

Title (en)
AN ELECTRICALLY CONDUCTIVE PTC INK WITH DOUBLE SWITCHING TEMPERATURES AND APPLICATIONS THEREOF IN FLEXIBLE DOUBLE-SWITCHING HEATERS

Title (de)
ELEKTRISCH LEITFÄHIGE PTC-TINTE MIT DOPPELTEN SCHALTTEMPERATUREN UND ANWENDUNGEN DAVON IN FLEXIBLEN DOPPELSCHALTHEIZUNGEN

Title (fr)
ENCRE CTP ÉLECTROCONDUCTRICE À TEMPÉRATURES DE DOUBLE COMMUTATION ET SES APPLICATIONS DANS DES DISPOSITIFS DE CHAUFFAGE SOUPLES À DOUBLE COMMUTATION

Publication
EP 3420041 A1 20190102 (EN)

Application
EP 17757340 A 20170224

Priority
• US 201662389396 P 20160224
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• US 2017019440 W 20170224

Abstract (en)
[origin: WO2017147480A1] A double-switching heater includes a double-switching PTC ink deposited on a substrate to form one or more resistors. The double-switching PTC ink has a first resin that provides a first PTC effect at a first temperature range and a second resin that provides a second PTC effect at a second temperature range, where the second temperature range is higher than the first temperature range. The substrate may be a flexible substrate or a rigid substrate, and may be deformable to generate a three-dimensional structure. The substrate may be: polyester, polyimide, polyamide, polypropylene, thermoplastic polyurethane, fiberglass, cement board, carbon composite materials, polyethylene terephthalate, polyethylene, aluminum, steel, glass composite, molded plastic, high-density polyethylene or styrene ethylene butylene styrene.

IPC 8 full level
C09D 11/52 (2014.01); **C09D 11/102** (2014.01); **C09D 11/107** (2014.01); **H05B 3/12** (2006.01); **H05B 3/14** (2006.01); **H05B 3/20** (2006.01)

CPC (source: EP US)
C09D 11/102 (2013.01 - EP US); **C09D 11/106** (2013.01 - EP); **C09D 11/52** (2013.01 - EP); **F16L 53/38** (2017.12 - EP); **H05B 3/145** (2013.01 - EP); **H05B 3/267** (2013.01 - EP); **H05B 3/34** (2013.01 - EP); **H05B 3/342** (2013.01 - EP); **H05B 3/44** (2013.01 - EP); **H05B 3/58** (2013.01 - EP); **H05B 2203/013** (2013.01 - EP); **H05B 2203/017** (2013.01 - EP); **H05B 2203/02** (2013.01 - EP); **H05B 2203/026** (2013.01 - EP); **H05B 2203/037** (2013.01 - EP); **H05B 2214/02** (2013.01 - EP)

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