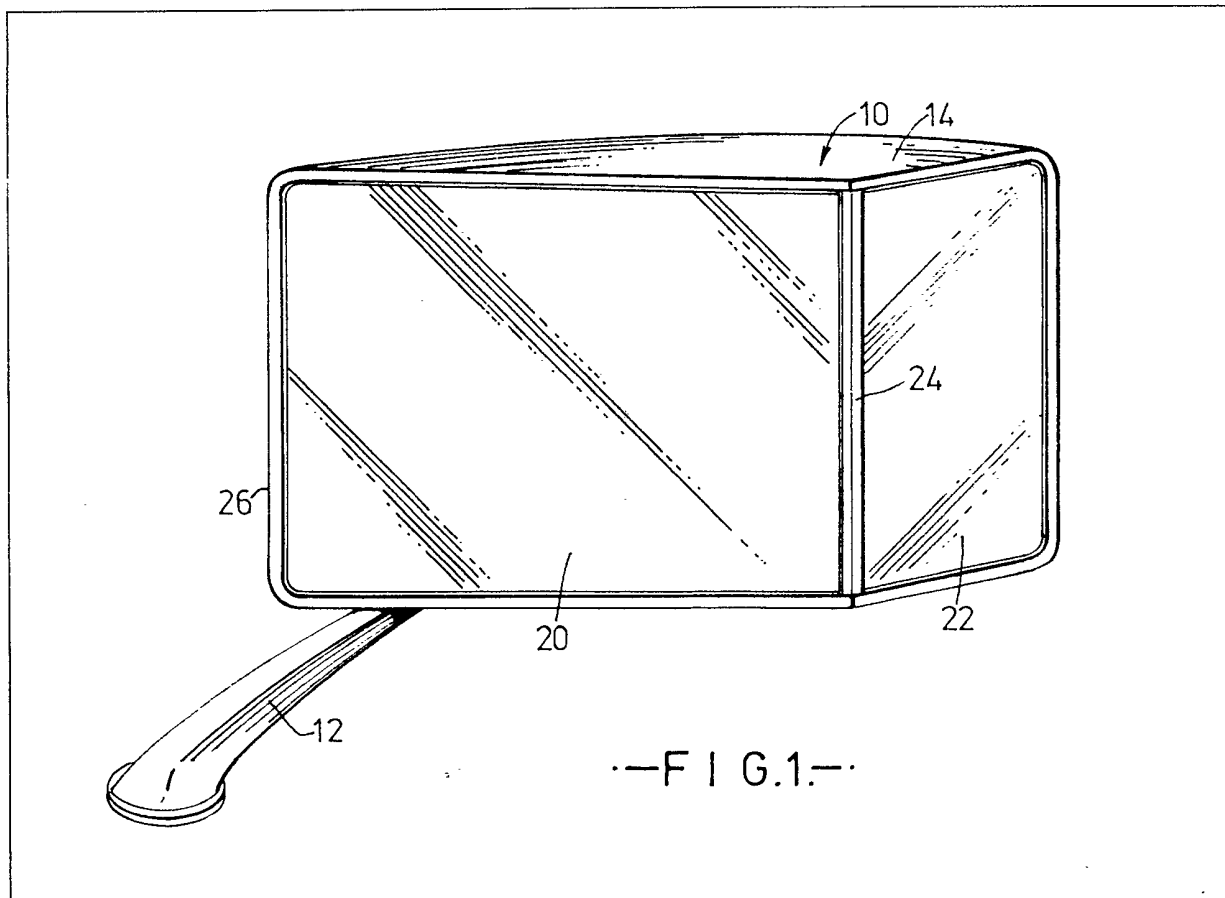
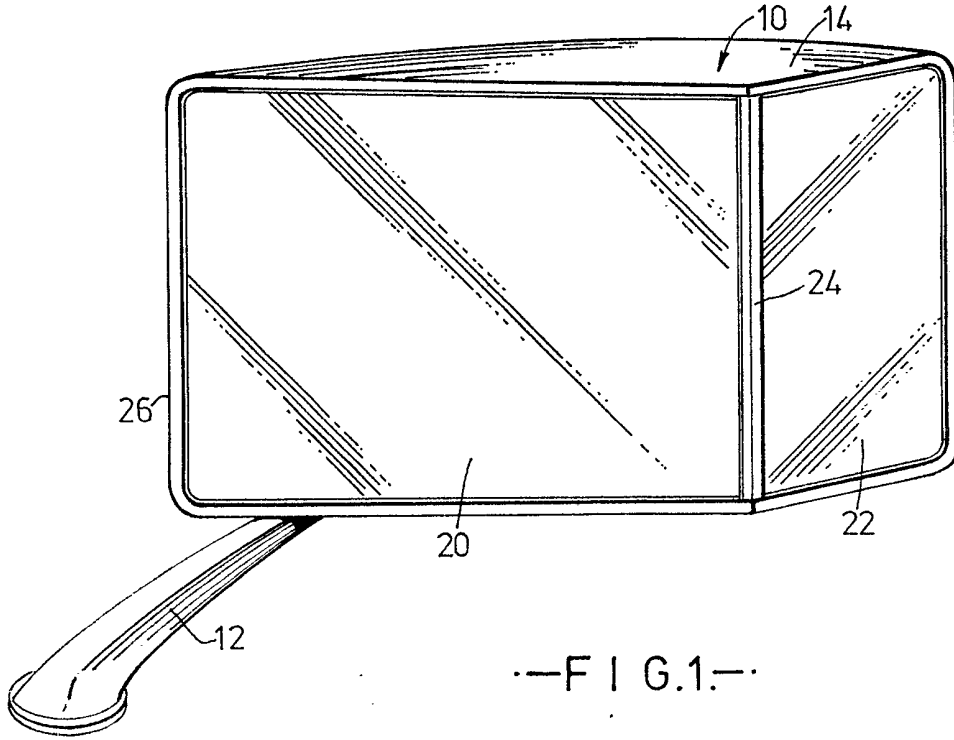


