

Title (en)

Suspension for cone loudspeaker

Title (de)

Aufhängung für Konuslautsprecher

Title (fr)

Suspension pour haut-parleur à membrane conique

Publication

EP 0659031 B1 19980923 (DE)

Application

EP 94118843 A 19941130

Priority

DE 4343324 A 19931218

Abstract (en)

[origin: EP0659031A1] According to the prior art, it is known to connect diaphragms (11) of cone loudspeakers to the loudspeaker frame (10) by means of so-called beads (13). Such beads (13) are predominantly formed from plastic or rubber and are connected to the diaphragm (11) and to the loudspeaker frame (10) by using suitable adhesives. This type of connection restricts the free choice of material of the abovementioned components because not all elastic bead materials can be connected to the diaphragm (11) with the required mechanical stability. The selection of material is restricted further if the loudspeaker is exposed to environmental temperatures of greater than 100 DEG C because the adhesive connections lose their strength under these conditions. This is why the invention is based on the object of specifying a high-strength suspension for diaphragms of cone loudspeakers. This object is achieved by the fact that the beads (13) are formed from an injectable high-temperature-resistant elastomer (silicone or fluoroelastomer) and that the inner edge (18) of the bead (13) is connected to the upper edge (19) of the diaphragm (11) by being vulcanised. Especially strong connections of diaphragm (11) and bead (13) are given when the upper edge (19) of the diaphragm (11) has penetrations (20) and the areas of the inner edge (18) arranged on both sides of the diaphragm (11) are connected to the bead material through the penetrations (20) in the diaphragm (11). <IMAGE>

IPC 1-7

H04R 7/20; **H04R 31/00**

IPC 8 full level

H04R 7/20 (2006.01); **H04R 31/00** (2006.01)

CPC (source: EP US)

H04R 7/20 (2013.01 - EP US)

Designated contracting state (EPC)

AT BE DE DK ES FR GB IT NL SE

DOCDB simple family (publication)

EP 0659031 A1 19950621; **EP 0659031 B1 19980923**; AT E171586 T1 19981015; DE 4343324 A1 19950622; DE 59406968 D1 19981029; DK 0659031 T3 19990614; ES 2122134 T3 19981216; JP H07264693 A 19951013; US 5574797 A 19961112

DOCDB simple family (application)

EP 94118843 A 19941130; AT 94118843 T 19941130; DE 4343324 A 19931218; DE 59406968 T 19941130; DK 94118843 T 19941130; ES 94118843 T 19941130; JP 31523494 A 19941219; US 35874294 A 19941219