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(71) Applicant : **SAMSUNG ELECTRONICS CO. LTD.**
416 Maetan-dong, Kwonson-gu
Suwon-city, Kyonggi-do (KR)

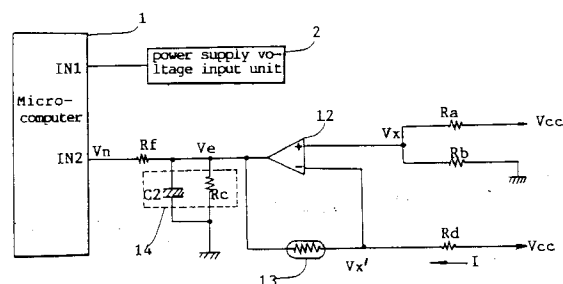
(72) Inventor : **Hyun, Jong-Hak**
593-28, 3-do 1-dong
Jeju-shi, Jeju-do (KR)
 Inventor : **Lee, Hyo-geun**
127-101, Chunchun Apartment, Changan-gu
Suwon-shi, Kyonggi-do (KR)

(74) Representative : **Stanley, David William et al**
APPLEYARD LEES 15 Clare Road
Halifax West Yorkshire HX1 2HY (GB)

(54) **Gas detection for microwave ovens.**

(57) In a gas detecting circuit of a microwave oven, current flowing through a gas sensor (13) is constantly maintained even if the power supply voltage (V_{cc}) is varied. A voltage across the gas sensor (13) varies with the resistance of the gas sensor (13), depending upon an amount of gas produced in cooking food, and is supplied to a microcomputer (1) to correctly set a cooking time of food. The microcomputer (1) controls the entire cooking operation of food, and the circuit further comprises a power supply voltage input unit (2) for supplying an input voltage to operate the microcomputer (1), a gas sensor (13) for sensing an amount of gas produced in the microwave oven in cooking, an amplifier (12) for amplifying the differential value between a first voltage (V_x) divided from the power supply voltage and a second voltage ($V_{x'}$) having the same initial potential as that of the first voltage (V_x), and allowing the output potential V_e of the amplifier (12) to be varied on the basis of the variation of the resistance of the gas sensor (13), and a filtering means (14) for filtering ripple components of the output voltage (V_e).

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European Patent
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EUROPEAN SEARCH REPORT

Application Number

EP 91 30 8572

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	US-A-4 319 110 (TAKESHI TANABE ET AL.) * column 2, line 59 - column 4, line 11; figure 4 *	1, 2, 4, 5, 7, 8	H05B6/68
A	EP-A-0 050 941 (KIDDE CONSUMER DURABLES CORP.) * page 5, line 32 - page 11, line 4; figures 1A, B *	1, 4-6, 8	
A	EP-A-0 148 162 (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.) * page 5, line 9 - page 6, line 2; figures 3, 4 *	1, 2, 4, 5, 7, 8	
A	GB-A-2 171 223 (SHARP KABUSHIKI KAISHA)		
A	GB-A-2 119 127 (HITACHI HEATING APPLIANCES CO. LTD.)		
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			H05B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 01 JUNE 1992	Examiner RAUSCH R. G.
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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