

PATENT APPLICATION

Title: **Multilayer multimaterial diaphragms for a high-fidelity acoustic baffle loudspeaker**

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ABSTRACT

A diaphragm 1 for a loudspeaker, characterized in that

- the diaphragm comprises a core 2 made up of structural foam cut with high precision and thermally molded to the geometric shape desired for the diaphragm,
- The outer surface 4 of which is covered with at least one, by preference several, outer layers 5 of resin-impregnated or non-resin-impregnated woven or nonwoven fibers forming a stratified "outer" skin 6,
- the inner surface 7 of which is covered or not covered with one or more "inner" layers 8 of resin-impregnated or non- resin-impregnated woven or nonwoven fibers forming a stratified or "inner" skin 6.

Appreciably the same results with respect to rigidity are obtained, but an important difference is made which is based on the process, in which the rate of application of the resin and the polymerization cycle are controlled. Lastly, greater stability is achieved for the characteristics.

FIGURE 1B