

Title (en)  
SULPHUR DIOXIDE DETECTION METHOD

Title (de)  
VERFAHREN ZUM NACHWEIS VON SCHWEFELDIOXID

Title (fr)  
PROCEDE DE DETECTION DE DIOXYDE DE SOUFRE

Publication  
**EP 1706726 A4 20080312 (EN)**

Application  
**EP 05700067 A 20050114**

Priority  
• AU 2005000035 W 20050114  
• AU 2004900213 A 20040116

Abstract (en)  
[origin: WO2005068977A1] There is disclosed a method of detecting sulphur dioxide clouds. The method comprises measuring infrared radiation at a viewing elevation at or above the horizon and at a key wavelength at which there is a sulphur dioxide feature and in the vicinity of which there is a region where the amount of infrared radiation from water vapour in the atmosphere varies in accordance with a predetermined relationship, measuring radiation at two or more subsidiary wavelengths in said region, determining the amount of radiation from water vapour at the key wavelength from the measured radiation at the subsidiary wavelengths using the predetermined relationship, and determining whether a sulphur dioxide cloud is present from the measured infrared radiation at the key wavelength and the determined amount of radiation from water vapour.

IPC 8 full level  
**G01N 21/35** (2006.01); **G01J 3/42** (2006.01); **G01J 3/45** (2006.01); **G08G 5/04** (2006.01)

CPC (source: EP)  
**G01N 21/3504** (2013.01)

Citation (search report)  
• [X] WO 02066966 A1 20020829 - CALIFORNIA ANALYTICAL INSTR IN [US], et al  
• [A] US 3805074 A 19740416 - MC CORMACK K  
• [A] JP S6011122 A 19850121 - SHIMADZU CORP  
• [A] HORROCKS L A ET AL: "Open-path Fourier transform infrared spectroscopy of SO<sub>2</sub>: An empirical errorbudget analysis, with implications for volcano monitoring", JOURNAL OF GEOGRAPHICAL RESEARCH, RICHMOND, VA, US, vol. 106, no. D21, 16 November 2001 (2001-11-16), pages 27647 - 27659, XP009094991, ISSN: 0148-0227  
• [A] HUTCHINSON R: "New developments in infrared on line gas analysis in difficult emission monitoring applications", JOURNAL A, SOFT VISION, BRUSSELS, BE, vol. 37, no. 4, December 1996 (1996-12-01), pages 21 - 28, XP009095092, ISSN: 0771-1107  
• [A] HO S -Y: "Long-path infrared spectra of CO, NO<sub>2</sub>, NO, SO<sub>2</sub> and N<sub>2</sub>O observed in a simulated atmosphere in trace amounts", INFRARED PHYSICS UK, vol. 13, no. 2, May 1973 (1973-05-01), pages 83 - 89, XP002467030, ISSN: 0020-0891  
• See references of WO 2005068977A1

Designated contracting state (EPC)  
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