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(54) Title: APPARATUS AND METHOD FOR RENDERING AN AUDIO SCENE USING VALID INTERMEDIATE DIFFRACTION PATHS

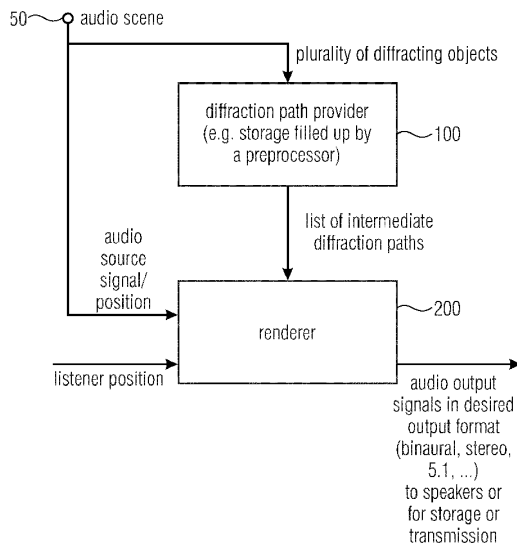


Fig. 7

(57) Abstract: An apparatus for rendering an audio scene (50) comprising an audio source at an audio source position and a plurality of diffracting objects, comprises: a diffraction path provider (100) for providing a plurality of intermediate diffraction paths (300, 400) through the plurality of diffracting objects, an intermediate diffraction path having a starting point and an output edge of the plurality of diffracting objects and an associated filter information for the intermediate diffraction path; a Tenderer (200) for rendering the audio source at a listener position, wherein the Tenderer (200) is configured for determining (216), based on the output edges of the intermediate diffraction paths and the listener position, one or more valid intermediate diffraction paths from the audio source position to the listener position, determining (218), for each valid intermediate diffraction path of the one or more valid intermediate diffraction paths, a filter representation for a full diffraction path, and calculating (220) audio output signals for the audio scene (50) using an audio signal associated to the audio source and the filter representation for each full diffraction path.

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