Title (en)

ENCODING AND DECODING METHODS AND APPARATUS, DEVICE, STORAGE MEDIUM, AND COMPUTER PROGRAM

Title (de)

CODIERUNGS- UND DECODIERUNGSVERFAHREN UND -VORRICHTUNG, VORRICHTUNG, SPEICHERMEDIUM UND COMPUTERPROGRAMM

Title (fr)

APPAREIL ET PROCÉDÉS DE CODAGE ET DE DÉCODAGE, DISPOSITIF, SUPPORT DE STOCKAGE ET PROGRAMME INFORMATIQUE

Publication

EP 4398242 A1 20240710 (EN)

Application

EP 22874757 A 20220922

Priority

- CN 202111155355 A 20210929
- CN 2022120507 W 20220922

Abstract (en)

Embodiments of this application disclose encoding and decoding methods and apparatuses, devices, a storage medium, and a computer program, and belong to the field of three-dimensional audio encoding and decoding technologies. The method includes: separately performing transient state detection on signals of M channels included in a time-domain three-dimensional audio signal of a current frame, to obtain M transient state detection results; determining a global transient state detection result based on the M transient state detection results; converting the time-domain three-dimensional audio signal into a frequency-domain three-dimensional audio signal based on the global transient state detection result; performing spatial encoding on the frequency-domain three-dimensional audio signal to obtain a spatial encoding parameter and frequency-domain signals of N transmission channels; encoding the frequency-domain signals of the N transmission channels based on the global transient state detection result to obtain a frequency-domain signal encoding result; encoding the spatial encoding parameter to obtain a spatial encoding parameter encoding result; and writing the spatial encoding parameter encoding result and the frequency-domain signal encoding result into a bistream. This can reduce encoding complexity and improve encoding efficiency.

IPC 8 full level

G10L 19/008 (2013.01)

CPC (source: EP)

G10L 19/008 (2013.01)

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 4398242 A1 20240710; AR 127171 A1 20231227; CN 115881139 A 20230331; WO 2023051370 A1 20230406

DOCDB simple family (application)

EP 22874757 A 20220922; AR P220102607 A 20220928; CN 202111155355 A 20210929; CN 2022120507 W 20220922