(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 0 790 755 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
07.01.1998 Bulletin 1998/02

(43) Date of publication A2:
20.08.1997 Bulletin 1997/34

(21) Application number: **97300933.5**

(22) Date of filing: **13.02.1997**

(51) Int Cl.[6]: **H05B 6/76**, H05B 6/64, H05B 6/80

(84) Designated Contracting States:
DE FR GB

(30) Priority: **14.02.1996 KR 9603568**

(71) Applicant: **Samsung Electronics Co., Ltd.**
Suwon City, Kyungki-do (KR)

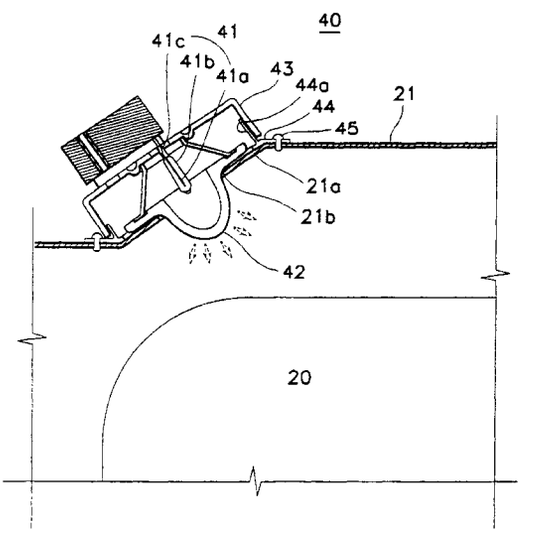
(72) Inventors:
- **Hong, Seok-Weon**
  Suwon-City, Kyungki-Do (KR)
- **Kim, Kwang-Ho**
  Seocho-Gu, Seoul (KR)

(74) Representative: **Read, Matthew Charles et al**
Venner Shipley & Co.
20 Little Britain
London EC1A 7DH (GB)

(54) Lighting device for microwave oven

(57) A microwave oven has a cooking chamber (20) for cooking a food using microwave energy, and a magnetron oscillator for producing microwave radiation to heat the food. The oven also includes a hole (21b) formed on an upper surface (21) of the cooking chamber and a lamp (41) for illuminating the cooking chamber through the hole. The lamp includes a filament (41a) and a bulb (41b), and the filament is located about 2mm above the upper surface (21). The hole, which is less than 19mm in diameter, is formed $^{2}/_{14}$th of the upper surface's depth from the front of the upper surface. The upper surface includes a beveled portion that slopes downward towards the front of the microwave oven in which the hole is formed. The lamp is located at the hole so as to face the rear of the cooking chamber and is covered by a protective glass cover (42) protruding into the cooking chamber.

FIG . 2



EP 0 790 755 A3

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 97 30 0933

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.6)
X	EP 0 409 323 A (WHIRLPOOL INT) * the whole document *	1-3,7,8, 11,12, 14,19	H05B6/76 H05B6/64 H05B6/80
A	EP 0 120 536 A (PHILIPS SVENSKA AB ;PHILIPS NV (NL)) * abstract *	1	
A	DE 90 00 951 U (BRÖKELMANN, JAEGER & BUSSE GMBH)		
A	DE 37 03 937 A (BOSCH SIEMENS HAUSGERAETE)		
A	EP 0 320 874 A (BOSCH SIEMENS HAUSGERAETE)		
A	DE 36 41 420 A (LICENTIA GMBH)		
A	DE 40 03 736 A (MIELE & CIE)		
A	DE 36 06 421 C (BOSCH-SIEMENS HAUSGERÄTE GMBH)		TECHNICAL FIELDS SEARCHED (Int.Cl.6) H05B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	18 November 1997	De Smet, F

CATEGORY OF CITED DOCUMENTS

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

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

EPO FORM 1503 03.82 (P04C01)