

Title (en)
Microphone hiss mitigation

Title (de)
Mikrofonzischabschwächung

Title (fr)
Atténuation de sifflements perceptibles de microphone

Publication
EP 2760221 A1 20140730 (EN)

Application
EP 13153113 A 20130129

Priority
EP 13153113 A 20130129

Abstract (en)
A system and method for mitigating microphone hiss may obtain a frequency spectrum characteristic for a microphone. A microphone that has limited dynamic range may create microphone hiss in an output signal. The microphone hiss may prevent a reproduction of a sound field, represented in an output signal of the microphone, from being perceived as a natural environment. The microphone frequency spectrum may be obtained using static measurements or calculated dynamically. A virtual noise floor may be calculated responsive to the microphone frequency spectrum and a desired noise floor. Gain coefficients may be calculated responsive to the output signal of the microphone. The gain coefficients may be calculated to mitigate undesirable signal content including background noise and echoes. The calculated gain coefficients may be modified responsive to the virtual noise floor. The modified gain coefficients may allow a reproduction of the sound field to be perceived as a natural environment.

IPC 8 full level
H04R 3/04 (2006.01); **G10L 21/0208** (2013.01)

CPC (source: EP)
G10L 21/0208 (2013.01); **H04R 3/04** (2013.01); **H04R 2410/00** (2013.01)

Citation (applicant)
• US 8036879 B2 20111011 - HETHERINGTON PHILLIP A [CA], et al
• US 7844453 B2 20101130 - HETHERINGTON PHILLIP A [CA]

Citation (search report)
• [X] US 2005278171 A1 20051215 - SUPPAPPOLA SETH [US], et al
• [I] US 2007156399 A1 20070705 - MATSUO NAOSHI [JP]
• [A] EP 1739657 A2 20070103 - HARMAN BECKER AUTOMOTIVE SYS [CA]
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Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

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