

Title (en)  
AUDIO PROCESSING

Title (de)  
AUDIOVERARBEITUNG

Title (fr)  
TRAITEMENT AUDIO

Publication  
**EP 3745744 A2 20201202 (EN)**

Application  
**EP 20176223 A 20200525**

Priority  
GB 201907601 A 20190529

Abstract (en)  
An apparatus for processing an input audio signal comprising multiple channels, the apparatus comprising: means for deriving, based on the input audio signal, a first signal component, comprising at least one input channel, and a second signal component, comprising multiple input channels, wherein the first signal component is dependent upon at least a first portion of a spatial audio image conveyed by the input audio signal, and the second signal component is dependent upon at least a second portion of the spatial audio image that is different to the first portion; cross-channel mixing means for cross-channel mixing of a plurality of input channels; means for directing the second signal component to the cross-channel mixing means for cross-channel mixing of at least some of the multiple input channels of the second signal component to produce a modified second signal component; bypass means for enabling the first signal component to bypass the cross-channel mixing means; and means for combining the first signal component and the modified second signal component into an output audio signal comprising two output channels configured for rendering by headphone apparatus.

IPC 8 full level  
**H04S 3/00** (2006.01)

CPC (source: CN EP GB)  
**G10L 19/00** (2013.01 - GB); **G10L 19/008** (2013.01 - GB); **H04S 3/004** (2013.01 - EP); **H04S 7/30** (2013.01 - GB); **H04S 7/306** (2013.01 - CN); **H04R 2420/01** (2013.01 - EP); **H04S 2420/01** (2013.01 - CN EP)

Cited by  
EP4035425A4; EP4340396A1; WO2021058858A1

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)  
**EP 3745744 A2 20201202**; **EP 3745744 A3 20210331**; CN 112019993 A 20201201; CN 112019993 B 20220617; CN 115190414 A 20221014; GB 201907601 D0 20190710; GB 2584630 A 20201216

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**EP 20176223 A 20200525**; CN 202010473489 A 20200529; CN 202210643129 A 20200529; GB 201907601 A 20190529