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(54) **Loudspeaker bass reflex system**

(57) An acoustic insert (6) for lining a loudspeaker reflex port (4), the insert (6) comprising an elongate hollow tube formed of a flexible material, having an outer wall sized and configured to seat within the port (4) and an inner wall extending in the elongate direction, the inner

wall having a circumference which varies along the length of the insert. When inserted in a port (4), the insert (6) alters the port resonance so as to vary the acoustic performance of the loudspeaker.

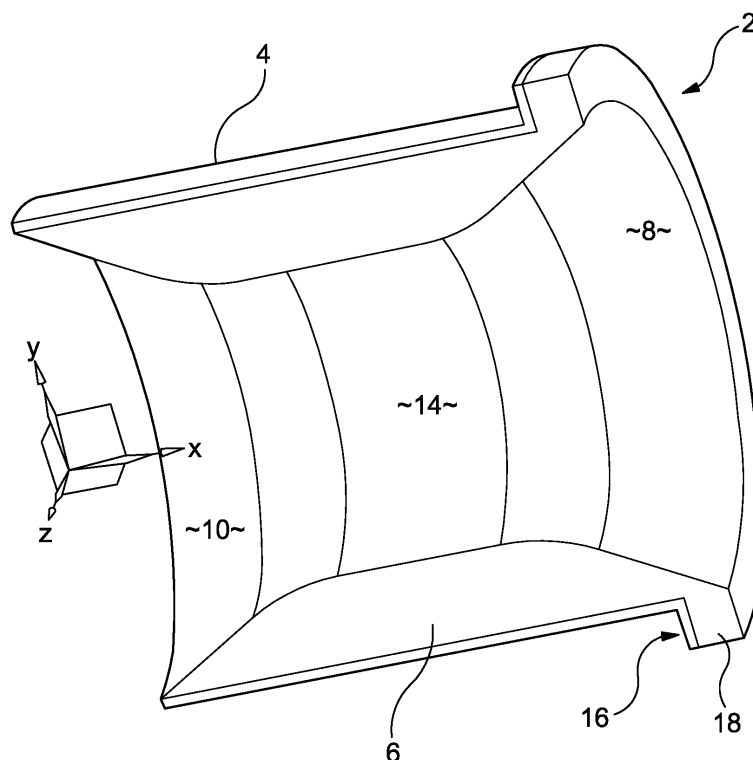


Fig. 1



EUROPEAN SEARCH REPORT

Application Number
EP 15 15 7053

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 4 997 057 A (FURUKAWA KAZUNARI [JP]) 5 March 1991 (1991-03-05) * column 1, lines 9-10 * * column 2, lines 13-18 * * column 4, lines 3-10; figures 2A,2B *	1-16	INV. H04R1/28
A	Martin Colloms ET AL: "Reflex or Vented Enclosures", HIGH PERFORMANCE LOUDSPEAKERS., 1 January 2005 (2005-01-01), pages 155-169, XP055429255, GB ISBN: 978-0-470-09430-3 Retrieved from the Internet: URL:none * page 162 *	1-16	
A	John Eargle: "Port turbulence under high drive conditions", Loudspeaker handbook, 1 January 2003 (2003-01-01), XP055429247, Boston ISBN: 978-1-4020-7584-1 Retrieved from the Internet: URL:none * page 82; figures 4-15A *	1-16	TECHNICAL FIELDS SEARCHED (IPC) H04R
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 29 November 2017	Examiner Fobel, Oliver
CATEGORY OF CITED DOCUMENTS 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		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 & : member of the same patent family, corresponding document	

EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 15 15 7053

5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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29-11-2017

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