

Title (en)
ACOUSTIC SPEAKER

Title (de)
LAUTSPRECHER

Title (fr)
HAUTPARLEUR

Publication
EP 3820159 B1 20230621 (EN)

Application
EP 20204192 A 20201027

Priority
IT 201900020664 A 20191108

Abstract (en)
[origin: EP3820159A1] Described is an acoustic speaker (1) for the reproduction of audio signals, comprising a first speaker (100A) and a respective first chamber, for reproducing at least one first audio signal $y_{₁}(t)$ in a first frequency range, a second speaker (101A) and a respective second chamber, for reproducing at least one second audio signal $y_{₂}(t)$ in a second frequency range equal to or different from said first frequency range, and a third speaker (102A) and a respective third chamber, for reproducing at least one third audio signal $y_{₃}(t)$ in a third frequency range equal to or different from said first frequency range and from said second frequency range, a main resonance chamber (113) provided with a main opening (103), and a structure for supporting said speakers and said main resonance chamber (113), said acoustic speaker (1) being characterised in that each of said first (100A), second (101A) and third (102A) speaker is arranged on a respective vertex of an equilateral triangle which circumscribes said main opening (103), said first (100A), second (101A) and third (102A) speaker and said main opening (103) being arranged on a same plane XY and oriented according to a same direction along a Z axis, perpendicular to said plane XY, so as to reproduce a further audio signal $y(t)$ resulting from the combination of said at least one first audio signal $y_{₁}(t)$, said at least one second audio signal $y_{₂}(t)$ and said at least one third audio signal $y_{₃}(t)$, and in that said further audio signal $y(t)$ results from the following formula $y(t) = A_0 + \sum_{n=1}^{\infty} A_n \sin n\omega t + \phi_n$.

IPC 8 full level
H04R 1/26 (2006.01); **H04R 1/28** (2006.01)

CPC (source: EP)
H04R 1/26 (2013.01); **H04R 1/2888** (2013.01); **H04R 1/24** (2013.01); **H04R 1/2811** (2013.01); **H04R 2201/02** (2013.01)

Citation (examination)
EP 0521655 A1 19930107 - YUGEN KAISHA TAGUCHI SEISAKUSH [JP]

Cited by
CN113852901A

Designated contracting state (EPC)
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