

Title (en)

Sonotrode and device for controlling and monitoring cutting processes on an ultrasound basis

Title (de)

Sonotrode und Vorrichtung zur Steuerung und Überwachung von Schneidvorgängen auf Ultraschallbasis

Title (fr)

Sonotrode et dispositif de commande et de surveillance de procédés de coupe à base d'ultrasons

Publication

**EP 2564997 B1 20181024 (DE)**

Application

**EP 12177226 A 20120720**

Priority

DE 102011081747 A 20110829

Abstract (en)

[origin: EP2564997A1] The device has an ultrasound device coupled with sonotrodes that comprise a sonotrode body. The sonotrode body is adapted to a processing task and an article and/or a workpiece. The sonotrode body sectionally consists of electrically conductive ceramic material. A bearing is provided as a counterpart for the sonotrodes, and a measuring unit measures electric resistance at the sonotrodes. A control unit regulates and controls a cutting process based on a measuring value of contact resistance of the sonotrodes. The sonotrodes comprise a sensor for measuring electronic resistance. An independent claim is also included for a sonotrode for an ultrasound-based processing machine i.e. cutting device.

IPC 8 full level

**B26D 7/08** (2006.01); **B26D 5/00** (2006.01)

CPC (source: EP)

**B26D 5/00** (2013.01); **B26D 7/086** (2013.01)

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