

CPC COOPERATIVE PATENT CLASSIFICATION

H ELECTRICITY

(NOTE omitted)

H04 ELECTRIC COMMUNICATION TECHNIQUE

(NOTE omitted)

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

1/00	Two-channel systems (H04S 5/00 , H04S 7/00 take precedence)	7/30	<ul style="list-style-type: none"> • {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)}
1/002	<ul style="list-style-type: none"> • {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	<ul style="list-style-type: none"> • • {Automatic calibration of stereophonic sound system, e.g. with test microphone}
1/005	<ul style="list-style-type: none"> • • {For headphones} 	7/302	<ul style="list-style-type: none"> • • {Electronic adaptation of stereophonic sound system to listener position or orientation (H04S 7/301 takes precedence)}
1/007	<ul style="list-style-type: none"> • {in which the audio signals are in digital form (data reduction aspects thereof based on psychoacoustics G10L 19/02)} 	7/303	<ul style="list-style-type: none"> • • • {Tracking of listener position or orientation}
3/00	Systems employing more than two channels, e.g. quadraphonic (H04S 5/00 , H04S 7/00 take precedence)	7/304	<ul style="list-style-type: none"> • • • • {For headphones}
3/002	<ul style="list-style-type: none"> • {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)} 	7/305	<ul style="list-style-type: none"> • • {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)}
3/004	<ul style="list-style-type: none"> • • {For headphones} 	7/306	<ul style="list-style-type: none"> • • • {For headphones}
3/006	<ul style="list-style-type: none"> • {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)} 	7/307	<ul style="list-style-type: none"> • • {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 H03G 5/00)}
3/008	<ul style="list-style-type: none"> • {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)} 	7/308	<ul style="list-style-type: none"> • • {Electronic adaptation dependent on speaker or headphone connection}
3/02	<ul style="list-style-type: none"> • 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 	7/40	<ul style="list-style-type: none"> • {Visual indication of stereophonic sound image (visual indication of individual signal levels H04R 29/008)}
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)	2400/00	Details of stereophonic systems covered by H04S but not provided for in its groups (not used, see subgroups)
5/005	<ul style="list-style-type: none"> • {of the pseudo five- or more-channel type, e.g. virtual surround} 	2400/01	<ul style="list-style-type: none"> • Multi-channel, i.e. more than two input channels, sound reproduction with two speakers wherein the multi-channel information is substantially preserved
5/02	<ul style="list-style-type: none"> • of the pseudo four-channel type, e.g. in which rear channel signals are derived from two-channel stereo signals 	2400/03	<ul style="list-style-type: none"> • 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)
7/00	Indicating arrangements; Control arrangements, e.g. balance control	2400/05	<ul style="list-style-type: none"> • Generation or adaptation of centre channel in multi-channel audio systems
		2400/07	<ul style="list-style-type: none"> • 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
- 2400/11 . Positioning of individual sound objects, e.g. moving airplane, within a sound field ([H04S 2420/13 takes precedence](#))
- 2400/13 . Aspects of volume control, not necessarily automatic, in stereophonic sound systems
- 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 (not used, see subgroups)**
- 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