

Title (en)

SCREEN-PRINTABLE BORON DOPING PASTE WITH SIMULTANEOUS INHIBITION OF PHOSPHORUS DIFFUSION IN CO-DIFFUSION PROCESSES

Title (de)

SIEBDRUCKBARE BOR-DOTIERPASTE MIT GLEICHZEITIGER HEMMUNG DER PHOSPHORDIFFUSION BEI CO-DIFFUSIONSPROZESSEN

Title (fr)

PÂTE DOPÉE AU BORE UTILISABLE EN SÉRIGRAPHIE, INHIBANT SIMULTANÉMENT LA DIFFUSION DE PHOSPHORE LORS DE PROCESSUS DE CO-DIFFUSION

Publication

EP 3284111 A1 20180221 (DE)

Application

EP 16713735 A 20160324

Priority

- EP 15001073 A 20150415
- EP 2016000518 W 20160324

Abstract (en)

[origin: WO2016165812A1] The present invention relates to a novel printable boron doping paste in the form of a hybrid gel on the basis of inorganic oxide precursors, preferably precursors of silicon dioxide, aluminum oxide and boron oxide, in the presence of organic polymer particles, the pastes according to the invention being usable in a simplified process for the production of solar cells, and the hybrid gel according to the invention functioning as a doping medium as well as a diffusion barrier.

IPC 8 full level

H01L 31/18 (2006.01); **C04B 35/10** (2006.01); **C30B 31/04** (2006.01); **H01L 21/22** (2006.01)

CPC (source: CN EP KR US)

C09D 11/03 (2013.01 - US); **C09D 11/32** (2013.01 - US); **C09D 11/52** (2013.01 - US); **C30B 29/06** (2013.01 - EP US); **C30B 31/04** (2013.01 - EP KR US); **H01L 21/2225** (2013.01 - CN EP US); **H01L 21/223** (2013.01 - EP US); **H01L 21/2254** (2013.01 - EP US); **H01L 31/02167** (2013.01 - KR); **H01L 31/18** (2013.01 - KR); **H01L 31/1804** (2013.01 - CN EP US); **Y02E 10/547** (2013.01 - EP US); **Y02P 70/50** (2015.11 - EP US)

Citation (search report)

See references of WO 2016165812A1

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 2016165812 A1 20161020; CN 107484432 A 20171215; EP 3284111 A1 20180221; KR 20170139580 A 20171219; TW 201710410 A 20170316; US 2018122640 A1 20180503

DOCDB simple family (application)

EP 2016000518 W 20160324; CN 201680021806 A 20160324; EP 16713735 A 20160324; KR 20177033010 A 20160324; TW 105111688 A 20160414; US 201615566954 A 20160324