

Title (en)
METHOD FOR OPERATING A SENSOR APPARATUS

Title (de)
VERFAHREN ZUM BETRIEB EINER SENSORVORRICHTUNG

Title (fr)
PROCÉDÉ POUR FAIRE FONCTIONNER UN DISPOSITIF DE DÉTECTION

Publication
EP 3155411 A1 20170419 (DE)

Application
EP 15729362 A 20150529

Priority
• DE 102014211321 A 20140613
• EP 2015062007 W 20150529

Abstract (en)
[origin: WO2015189055A1] A method for operating a sensor apparatus (110) is proposed. The sensor apparatus (110) has at least one sensor element (112) for sensing at least one portion of a gas component in a gas in a measuring gas chamber (114). The sensor element (112) comprises at least one first electrode (116) and at least one second electrode (118). The second electrode (118) is arranged in at least one measuring cavity (120). The measuring cavity (120) can be supplied with gas from the measuring gas chamber (114) via at least one diffusion barrier (122). The first electrode (116) and the second electrode (118) are connected by means of at least one solid electrolyte (124) and form a pump cell (126). The sensor apparatus (110) additionally has at least one controller (128). The controller (128) is connected to the first electrode (116) by means of at least one first signal line (130). The controller (128) is connected to the second electrode (118) by means of at least one second signal line (132). The first signal line (130) is connected to an electrical earth (136) by means of at least one first interference suppression capacitance c1 (134). The second signal line (132) is connected to the electrical earth (136) by means of at least one second interference suppression capacitance c2 (138). At least one measuring resistor (140) is arranged between the electrical earth (136) and at least one from the first signal line (130) and the second signal line (132). The controller (128) is set up to operate the pump cell (126) with a function current. The method involves application of a plurality of different switching states to the pump cell (126) in order to determine the first interference suppression capacitance c1 (134) and the second interference suppression capacitance c2 (138).

IPC 8 full level
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See references of WO 2015189055A1

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