Title (en)

QUANTIFYING AND ANALYZING ORGANOIDS FROM DIGITAL IMAGES

Title (de)

QUANTIFIZIERUNG UND ANALYSE VON ORGANOIDEN AUS DIGITALEN BILDERN

Title (fr)

QUANTIFICATION ET ANALYSE D'ORGANOÏDES À PARTIR D'IMAGES NUMÉRIQUES

Publication

EP 4371083 A1 20240522 (EN)

Application

EP 22751302 A 20220712

Priority

- EP 21185029 A 20210712
- EP 2022069465 W 20220712

Abstract (en)

[origin: EP4120119A1] A method (100) for quantifying and/or analyzing organoids from a digital image (2) of a biological sample (1), comprising the steps of:• mapping (110), by a first neural network (3a) and/or a first section (4a) of one neural network (4), the image (2) to bounding boxes (5) that enclose instances of organoids;• mapping (120), by a second neural network (3b) and/or a second section (4b) of the one neural network (4), for each bounding box (5), the content of this bounding box (5), and/or a work product of the first neural network (3a) and/or first section (4a) that relates to this bounding box (5), to one or more masks (6) that identify the image pixels belonging to each instance (7) of an organoid; and• evaluating (130), from the one or more masks (6), a number (7a) of instances (7) of organoids in the image, and/or at least one physical and/or biological property (7b) of at least one instance (7) of an organoid.

IPC 8 full level

G06V 10/25 (2022.01); **G06V 20/69** (2022.01)

CPC (source: EP)

G06F 18/24133 (2023.01); **G06V 10/25** (2022.01); **G06V 20/69** (2022.01)

Citation (search report)

See references of WO 2023285461A1

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)

EP 4120119 A1 20230118; EP 4371083 A1 20240522; WO 2023285461 A1 20230119

DOCDB simple family (application)

EP 21185029 A 20210712; EP 2022069465 W 20220712; EP 22751302 A 20220712