(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
9 August 2001 (09.08.2001)

PCT

(10) International Publication Number
WO 01/57499 A1

(51) International Patent Classification[7]: G01N 21/35

(21) International Application Number: PCT/GB01/00365

(22) International Filing Date: 30 January 2001 (30.01.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0002535.3 4 February 2000 (04.02.2000) GB

(71) Applicant *(for all designated States except US)*: **LATTICE INTELLECTUAL PROPERTY LTD.** [GB/GB]; 130 Jermyn Street, London SW1Y 4UR (GB).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **HODGKINSON, Elizabeth, Jane** [GB/GB]; 1 Mansfield Avenue, Quorn, Loughborough, Leicestershire LE12 8BD (GB).

(74) Agent: **BURRIDGE, John, R., W.**; Lattice Intellectual Property Ltd., 23 Buckingham Gate, London SW1E 6LB (GB).

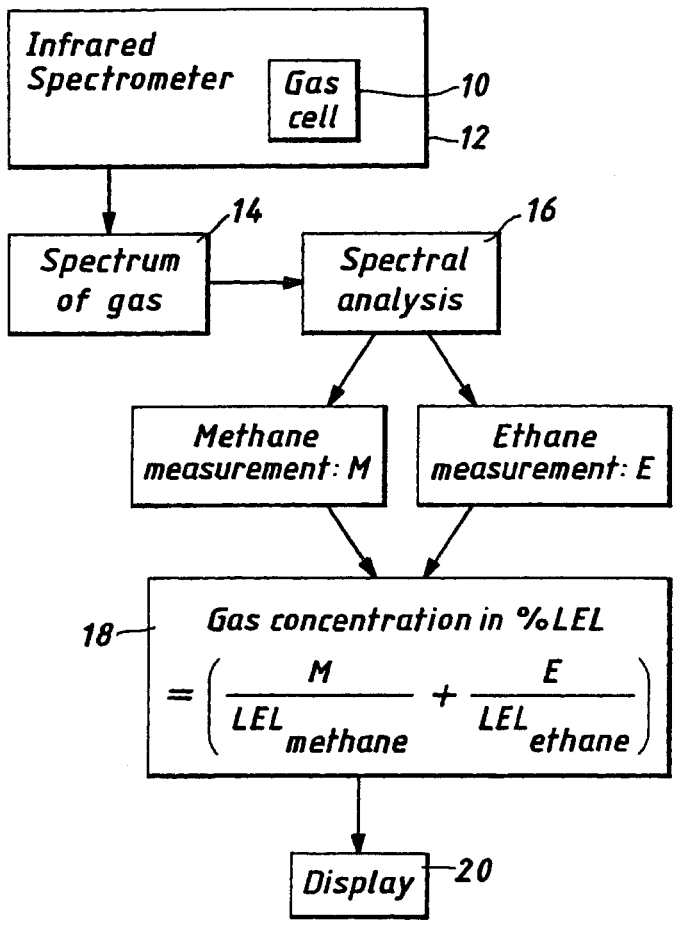
(81) Designated States *(national)*: AU, BR, CA, CN, IN, JP, KR, NO, RU, SG, US.

(84) Designated States *(regional)*: European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR).

Published:
— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

[Continued on next page]

(54) Title: A METHOD FOR DETERMINING THE SAFETY OF GAS MIXTURES



(57) Abstract: A method for determining the safety of a gas mixture containing first and second flammable components together with non-flammable components, comprises using an optical detector to make at least two measurements influenced by the concentration in the gas mixture of the first and second flammable components. The percentage lower explosion limit of the gas mixture is calculated by a method based on the combination of the measurements. The method leads to acceptably accurate results, despite the presence of other flammable component(s) in the gas mixture.

WO 01/57499 A1

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.