

Title (en)

METHOD FOR ANALYZING BIOLOGICAL SPECIMENS BY SPECTRAL IMAGING

Title (de)

VERFAHREN ZUR ANALYSE BIOLOGISCHER PROBEN DURCH SPEKTRALBILDGEBUNG

Title (fr)

PROCÉDÉ POUR L'ANALYSE D'ÉCHANTILLONS BIOLOGIQUES PAR IMAGERIE SPECTRALE

Publication

**EP 2585811 A4 20171220 (EN)**

Application

**EP 11799012 A 20110624**

Priority

- US 35860610 P 20100625
- US 2011041884 W 20110624

Abstract (en)

[origin: WO2011163624A1] A method for analyzing biological specimens by spectral imaging to provide a medical diagnosis includes obtaining spectral and visual images of biological specimens and registering the images to detect cell abnormalities, pre-cancerous cells, and cancerous cells. This method eliminates the bias and unreliability of diagnoses that is inherent in standard histopathological and other spectral methods. In addition, a method for correcting confounding spectral contributions that are frequently observed in microscopically acquired infrared spectra of cells and tissue includes performing a phase correction on the spectral data. This phase correction method may be used to correct various types of absorption spectra that are contaminated by reflective components.

IPC 8 full level

**A61B 5/00** (2006.01); **G01N 21/35** (2014.01); **G01N 21/3581** (2014.01); **G01N 21/552** (2014.01); **G01N 21/64** (2006.01); **G01N 21/65** (2006.01); **G06K 9/00** (2006.01); **G06T 7/33** (2017.01)

CPC (source: EP KR)

**A61B 5/0071** (2013.01 - EP); **A61B 5/0075** (2013.01 - EP); **A61B 5/415** (2013.01 - EP); **A61B 5/418** (2013.01 - EP); **G01N 21/35** (2013.01 - KR); **G01N 21/552** (2013.01 - EP); **G01N 21/6456** (2013.01 - EP); **G01N 21/65** (2013.01 - EP KR); **G01N 33/483** (2013.01 - KR); **G06T 7/33** (2016.12 - EP); **G06V 20/69** (2022.01 - EP); **A61B 5/7257** (2013.01 - EP); **G01N 21/35** (2013.01 - EP); **G01N 21/3581** (2013.01 - EP); **G01N 2021/3595** (2013.01 - EP); **G01N 2021/6417** (2013.01 - EP); **G01N 2021/653** (2013.01 - EP); **G01N 2201/1293** (2013.01 - EP); **G01N 2201/1296** (2013.01 - EP); **G06T 2207/10024** (2013.01 - EP); **G06T 2207/10048** (2013.01 - EP); **G06T 2207/30024** (2013.01 - EP)

Citation (search report)

- [XY] US 2003026762 A1 20030206 - MALMROS MARK K [US], et al
- [XY] US 6002476 A 19991214 - TREADO PATRICK [US]
- [XY] US 2009002702 A1 20090101 - MAIER JOHN [US], et al
- [XY] US 2009112101 A1 20090430 - FURNESS III THOMAS A [US], et al
- [XY] US 2006281068 A1 20061214 - MAIER JOHN S [US], et al
- [XY] WO 2009146425 A1 20091203 - UNIV NORTHEASTERN [US], et al
- [XY] US 2004186382 A1 20040923 - MODELL MARK [US], et al
- [XY] US 5713364 A 19980203 - DEBARYSHE GREGORY [US], et al
- [XY] WO 9303672 A1 19930304 - REDD DOUGLAS C B [US]
- [XY] US 6215554 B1 20010410 - ZHANG YI [CN]
- See references of WO 2011163624A1

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

DOCDB simple family (publication)

**WO 2011163624 A1 20111229**; AU 2011270731 A1 20130207; AU 2011270731 A8 20130307; BR 112012033200 A2 20161206; CA 2803933 A1 20111229; CA 2803933 C 20171003; EP 2585811 A1 20130501; EP 2585811 A4 20171220; IL 223853 A 20171231; JP 2013535014 A 20130909; JP 2016028250 A 20160225; JP 6019017 B2 20161102; JP 6366556 B2 20180801; KR 20130056886 A 20130530; MX 2012015240 A 20131202; MX 337696 B 20160315

DOCDB simple family (application)

**US 2011041884 W 20110624**; AU 2011270731 A 20110624; BR 112012033200 A 20110624; CA 2803933 A 20110624; EP 11799012 A 20110624; IL 22385312 A 20121224; JP 2013516834 A 20110624; JP 2015191282 A 20150929; KR 20137002021 A 20110624; MX 2012015240 A 20110624