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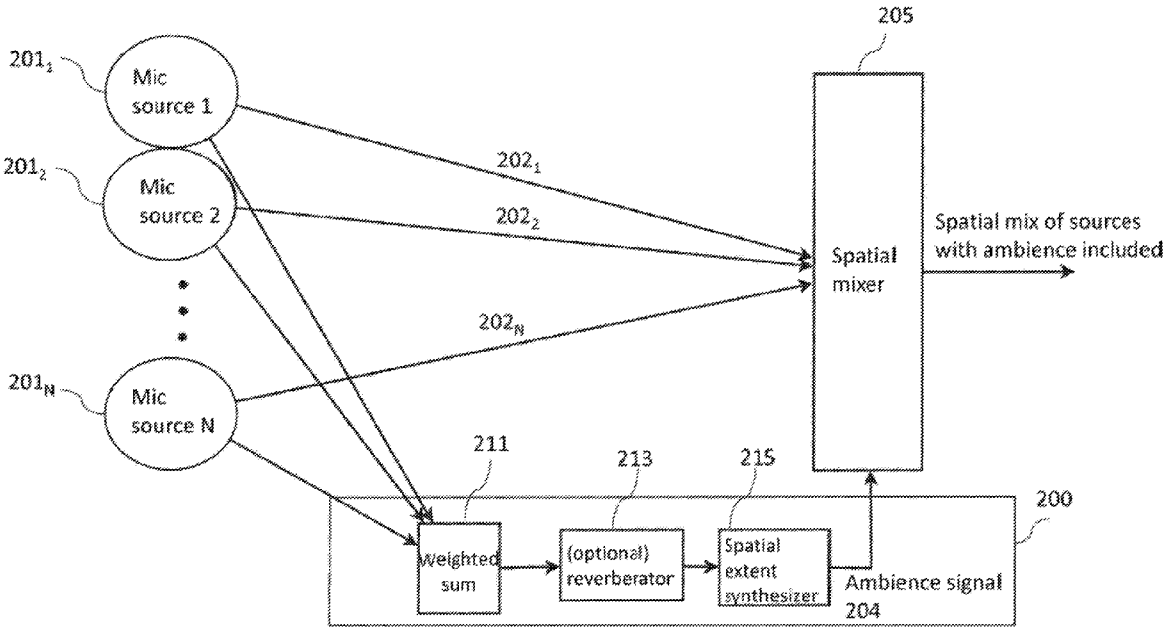
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(54) Title: AUDIO SIGNAL GENERATION FOR SPATIAL AUDIO MIXING

Figure 2



(57) Abstract: An apparatus for generating an intended spatial audio field, the apparatus configured to: receive at least two audio signals (202), wherein each audio signal is received from a separate microphone (201), each separate microphone is located in the same environment and configured to capture a sound source; analyse each audio signal to determine at least in part an ambience audio signal; generate a sum audio signal from the determined ambience audio signal (204) based on the at least two audio signals; and process the sum audio signal to spatially extend the sum audio signal so as to generate the intended spatial audio field, herein the sum audio signal comprises the ambience audio signal for the intended spatial audio field.

[Continued on next page]

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A. **CLASSIFICATION OF SUBJECT MATTER**

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC: H04H, H04R, H04S, G10K, G10L

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FI, SE, NO, DK

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EPODOC, WPIAP, EPO-Internal full-text databases, Full-text translation databases from Asian languages, XP3GPP, XPAIP, XPESP, XPETSI, XPI3E, XPIEE, XPIETF, XPIOP, XPIPCOM, XPJPEG, XPMISC, XPOAC, XPRD, XPTK, COMPDX, INSPEC, TDB, NPL, Patinfo, IEEE Xplore, AES (aes.org portal), Google

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 2355558 A1 (QNX SOFTWARE SYSTEMS [CA]) 10 August 2011 (10.08.2011) figs. 1, 3; pars. [0015]-[0018], [0020]-[0021]	1-30
X	US 2008298610 A1 (VIROLAINEN JUSSI [FI] et al.) 04 December 2008 (04.12.2008) abstract; figs. 1-5; pars. [0025], [0028]-[0029], [0037]-[0039], [0043]-[0044], [0050]-[0051]; claims 1, 10	1-30
X	Kowalczyk, K. et. al., "Parametric Spatial Sound Processing: A flexible and efficient solution to sound scene acquisition, modification, and reproduction", IEEE Signal Processing Magazine, Vol. 32, Iss. 2, 2015-02-10, pp. 31-42 figs. 1, 3, 5; page 33, column 1; page 37, column 1; page 38, column 2	1-30

☒ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2017005979 A1 (NOKIA TECHNOLOGIES OY [FI]) 12 January 2017 (12.01.2017) fig. 9; page 17, line 35 – page 18, line 4; page 22, lines 10-22	12, 27

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H04H 20/88 (2008.01)
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