

Title (en)
APPARATUSES, SYSTEMS, AND METHODS FOR PATHOGEN DETECTION BASED ON RAMAN SPECTROSCOPY

Title (de)
VORRICHTUNGEN, SYSTEME UND VERFAHREN ZUR PATHOGENDETEKTION AUF DER BASIS VON RAMANSPEKTROSKOPIE

Title (fr)
APPAREILS, SYSTÈMES ET PROCÉDÉS POUR DÉTECTER DES AGENTS PATHOGÈNES SUR LA BASE D'UNE SPECTROSCOPIE RAMAN

Publication
EP 4127679 A1 20230208 (EN)

Application
EP 21721717 A 20210402

Priority

- US 202063004795 P 20200403
- US 202063004957 P 20200403
- US 2021025637 W 20210402

Abstract (en)
[origin: WO2021203041A1] Apparatuses, systems, and methods for Raman spectroscopy are described. In certain implementations, a Raman spectroscopic system for determining antimicrobial resistance of a pathogen in a sample is provided. The Raman spectroscopic system may include a cuvette configured to receive the sample, an excitation light source configured to radiate a light beam into the cuvette through a bottom end of the cuvette and onto a portion of the sample contained in the cuvette, and at least one optical element configured to direct a Raman signal from the portion of the sample passing through the bottom end of the cuvette to a Raman spectrometer. The Raman spectroscopic system is configured to detect resistance or susceptibility of the pathogen to at least one antimicrobial agent based on the Raman signal.

IPC 8 full level
G01N 21/65 (2006.01)

CPC (source: EP)
C12Q 1/18 (2013.01); **G01J 3/0208** (2013.01); **G01J 3/021** (2013.01); **G01J 3/0218** (2013.01); **G01J 3/18** (2013.01); **G01J 3/1838** (2013.01); **G01J 3/44** (2013.01); **G01N 21/65** (2013.01); **G01N 33/56983** (2013.01); **G01J 2003/1861** (2013.01); **G01N 2021/651** (2013.01); **G01N 2333/11** (2013.01); **G01N 2333/165** (2013.01)

Citation (search report)
See references of WO 2021203041A1

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
WO 2021203041 A1 20211007; EP 4127679 A1 20230208

DOCDB simple family (application)
US 2021025637 W 20210402; EP 21721717 A 20210402