

CPC COOPERATIVE PATENT CLASSIFICATION

H ELECTRICITY

(NOTE omitted)

H04 ELECTRIC COMMUNICATION TECHNIQUE

(NOTE omitted)

H04S STEREOPHONIC SYSTEMS

NOTES

1. In this subclass, the following term is used with the meaning indicated:
 - "stereophonic systems" covers quadrasonic or similar systems
2. In this subclass, it is desirable to add the indexing codes of [H04S 2400/00](#) and [H04S 2420/00](#).

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

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|-------------|---|----------------|--|
| 1/00 | Two-channel systems (H04S 5/00 , H04S 7/00 take precedence) | 7/30 | • {Control circuits for electronic adaptation of the sound field} |
| 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)} | 7/301 | • • {Automatic calibration of stereophonic sound system, e.g. with test microphone} |
| 1/005 | • • {For headphones} | 7/302 | • • {Electronic adaptation of stereophonic sound system to listener position or orientation (H04S 7/301 takes precedence)} |
| 1/007 | • {in which the audio signals are in digital form (data reduction aspects thereof based on psychoacoustics G10L 19/02)} | 7/303 | • • • {Tracking of listener position or orientation} |
| | | 7/304 | • • • • {For headphones} |
| | | 7/305 | • • {Electronic adaptation of stereophonic audio signals to reverberation of the listening space (H04S 7/301 takes precedence)} |
| 3/00 | Systems employing more than two channels, e.g. quadrasonic (H04S 5/00 , H04S 7/00 take precedence) | 7/306 | • • • {For headphones} |
| 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)} | 7/307 | • • {Frequency adjustment, e.g. tone control (H04S 7/301 takes precedence)} |
| 3/004 | • • {For headphones} | 7/308 | • • {Electronic adaptation dependent on speaker or headphone connection} |
| 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} | 7/40 | • {Visual indication of stereophonic sound image} |
| 3/008 | • {in which the audio signals are in digital form, i.e. employing more than two discrete digital channels (data reduction aspects thereof based on psychoacoustics G10L 19/02)} | 2400/00 | Details of stereophonic systems covered by H04S but not provided for in its groups |
| 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 | 2400/01 | • Multi-channel, i.e. more than two input channels, sound reproduction with two speakers wherein the multi-channel information is substantially preserved |
| | | 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) |
| 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 | 2400/05 | • Generation or adaptation of centre channel in multi-channel audio systems |
| 5/005 | • {of the pseudo five- or more-channel type, e.g. virtual surround} | 2400/07 | • Generation or adaptation of the Low Frequency Effect [LFE] channel, e.g. distribution or signal processing |
| 5/02 | • of the pseudo four-channel type, e.g. in which rear channel signals are derived from two-channel stereo signals | 2400/09 | • Electronic reduction of distortion of stereophonic sound systems |
| | | 2400/11 | • Positioning of individual sound objects, e.g. moving airplane, within a sound field (H04S 2420/13 takes precedence) |
| 7/00 | Indicating arrangements; Control arrangements, e.g. balance control | 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

2420/00 Techniques used stereophonic systems covered by [H04S](#) but not provided for in its groups

- 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]
- 2420/03 . Application of parametric coding in stereophonic audio systems
- 2420/05 . Application of the precedence or Haas effect, i.e. the effect of first wavefront, in order to improve sound-source localisation
- 2420/07 . Synergistic effects of band splitting and sub-band processing
- 2420/11 . Application of ambisonics in stereophonic audio systems
- 2420/13 . Application of wave-field synthesis in stereophonic audio systems