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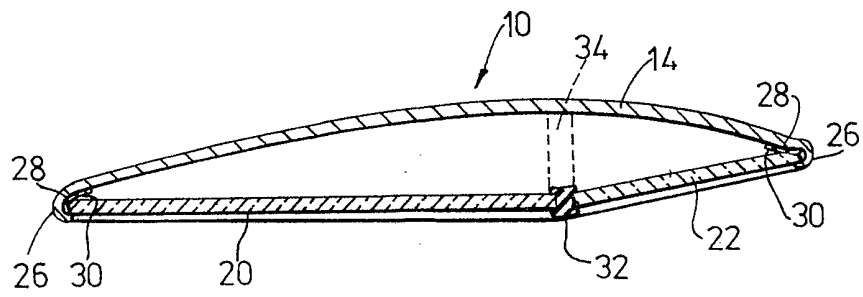
(54) Rearview mirrors

(57) A vehicle external mirror (10) has two reflective areas or facets (20, 22) angled relative to each other. One (20) serves normal rear view purposes along and outwardly of the side of a vehicle, and the other (22) serves to provide a further, more outward, field of view to and sight of overtaking vehicles and assist entry to one carriageway or road from another road, such as a slip road.





—FIG. 1.—



—FIG. 2.—

SPECIFICATION

Vehicle external mirror

5 The invention relates to mirrors and particularly to external mirrors, such as wing mirrors, for motor vehicles.

In general, the field of view available with such mirrors is not wide enough unless convex mirrors are used when depth of view is distorted. The latter can be alarming as the main purpose of such mirrors are to judge overtaking and traffic lane entry opportunities according to following or existing traffic, and to assist in reversing manoeuvres.

10 It is an object of this invention to provide an alternative way of improving field of view with less effect on distance judgement. To this end I propose that a mirror have two main reflective areas, one angled relative to the other.

20 Preferred external vehicle mirrors of this invention have relatively large and small reflective areas, the former nearest the vehicle and the latter extending away from the outer edge of the former both in extent and angularly. The larger area may then serve the normal purpose of giving a rearward view along and outwards of the side of the vehicle and to an angle dictated by optics. However, beyond that angle, the smaller portion will give a field of view very much to one side of the vehicle but still at least somewhat rearwardly thereof in order to detect any very close overtaking vehicle.

