

Title (en)
AUDIO SIGNAL PROCESSING APPARATUS AND SIGNAL PROCESSING METHOD FOR A SOUND SYSTEM, PARTICULARLY IN A VEHICLE

Title (de)
AUDIOSIGNALVERARBEITUNGSVORRICHTUNG UND SIGNALVERARBEITUNGSVERFAHREN FÜR EIN TONSYSTEM, INSBESONDERE IN EINEM FAHRZEUG

Title (fr)
APPAREIL ET PROCÉDÉ DE TRAITEMENT DE SIGNAL SONORE POUR UN SYSTÈME SONORE DE VÉHICULE

Publication
EP 3094110 A1 20161116 (EN)

Application
EP 15167645 A 20150513

Priority
EP 15167645 A 20150513

Abstract (en)
An audio signal processing apparatus (10) comprises a signal input section (11) through which in operation at least one audio signal (50) is received, and a splitting section (12) configured to generate a first signal (61) and a second signal (62) from the received at least one audio signal (50), wherein the first signal (61) comprises signal components of a first frequency range of the at least one audio signal and the second signal (62) comprises signal components of a second frequency range of the at least one audio signal, the first frequency range comprising lower frequencies than the second frequency range and the first and second frequency ranges having a cross-over frequency (fxA). A first output section (41) is arranged to generate a first output signal (71) for at least one first loudspeaker (21A) from the first signal (61), and a second output section (42) is arranged to generate a second output signal (72) for at least one second loudspeaker (22A) from the second signal (62). A processing section (30) receives a volume control signal (70) which is indicative of a user volume input and is configured to determine a first cross-over frequency value (fx1) according to the volume control signal (70) and to determine a second cross-over frequency value (fx2) which comprises a calculation of a power value of signal components over at least one frequency band of the at least one audio signal (50), wherein the processing section (30) is configured to determine the cross-over frequency (fxA) from one of the first and second cross-over frequency values (fx1, fx2).

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CPC (source: EP)
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Citation (applicant)
• WO 2010122441 A1 20101028 - KONINKL PHILIPS ELECTRONICS NV [NL], et al
• JP H0833093 A 19960202 - SONY CORP

Citation (search report)
• [Y] US 2014093096 A1 20140403 - SHEEN TIMOTHY W [US], et al
• [Y] GB 2181626 A 19870423 - CANON KK
• [A] US 4583245 A 19860415 - GELOW WILLIAM J [US], et al

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Designated extension state (EPC)
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