

Title (en)
HEATING ELEMENT

Title (de)
HEIZELEMENT

Title (fr)
ÉLÉMENT CHAUFFANT

Publication
EP 3479651 A1 20190508 (EN)

Application
EP 17736731 A 20170629

Priority
• GB 201611397 A 20160630
• GB 2017051909 W 20170629

Abstract (en)
[origin: GB2551789A] A self-regulating heating element A comprises a positive temperature coefficient heating core B disposed between a pair of electrodes C, the heating core comprising: a first conductive polymer composite D comprising first conductive particles E dispersed in a first polymer matrix F, the first conductive particles having an aspect ratio greater than 100; and a second conductive polymer composite G comprising second conductive particles H dispersed in a second polymer matrix I, the second conductive particles having an aspect ratio of from 1 to 100 and a longest dimension of greater than 10µm, wherein the first conductive polymer composite and the second conductive polymer composite are arranged in series between the pair of electrodes. The first conductive particles may comprise carbon nanotubes and the second conductive particles may comprise spheres and/or flakes and may be silver particles or silver-coated glass particles.

IPC 8 full level
H05B 3/14 (2006.01); **H05B 3/56** (2006.01)

CPC (source: EP GB)
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Citation (search report)
See references of WO 2018002633A1

Cited by
US2023092288A1; WO2021175684A1

Designated contracting state (EPC)
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GB 201611397 D0 20160817; **GB 2551789 A 20180103**; **GB 2551789 B 20211020**; CA 3027473 A1 20180104; CA 3027473 C 20201215; EP 3479651 A1 20190508; EP 3479651 B1 20200422; ES 2787033 T3 20201014; WO 2018002633 A1 20180104

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