

Title (en)

METHOD FOR CHARACTERISING SPERM CELLS

Title (de)

VERFAHREN ZUR CHARAKTERISIERUNG VON SPERMAZELLEN

Title (fr)

PROCÉDÉ DE CARACTÉRISATION DE SPERMATOZOÏDES

Publication

EP 4268120 A1 20231101 (FR)

Application

EP 21839575 A 20211220

Priority

- FR 2013979 A 20201222
- EP 2021086909 W 20211220

Abstract (en)

[origin: WO2022136325A1] Method for characterising a travelling particle in a sample (10), the method comprising: a) acquiring at least one image ($I_{0,n}$) of the sample during an acquisition period, using an image sensor (20), and forming a series of images, the series of images comprising at least one image; b) using each image in the series of images resulting from a) as the input image ($I_{in,n}$) of a convolutional neural network for detection (CNNd), the convolutional neural network for detection being configured to detect the particles and to produce, from each image, an output image ($I_{out,n}$) in which each particle detected is assigned an intensity distribution which is centred on the particle and extends around the particle; c) for each particle detected, from each output image ($I_{out,n}$) resulting from b), estimating a position ((x_i, y_i)) of each particle detected in each image in the series of images; d) characterising each particle detected from the estimate of the position resulting from c), based on each image in the series of images.

IPC 8 full level

G01N 15/10 (2006.01); **G01N 15/14** (2006.01); **G06V 10/44** (2022.01); **G06V 20/69** (2022.01)

CPC (source: EP US)

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G01N 2015/1006 (2013.01 - EP US); **G01N 2015/1027** (2024.01 - EP); **G01N 2015/144** (2013.01 - EP); **G01N 2015/1497** (2013.01 - EP)

Citation (search report)

See references of WO 2022136325A1

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)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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