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- (71) Applicant (for all designated States except US): **CAMBRIDGE UNIVERSITY TECHNICAL SERVICES LTD.** [GB/GB]; The Old Schools, Trinity Lane, Cambridge CB2 1TS (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **LOWE, Christopher, Robin** [GB/GB]; Institute of Biotechnology, Tennis Court Road, Cambridge CB2 1QT (GB). **KABILAN, Satyamoorthy** [MY/GB]; Smart Holograms Ltd., 291 Cambridge Science Park, Cambridge CB4 0WF (GB). **LEE, Mei-Ching** [GB/GB]; Institute of Biotechnology, Tennis Court Road, Cambridge CB2 1QT (GB).
- (74) Agent: **GILL JENNINGS & EVERY**; Broadgate House, 7 Eldon Street, London EC2M 7LM (GB).
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(54) Title: METHOD OF DETECTING AN ANALYTE USING A HOLOGRAPHIC SENSOR

(57) Abstract: A method for the detection of an analyte in a fluid, which comprises contacting the fluid with a holographic element comprising a medium and a hologram disposed throughout the volume of the medium, wherein an optical characteristic of the element changes as a result of a variation of a physical property occurring throughout the volume of the medium, and wherein the variation arises as a result of interaction between the medium and the analyte; and detecting any change of the optical characteristic of the element; wherein (a) the medium comprises a group which is capable of reacting with the analyte, wherein the analyte or the group is capable of existing in a plurality of forms, and the detecting is conducted in the presence of a first catalyst which is capable of catalysing the conversion of a relatively less reactive form of the analyte or group to a relatively more reactive form; or (b) the fluid comprises a component, other than the analyte, which is capable of interacting with the medium, and the detecting is conducted in the presence of a second catalyst capable of catalysing the removal of said component.



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