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(54) **Title:** METHODS FOR ASSAYING BIOLOGICAL CELLS IN A MICROFLUIDIC DEVICE

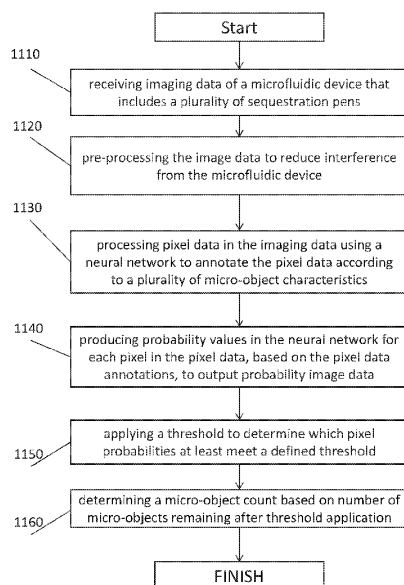


FIG. 10

(57) **Abstract:** Methods are provided for the assay of secreted biomolecules using automated detection and characterization of micro-objects in a microfluidic device. The biomolecules can be secreted by cells, particularly immunological cells, such as T cells. The biomolecules being assayed can include cytokines, growth factors, and the like. Methods are also provided for assaying the cytotoxicity of a cell with respect to another, target cell. Also provided are kits and non-transitory computer-readable media in which programs are stored for causing a system comprising a computer to perform automated methods for detecting secreted biomolecules and/or cytotoxicity in a microfluidic device.

SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN,
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