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## (54) A 5.1 channel signal output mixer circuit for earphone

(57) A 5.1 channel signal output mixer circuit for earphone using step gain amplification unit comprising a filtering gain unit, a mixing gain unit and a noise reduction gain unit, wherein said filtering gain unit obtaining a bandwidth-adjusted subwoofer signal from two waveform

shaping circuits, said mixing gain mixing said subwoofer signal with an output signal of a front channel to form a first signal, said noise reduction gain receiving said first signal for noise removal to form a signal and outputting said signal to a speaker.

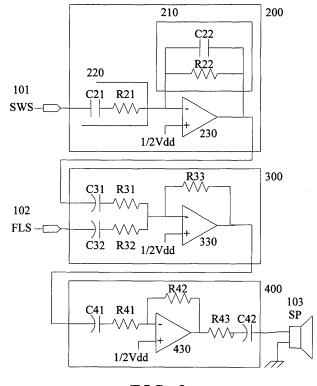


FIG. 6



## **EUROPEAN SEARCH REPORT**

Application Number EP 03 02 4363

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Category	Citation of document with ir of relevant passa	ndication, where appropriate, ges	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document		E : earlier patent doo after the filling date her D : document cited in L : document cited for 	T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document oited for other reasons  &: member of the same patent family, corresponding document	

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