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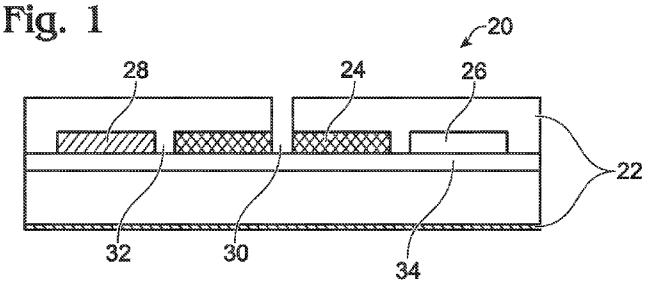
(54) Title: ELECTROCHEMICAL BIOSENSOR

Fig. 1



(57) Abstract: A simple, fast, selective and highly sensitive electrochemical method assay and disposable device for detection of viruses, bacteria, proteins, DNA, and/or organic/inorganic compounds. The sensor has a multi-layered construction, with each successive layer performing a different function. The design further allows for the packing of numerous microscopic electrode transducers onto the small footprint of a biochip device, allowing for a high-density array of sensors.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2009/030304

A. CLASSIFICATION OF SUBJECT MATTER

G01N 27/327(2006.01)i, G01N 33/48(2006.01)i, G01N 27/28(2006.01)i, G01N 33/487(2006.01)i, G01N 27/416(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC G01N 27/28, 27/327, 27/416, 33/48, 33/487

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

D/B : eKOMPASS(KIPO internal)

KEY WORD : electrode device, fluid inlet, capture agent

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	US 2007-240986 A1 (Frederic Reymond et al.) 18 OCT. 2007 see page 3, 4, 6-8, 10 ; figures 1-2, 7	1, 9, 11, 17-18 2-3, 5-8, 12-16, 20
X / Y	JP 60-250246 A (Matsushita Electric Works ltd.) 10 DEC. 1985 see page 2, 4; figures 1-2	1, 17 / 11
Y	JP 08-285815 A (Casio Comput co. ltd.) 1 NOV. 1996 see page 1, 3; figure 1	1, 2, 5, 11, 13, 17
Y	US 2005-0186333 A1 (Joel S. Douglas) 25 AUG. 2005 see page 3, 5, 7-8; figures 2, 10	1, 3, 6-8, 14-16
Y	US 6001239 A (Joel S. Douglas et al.) 14 DEC. 1999 see column 7, 10-13; figures 2, 7 ---------- END OF DOCUMENT ----------	1-3, 11-12, 17, 20

☒ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
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Information on patent family members

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