[Technical Problem]

[0006]

Incidentally, with the technique disclosed in PTL 1, it may be difficult to appropriately reduce the amount of computation and the computational load.

[0007]

Accordingly, embodiments of the present disclosure provide an audio signal processing method and the like that can appropriately reduce the amount of computation and the computational load.

[Solution to Problem]

[0008]

According to a first aspect of the present disclosure, there is provided an audio signal processing method executed by an audio signal processing device, the audio signal processing method including: obtaining an audio signal including attribute information identifying an attribute of the audio signal; and performing first determination processing and second determination processing when the attribute identified by the attribute information included in the audio signal obtained is information indicating an indirect sound, the first determination processing being processing to determine whether the audio signal obtained satisfies a first condition, the second determination processing being processing to determine whether the audio signal obtained satisfies a second condition different from the first condition, wherein in the performing, the audio signal obtained is determined not to be output when the audio signal obtained fails to satisfy at least one of the first condition or the second condition.

[0009]

According to a second aspect of the present disclosure, there is provided an audio signal processing method executed by an audio signal processing device, the audio signal processing method including: obtaining an audio signal; and performing, on the audio signal obtained, one or more first processes, first determination processing, second determination processing, and one or more second

processes different from the one or more first processes, wherein the first determination processing is processing to determine whether the audio signal satisfies a first condition, the first condition is a condition based on a first adjustment value that is a value based on a first adjustment amount indicating an adjustment amount related to the one or more first processes, the second determination processing is processing to determine whether the audio signal satisfies a second condition, the second condition is a condition based on a second adjustment value that is a value based on a second adjustment amount indicating an adjustment amount related to the one or more second processes, the adjustment amount related to the one or more first processes indicates an amount by which an amplitude of the audio signal obtained is to be amplified, the adjustment amount related to the one or more second processes indicates an amount by which the amplitude of the audio signal to be output is to be amplified, and the performing of the one or more second processes on the audio signal is skipped when either the first condition or the second condition is determined not to be satisfied.

[0010]

According to a third aspect of the present disclosure, there is provided a computer program for causing a computer to execute the audio signal processing method described above.

[0011]

According to a fourth aspect of the present disclosure, there is provided an audio signal processing device including: an obtainer that obtains an audio signal including attribute information identifying an attribute of the audio signal; and a determiner that performs first determination processing and second determination processing when the attribute identified by the attribute information included in the audio signal obtained is information indicating an indirect sound, the first determination processing being processing to determine whether the audio signal obtained satisfies a first condition, the second determination processing being processing to determine whether the audio signal obtained satisfies a second condition different from the

first condition, wherein the determiner determines that the audio signal obtained is not to be output when the audio signal obtained fails to satisfy at least one of the first condition or the second condition.

[0012]

Note that these comprehensive or specific aspects may be implemented as a system, a device, a method, an integrated circuit, a computer program, or a non-transitory computer-readable recording medium such as a CD-ROM, or may be implemented as any combination of a system, a device, a method, an integrated circuit, a computer program, and a recording medium.

[Advantageous Effects of Invention]

[0013]

The audio signal processing method and the like according to embodiments of the present disclosure make it possible to appropriately reduce the amount of computation and the computational load.

[Brief Description of Drawings]

[0014]

[FIG. 1]

FIG. 1 is a diagram illustrating one example of a direct sound and reflected sounds generated in a sound space.

[FIG. 2]

FIG. 2 is a diagram illustrating an example of a three-dimensional sound reproduction system according to Embodiment 1.

[FIG. 3A]

FIG. 3A is a block diagram illustrating a configuration example of an encoding device according to Embodiment 1.

[FIG. 3B]

FIG. 3B is a block diagram illustrating a configuration example of a decoding device according to Embodiment 1.

[FIG. 3C]