

Title (en)

SOUND IMAGE MANIPULATION APPARATUS FOR SOUND IMAGE ENHANCEMENT

Title (de)

SCHALLBILDVERARBEITUNGSVORRICHTUNG ZUR SCHALLBILDVERBESSERUNG

Title (fr)

APPAREIL DE MANIPULATION D'UNE IMAGE SONORE POUR AMELIORER CETTE IMAGE SONORE

Publication

**EP 0677235 B1 19990804 (EN)**

Application

**EP 94907123 A 19931230**

Priority

- US 9312688 W 19931230
- US 9211335 W 19921231

Abstract (en)

[origin: WO9416538A1] The manipulation system and apparatus receive electronic signals which are to be processed as enhanced stereophonic audio signals from two laterally spaced loudspeakers in front of the listener, either directly before recording or broadcasting, or 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 two loudspeakers, 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 generate 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 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.

IPC 1-7

**H04S 3/00**; **H04S 3/02**; **H04S 5/02**

IPC 8 full level

**H04S 1/00** (2006.01); **H04S 3/00** (2006.01); **H04S 5/02** (2006.01); **H04S 7/00** (2006.01); **H04S 3/02** (2006.01)

IPC 8 main group level

**H04S** (2006.01)

CPC (source: EP)

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