

Title (en)
AUDIO SIGNAL PROCESSING IN A VEHICLE

Title (de)
AUDIOSIGNALVERARBEITUNG IN EINEM FAHRZEUG

Title (fr)
TRAITEMENT DE SIGNAL AUDIO DANS UN VÉHICULE

Publication
EP 3375204 A1 20180919 (DE)

Application
EP 16788664 A 20161026

Priority
• DE 102015222105 A 20151110
• EP 2016075831 W 20161026

Abstract (en)
[origin: WO2017080830A1] The present invention relates to a method for audio signal processing in a vehicle (10). In order to allow simple and reliable echo cancellation for voice recognition during simultaneous reproduction of a multichannel audio source signal in a vehicle (10), a mono audio signal is generated on the basis of a multichannel audio source signal. The mono audio signal is limited to a frequency range between a prescribed lower frequency and a prescribed upper frequency, for example to a range from 100 Hz to 8 kHz. The limited mono audio signal is output via multiple loudspeakers (17–20) in the vehicle (10). An influence of the limited mono audio signal that is output via the multiple loudspeakers (17–20) on a voice audio signal received in the vehicle (10) via a microphone (13) is compensated for by means of the limited mono audio signal in an echo canceller (25).

IPC 8 full level
H04R 3/02 (2006.01); **G10L 21/02** (2013.01); **H04S 7/00** (2006.01)

CPC (source: EP US)
G10L 21/0208 (2013.01 - EP US); **G10L 21/0232** (2013.01 - US); **H04R 3/02** (2013.01 - EP US); **H04R 5/02** (2013.01 - US); **H04S 7/307** (2013.01 - EP US); **G10L 2021/02082** (2013.01 - EP US); **G10L 2021/02161** (2013.01 - EP US); **G10L 2021/02166** (2013.01 - US); **H04R 5/04** (2013.01 - EP US); **H04R 2430/03** (2013.01 - EP US); **H04R 2499/13** (2013.01 - EP US); **H04S 2400/05** (2013.01 - EP US)

Citation (search report)
See references of WO 2017080830A1

Cited by
CN112309416A

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

DOCDB simple family (publication)
DE 102015222105 A1 20170511; CN 108353229 A 20180731; CN 108353229 B 20201023; EP 3375204 A1 20180919; EP 3375204 B1 20190619; US 10339951 B2 20190702; US 2018358031 A1 20181213; WO 2017080830 A1 20170518

DOCDB simple family (application)
DE 102015222105 A 20151110; CN 201680065656 A 20161026; EP 16788664 A 20161026; EP 2016075831 W 20161026; US 201615775097 A 20161026