



(11) **EP 3 395 240 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:  
**31.10.2018 Bulletin 2018/44**

(21) Application number: **18178373.9**

(22) Date of filing: **27.07.2011**

(51) Int Cl.:  
**A61B 5/00** <sup>(2006.01)</sup> **A61B 5/145** <sup>(2006.01)</sup>  
**A61B 5/1468** <sup>(2006.01)</sup> **A61B 5/1486** <sup>(2006.01)</sup>  
**C12Q 1/00** <sup>(2006.01)</sup>

(84) Designated Contracting States:  
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB  
GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO  
PL PT RO RS SE SI SK SM TR**

(30) Priority: **28.07.2010 US 36855310 P**

(62) Document number(s) of the earlier application(s) in  
accordance with Art. 76 EPC:  
**15175054.4 / 3 009 065  
11813123.4 / 2 598 021**

(71) Applicant: **Abbott Diabetes Care, Inc.**  
**Alameda, CA 94502 (US)**

(72) Inventors:  
• **Hoss, Udo**  
**Castro Valley, CA California 94522 (US)**

• **Feldman, Benjamin**  
**Oakland, CA California 94618 (US)**  
• **Ouyang, Tianmei**  
**Fremont, CA California 94539 (US)**

(74) Representative: **Booth, Catherine Louise**  
**Mathys & Squire LLP**  
**The Shard**  
**32 London Bridge Street**  
**London SE1 9SG (GB)**

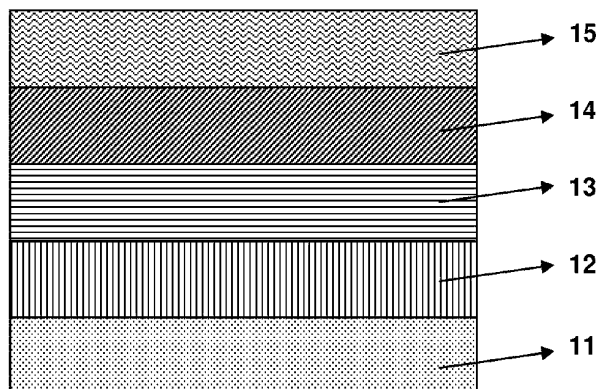
Remarks:  
This application was filed on 18-06-2018 as a  
divisional application to the application mentioned  
under INID code 62.

(54) **METHODS OF MONITORING A LEVEL OF AN ANALYTE IN A SUBJECT, USING ANALYTE  
SENSORS HAVING TEMPERATURE INDEPENDENT MEMBRANES**

(57) Embodiments of the present disclosure relate to  
analyte determining methods and devices (e.g., electro-  
chemical analyte monitoring systems) that have a mem-  
brane structure with an analyte permeability that is sub-  
stantially temperature independent. The devices also in-  
clude a sensing layer disposed on a working electrode

of *in vivo* analyte sensors, e.g., continuous and/or auto-  
matic *in vivo* monitoring using analyte sensors and/or  
test strips. Also provided are systems and methods of  
using the, for example electrochemical, analyte sensors  
in analyte monitoring.

10



**FIG. 1**

**EP 3 395 240 A1**