

PATENT SPECIFICATION

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 (72) Inventor BRUNO GADDI



(54) IMPROVED FLASHING INDICATORS FOR A VEHICLE

(71) We, PIAGGIO & C. S.P.A., a Societe per Azioni organised under the laws of Italy, of Via Antonio Cecchi 6, Genova, Italy, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The present invention relates to a two-wheeled motor vehicle of the kind comprising a front apron and a rear pair of motor cowlings and more especially to the arrangement on such a vehicle of flashing indicators for indicating when the vehicle is turning.

In accordance with the invention such a vehicle comprises a front pair of flashing direction indicators partially incorporated in the front apron and projecting forwardly therefrom and a rear pair of flashing direction indicators partially incorporated in the motor cowlings.

The invention will now be described in more detail with the aid of an example illustrated in the accompanying drawings in which:—

Figures 1, 2 and 3 show the general arrangement of the direction indicators in side elevational view, rear view and front view of the vehicle, respectively.

Figures 4, 5, 6 and 7 show the details of the left front indicator, placed on the apron 3, in side view, front view, horizontal cross-sectional view taken along the line A-A of Figure 4, and vertical cross-sectional view taken along the line B-B of Figure 6, respectively.

Figures 8, 9, 10 and 11 show the details of the right rear indicator placed on the engine hood in side view, front view, horizontal cross-sectional view taken along the line B-B of Figure 8 and vertical cross-sectional view taken along the line C-C of Figure 10, respectively.

As can be seen, the devices of the front indicators 1' and 1" are each applied in the crowned frontmost portion which is farthest from the middle plane P-P of the front apron 3 of the vehicle M and are incorporated in the glove box 4, the latter being

permanently affixed to the rear face of the apron 3.

The rear direction indicators 2' and 2" are applied to the rear ends of the cowlings 5 and 6, in which they remain incorporated, similarly to the front indicators, so that the mirror surface of the lamp-carrier of the indicators cannot be seen from the outer surfaces.

More particularly each front indicator (see Figures 4, 5, 6, 7) is essentially composed by a body 7, integral with a lamp-carrier 8, a reflector 9 and a frame 10, by a lamp 11 and by a refractor transparent member 12 urged against the front 10 through a rubber gasket 13 by screws 14 which are also intended to fasten the body 7 to the apron 3, through which a special slot 15 has been formed for allowing the incorporation of the indicator device in the inner space of the glove box 4.

Each rear indicator 2' (see Figures 8, 9, 10, 11) is composed by a body 16 equipped with frames 17, a reflector 18 fastened to the body 16 by screws 19 and carrying the lamp-carrier 20, by the lamp 21 and the refractor transparent member 22 pressed against the frame 17 through the rubber gasket 23 by screws 24.

Conversely, the body 16 is fastened by screws 25 with nuts, to the cowlings 5 through which a special slot 26 has been formed in order to incorporate the indicator.

The constructional approach described above is reported by way of example only of the invention, since modifications and changes may be introduced therein without departing from the scope of the invention.

WHAT WE CLAIM IS:—

1. A two-wheeled motor vehicle of the kind comprising a front apron and a rear pair of motor cowlings, said vehicle comprising a front pair of flashing direction indicators partially incorporated in the front apron and projecting forwardly therefrom and a rear pair of flashing direction indicators partially incorporated in the motor cowlings.

2. A two-wheeled motor vehicle accord-

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(71) We, PIAGGIO & C. S.P.A., a Societe per Azioni organised under the laws of Italy, of Via Antonio Cecchi 6, Genova, Italy, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The present invention relates to a two-wheeled motor vehicle of the kind comprising a front apron and a rear pair of motor cowlings and more especially to the arrangement on such a vehicle of flashing indicators for indicating when the vehicle is turning.

In accordance with the invention such a vehicle comprises a front pair of flashing direction indicators partially incorporated in the front apron and projecting forwardly therefrom and a rear pair of flashing direction indicators partially incorporated in the motor cowlings.

The invention will now be described in more detail with the aid of an example illustrated in the accompanying drawings in which:—

Figures 1, 2 and 3 show the general arrangement of the direction indicators in side elevational view, rear view and front view of the vehicle, respectively.

