Title (en)
AUDIO SIGNAL DISTRIBUTION

Title (de)
AUDIOSIGNALVERTEILUNG

Title (fr)
DISTRIBUTION DE SIGNAUX AUDIO

Publication
EP 3182723 A1 20170621 (EN)

Application
EP 15200450 A 20151216

Priority
EP 15200450 A 20151216

Abstract (en)
An audio signal distribution system and method comprise receiving an audio source signal (X L (jÉ), X R (jÉ)) to be reproduced by a loudspeaker (104, 105) disposed at a first position; providing to the loudspeaker a loudspeaker signal that represents the audio source signal (X L (jÉ), X R (jÉ)) to be reproduced by the loudspeaker (104, 105); and providing to two speakers (107, 108) of a headphone, disposed at a second position and a third position, two headphone signals (S L (jÉ) [+Y L (jÉ)] , S R (jÉ) [+Y R (jÉ)]) which comprise the loudspeaker signals filtered with electrical domain transfer functions (C LL , C LR , C RL , C RR). The electrical domain transfer functions are configured to model acoustic domain transfer functions (H LL , H LR , H RL , H RR) representing the acoustic paths between the first position and each of the second position and third position so that at the second position and third position sound acoustically broadcasted by the loudspeaker (104, 105) is reduced or cancelled by sound broadcasted by the respective speaker (107, 108) of the headphone.

IPC 8 full level
H04R 1/10 (2006.01); G10K 11/175 (2006.01)

CPC (source: EP US)
G10K 11/17813 (2017.12 - EP US); **H04R 1/1083** (2013.01 - EP US); G10K 2210/12 (2013.01 - EP); G10K 2210/1282 (2013.01 - EP); G10K 2210/3055 (2013.01 - EP); H04R 2460/01 (2013.01 - EP)

Citation (search report)
• [XI] US 2011150233 A1 20110623 - GAUTAMA TEMUJIN [BE]
• [I] EP 2405670 A1 20120111 - HARMAN BECKER AUTOMOTIVE SYS [DE]
• [XI] US 2007242834 A1 20071018 - COUTINHO ROY S [US], et al
• [A] US 2012128166 A1 20120524 - KIM LAE-HOON [US], et al
• [A] US 2005032500 A1 20050210 - NASHIF PETER J [US], et al

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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