

**Information on Search Strategy - Pilot phase (see OJ 2015, A86)**

The type of information contained in this sheet may change during the pilot for improving the usefulness of this new service.

Application Number

PCT/GB2020/050996

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

APPLICANT: SENSORHUT LTD

IPC CLASSIFICATION: G01N27/64, G01N33/00, G01N1/22

EXAMINER: Colasanti, Katharina

CONSULTED DATABASES: WPI

CLASSIFICATION SYMBOLS DEFINING EXTENT OF THE SEARCH:

IPC:

CPC: G01N27/64/LOW, G01N33/0047/LOW, G01N33/0057/LOW, G01N33/0016/LOW, G01N33/0004/LOW, G01N27/12/LOW, G01N27/14/LOW, G01N27/LOW, G01N1/2214/LOW

FI/F-TERMS:

KEYWORDS OR OTHER ELEMENTS FEATURING THE INVENTION:

Gas detector for detecting e.g. VOCs comprising a porous dielectric or semiconducting sorbent material (e.g. zeolite, activated carbon or metal organic frameworks) and a cooling unit. Adsorbant is cooled to facilitate adsorption of target analyte. sensor records baseline response.

Temperature/pressure of adsorbant is changed to desorb analyte. First response recorded and corrected by baseline to determine gas (concentration). Second temperature change possible to desorb further analyte. Temperature and/or pressure of adsorbant can be changed. Temperature profile can be linear or non-linear. Comparison of measurement results with reference measurements. Initial fast characterization to identify target gas and to set measurement parameters based on respective target gas. Corresponding measurement method claimed. photoionization suggested as sensor. Use of adsorbant in analyte sensor claimed.