

Title (en)

TWS EARPHONE AND PLAYING METHOD AND DEVICE OF TWS EARPHONE

Title (de)

TWS-KOPFHÖRER UND ABSPIELVERFAHREN UND -VORRICHTUNG FÜR EINEN TWS-KOPFHÖRER

Title (fr)

ÉCOUTEUR TWS ET PROCÉDÉ ET DISPOSITIF DE FONCTIONNEMENT DE L'ÉCOUTEUR TWS

Publication

**EP 4297428 A1 20231227 (EN)**

Application

**EP 22794455 A 20220328**

Priority

- CN 202110467311 A 20210428
- CN 2022083464 W 20220328

Abstract (en)

This application provides a TWS earphone, and a play method and apparatus of a TWS earphone. The TWS earphone includes an audio signal processing path, a frequency divider, and at least two speakers. An output end of the audio signal processing path is connected to an input end of the frequency divider, and an output end of the frequency divider is connected to the at least two speakers. The audio signal processing path is configured to output a speaker drive signal. The frequency divider is configured to divide the speaker drive signal into sub-audio signals of at least two frequency bands. The at least two frequency bands correspond to main operating frequency bands of the at least two speakers. Adjacent frequency bands in the at least two frequency bands partially overlap, or adjacent frequency bands in the at least two frequency bands do not overlap. The at least two speakers are configured to play the corresponding sub-audio signals. This application can provide a high-quality audio source in various frequency bands, and can also support ultra-wideband audio calls.

IPC 8 full level

**H04R 1/10** (2006.01)

CPC (source: CN EP)

**G10K 11/1785** (2018.01 - EP); **G10K 11/17881** (2018.01 - EP); **G10K 11/17885** (2018.01 - EP); **H04R 1/1083** (2013.01 - CN EP); **H04R 3/12** (2013.01 - CN); **H04R 3/14** (2013.01 - EP); **H04R 23/02** (2013.01 - CN); **G10K 2210/1081** (2013.01 - EP); **H04R 1/1016** (2013.01 - EP); **H04R 1/24** (2013.01 - EP); **H04R 5/033** (2013.01 - EP); **H04R 2430/03** (2013.01 - EP); **H04R 2460/01** (2013.01 - CN EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**EP 4297428 A1 20231227**; CN 115250397 A 20221028; WO 2022227982 A1 20221103

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