

Title (en)  
METHOD AND DEVICE FOR SIMULATING (ELECTRONIC ARTIFICIAL HEAD) THE FREE-FIELD TRANSMISSION CHARACTERISTICS OF THE EAR

Publication  
**EP 0156334 B1 19921125 (DE)**

Application  
**EP 85103441 A 19850323**

Priority  
• DE 3411235 A 19840327  
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Abstract (en)  
[origin: US4672569A] An electroacoustic simulation method and apparatus for imitating electroacoustically the human outer ear having transmission properties corresponding to those of the human outer ear when exposed to sound in the free field is proposed, wherein the physical acoustical causes of the outer ear, the head, the upper part of the body, the pinna rim, and the like, are represented mathematically by simple partial models and approximated in the form of electric circuits containing circuit elements such as high-pass filters, low-pass filters, all-pass filters . . . and the like, with the possibility to vary certain properties of the circuit elements continuously by varying the parameters so that arbitrary directions of sound incidence can be adjusted infinitely in the horizontal and median planes.

IPC 1-7  
**G06G 7/60; H04R 5/027**

IPC 8 full level  
**H04R 3/00** (2006.01); **G06G 7/60** (2006.01); **G06J 1/00** (2006.01); **H04R 5/027** (2006.01); **H04S 1/00** (2006.01)

IPC 8 main group level  
**G01H** (2006.01); **G09B** (2006.01); **H04S** (2006.01)

CPC (source: EP US)  
**G06G 7/60** (2013.01 - EP US); **G06J 1/00** (2013.01 - EP US); **H04R 5/027** (2013.01 - EP US)

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Designated contracting state (EPC)  
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**EP 0156334 A2 19851002; EP 0156334 A3 19880127; EP 0156334 B1 19921125**; AT E82812 T1 19921215; AU 4043085 A 19851003; AU 573493 B2 19880609; BR 8501394 A 19851126; CA 1237192 A 19880524; DE 3509358 A1 19851114; DE 3586850 D1 19930107; DK 134285 A 19850928; DK 134285 D0 19850325; US 4672569 A 19870609

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