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LAAKSONEN(10) **Pub. No.: US 2023/0232182 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **SPATIAL AUDIO CAPTURE, TRANSMISSION
AND REPRODUCTION**(52) **U.S. Cl.**CPC **H04S 7/304** (2013.01); **G10L 19/008**
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2400/11 (2013.01); **H04S 2420/11** (2013.01)(71) Applicant: **Nokia Technologies Oy**, Espoo (FI)(72) Inventor: **Lasse LAAKSONEN**, Tampere (FI)

(57)

ABSTRACT(21) Appl. No.: **18/188,820**(22) Filed: **Mar. 23, 2023****Related U.S. Application Data**(63) Continuation of application No. 17/258,600, filed on
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An apparatus configured to: obtain at least one spatial audio signal that defines an audio scene forming at least in part an immersive media content; obtain metadata associated with the at least one spatial audio signal; obtain at least one augmentation control parameter associated with the at least one spatial audio signal; obtain at least one augmentation audio signal; render an output audio signal that is based, at least partially, on the at least one spatial audio signal, the metadata associated with the at least one spatial audio signal, the at least one augmentation control parameter, and the at least one augmentation audio signal; and obtain an indication that at least part of the at least one spatial audio signal has been omitted from the output audio signal based, at least partially, on at least part of the at least one augmentation audio signal included in the output audio signal.

