sheet or plate in which case the luminous indication
30 through the diaphragms 4 and 5 would be visible by transparency on the screen 2.

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
35 claim is:—

1. A geographical indicator for radio-receiving apparatus, characterised by the interposition, between a dial on which is drawn a geographical map and a luminous source, of a shutter constituted by two or more diaphragms at least comparatively opaque and provided with transparent points intended to correspond together, these diaphragms being superposed and mounted movable independently of one another and connected to the control of the variable condensers under such conditions as to be displaced in a different manner with respect to one another.

2. A geographical indicator as claimed in claim 1, characterised in that the shutter is formed by two diaphragms which are displaced at the same time in different directions or senses by the tuning member.

3. A geographical indicator as claimed in claim 1, characterised in that the dial on which the geographical map is drawn is constituted by a translucent sheet or plate.

4. Geographical indicators for radio-receiving apparatus, substantially as described and substantially as shown in the accompanying drawing.

Dated this 6th day of February, 1936.

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.]

