

Title (en)

Sub-harmonic generator and stereo expansion processor

Title (de)

Subharmonischer Erzeuger und Prozessor zur stereophonischen Erweiterung

Title (fr)

Générateur subharmonique et processeur pour augmentation d'effet stéréophonique

Publication

EP 1308925 A1 20030507 (EN)

Application

EP 01309021 A 20011024

Priority

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Abstract (en)

A sub-harmonic generator includes: an input filter (102) operable to receive an input signal containing frequencies from among a first range and to produce a first intermediate signal containing frequencies from among a second range; a signal divider circuit (105) operable to receive the first intermediate signal and to produce a square wave signal containing square wave signal components at fundamental frequencies from among a third range, the third range of frequencies being about one octave below the second range of frequencies; a wave-shaping circuit (114) operable to receive the square wave signal and to produce a second intermediate signal containing sinusoidal signal components from among frequencies corresponding to the respective fundamental frequencies of the square wave signal components; an RMS detector (124) operable to produce an RMS signal corresponding to an instantaneous amplitude of the first intermediate signal; and a voltage controlled amplifier (118) operable to amplify the second intermediate signal by an amount proportional to the RMS signal to produce a sub-harmonic signal. <IMAGE>

IPC 1-7

G10H 1/02; **G10H 1/12**

IPC 8 full level

G10H 1/02 (2006.01); **G10H 1/12** (2006.01)

CPC (source: EP)

G10H 1/02 (2013.01); **G10H 1/12** (2013.01)

Citation (search report)

- [A] US 5473108 A 19951205 - MATSUDA EIJI [JP], et al
- [A] US 4841572 A 19890620 - KLAYMAN ARNOLD I [US]
- [A] US 5369224 A 19941129 - MIYATA TOMOMI [JP]
- [A] US 4866774 A 19890912 - KLAYMAN ARNOLD I [US]

Designated contracting state (EPC)

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