

Publication

**EP 0546619 A3 19940420**

Application

**EP 92203748 A 19921203**

Priority

US 80535691 A 19911209

Abstract (en)

[origin: EP0546619A2] A circuit for doubling and mixing low frequency audio signals includes an input for receiving an audio signal having a substantially wide frequency range, a circuit coupled to said input means for separating signal components in a low frequency band of the audio signal from the wide frequency range thereof, a frequency doubler coupled to the separating circuit for doubling the frequencies of the signal components in the low frequency band, and a mixer for mixing the frequency doubled signal components with the input audio signal, whereby the signal components in the low frequency band now also appear one octave higher.

IPC 1-7

**H04S 1/00**; **H04R 5/04**; **H04R 3/04**

IPC 8 full level

**H04R 3/04** (2006.01); **H04R 5/04** (2006.01); **H04S 1/00** (2006.01)

CPC (source: EP)

**H04R 3/04** (2013.01); **H04R 5/04** (2013.01); **H04S 1/00** (2013.01)

Citation (search report)

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- [YA] GB 2153187 A 19850814 - LINN PROD LTD
- [A] US 4734591 A 19880329 - ICHITSUBO IKUROH [JP]
- [A] US 4607381 A 19860819 - SHIMIZU YOSHIO [JP]

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**EP 0546619 A2 19930616**; **EP 0546619 A3 19940420**; **EP 0546619 B1 19980923**; DE 69227091 D1 19981029; DE 69227091 T2 19990520; JP H05328481 A 19931210

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