

Title (en)

Warning signal generator for feeding a pressure chamber loudspeaker.

Title (de)

Warnsignalgenerator zur Speisung eines Druckkammerlautsprechers.

Title (fr)

Générateur de signal d'avertissement pour l'alimentation d'un haut-parleur à chambre de compression.

Publication

**EP 0025537 A1 19810325 (DE)**

Application

**EP 80105148 A 19800829**

Priority

DE 2936981 A 19790913

Abstract (en)

1. Warning signal generator for supplying a signal to a compression driver projector horn whose sound propagation range lies above a preset fundamental frequency of a warning signal to be propagated by a compression driver projection horn loudspeaker, and the aforementioned warning signal contains a great many components of harmonics that occur in the sound projection range of the compression driver projection horn loudspeaker, characterized by the warning signal is a composite signal formed to be a square wave signal at constant amplitude and comprising a first square wave signal (4f) at the frequency of the fourth harmonic and a second square wave signal (2f) at the frequency of the second harmonic, whereby the fundamental frequency (f) is the changeover switching frequency used for switching between the first and second (4f, 2f) square wave signals, so that at the output (A) of the warning signal generator, the signal alternates at the same periodic rate of change of the fundamental frequency (f), and during each first half-period of the fundamental frequency, the first square wave signal appears and during each second half-period of the fundamental frequency, the second square wave signal appears, with the consequence that the warning signal appears as the composite of the two (Fig. 2d).

Abstract (de)

Die Erfindung betrifft einen Warnsignalgenerator zur Speisung eines Druckkammerlautsprechers (6), dessen Übertragungsbereich oberhalb einer vorgegebenen Grundwelle eines vom Druckkammerlautsprecher (6) abzustrahlenden Warnsignals liegt. Das Warnsignal enthält einen großen Anteil von Oberwellen, die in den Übertragungsbereich des Druckkammerlautsprechers (6) fallen und deren gegenseitige Phasenlage einen minimalen Crestfaktor des Warnsignals ergibt. Hierzu eignet sich besonders ein zusammengesetztes Rechtecksignal, bei dem abwechselnd im Takt der Grundwelle (f) eine Periode eines ersten Rechtecksignals mit der doppelten Wiederholungsfrequenz 2f der Grundwelle und eines zweiten Rechtecksignals mit der vierfachen Wiederholungsfrequenz 4f der Grundwelle als Warnsignal auftritt.

IPC 1-7

**G08B 3/10; G10K 9/12; H04R 3/00**

IPC 8 full level

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CPC (source: EP)

**G08B 3/10 (2013.01); G10K 15/02 (2013.01)**

Citation (search report)

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