Title (en)
METHOD OF METAL PLATING OF POLYMER-CONTAINING SUBSTRATES

Title (de)
VERFAHREN ZUR METALLBESCHICHTUNG VON POLYMERHALTIGEN SUBSTRATEN

Title (fr)
PROCÉDÉ DE PLACAGE MÉTALLIQUE DE SUBSTRATS CONTENANT UN POLYMÈRE

Publication
EP 3784822 A1 20210303 (EN)

Application
EP 19716434 A 20190412

Priority
• EP 18168933 A 20180424
• EP 2019059459 W 20190412

Abstract (en)
[origin: WO2019206682A1] Method of forming a metallic plating (9) on a substrate (1), comprising the steps of: - providing a substrate (1) comprising a hydrocarbon-based polymer containing C-C and either or both of C-H and N-H bonds; - covalently bonding an azide-containing primer compound (3) to said substrate (1) by C-H and/or N-H insertion, said primer compound (3) comprising molecules each having at plurality of C-H and/or C-N insertion sites; - in the absence of in-situ polymerisation, covalently bonding a pre-synthesised chelating polymer (5) to said primer compound (3) by C-H and/or N-H insertion, said chelating polymer (5) being capable of forming ligand bonds with metal atoms or ions; - dispersing a plating catalyst (7) in said pre-synthesised polymer (5); - forming said metallic plating (9) on said pre-synthesised polymer (5) by means of electroless plating or electroplating.

IPC 8 full level
C25D 5/56 (2006.01); **C23C 18/20** (2006.01); **C23C 18/30** (2006.01); **C23C 18/32** (2006.01); **C23C 18/38** (2006.01); **C23C 18/42** (2006.01); **C23C 18/48** (2006.01)

CPC (source: EP US)
C23C 18/1641 (2013.01 - US); **C23C 18/2086** (2013.01 - EP US); **C23C 18/30** (2013.01 - EP US); **C23C 18/32** (2013.01 - EP); **C23C 18/38** (2013.01 - EP US); **C23C 18/42** (2013.01 - EP); **C23C 18/48** (2013.01 - EP); **C25D 5/56** (2013.01 - EP US)

Citation (search report)
See references of WO 2019206682A1

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)
WO 2019206682 A1 20191031; EP 3784822 A1 20210303; US 2021238748 A1 20210805

DOCDB simple family (application)
EP 2019059459 W 20190412; EP 19716434 A 20190412; US 201917049812 A 20190412