

Title (en)

AUTOMATED, MICROSCOPE-ASSISTED EXAMINATION PROCESS OF TISSUE OR BODILY FLUID SAMPLES

Title (de)

VERFAHREN ZUR AUTOMATISIERTEN MIKROSKOPUNTERSTÜTZTEN UNTERSUCHUNG VON GEWEBEPROBEN ODER KÖRPERFLÜSSIGKEITSPROBEN

Title (fr)

PROCEDE D'ANALYSE AUTOMATISEE ASSISTEE PAR ORDINATEUR D'ECHANTILLONS TISSULAIRES OU D'ECHANTILLONS DE LIQUIDES ORGANIQUES

Publication

EP 0896661 A1 19990217 (DE)

Application

EP 97920751 A 19970425

Priority

- DE 19616997 A 19960427
- EP 9702130 W 19970425

Abstract (en)

[origin: DE19616997A1] An automated, microscope-assisted examination process of tissue or bodily fluid samples is carried out by means of neuronal networks. In a first examination process, the sample is at first classified according to its type and then a digitised image is divided into contiguous segments which are examined by one or several neuronal networks. The sample is classified as pathological when it contains cell types which do not correspond to the type of the sample or when structural cell or tissue changes are present. In a second examination process, the digitised image is again segmented and the segments are checked for the presence of a cell object. The cell object is then examined to ascertain whether it is a single cell or a cell complex. A third evaluation stage ascertains whether the detected cell object lies at one of the image boundaries. If that is the case, an image is again recorded in which the detected cell objects are entirely contained. Finally, the segments in which cell objects have been detected are recorded with higher magnification for evaluation purposes.

IPC 1-7

G01N 15/14; **G06K 9/00**; **G06F 19/00**

IPC 8 full level

G06T 7/00 (2006.01); **G01N 15/14** (2006.01); **G06K 9/00** (2006.01)

CPC (source: EP US)

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