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(54) **Title:** METHOD FOR THE PREPARATION OF A WORKING ELECTRODE COMPRISING LASER IRRADIATION OF THE SENSING MATERIAL AND CORRESPONDING ANALYTE SENSOR

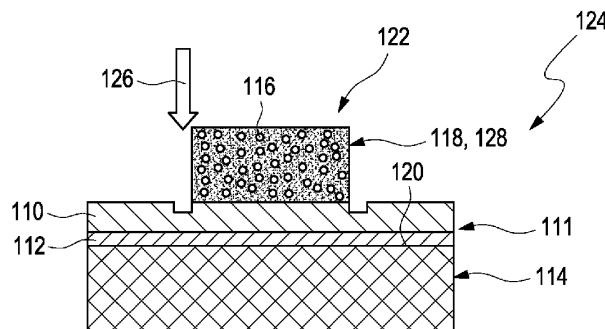


Fig. 3

(57) **Abstract:** A method for the preparation of a working electrode (122) on a sensor substrate (114) is disclosed. The method comprising: • a) providing at least one sensor substrate (114) comprising at least a first side (120), the first side (120) comprising at least one conductive trace (111); • b) applying at least one layer of at least one sensing material (118) onto the first side (120) of the sensor substrate (114), wherein the sensing material (118) covers at least a portion of the at least one conductive trace (111); and • c) irradiating the layer of the sensing material (118) with at least one laser beam, wherein at least a first portion of the layer of the sensing material (118) is at least partially removed and wherein at least a second portion of the sensing material (118) covering the at least one conductive trace (111) is preserved on the first side (120) of the sensor substrate (114) to obtain at least one working electrode (122) on the sensor substrate (114); • e) applying at least one membrane layer, the membrane layer at least partially covering the working electrode, wherein the membrane layer comprises at least one cross-linker for cross-linking at least a part of the sensing material, wherein the method further comprises: • f) at least one diffusion step, wherein in the diffusion step the cross-linker comprised in the membrane layer at least partially diffuses into the sensing material.

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