

Title (en)

DEVICE FOR ELECTROCHEMICAL DETECTION BY AMPEROMETRY OF AT LEAST ONE ELECTROACTIVE SPECIES IN A LIQUID MEDIUM

Title (de)

VORRICHTUNG ZUR ELEKTROCHEMISCHEN DETEKTION DURCH AMPEROMETRIE VON MINDESTENS EINER ELEKTROAKTIVEN SPEZIES IN EINEM FLÜSSIGEN MEDIUM

Title (fr)

DISPOSITIF DE DÉTECTION ÉLECTROCHIMIQUE PAR AMPÉROMÉTRIE D'AU MOINS UNE ESPÈCE ÉLECTROACTIVE EN MILIEU LIQUIDE

Publication

EP 3371581 A1 20180912 (FR)

Application

EP 16758181 A 20160831

Priority

- FR 1558093 A 20150901
- EP 2016070474 W 20160831

Abstract (en)

[origin: WO2017037094A1] The invention relates to a device for electrochemical detection by amperometry of at least one electroactive species in a liquid medium. It comprises: a system for electrochemical measurement by amperometry (12); at least two work electrodes (3); at least one reference electrode (4); and at least one counter electrode (5); the work electrodes, the reference electrode and the counter electrode being connected to the electrochemical measurement system in order to allow electrochemical detection by amperometry of said species. The device is characterised in that each work electrode includes an electrically conductive mounting (14) made of doped diamond, having a surface portion covered by a metal catalyst that is different for each work electrode, said metal catalyst being in the form of separate contact pads (13) of nanometric size and being selected from gold, silver, rhodium, osmium, platinum, iridium, palladium, ruthenium and the alloys thereof.

IPC 8 full level

G01N 27/27 (2006.01); **G01N 27/30** (2006.01); **G01N 27/403** (2006.01); **G01N 33/18** (2006.01)

CPC (source: EP)

G01N 27/27 (2013.01); **G01N 27/49** (2013.01); **G01N 27/308** (2013.01); **G01N 33/493** (2013.01)

Citation (search report)

See references of WO 2017037094A1

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 3040490 A1 20170303; **FR 3040490 B1 20170929**; EP 3371581 A1 20180912; WO 2017037094 A1 20170309

DOCDB simple family (application)

FR 1558093 A 20150901; EP 16758181 A 20160831; EP 2016070474 W 20160831