Figures 4, 5, 6 and 7 show the details of the left front indicator, placed on the apron 3, in side view, front view, horizontal cross-sectional view taken along the line A-A of Figure 4, and vertical cross-sectional view taken along the line B-B of Figure 6, respectively.

Figures 8, 9, 10 and 11 show the details of the right rear indicator placed on the engine hood in side view, front view, horizontal cross-sectional view taken along the line B-B of Figure 8 and vertical cross-sectional view taken along the line C-C of Figure 10, respectively.

As can be seen, the devices of the front indicators 1' and 1'' are each applied in the crowned frontmost portion which is farthest from the middle plane P-P of the front apron 3 of the vehicle M and are incorporated in the glove box 4, the latter being

permanently affixed to the rear face of the apron 3.

The rear direction indicators 2' and 2'' are applied to the rear ends of the cowlings 5 and 6, in which they remain incorporated, 55 similarly to the front indicators, so that the mirror surface of the lamp-carrier of the indicators cannot be seen from the outer surfaces.

More particularly each front indicator 60 (see Figures 4, 5, 6, 7) is essentially composed by a body 7, integral with a lamp-carrier 8, a reflector 9 and a frame 10, by a lamp 11 and by a refractor transparent member 12 urged against the front 10 65 through a rubber gasket 13 by screws 14 which are also intended to fasten the body 7 to the apron 3, through which a special slot 15 has been formed for allowing the incorporation of the indicator device in the inner 70 space of the glove box 4.

Each rear indicator 2' (see Figures 8, 9, 10, 11) is composed by a body 16 equipped with frames 17, a reflector 18 fastened to the body 16 by screws 19 and carrying the lamp-carrier 20, by the lamp 21 and the refractor transparent member 22 pressed against the frame 17 through the rubber gasket 23 by screws 24.

Conversely, the body 16 is fastened by 80 screws 25 with nuts, to the cowlings 5 through which a special slot 26 has been formed in order to incorporate the indicator.

The constructional approach described 85 above is reported by way of example only of the invention, since modifications and changes may be introduced therein without departing from the scope of the invention.

WHAT WE CLAIM IS:—

1. A two-wheeled motor vehicle of the kind comprising a front apron and a rear pair of motor cowlings, said vehicle comprising a front pair of flashing direction indicators partially incorporated in the front apron and projecting forwardly therefrom and a rear pair of flashing direction indicators partially incorporated in the motor cowlings.

2. A two-wheeled motor vehicle accord- 100



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ing to claim 1, wherein the front indicators are located at the lateral edges of the front apron and the rear indicators are located at the rear edges of the motor cowlings.

5 3. A two-wheeled motor vehicle according to claim 2, wherein each front indicator comprises a hollow body, which houses a lamp, and a refractor transparent cover, said hollow body being housed in a glove box
10 affixed to the rear of the front apron and said transparent cover being located externally to the front apron and having a shape which substantially reproduces that of the corresponding edge of the front apron.

15 4. A two-wheeled motor vehicle according to claim 2, wherein each rear indicator comprises a hollow body, which houses a lamp, and a refractor transparent cover, said hollow body being housed inside the
20 respective motor cowling and said transparent cover being located externally to the motor cowling and having a wrapping rounded shape which substantially reproduces that of the rear edge of the motor
25 cowling.

5. A two-wheeled motor vehicle accord-

ing to claim 3, wherein said hollow body of of each front indicator is integral with a lamp-carrier, a reflector and a frame located outside the glove box around an opening of 30 the front apron, said transparent cover being urged against said frame through a sealing gasket by screws which also fasten said hollow body to the front apron.

6. A two-wheeled motor vehicle according 35 to claim 4, wherein said hollow body of each rear indicator is equipped with a frame located outside the motor cowling around an opening thereof and fixed to the motor cowling by screws, a reflector being 40 fastened to said hollow body by screws and carrying a lamp-carrier, said transparent cover being urged against said frame through a sealing gasket by screws.

7. A two-wheeled motor vehicle accord- 45 ing to claim 1, substantially as disclosed hereinbefore and as illustrated in the accompanying drawings.

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