t 568-01

United States Patent

Chowning

[15] 3,665,105

[45] May 23, 1972

[54] METHOD AND APPARATUS FOR SIMULATING LOCATION AND MOVEMENT OF SOUND

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[22] Filed: Mar. 9, 1970

[21] Appl. No.: 17,747

[52] U.S. Cl. ..... 179/1 G, 179/1 J

[51] Int. Cl. H04r 5/00, H03h 7/30

[58] Field of Search ..... 179/1 G, 1 GP, 1 M, 1 DM, 1 J, 179/1 AT

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[57] ABSTRACT

A method and system for generating or processing music or sound signal information to provide, in addition to the musical parameters of pitch, loudness, time, timbre, control over the apparent location and movement of the sound. The method and system controls the distribution of energy between loudspeakers to provide amplitude changes for the direct and reverberant signals and doppler shift to give the illusion of motion or arbitrary location in space of the sound produced by the loudspeakers.

12 Claims, 6 Drawing Figures