

Title (en)

Ceramic heater and manufacturing method therefor, and heating apparatus

Title (de)

Keramischer Heizer und Herstellungsverfahren dafür, und Heizvorrichtung

Title (fr)

Élément chauffant en céramique et son procédé de fabrication et appareil de chauffage

Publication

**EP 2608629 B1 20170719 (EN)**

Application

**EP 12199164 A 20121221**

Priority

- JP 2011279122 A 20111221
- JP 2012203784 A 20120917

Abstract (en)

[origin: EP2608629A2] A ceramic heater having a substrate and a heat-generating element. The substrate is formed from an electrically insulating ceramic and extends rearward from the forward end of the ceramic heater in the direction of the axis. The heat-generating element has a heat-generating portion formed from an electrically conductive ceramic which contains silicon nitride and an electrically conductive material, disposed in a forward end portion of the substrate, and having a shape resembling the letter U as viewed along the direction of the axis. The heat-generating portion has a fracture toughness of 4.3 Mpa·m<sup>0.5</sup> or more.

IPC 8 full level

**H05B 3/14** (2006.01)

CPC (source: EP US)

**H05B 3/141** (2013.01 - EP US); **H05B 2203/017** (2013.01 - EP US); **H05B 2203/027** (2013.01 - EP US); **Y10T 29/49083** (2015.01 - EP US)

Citation (examination)

EP 1213274 A2 20020612 - NGK SPARK PLUG CO [JP]

Cited by

CN107046739A; CN106376107A

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