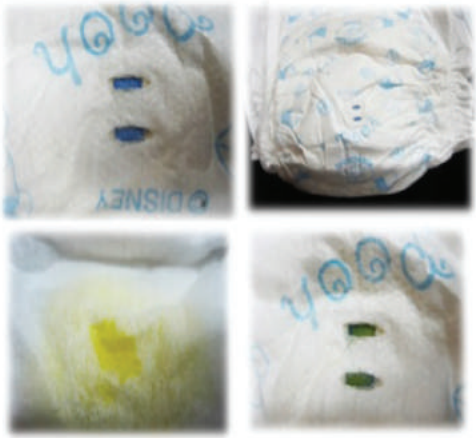
ANALYTICAL CLOTH

Cloth-Based Microfluidic Analytical Device (UCAD) Embedded in Sanitary Napkin for on-Site Urine Analysis



DESCRIPTION

A combination of diagnostic/assay kit made in cotton fabric with the daily sanitary product, e.g sanitary napkin, to carry out, early detection of diseases from secreted body fluid, e.g. urine, in a seamless and easy way for the user by colorimetric method, similar like pH test paper.

Needs

a) Using cotton fabrics and wax as low-cost basic materials with batik-inspired fabrication technique.
b) The device is embedded in wearable sanitary products.

Application

a) The use of microfluidic technology makes use of small amounts of reagent to carry out the assays, thus lowering the cost per assay.

b) Bringing the "Diagnostic Lab" near to everyone for the daily routine check.

c) The product is made from sustainable raw material and also biodegradable.

Benefits

a) Environmental friendly : Biodegradable
b) Source material: Sustainable.
c) Low cost of material and fabrication process.
d) Easy to use and to interpret.
e) In situ sampling.

Targeted Market

a) Sanitary product industry.
b) Health care industry.

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