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(54) Title: METHOD FOR DETERMINING A MEMBRANE PROPERTY OF AN ANALYTE SENSOR

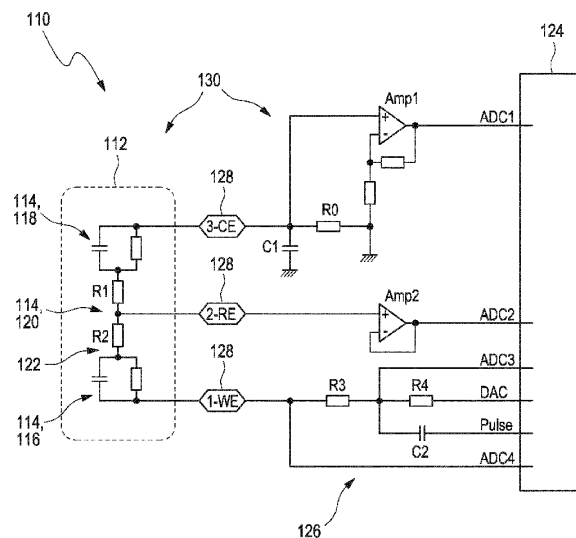


Fig. 1

(57) Abstract: A method for determining at least one membrane property of an analyte sensor (112) is pro-posed. The analyte sensor (112) comprises at least two measurement electrodes (114). At least one of the measurement electrodes (114) comprises at least one membrane element (122) having at least one membrane property. The method comprising the following steps: a) (134) generating at least one fast-transient voltage signal and applying the fast-transient voltage signal to the measurement electrodes (114) at an application time t_0 ; b) (136) measuring a first response signal U_1 at a first time t_1 and a second response signal U_2 at a second time t_2 with $t_0 \neq t_1 \neq t_2$, wherein the application time t_0 precedes the first time t_1 and the second time t_2 ; c) (138) determining a response signal U_0 at the application time t_0 by evaluating the first response signal U_1 and the second response

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signal U₂; d) (140) determining the at least one membrane property by evaluating of the response signal U₀ at the application time t₀.