

Title (en)

Heating element and use of the heating element as a pressure sensor

Title (de)

Heizelement sowie Verwendung des Heizelementes als Drucksensor

Title (fr)

Élément de chauffage et utilisation de l'élément de chauffage comme capteur de pression

Publication

EP 2699053 A3 20140507 (DE)

Application

EP 13180650 A 20130816

Priority

- DE 102012107579 A 20120817
- DE 102012112007 A 20121210

Abstract (en)

[origin: EP2699053A2] The heating element (501) has a heating element main portion which is made up of carbon material having a filament structure (502). The parallel yarns of filament structure are twisted or braided to form a cord or cable. An electrical terminal (503-506) is arranged in the ends of the parallel yarns of the cord or cable. The electrical terminal is embedded in a heat resistant silicone layer having ceramic material. The filament structure is surrounded with the heat resistant silicone layer of metallic tube, so that terminals are arranged in end of metallic tube.

IPC 8 full level

H05B 3/06 (2006.01); **H05B 3/14** (2006.01); **H05B 3/34** (2006.01); **H05B 3/54** (2006.01)

CPC (source: EP)

H05B 3/06 (2013.01); **H05B 3/145** (2013.01); **H05B 3/342** (2013.01); **H05B 3/54** (2013.01); **H05B 2203/016** (2013.01)

Citation (search report)

- [X] WO 02056638 A1 20020718 - SASAKI TSUNEJI [JP]
- [X] US 2011206865 A1 20110825 - WALL ARTHUR C [US], et al
- [X] EP 0586707 A1 19940316 - SUMITOMO CHEMICAL CO [JP]
- [XP] WO 2013024939 A1 20130221 - NEOEN CO LTD [KR], et al & KR 20130018091 A 20130220 - NEOEN CO LTD [KR]

Cited by

CN107734723A; CN116984404A

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)

EP 2699053 A2 20140219; EP 2699053 A3 20140507

DOCDB simple family (application)

EP 13180650 A 20130816