

Title (en)

METHOD AND DEVICE FOR ELECTRICALLY POWERING A TRANSDUCER GENERATING SONIC AND ULTRASONIC VIBRATIONS

Publication

**EP 0217694 B1 19910424 (FR)**

Application

**EP 86401833 A 19860819**

Priority

FR 8513032 A 19850827

Abstract (en)

[origin: US4748365A] The invention relates to a method for supplying electric power to a transducer for generating sonic or ultrasonic vibrations. It is characterized in that in the automatic control stage, the control device (11) is kept within said command and control loop and, by means of its processor and as a function of the data furnished to this processor and in particular data emitted by the analysis means (6-8) furnishing the phase displacement (Df) and the direction (Sf) of the phase displacement between the current (I) and the voltage (U) of the power supply of the transducer, adapter control signals (12) are processed, each of which determines an output frequency and by way of which, not taking into account anything but the possible existence of a phase displacement requiring correction, whatever the value and the direction of this phase displacement, the progressive modification of the frequency is commanded, in the direction dictated by the direction of the phase displacement, until arriving at one of two situations, which are either the disappearance of the difference of the phases requiring correction, or the arrival at a previously fixed limit of the modification of the frequencies since the frequency at the beginning of this modification.

IPC 1-7

**B06B 1/02**

IPC 8 full level

**B06B 1/02** (2006.01); **H04R 3/00** (2006.01)

CPC (source: EP US)

**B06B 1/0253** (2013.01 - EP US)

Cited by

EP0770430A1; EP0662356A3; US5637947A; US4882525A; EP0307685A1; FR2740572A1; US5739724A; EP0645057A4; US7667851B2; WO2018218324A3

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

**EP 0217694 A1 19870408**; **EP 0217694 B1 19910424**; AT E62835 T1 19910515; AU 6184386 A 19870305; CA 1267720 A 19900410; DE 3678890 D1 19910529; FR 2586883 A1 19870306; FR 2586883 B1 19940401; IL 79840 A0 19861130; IL 79840 A 19920818; JP S62110784 A 19870521; US 4748365 A 19880531

DOCDB simple family (application)

**EP 86401833 A 19860819**; AT 86401833 T 19860819; AU 6184386 A 19860826; CA 516785 A 19860826; DE 3678890 T 19860819; FR 8513032 A 19850827; IL 7984086 A 19860826; JP 20121986 A 19860827; US 90105086 A 19860827