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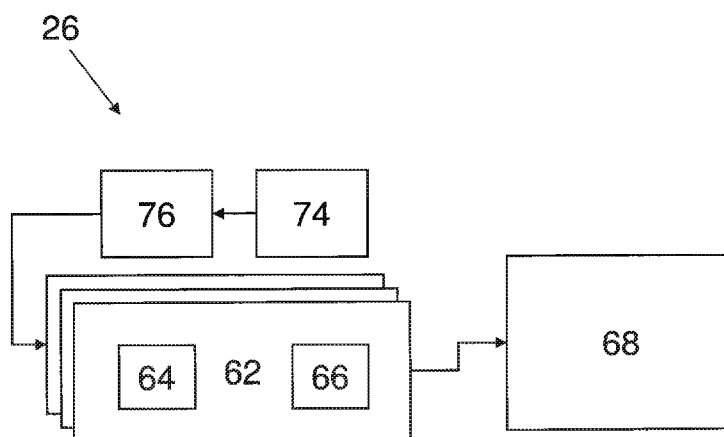


Figure 2

(57) Abstract: A plurality of control points (10) are defined which each have a known spatial relationship relative to an array of transducers. An amplitude is assigned to each control point (12). A matrix (16) is produced containing elements which represent, for each of the control points, the effect that producing a modeled acoustic field having the assigned amplitude with a particular phase at the control point has on the consequential amplitude and phase of the modeled acoustic field at the other control points (14). Eigenvectors of the matrix (18) are determined, each eigenvector representing a set of phases and relative amplitudes of the modeled acoustic field at the control points. One of the sets (20) is selected and the transducer array is operated to cause one or more of the transducers to output an acoustic wave each having an initial amplitude and phase such that the phases and amplitudes of the resultant acoustic field at the control points correspond to the phases and relative amplitudes of the selected set (22, 24).