

Title (en)
IMPEDANCE MEASUREMENT IN A FLUIDIC MICROSYSTEM

Title (de)
IMPEDANZMESSUNG IN EINEM FLUIDISCHEN MIKROSYSTEM

Title (fr)
MESURE D'IMPEDANCE DANS UN MICROSYSTEME FLUIDIQUE

Publication
EP 1525449 A1 20050427 (DE)

Application
EP 03766323 A 20030728

Priority
• DE 10234487 A 20020729
• EP 0308312 W 20030728

Abstract (en)
[origin: WO2004013614A1] The invention relates to a method and to a measuring device used for impedance measurement in a fluidic microsystem, comprising a compartment (10) through which a fluid consisting of at least one suspended particle (16) flows and wherein at least one impedance detector (40) is arranged, enabling at least one impedance value to be detected in order to detect the at least one particle, said impedance value being characteristic of the impedance of the compartment and being modified by the presence of the at least one particle in a predetermined manner. The at least one particle is focussed at a predetermined distance in relation to the impedance detector. Said focussing includes movement of the at least one particle in relation to the fluid flowing in the compartment by dielectrophoretic forces which are exerted by means of at least two focussing electrodes (30).

IPC 1-7
G01N 15/12

IPC 8 full level
G01N 15/12 (2006.01)

CPC (source: EP US)
G01N 15/131 (2024.01 - EP US); **G01N 2015/133** (2024.01 - EP US); **G01N 2015/135** (2024.01 - EP US)

Citation (search report)
See references of WO 2004013614A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2004013614 A1 20040212; AU 2003253345 A1 20040223; DE 10234487 A1 20040226; EP 1525449 A1 20050427; JP 2005534911 A 20051117; JP 4152949 B2 20080917; US 2006243594 A1 20061102

DOCDB simple family (application)
EP 0308312 W 20030728; AU 2003253345 A 20030728; DE 10234487 A 20020729; EP 03766323 A 20030728; JP 2004525341 A 20030728; US 52317503 A 20030728