

Title (en)

Loudspeaker device and television receiver using the device

Title (de)

Lautsprechervorrichtung und Fernsehempfänger zur Anwendung derselben

Title (fr)

Dispositif de haut-parleur et récepteur de télévision utilisant le même

Publication

EP 0744880 A1 19961127 (EN)

Application

EP 96108264 A 19960523

Priority

JP 15256095 A 19950526

Abstract (en)

A loudspeaker device comprises a loudspeaker 3 and a sound tube 4 having an open end and a closed end opposite thereto and connected to a sound wave radiating portion of the speaker 3 for guiding sound waves radiated from the speaker 3 to the open end of the sound tube 4, the speaker 3 being attached to a side wall of the sound tube 4, the sound tube having a wave guide direction intersecting the direction of radiation of sound waves from the speaker 3, the speaker 3 being attached to the sound tube 4 at a position intermediate between the closed end and the open end. This construction effectively suppresses occurrence of standing waves in the interior of the sound tube 4, realizing satisfactory acoustic characteristics over a wide range of low to high frequencies. <IMAGE>

IPC 1-7

H04R 5/02; H04R 1/34; H04R 1/28; H04N 5/64

IPC 8 full level

H04N 5/64 (2006.01); **H04R 1/02** (2006.01); **H04R 1/28** (2006.01); **H04R 1/34** (2006.01); **H04R 5/02** (2006.01)

CPC (source: EP KR)

H04R 1/34 (2013.01 - KR); **H04R 5/02** (2013.01 - EP)

Citation (search report)

- [XY] EP 0451885 A1 19911016 - PHILIPS NV [NL]
- [YA] EP 0451991 A2 19911016 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- [A] US 3993162 A 19761123 - JUUTI KENNETH
- [A] GB 735402 A 19550817 - GEN ELECTRIC CO LTD, et al
- [A] EP 0390165 A2 19901003 - SANYO ELECTRIC CO [JP]
- [A] EP 0605224 A1 19940706 - TOSHIBA KK [JP]
- [A] WO 9119406 A1 19911212 - MITSUBISHI ELECTRIC CORP [JP]

Cited by

US7426280B2; EP1221823A3; US11451902B1; US11490190B1; US9107003B2; US11026017B2; WO2018193154A1; WO2022246012A1; EP2648421A4; EP4009657A4; JP2022547321A; US9363586B2; US9866933B2; EP1221823A2; US8175311B2; US10299032B2; US11910157B2

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