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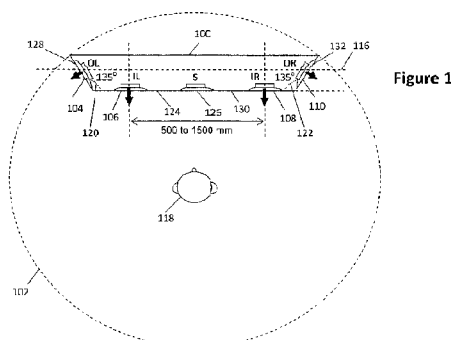
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(54) Title: METHOD AND AUDIO SYSTEM FOR PROCESSING MULTI-CHANNEL AUDIO SIGNALS FOR SURROUND
SOUND PRODUCTION



(57) Abstract: A method and audio system for processing multi-channel audio signals for surround sound production on a plurality of loudspeakers to a listening area. The plurality of loudspeakers is front located with respect to the listening area. The plurality of loudspeakers comprises an outer left loudspeaker, an inner left loudspeaker, an inner right loudspeaker and an outer right loudspeaker. The multi-channel audio signals comprise one or more low frequency effects audio signals and one or more audio signals categorised as front based left inclined, front based right inclined, rear based left inclined, rear based right inclined, and centre based. The method comprising filtering and adjusting phase and amplitude of one or more audio signals that are front based left inclined, front based right inclined, rear based left inclined and rear based right inclined in a specific manner, and transmitting the one or more processed audio signals in a specific manner to the outer left loudspeaker, the outer right loudspeaker, the inner left loudspeaker and the inner right loudspeaker.