

Title (en)

METHOD FOR MEASURING THE CONCENTRATION OF GASEOUS SPECIES IN A BIOGAS

Title (de)

VERFAHREN ZUR MESSUNG DER KONZENTRATION VON GASSEN SPEZIES IN EINEM BIOGAS

Title (fr)

PROCEDE POUR LA MESURE DE LA CONCENTRATION EN ESPECES GAZEUSES DANS UN BIOGAZ

Publication

**EP 3921625 A1 20211215 (FR)**

Application

**EP 20701268 A 20200114**

Priority

- FR 1901225 A 20190207
- EP 2020050834 W 20200114

Abstract (en)

[origin: WO2020160880A1] The invention relates to a method for in situ measurement of the concentration of gaseous chemical species contained in a biogas (10) circulating in a line (20), for example of a biogas treatment plant or of a system utilizing a biogas. The method of the invention is implemented by means of an optical measurement system (40) comprising a light source (41) and a spectrometer (44). The source (41) emits UV radiation (42) through the biogas (10) within a measurement area (21) situated in the line. The spectrometer (44) detects at least a portion of said UV radiation having passed through the biogas (10) and generates a digital signal of the luminous intensity (50) depending on the wavelength of the portion of the UV radiation having passed through the biogas. A determination is then made of the concentration of the chemical species from the digital signal of the luminous intensity (50).

IPC 8 full level

**G01N 21/33** (2006.01); **G01N 21/59** (2006.01); **G01N 21/84** (2006.01)

CPC (source: EP KR US)

**G01N 21/33** (2013.01 - EP KR US); **G01N 21/85** (2013.01 - EP KR US); **G01N 21/8507** (2013.01 - EP KR); **G01N 33/0042** (2013.01 - US);  
**G01N 33/0044** (2013.01 - US); **G01N 2021/8514** (2013.01 - EP KR); **G01N 2021/8578** (2013.01 - EP KR US); **G01N 2201/061** (2013.01 - US);  
**G01N 2201/0636** (2013.01 - US); **Y02E 50/30** (2013.01 - EP)

Citation (search report)

See references of WO 2020160880A1

Designated contracting state (EPC)

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2020160880 A1 20200813**; CN 113424046 A 20210921; EP 3921625 A1 20211215; FR 3092665 A1 20200814; JP 2022520557 A 20220331;  
KR 20210121234 A 20211007; US 2022128459 A1 20220428

DOCDB simple family (application)

**EP 2020050834 W 20200114**; CN 202080013295 A 20200114; EP 20701268 A 20200114; FR 1901225 A 20190207;  
JP 2021546729 A 20200114; KR 20217028418 A 20200114; US 202017428238 A 20200114