

Title (en)

LOW VISCOSITY PRECURSOR COMPOSITIONS AND METHODS FOR THE DEPOSITION OF CONDUCTIVE ELECTRONIC FEATURES

Title (de)

NIEDERVISKOSE PRECURSORZUSAMMENSETZUNGEN UND VERFAHREN ZUM AUFTRAGEN VON ELEKTRONISCH LEITFÄHIGEN STRUKTURELEMENTEN

Title (fr)

COMPOSITIONS DE PRECURSEUR A FAIBLE VISCOSITE ET PROCEDES DE DEPOT D'ELEMENTS ELECTRONIQUES CONDUCTEURS

Publication

**EP 1448725 A4 20080723 (EN)**

Application

**EP 02773719 A 20021004**

Priority

- US 0231884 W 20021004
- US 32762001 P 20011005
- US 32762101 P 20011005

Abstract (en)

[origin: WO03032084A2] Abstract A precursor composition for the deposition and formation of an electrical feature such as a conductive feature. The precursor composition advantageously has a low viscosity enabling deposition using direct-write tools. The precursor composition also has a low conversion temperature, enabling the deposition and conversion to an electrical feature on low temperature substrates. A particularly preferred precursor composition includes silver metal for the formation of highly conductive silver features. Another particularly preferred precursor composition includes copper metal for the formation of highly conductive copper features.

IPC 1-7

**C09D 11/00; H05K 1/09; H01B 1/02; B05D 5/06**

IPC 8 full level

**B05D 3/02** (2006.01); **B05D 5/12** (2006.01); **B22F 9/30** (2006.01); **B41M 5/00** (2006.01); **B41M 5/50** (2006.01); **B41M 5/52** (2006.01); **C09D 11/00** (2006.01); **C23C 18/06** (2006.01); **C23C 18/08** (2006.01); **C23C 20/04** (2006.01); **H01B 1/02** (2006.01); **H01L 21/28** (2006.01); **H01L 21/288** (2006.01); **H01L 21/316** (2006.01); **H01L 21/3205** (2006.01); **H05K 1/16** (2006.01); **H05K 3/10** (2006.01); **H01L 21/314** (2006.01); **H05K 1/03** (2006.01); **H05K 1/09** (2006.01); **H05K 3/12** (2006.01); **H05K 3/40** (2006.01)

CPC (source: EP KR US)

**B05D 5/12** (2013.01 - KR); **B22F 9/30** (2013.01 - EP); **C09D 11/30** (2013.01 - EP); **C23C 18/06** (2013.01 - EP US); **C23C 18/08** (2013.01 - EP US); **H01B 1/02** (2013.01 - KR); **H01B 1/026** (2013.01 - EP); **H05K 1/162** (2013.01 - EP); **H05K 3/105** (2013.01 - EP); **H01L 21/288** (2013.01 - EP); **H05K 1/0346** (2013.01 - EP); **H05K 1/097** (2013.01 - EP); **H05K 3/107** (2013.01 - EP); **H05K 3/125** (2013.01 - EP); **H05K 3/1258** (2013.01 - EP); **H05K 3/4061** (2013.01 - EP); **H05K 3/4069** (2013.01 - EP); **H05K 2201/09036** (2013.01 - EP); **H05K 2203/013** (2013.01 - EP); **H05K 2203/1142** (2013.01 - EP); **H05K 2203/121** (2013.01 - EP)

Citation (search report)

- [A] US 5980998 A 19991109 - SHARMA SUNITY [US], et al
- [A] WO 0154203 A2 20010726 - MIDWEST RESEARCH INST [US], et al
- [A] US 4913938 A 19900403 - KAWAKAMI TAKAMASA [JP], et al
- [A] EP 0508399 A2 19921014 - MITSUBISHI GAS CHEMICAL CO [JP]
- See references of WO 03032084A2

Citation (examination)

- GB 566718 A 19450110 - JOHNSON MATTHEY CO LTD, et al
- WO 0170392 A1 20010927 - SUPERIOR MICROPOWDERS LLC [US]

Cited by

US9828694B2; WO2011130137A2; US8877103B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

**WO 03032084 A2 20030417; WO 03032084 A3 20030821**; AU 2002337822 A1 20030422; CA 2461338 A1 20030417; CA 2461338 C 20111220; EP 1448725 A2 20040825; EP 1448725 A4 20080723; JP 2005537386 A 20051208; KR 100893564 B1 20090417; KR 20050033513 A 20050412

DOCDB simple family (application)

**US 0231884 W 20021004**; AU 2002337822 A 20021004; CA 2461338 A 20021004; EP 02773719 A 20021004; JP 2003534993 A 20021004; KR 20047004984 A 20040402