CPC COOPERATIVE PATENT CLASSIFICATION

H04S STEREOPHONIC SYSTEMS (information storage on discs or tapes G11B ; broadcast systems for the distribution of stereophonic information H04H 20/88; multiplex systems in general H04J)

NOTE

In this subclass, the following term is used with the meaning indicated:
- "stereophonic systems" covers quadraphonic or similar systems

Guidance heading:

H04S 1/00 **Two-channel systems** (H04S 5/00, H04S 7/00 take precedence)

H04S 1/002 . { Non-adaptive circuits, e.g. manually adjustable or static, for enhancing the sound image or the spatial distribution (control circuits for electronic adaptation of the sound field H04S 7/30) }

H04S 1/005 . . { For headphones }

H04S 1/007 . {in which the audio signals are in digital form (data reduction aspects thereof based on psychoacoustics G10L 19/02) }

H04S 3/00 **Systems employing more than two channels, e.g. quadraphonic** (H04S 5/00, H04S 7/00 take precedence)

H04S 3/002 . { Non-adaptive circuits, e.g. manually adjustable or static, for enhancing the sound image or the spatial distribution (control circuits for electronic adaptation of the sound field H04S 7/30) }

H04S 3/004 . . {For headphones }

H04S 3/006 . { in which a plurality of audio signals are transformed in a combination of audio signals and modulated signals, e.g. CD-4 systems (for broadcasting H04H 20/88, H04B 1/1646) }

H04S 3/008 . {in which the audio signals are in digital form, i.e. employing more than two discrete digital channels, e.g. Dolby Digital, Digital Theatre Systems (DTS) (data reduction aspects thereof based on psychoacoustics G10L 19/02) }

H04S 3/02 . of the matrix type, i.e. in which input signals are combined algebraically, e.g. after having been phase shifted with respect to each other

H04S 5/00 **Pseudo-stereo systems, e.g. in which additional channel signals are derived from monophonic signals by means of phase shifting, time delay or reverberation** (arrangements for producing a reverberation or echo sound G10K 15/08)

H04S 5/005 . { of the pseudo five- or more-channel type, e.g. virtual surround }

H04S 5/02 . of the pseudo four-channel type, e.g. in which rear channel signals are derived from

two-channel stereo signals

H04S 7/00 **Indicating arrangements; Control arrangements, e.g. balance control**

WARNING

Groups H04S 7/30 to H04S 7/40 do not correspond to former or current IPC groups.

H04S 7/30 . { Control circuits for electronic adaptation of the sound field (non-adaptive circuits, i.e. manually adjustable or static, for enhancing the sound image or the spatial distribution H04S 1/002, H04S 3/002) }

H04S 7/301 . . { Automatic calibration of stereophonic sound system, e.g. with test microphone }

H04S 7/302 . . { Electronic adaptation of stereophonic sound system to listener position or orientation (H04S 7/301 takes precedence) }

H04S 7/303 . . . { Tracking of listener position or orientation }

H04S 7/304 . . . . { For headphones }

H04S 7/305 . . { Electronic adaptation of stereophonic audio signals to reverberation of the listening space (H04S 7/301 takes precedence; arrangements for producing a reverberation or echo sound G10K 15/08; for public address systems H04R 27/00, H04R 29/00) }

H04S 7/306 . . . { For headphones }

H04S 7/307 . . { Frequency adjustment, e.g. tone control (H04S 7/301 takes precedence; circuits for correcting the frequency response of transducers H04R 3/04; tone control circuits in amplifiers per se H03G5) }

H04S 7/308 . . { Electronic adaptation dependent on speaker or headphone connection }

H04S 7/40 . { Visual indication of stereophonic sound image (visual indication of individual signal levels H04R 29/008) }

Guidance heading:

H04S 2400/00 **Details of stereophonic systems covered by H04S but not provided for in its groups** (not used, see subgroups)

H04S 2400/01 . Multi-channel, i.e. more than two input channels, sound reproduction with two speakers wherein the multi-channel information is substantially preserved

H04S 2400/03 . Aspects of down-mixing multi-channel audio to configurations with lower numbers of playback channels, e.g. 7.1 -> 5.1 (H04S 2400/01 takes precedence)

H04S 2400/05 . Generation or adaptation of centre channel in multi-channel audio systems

H04S 2400/07 . Generation or adaptation of the Low Frequency Effect [LFE] channel, e.g. distribution or signal processing

H04S 2400/09 . Electronic reduction of distortion of stereophonic sound systems

H04S 2400/11 . Positioning of individual sound objects, e.g. moving airplane, within a sound field (H04S 2420/13 takes precedence)

H04S 2400/13 . Aspects of volume control, not necessarily automatic, in stereophonic sound systems

H04S 2400/15 . Aspects of sound capture and related signal processing for recording or reproduction

Guidance heading:

H04S 2420/00 Techniques used stereophonic systems covered by H04S but not provided for in its groups (not used, see subgroups)

H04S 2420/01 . Enhancing the perception of the sound image or of the spatial distribution using head related transfer functions [HRTF's] or equivalents thereof, e.g. interaural time difference [ITD] or interaural level difference [ILD]

H04S 2420/03 . Application of parametric coding in stereophonic audio systems

H04S 2420/05 . Application of the precedence or Haas effect, i.e. the effect of first wavefront, in order to improve sound-source localisation

H04S 2420/07 . Synergistic effects of band splitting and sub-band processing

H04S 2420/11 . Application of ambisonics in stereophonic audio systems

H04S 2420/13 . Application of wave-field synthesis in stereophonic audio systems