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2,810,447

REAR SEAT SPEAKER

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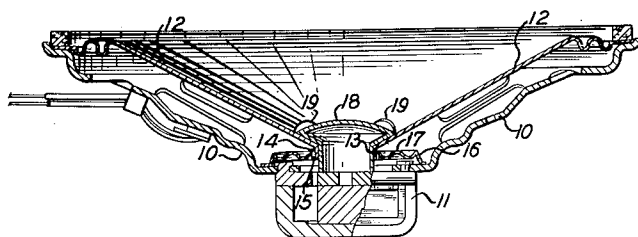


FIG. 1

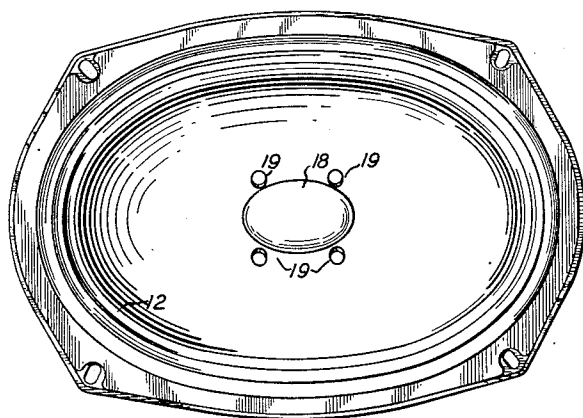


FIG. 2

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ATTORNEYS

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2,810,447

REAR SEAT SPEAKER

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4 Claims. (Cl. 181—31)

This invention resides in the field of sound reproduction and is more specifically concerned with a loud speaker especially adapted for mounting behind the rear seat of motor vehicles. Such speakers are usually mounted with the axis of the speaker in an approximately vertical position with the apex of the cone pointing downward.

Trouble has been experienced with this type of installation because debris of various types has collected in the speaker cone and gravitated to its center where it is agitated by the movement inherent in the operation of the speaker and so has produced objective noise.

This invention has been developed to overcome this difficulty in rear seat speaker installation, although it is usable wherever it is desired to mount speakers in a vertical position.

This invention is best understood by reference to the figures of drawing in which:

Figure 1 is a cross section of a typical automotive speaker, and

Figure 2 is a plan view of a similar speaker.

Turning to Figure 1, the speaker is characterized by a stamped base 10 to which is secured magnetic means 11 and which also supports perforate paper cone 12. Perforate paper cone 12 terminates in neck 13 to which is secured coil 14 in air gap 15 of magnetic means 11. Coil 14 is energized from a radio receiver and imparts to perforate cone 12 an axial motion which is productive of the actual sound. Neck 13 is also supported upon stamped base 10 through imperforate spider 16 and diaphragm 17. This diaphragm usually comprises a corrugated varnish treated cloth.

Dust dome 18 is secured as by an adhesive to perforate paper cone 12 near its apex and serves to deflect debris towards perforations 19 which are pierced through perforate paper cone 12 at the juncture of dust dome 18 and cone 12.

Figure 2 shows the location of these perforations 19

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and discloses that in the preferred structure these perforations are four in number and tangent to the edge of dust dome 18. The standard base 10, the perforate paper cone 12 and dust dome 18 are all shown to be elliptical in plan view, although this is unnecessary and forms no part of the invention. Obviously, any other acceptable configuration may be employed. Similarly, the number and precise location of perforations 19 may be widely varied without departing from the scope of the invention.

Any debris falling into perforate paper cone 12 will gravitate to perforations 19 and under the influence of the movement of perforate paper cone 12 and attached dust dome 18 and will fall through perforation 19 and into the space between cone 12 and stamped base 10 where such debris is harmless.

It will be understood that the invention is not to be limited to the exact construction shown and described, but that various changes and modifications may be made without departing from the spirit and scope of the invention, as defined in the appended claims.

I claim as my invention:

1. A loud speaker comprising a sound generating cone having a base and an apex, and a convex dust dome adhesively secured to said sound generating cone near its apex, said sound generating cone being pierced by at least one perforation adjacent the periphery of the dust dome.

2. A loud speaker comprising a sound generating cone having a base and an apex, and a convex dust dome adhesively secured to said sound generating cone near its apex, said sound generating cone being pierced by a plurality of perforations adjacent the periphery of the dust dome.

3. A loud speaker comprising a sound generating cone having a base and an apex, and a convex dust dome secured to said sound generating cone near its apex, said sound generating cone being pierced by at least one perforation adjacent the periphery of the dust dome.

4. A loud speaker comprising a sound generating cone having a base and an apex, and a convex dust dome secured to said sound generating cone near its apex, said sound generating cone being pierced by a plurality of perforations, the edge of the perforations adjacent the dust dome being tangent to the dust dome.

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