

Title (en)

METHOD AND APPARATUS FOR DETERMINING A PROLIFERATION INDEX OF A CELL SAMPLE

Publication

**EP 0460071 A4 19930203 (EN)**

Application

**EP 90904138 A 19900223**

Priority

US 31528989 A 19890224

Abstract (en)

[origin: WO9010277A1] An image processing method and apparatus (10) determines a proliferation index of a cell sample by staining the cells with a chromogen for a proliferation substance and a counterstain for the cell nuclei. The chromogen is activated by an antibody-enzyme conjugate which binds to the proliferation substance to produce a stained cell sample. The stained cell sample is examined with an optical microscope (12), forming a portion of the apparatus, which produces a magnified cell sample image. The apparatus optically filters (18) the cell sample image and produces a pair of optically enhanced proliferation substance and cell nuclei images. The enhanced images are electronically analyzed to determine the amounts of cell nuclei and proliferation substance appearing in the images, respectively. The amounts are then compared to yield a proliferation index for the portion of the cell sample appearing in the cell sample image.

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**G06K 9/34**

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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- [X] CELL TISSUE KINETICS, vol. 19, 1986, pages 275-287; M. PINCU et al.: "A modified harlequin stain for cell kinetics"
- [A] CYTOMETRY, vol. 9, no. 3, May 1988, pages 201-205, Alan R. Liss, Inc.; C SOUCHIER et al.: "Image analysis applied to proliferating cells in malignant lymphoma"
- See references of WO 9010277A1

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