Also, the smaller area mirror can serve an extremely useful purpose when approaching a road or carriageway at an acute angle as often happens when joining a motorway from a slip road. Then, obviously, a far better sight of traffic on the carriageway to be joined will be given than with a normal external mirror.

One embodiment of the invention will now be described, by way of example, with reference to the accompanying drawing, in which:

Figure 1 is a driver's view of an external vehicle mirror; and

Figure 2 is a section on line AA of *Figure 1*.

45 In the drawing, an external mirror 10 for a road vehicle has a conventional stand-off arm 12 from a mount, not shown, that conveniently includes any conventional means of affording about 90° of swinging movement between an operative mirror position and a retracted position with the mirror generally parallel with the vehicle body. Usually, such means has a spring loaded seating to latch at least in the operative mirror position. Also, a conventional angular adjustment joint, such as a ball and clamp, will be provided between the arm 12 and the mirror proper.

The mirror itself comprises a holder 14 that, again in conventional manner, has a pressed metal or moulded plastics body presenting a curved rear surface to improve airflow past the mirror.

60 However, the salient features of the mirror 10, from the point of view of this invention, concern the two distinct mirror facets 20 and 22 that are angled relative to each other at 24 to give differing fields of view. The main one 20 of these mirror facets is closest to the vehicle and serves in conventional

manner to give a rearward field view from the side of the vehicle outwards as limited by its size and shape. The other mirror facet 22 makes an angle of about 10° with the general plane of the main facet 20 in a direction away from a viewing driver. That will afford another field of view which will cover positions outwardly of the field of view of the main mirror facet close to the vehicle where the field of view of the main mirror facet is inevitably most restricted.

70 It has been found that plane mirror facets give satisfactory results, which is advantageous from a cost viewpoint, but the use of a non-plane mirror facet or facets is not to be ruled out should that be desired or found to afford operational advantages in some applications of the invention. Also, the angle of 10° between plane mirror facets was found to be satisfactory in one particular application to a wing mirror. However, other angles may be used as found to be satisfactory or advantageous, say for different distances between drive position and wing mirror mounting. In general, however, a range from 2½° to 12½° is believed to cover most practical embodiments. External cab or door mounting mirrors can also benefit from this invention and the most advantageous mirror facet angle may then differ from that required of a wing mirror.

A flexible or hinged joint 24 between the mirror facets may well prove to be a practical proposition, especially for mirrors of the type having the mirror itself movable within a shield as is becoming common practice for door mounted mirrors adjustable by a linkage from within the vehicle. Any mirror facet adjustment should, of course, be lockable or sufficiently stiff in action to resist movement by vehicle vibration. It is believed that a single deformable sheet, for example of metal, would suffice, either directly silvered and mirror finished, or as a carrier for two glass facets preferable sealed relative to each other by mastic or a resilient compressed seal to allow at least minor relative angular adjustment.

105 However, the drawing shows a fixed facet mirror with a preset angle between glass facets conventionally mounted within a mirror body rim 26 on rim adjacent flats 28 and with a seal strip 30 to the rim 26. A further double channel seal 32 is shown between the two facets 20, 22. It will, of course, be appreciated that the facets could be integral one with the other and need not be of glass. Also, the mirror holder could have a support (dashed lines 34) for the mirror facet joint perhaps especially if moulded from synthetic plastics material. Then, both facets could be afforded independently in any conventional way.

120 Conceivably, of course, the facets 20, 22 could be mounted in a holder suitable for attachment to and over a standard, single facet, vehicle mirror, e.g. by clips or clamps.

CLAIMS

- 125
1. Vehicle external mirror comprising two reflective areas one angled relative to the other to give two fields of rearward view.
 2. Vehicle external mirror according to claim 1
- 130 wherein one of said areas is larger than the other for

giving a normal field of view along the side and outwardly of a vehicle and the other extends away from the larger area at its outer edge for giving a field view beyond that of the larger area.

5 3. Vehicle external mirror according to either preceding claim, comprising a body carrying said reflective areas.

10 4. Vehicle external mirror according to claim 3, wherein said body is adapted for securement to an existing vehicle external mirror over its single reflective area.

5. Vehicle external mirror according to claim 4, wherein said body is adapted for universal mounting to a stand-off arm.

15 6. Vehicle external mirror substantially as herein described with reference to and as shown in the accompanying drawings.

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