

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference P36290WO/HGR	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/GB2020/050996	International filing date ( <i>day/month/year</i> ) 22 April 2020 (22-04-2020)	(Earliest) Priority Date ( <i>day/month/year</i> ) 7 May 2019 (07-05-2019)
Applicant  SENSORHUT LTD		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 6 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of:

- the international application in the language in which it was filed  
 a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b.  This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6*bis*(a)).

c.  With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2.  **Certain claims were found unsearchable** (See Box No. II)

3.  **Unity of invention is lacking** (see Box No III)

4. With regard to the **title**,

- the text is approved as submitted by the applicant  
 the text has been established by this Authority to read as follows:

DETECTOR FOR DETECTING ANALYTES IN GAS PHASE COMPRISING POROUS DIELECTRIC OR SEMICONDUCTING SORBENT AND CORRESPONDING DETECTION METHOD

5. With regard to the **abstract**,

- the text is approved as submitted by the applicant  
 the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

6. With regard to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 5A  
 as suggested by the applicant  
 as selected by this Authority, because the applicant failed to suggest a figure  
 as selected by this Authority, because this figure better characterizes the invention
- b.  none of the figures is to be published with the abstract

## Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

A detector for, and a method of, detecting analytes in gases in described. The detector comprises a sorbent for sorbing therein and/or thereon and/or desorbing therefrom, an analyte included in a gas exposed thereto, at a zeroth temperature, pressure  $(T_0, P_0)$ , a controller arranged to change the zeroth temperature, pressure  $(T_0, P_0)$  to a first temperature, pressure  $(T_1, P_1)$  according to a first equation, to desorb and/or sorb at least some of the analyte; and a sensor arranged to sense at least some of the analyte and to output a response corresponding to the sensed analyte. The response comprises and/or is a characteristic response of the analyte. The first response is modified based on a first baseline response at the zeroth temperature, pressure  $(T_0, P_0)$ .

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International application No  
PCT/GB2020/050996

A. CLASSIFICATION OF SUBJECT MATTER  
INV. G01N27/64 G01N33/00 G01N1/22  
ADD.  
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2019/025271 A1 (YAN MIAOLEI [US] ET AL) 24 January 2019 (2019-01-24) figure 1 paragraph [0014] - paragraph [0018] -----	17
X	US 2007/077176 A1 (LAMBERT DAVID K [US] ET AL) 5 April 2007 (2007-04-05) figure 1 paragraph [0033] - paragraph [0038] -----	17
X	US 2009/317916 A1 (EWING KENNETH J [US] ET AL) 24 December 2009 (2009-12-24) figures 5, 6A paragraph [0034] - paragraph [0035] paragraph [0042] paragraph [0048] - paragraph [0049] paragraph [0067] - paragraph [0068] -----	17
A	-/--	1-16

Further documents are listed in the continuation of Box C.

See patent family annex.

\* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search  16 July 2020	Date of mailing of the international search report  27/07/2020
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer  Colasanti, Katharina
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International application No  
PCT/GB2020/050996

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2015/151537 A1 (SHARP KK [JP]) 8 October 2015 (2015-10-08) figure 1 page 3, paragraph 5 - page 8, paragraph 5 -----	17
X	US 2008/184886 A1 (TUFTS JENIA A [US] ET AL) 7 August 2008 (2008-08-07) figures 1-12 paragraph [0004] - paragraph [0149] -----	1-17
A	US 2016/146765 A1 (OVADIA YUVAL [IL] ET AL) 26 May 2016 (2016-05-26) paragraph [0067] -----	1-16
X	US 2015/168330 A1 (GRYSKA STEFAN H [US] ET AL) 18 June 2015 (2015-06-18) figure 1 paragraph [0045] paragraph [0048] paragraph [0065] -----	17 1-16
A	US 2016/096793 A1 (FILIPOVIC DUSANKA [CA] ET AL) 7 April 2016 (2016-04-07) paragraph [0084] -----	4,13
X	WO 2019/031260 A1 (SEMITEC CORP [JP]) 14 February 2019 (2019-02-14) figures 1, 2 paragraph [0047] paragraph [0074] -----	17 2,11
A	US 2016/018373 A1 (PAGÉ THIERRY [CA] ET AL) 21 January 2016 (2016-01-21) paragraph [0090] -----	7,14

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No

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