

Title (en)
LOUDSPEAKER, LOUDSPEAKER MODULE, AND ELECTRONIC DEVICE

Title (de)
LAUTSPRECHER, LAUTSPRECHERMODUL, UND ELEKTRONISCHE VORRICHTUNG

Title (fr)
HAUT-PARLEUR, MODULE DE HAUT-PARLEUR, ET DISPOSITIF ÉLECTRONIQUE

Publication
EP 4068804 A4 20230913 (EN)

Application
EP 21738865 A 20210105

Priority
• CN 202010019342 A 20200108
• CN 2021070212 W 20210105

Abstract (en)
[origin: EP4068804A1] Embodiments of this application disclose a speaker, a speaker module, and an electronic device. The speaker includes a support, a first diaphragm, a first piezoelectric plate, and a moving coil speaker core. Peripheral edges of the first diaphragm are fastened to the support, and the first piezoelectric plate is fastened to a middle part of the first diaphragm. The moving coil speaker core is fastened to the support and is spaced from the first diaphragm. The moving coil speaker core includes a second diaphragm. The second diaphragm is disposed facing the first diaphragm. The second diaphragm, the support, and the first diaphragm jointly enclose a front cavity. The support is provided with a speaker hole, and the speaker hole connects the front cavity and external space of the speaker. The first diaphragm and the second diaphragm of the speaker are disposed opposite each other and share the front cavity, to complement medium-frequency and high-frequency responses of the speaker and improve overall loudness of the speaker.

IPC 8 full level
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CPC (source: CN EP)
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Citation (search report)
• [XAI] US 2018249255 A1 20180830 - ISHII SHIGEO [JP], et al
• [XY] US 2017026758 A1 20170126 - WEN TSENG-FENG [CN], et al
• [Y] US 2014044300 A1 20140213 - OSADA MASATAKA [JP], et al
• See references of WO 2021139632A1

Designated contracting state (EPC)
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EP 4068804 A1 20221005; **EP 4068804 A4 20230913**; CN 113099367 A 20210709; WO 2021139632 A1 20210715

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