

Title (en)

METHOD FOR DETERMINING ASYMMETRIC VIBRATIONS IN AN ELECTRIC DEVICE

Title (de)

VERFAHREN ZUM FESTSTELLEN UNSYMMETRISCHER SCHWINGUNGEN IN EINEM ELEKTRISCHEN GERÄT

Title (fr)

PROCÉDÉ DE DÉTERMINATION DE VIBRATIONS ASYMÉTRIQUES DANS UN APPAREIL ÉLECTRIQUE

Publication

**EP 3959790 A1 20220302 (DE)**

Application

**EP 20725091 A 20200421**

Priority

- DE 102019207358 A 20190520
- EP 2020061039 W 20200421

Abstract (en)

[origin: WO2020233922A1] The invention relates to a method for determining a direct current component in an electric device (1) which is connected to a high-voltage supply network, which method comprises: - acquiring operating noises of the electric device (1) with the aid of acoustic sensors, which provide acoustic signals at the output; - breaking the acoustic signals down into the frequency components thereof by means of a Fourier transformation yielding a frequency spectrum; - determining odd and even frequency components of the frequency spectrum in dependence upon a basic frequency of the high-voltage supply network and setting them in a ratio (R) to one another; - concluding that a direct current component is present if the ratio (R) exceeds a predefined threshold value; wherein the acoustic sensors are part of a portable unit (8).

IPC 8 full level

**G01R 29/00** (2006.01); **G01R 31/00** (2006.01); **H02J 3/01** (2006.01)

CPC (source: EP US)

**G01R 19/0015** (2013.01 - EP US); **H02J 3/01** (2013.01 - EP); **H04W 4/38** (2018.01 - US); **Y02E 40/40** (2013.01 - EP)

Citation (search report)

See references of WO 2020233922A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**DE 102019207358 A1 20201126**; EP 3959790 A1 20220302; US 2022236305 A1 20220728; WO 2020233922 A1 20201126

DOCDB simple family (application)

**DE 102019207358 A 20190520**; EP 2020061039 W 20200421; EP 20725091 A 20200421; US 202017613177 A 20200421