Claims

1. Apparatus for generating an enhanced sound field description, the apparatus comprising:

a sound field generator for generating a first sound field description indicating a sound field with respect to a first reference location and a second sound field description indicating the sound field with respect to a second reference location, the second reference location being different from the first reference location; and

a meta data generator for generating meta data relating to spatial information of the sound field,

wherein the meta data generator is configured to determine a first geometrical information on the first sound field description and a second geometrical information on the second sound field description as the meta data, and

wherein the first sound field description, the second sound field description and the meta data comprising the first geometrical information and the second geometrical information constitute the enhanced sound field description.

2. Apparatus of claim 1,

wherein the meta data generator is configured

to determine, as the first geometrical information, one of the first reference location and the second reference location and, to determine as the second geometrical information, the other of the first reference location and the second reference location, or a distance between the first reference location and the second reference location or a location vector between the first reference location and the second reference location as the meta data.

3. Apparatus of claim 2,

wherein the first sound field description is a first Ambisonics description, and wherein the second sound field description is a second Ambisonics description, or wherein

the first sound field description and the second sound field description are one of an Ambisonics or a DirAC description.

4. Apparatus of one of the preceding claims,

wherein the first geometrical information is an information on a first vector directed from a predetermined origin to the first reference location of the first sound field description, and

wherein the second geometrical information is an information on a second vector directed from the predetermined origin to the second reference location of as the second sound field description.

5. Apparatus of one of the claims 1 to 4,

wherein the first geometrical information is an information on one of a first vector directed from a predetermined origin to the first reference location of the first sound field description and a second vector directed from the predetermined origin to the second reference location of the second sound field description, and wherein the second geometrical information comprises an information on the vector between the first reference location and the second reference location.

6. Apparatus of one of the claims 1 to 5,

wherein one of the first reference location and the second reference location is a predetermined origin representing the first geometrical information, and wherein the second geometrical information comprises an information on a vector between the predetermined origin and the other of the first reference location and the second reference location.

7. Apparatus of one of the claims 1 to 6, wherein the sound field generator is configured for generating the first sound field description or the second sound field description using a real microphone device or by a sound synthesis using a virtual microphone technique.

8. Method of generating an enhanced sound field description, comprising:

generating a first sound field description indicating a sound field with respect to a first reference location and a second sound field description indicating the sound field with respect to a second reference location, the second reference location being different from the first reference location; and

generating meta data relating to spatial information of the sound field,

wherein the generating the meta data comprises determining a first geometrical information of the first sound field description and a second geometrical information of the second sound field description as the meta data, and

wherein the first sound field description, the second sound field description and the meta data comprising the first geometrical information and the second geometrical information constitute the enhanced sound field description.

9. Computer program for performing, when running on a computer or processor, the method of claim 8.

10. Enhanced sound field description, comprising:

a first sound field description indicating a sound field with respect to a first reference location and a second sound field description indicating the sound field with respect to a second reference location, the second reference location being different from the first reference location; and

meta data relating to spatial information of the sound field and comprising a first geometrical information on the first sound field description and a second geometrical information on the second sound field description.

11. Enhanced sound field description of claim 10,

wherein the first geometrical information comprises one of the first reference location and the second reference location and the second geometrical information comprises the other of the first reference location and the second reference location or a distance between the reference location and the further reference location or a

location vector between the reference location and the further reference location or any information related to the reference location and the further reference location.