

ENCODER/DECODER FOR MULTIDIMENSIONAL SOUND FIELDS**ABSTRACT**

The invention relates in general to the recording, transmitting, and reproducing of multi-dimensional sound fields intended for human hearing. More particularly, the invention relates to subband encoding and decoding of signals representing such sound fields, wherein the encoded signals may be carried by multiple discrete signals and/or a composite signal with a control signal conveying either the relative levels of the encoded signals, or the apparent direction of the sound field represented by the encoded signals. In digital implementations, adaptive bit allocation may be used to reduce the informational requirements of the encoded signals.

FIGURE 7