

ABSTRACT OF THE DISCLOSURE

The manipulation system and apparatus receive electronic signals which are to be processed and recorded for playback as enhanced stereophonic audio signals from two laterally spaced
-5 loudspeakers in front of the listener, either directly, after recording, or after being broadcast. The system and apparatus process those signals to produce a conditioning signal, such as which would be produced by virtual room boundaries, which is heard together with the original signals so that an enlarged listening area is perceived by the listener. By amplitude and phase control of the signal to the
10 two real speakers, the system and apparatus provide a means for control over the enhanced sound field. This enhanced sound field is perceived by the listener as being contained within boundaries larger than those normally reproduced by stereophonic speakers.

The system and apparatus generates a conditioning signal for the enhancement of natural, and generation of artificial, spatial qualities present in stereo signals usually masked in the acoustic environment in which reproduction takes place, through generation of phantom boundaries. The
15 apparatus can monitor its own output and shut down or reduce the effects if the output contains qualities that cannot be broadcast. The apparatus provides self-adjustment in the electronic system to maintain spatial masking reversal at a constant value regardless of program material.

figure 16(a) at 16(b)

This Sheet Has Been Replaced

