

Title (en)
THREE-PART NANO-CATALYST AND USE THEREOF FOR PHOTOCATALYSIS

Title (de)
DREITEILIGER NANOKATALYSATOR UND VERWENDUNG DAVON ZUR FOTOKATALYSE

Title (fr)
NANO-CATALYSEUR TRIPTYQUE ET SON UTILISATION POUR LA PHOTO-CATALYSE

Publication
EP 3525929 A1 20190821 (FR)

Application
EP 17794011 A 20171016

Priority
• FR 1660040 A 20161017
• FR 2017052842 W 20171016

Abstract (en)
[origin: WO2018073525A1] The present invention relates to a nanocatalyst-type nanoscale composition comprising a nanoparticle semiconductor, plasmonic metal nanoparticles and an organic photosensitiser of the carbo-mer type. The present invention also relates to a method for producing the nano-catalyst of the invention. The invention further relates to the use of the nanocatalyst of the invention for photoelectrolysis , in particular, for the photoelectrolysis of water, as well as to a power source comprising said nanocatalyst.

IPC 8 full level
B01J 31/06 (2006.01); **B01J 21/06** (2006.01); **B01J 23/50** (2006.01); **B01J 23/52** (2006.01); **B01J 23/54** (2006.01); **B01J 23/72** (2006.01); **B01J 23/80** (2006.01); **B01J 35/00** (2006.01); **B01J 37/34** (2006.01); **C01B 3/04** (2006.01)

CPC (source: EP US)
B01J 19/123 (2013.01 - US); **B01J 19/127** (2013.01 - US); **B01J 21/063** (2013.01 - EP US); **B01J 23/06** (2013.01 - US); **B01J 23/50** (2013.01 - EP US); **B01J 23/52** (2013.01 - EP US); **B01J 23/54** (2013.01 - EP US); **B01J 23/72** (2013.01 - EP US); **B01J 23/80** (2013.01 - EP US); **B01J 31/069** (2013.01 - EP US); **B01J 31/2295** (2013.01 - US); **B01J 31/26** (2013.01 - US); **B01J 35/23** (2024.01 - EP US); **B01J 35/39** (2024.01 - EP US); **B01J 37/04** (2013.01 - US); **B01J 37/345** (2013.01 - EP US); **C01B 3/042** (2013.01 - EP US); **C01B 13/0207** (2013.01 - EP US); **B01J 21/02** (2013.01 - EP US); **B01J 23/06** (2013.01 - EP); **B01J 2219/0877** (2013.01 - US); **B01J 2219/0892** (2013.01 - US); **B01J 2219/1203** (2013.01 - US); **Y02E 60/36** (2013.01 - EP US)

Citation (search report)
See references of WO 2018073525A1

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)
FR 3057471 A1 20180420; **FR 3057471 B1 20181207**; EP 3525929 A1 20190821; US 11446649 B2 20220920; US 2019255517 A1 20190822; WO 2018073525 A1 20180426

DOCDB simple family (application)
FR 1660040 A 20161017; EP 17794011 A 20171016; FR 2017052842 W 20171016; US 201716342589 A 20171016