

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 B1 20200701 (EN)**

Application

**EP 15167645 A 20150513**

Priority

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Abstract (en)

[origin: EP3094110A1] 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).

IPC 8 full level

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