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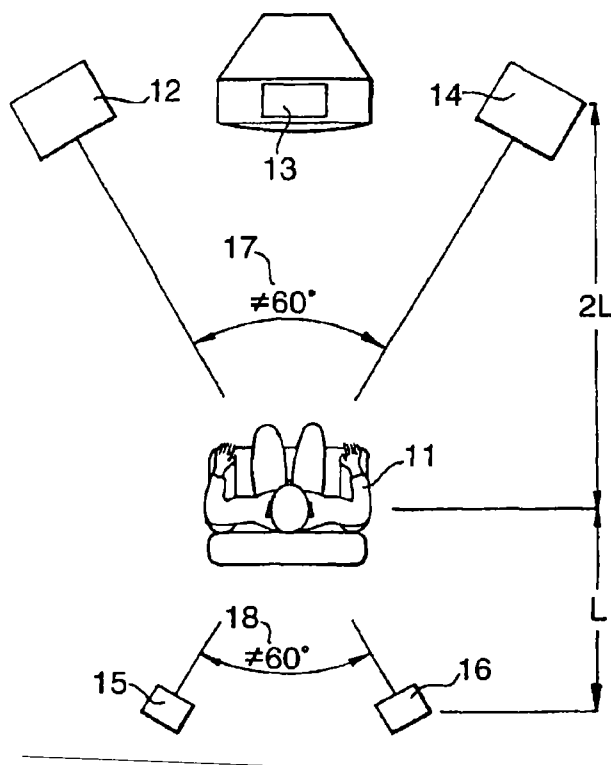
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(54) Title: SYSTEM AND METHOD FOR OPTIMIZATION OF THREE-DIMENSIONAL AUDIO



(57) Abstract: The invention provides a system for optimization of three-dimensional audio listening having a media player and a multiplicity of speakers disposed within a listening space, the system including a portable sensor having a multiplicity of transducers strategically arranged about the sensor for receiving test signals from the speakers and for transmitting the signals to a processor connectable in the system for receiving multi-channel audio signals from the media player and for transmitting the multi-channel audio signals to the multiplicity of speakers, the processor including (a) means for initiating transmission of test signals to each of the speakers and for receiving the test signals from the speakers to be processed for determining the location of each of the speakers relative to a listening place within the space determined by the placement of the sensor; (b) means for manipulating each sound track of the multi-channel sound signals with respect to intensity, phase and/or equalization according to the relative location of each speaker in order to create virtual sound sources in desired positions, and (c) means for communicating between the sensor and the processor. The invention further provides a method for the optimization of three-dimensional audio listening using the above-described system.

WO 01/67814 A3



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