

Title (en)

INFRARED CHEMICAL VAPOR DETECTOR AND METHOD.

Title (de)

CHEMISCHER INFRAROT DAMPFPHASENDETEKTOR UND VERFAHREN.

Title (fr)

DETECTEUR A INFRAROUGE DE VAPEURS CHIMIQUES ET PROCEDE.

Publication

**EP 0615613 A4 19940721 (EN)**

Application

**EP 93900783 A 19921203**

Priority

- US 9210401 W 19921203
- US 80198391 A 19911203

Abstract (en)

[origin: WO9311424A1] The invention relates to the remote infrared radiometric detection of chemical vapors (20). Air quality and substance control concerns present a need for more efficient ways of detecting the presence of select chemical vapors (20) in the atmosphere. A method and apparatus for such a detector includes elements for filtering (26, 34) collected infrared energy over a filter bandwidth by bandpass filtering only a fractional bandwidth of the filter bandwidth at any one time and repeatedly scanning the filter bandwidth with the passed fractional bandwidth. Also included are elements for measuring infrared energy (32) passed by the bandpass filtering thereby producing an output signal and for repeatedly nulling (40) the output signal in relation to the repeated scanning of the filter bandwidth. The invention is applicable to air monitoring including pollution control, chemical detection and the detection of any substances which provide telltale chemical vapors (20).

IPC 1-7

**G01J 5/60**

IPC 8 full level

**G01N 21/35** (2006.01); **G01J 3/12** (2006.01)

CPC (source: EP)

**G01N 21/3518** (2013.01); **G01J 2003/1234** (2013.01); **G01N 2021/3531** (2013.01); **G01N 2201/12723** (2013.01)

Citation (search report)

- [XY] US 3409772 A 19681105 - WORMSER ERIC M
- [Y] US 4682291 A 19870721 - REUVENI ASHER [IL]
- [A] WO 9115739 A1 19911017 - COMMW SCIENT IND RES ORG [AU]
- See references of WO 9311424A1

Designated contracting state (EPC)

AT CH DE DK ES FR GB IE IT LI SE

DOCDB simple family (publication)

**WO 9311424 A1 19930610**; CA 2125038 A1 19930610; EP 0615613 A1 19940921; EP 0615613 A4 19940721

DOCDB simple family (application)

**US 9210401 W 19921203**; CA 2125038 A 19921203; EP 93900783 A 19921203