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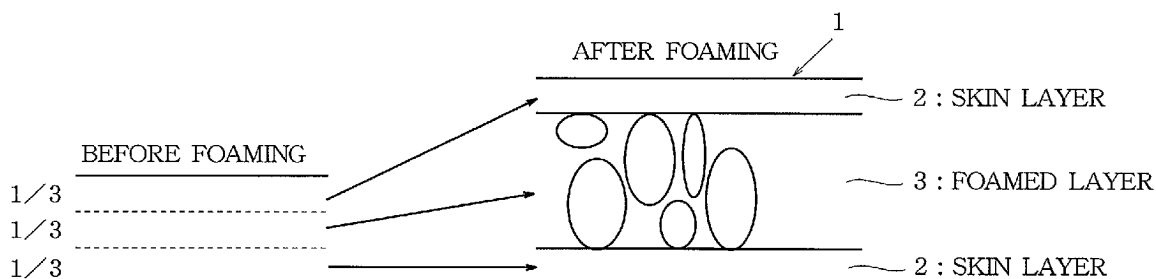
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(54) **Loudspeaker diaphragm of an injection foam molded body**

(57) An inorganic or organic filler in an amount of 3 to 30 % by weight is added to a resin containing a foaming agent. The resulting resin mixture material is injection molded into a loudspeaker diaphragm (1) having a three-layer structure in which a foamed layer (3) is covered with unfoamed skin layers (2). For forming the three-layer structure, a resin mixture material of polypropylene containing a foaming agent is injected into a cavity of a mold (20). Immediately after the injection and the completion of forming the skin layers (2), the mold

(20) is separated so that the material may start foaming at its inside to form the foamed layer (3). Since the surfaces of the resin mixture material are in contact with the inner surfaces of the mold in the injection, the surfaces of the resin mixture material have solidified before the foaming takes place, so as to form the unfoamed skin layers (2). By adjusting the filler to the appropriate content, the loudspeaker diaphragm (1) is improved in appearance quality while keeping the other physical properties with favourable characteristics.

FIG.1





European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 99 10 5479

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			H04R
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 11 January 2005	Examiner Kunzelmann, C
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 99 10 5479

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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