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(54) Title: METHOD OF DETERMINING A CONCENTRATION OF AN ANALYTE IN A BODILY FLUID

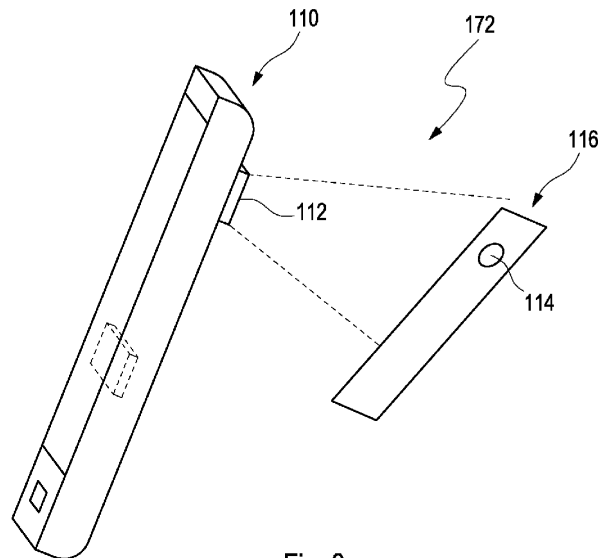


Fig. 8

(57) Abstract: A method of determining a concentration of an analyte in a bodily fluid by using a mobile device (110) having a camera (112) is proposed. The method comprises the following steps: a) prompting a user to one or more of - apply a drop of bodily fluid to at least one test field (114) of an optical test strip (116), or - confirm an application of a drop of bodily fluid to at least one test field (114) of an optical test strip (116); b) waiting for a predetermined minimum amount of waiting time; c) capturing at least one image of at least one part of the test field (114), with the test field (114) having the drop of bodily fluid applied thereto, by using the camera (112); d) determining the concentration of the analyte in the bodily fluid based on the image captured in step c), comprising: i) estimating a point in time of sample application to the test field (114), by taking into account at least one first item of information derived from the image captured in step c) by using at least one first color channel of a color space, wherein the first item of information



WO 2020/109525 A1

[Continued on next page]

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is time-dependent; and ii) estimating the concentration of the analyte in the bodily fluid, by taking into account at least one second item of information derived from the image by using at least one second color channel of the color space, wherein the second item of information is concentration-dependent.