

Title (en)

IMPULSE-RESOLVING PHOTO-ELECTRON SPECTROMETER AND METHOD FOR IMPULSE-RESOLVING PHOTO-ELECTRON SPECTROSCOPY

Title (de)

IMPULSAUFLÖSENDES PHOTOLEKTRONENSPEKTROMETER UND VERFAHREN ZUR IMPULSAUFLÖSENEN PHOTOLEKTRONENSPEKTROSKOPIE

Title (fr)

SPECTROMÈTRE PHOTOÉLECTRONIQUE À RÉSOLUTION D'IMPULSION ET PROCÉDÉ DE SPECTROSCOPIE PHOTOÉLECTRONIQUE À RÉSOLUTION D'IMPULSION

Publication

**EP 3724913 A1 20201021 (DE)**

Application

**EP 18827013 A 20181214**

Priority

- DE 102017130072 A 20171215
- EP 2018084995 W 20181214

Abstract (en)

[origin: WO2019115784A1] The invention relates to the field of physics and relates to an impulse-resolving photo-electron spectrometer, by means of which the physical properties can be determined. The aim of the invention is to provide an impulse-resolving photo-electron spectrometer enabling the device components to have a simple structure with a significantly reduced overall volume. The aim of the invention is achieved by means of an impulse-resolving photo-electron spectrometer comprising components arranged one behind the other in the direction of the optical axis at least in a vacuum and which are each at least one electron emission sample and a focusing system, wherein the focusing system consists of at least one electron lens and at least one detector, wherein the electron lens consists of three cylindrical elements, wherein the first cylindrical element has a potential = 0 and the two subsequently arranged cylindrical elements have a potential of ≠ 0, and wherein the detector is one or more spatially resolved detectors which are arranged in the focal plane of the electron lens.

IPC 8 full level

**H01J 49/48** (2006.01); **H01J 49/00** (2006.01); **H01J 49/06** (2006.01)

CPC (source: EP US)

**H01J 49/0004** (2013.01 - EP US); **H01J 49/06** (2013.01 - EP US); **H01J 49/46** (2013.01 - US); **H01J 49/48** (2013.01 - EP)

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)

**DE 102017130072 A1 20190619; DE 102017130072 B4 20210520;** CN 111727489 A 20200929; CN 111727489 B 20231117;  
EP 3724913 A1 20201021; JP 2021507459 A 20210222; JP 7038828 B2 20220318; US 11133166 B2 20210928; US 2021090868 A1 20210325;  
WO 2019115784 A1 20190620

DOCDB simple family (application)

**DE 102017130072 A 20171215;** CN 201880089568 A 20181214; EP 18827013 A 20181214; EP 2018084995 W 20181214;  
JP 2020532775 A 20181214; US 201816771705 A 20181214