

Title (en)
DEVICE FOR ANALYZING MEASUREMENT GASES, PARTICULARLY BREATHING AIR

Title (de)
VORRICHTUNG ZUR ANALYSE VON MESSGASEN, INSBESONDERE ATEMLUFT

Title (fr)
DISPOSITIF D'ANALYSE DE GAZ, EN PARTICULIER D'AIR EXPIRÉ

Publication
EP 3224596 A2 20171004 (DE)

Application
EP 15801432 A 20151127

Priority
• DE 202014105760 U 20141128
• EP 2015077919 W 20151127

Abstract (en)
[origin: WO2016083576A2] The invention relates to a method for analyzing a measurement gas, preferably breathing air, in particular for the detection, by isotope separation techniques, of gases in the air, and to a device (10) which is suitable therefor and comprises: a measuring cell (100) having an inlet (300) and an outlet (160) for the measurement gas to be analyzed; a laser-detector arrangement (220) having at least one laser light source (450) for producing laser light and at least one detector (440, 460) for detecting the laser light, said laser-detector arrangement (220) being designed such that the measuring cell (100) is located in a beam path (L4) of the laser light between the laser light source (450) and the detector (440, 460); and an evaluation unit, designed to evaluate a detector signal of the detector (440, 460) for the purpose of analysis of the measurement gas; characterized by a mechanism (320, 330, 360) for the flow-dependent pre-heating of the measurement gas, which mechanism is mounted upstream of a main temperature control unit (340) of the device in the flow direction of the measurement gas.

IPC 8 full level
G01N 21/03 (2006.01); **G01N 21/15** (2006.01); **G01N 21/39** (2006.01); **G01N 21/49** (2006.01)

CPC (source: EP)
G01N 21/0332 (2013.01); **G01N 21/39** (2013.01); **G01N 33/497** (2013.01); **G01N 21/05** (2013.01); **G01N 2021/158** (2013.01)

Citation (search report)
See references of WO 2016083576A2

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)
DE 202014105760 U1 20160108; EP 3224596 A2 20171004; WO 2016083576 A2 20160602; WO 2016083576 A3 20160721

DOCDB simple family (application)
DE 202014105760 U 20141128; EP 15801432 A 20151127; EP 2015077919 W 20151127