Apparatus and Method for Reproducing a Spatially Extended Sound Source or Apparatus and Method for Generating a Bitstream from a Spatially Extended Sound Source

Abstract

Apparatus for reproducing a spatially extended sound source having a defined position and geometry in a space, the apparatus comprises an interface (100) for receiving a listener position; a projector (120) for calculating a projection of a two-dimensional or three-dimensional hull associated with the spatially extended sound source onto a projection plane using the listener position, information on the geometry of the spatially extended sound source, and information on the position of the spatially extended sound source; a sound position calculator (140) for calculating positions of at least two sound sources for the spatially extended sound source using the projection plane; and a renderer (160) for rendering the at least two sound sources at the positions to obtain a reproduction of the spatially extended sound source having two or more output signals, wherein the renderer (160) is configured to use different sound signals for the different positions, wherein the different sound signals are associated with the spatially extended sound source.

Fig. 9