ABSTRACT

TITLE : "IMPEDANCE BASED APPARATUSES AND METHODS FOR ANALYZING CELLS AND PARTICLES"

A device for monitoring the migration or invasion of a biological particle such as a cell is disclosed. The device includes an upper chamber adapted to receive and retain a cell sample, a lower chamber having at least two electrodes, and a biocompatible porous membrane having a porosity sufficient to allow cells to migrate therethrough. The membrane is disposed in the device so as to separate the upper and lower chambers from one another. Migration of cells through the porous membrane permits contact between the migrating cells and one or more electrodes of the lower chamber. The contact provides a detectable change in impedance between or among the electrodes, as shown in Figure 1.