

Title (en)

APPARATUS AND METHOD FOR DIGITAL MAGNETIC BEADS ANALYSIS

Title (de)

VORRICHTUNG UND VERFAHREN ZUR DIGITALEN MAGNETKÜGELCHEN-ANALYSE

Title (fr)

APPAREIL ET PROCÉDÉ POUR L'ANALYSE DE PERLES MAGNÉTIQUES NUMÉRIQUES

Publication

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Application

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Abstract (en)

[origin: WO2009020506A1] A Light Transmitted Assay Beads or digital magnetic microbead having a digitally coded structure that is partially transmissive and opaque to light. When hundreds or thousands of LITAB are settled down to the bottom of a microwell in a microplate, the barcode can be decoded by image processed accurately and reliable. Microplate is a standard bioassay format; each plate can have 96, 384, or 1536 patient samples. Therefore, a large number of targets in a sample can be analyzed in one single microwell. The image decoding algorithms comprise of four main processes (1) enhancement of image (2) segmentation of beads (3) extraction of barcode slits, and (4) decoding of barcodes. The bead image is taken from the bottom of an optically clear microplate, and barcode pattern can be decoded by image software. Therefore, the whole bead bioassay experiment can be performed in the microplate without taking the beads out.

IPC 8 full level

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Citation (search report)

See references of WO 2009020506A1

Cited by

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