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[Continued on next page]

(54) Title: DISTRIBUTED SPATIAL AUDIO DECODER

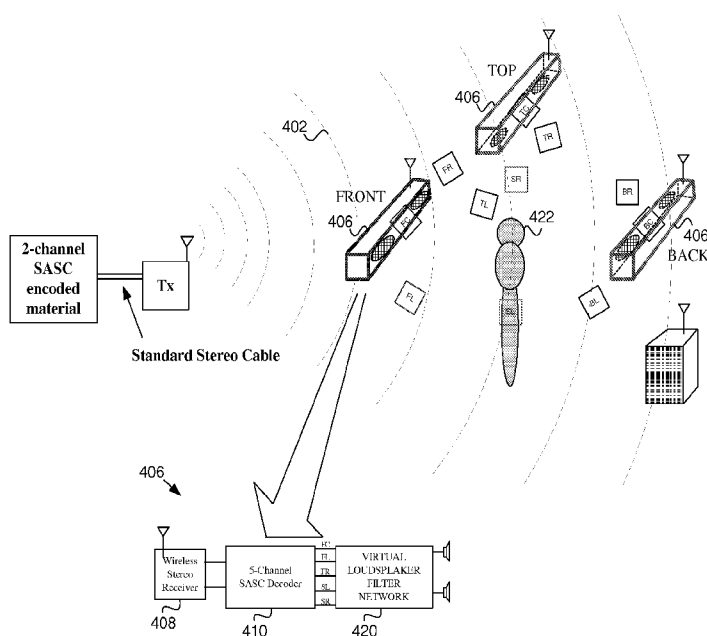


FIG 4

(57) Abstract: This invention describes a method
for decentralized decoding of a multichannel audio
signal by broadcasting the original encoded data and
distributing the decoding process between a
plurality of receiving units. This allows for the de-
sign and manufacture of scalable multichannel au-
dio reproduction systems having an arbitrary num-
ber of output channels, composed of a plurality of
generic decoder and loudspeaker units each gener-
ating fewer output channels. With distributed de-
coding, a manufacturer can use 'off-the-shelf' stereo
or mono signal processors, digital-to-analog con-
verters and amplifier components in each generic
decoding module, thus reducing manufacturing
costs and complexity requirements for each module
while offering unlimited scalability in the total
number of output channels.

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