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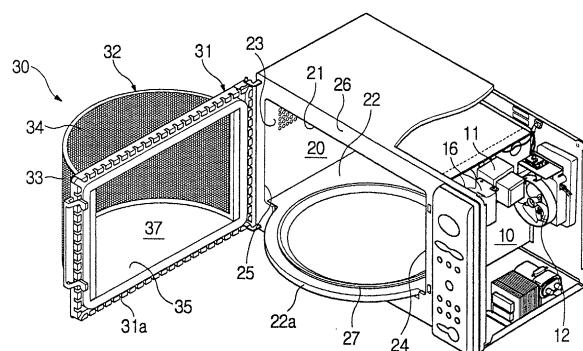
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### (54) Microwave oven and more particularly to a door for a microwave oven

(57) A microwave oven includes a cooking chamber (20) having an opening and a door (30) which selectively opens and closes the opening of the cooking chamber. The door includes a frame (31) which is constructed to form a circumferential edge of the door and be brought into contact with a rim of the opening, and a front see-through member (32) which projects forward from both sides of the frame. The door is formed by joining a first piece including the frame (31) with a second piece including a front plate (32).

FIG. 2





DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	PATENT ABSTRACTS OF JAPAN vol. 013, no. 469 (M-883), 24 October 1989 (1989-10-24) & JP 01 184332 A (TOSHIBA CORP), 24 July 1989 (1989-07-24) * abstract * * figures 1-4 *	1,3,8, 12,15	H05B6/80
Y	-----	13	
X	US 3 943 318 A (HIRAI ET AL) 9 March 1976 (1976-03-09) * abstract * * figures 1-6 * * column 2, line 66 - column 3, line 20 * * column 3, line 44 - line 65 * * column 4, line 4 - line 10 * * figures 1,3-6 *	1,2,15	
Y	----- * column 3, line 21 - line 25 * * column 3, line 53 - line 60 * * column 4, line 10 - line 12 * * column 5, line 14 - line 17 * * figures 3,6 *	3-6,11	
A	-----	10	TECHNICAL FIELDS SEARCHED (IPC)
Y	US 5 365 918 A (SMITH ET AL) 22 November 1994 (1994-11-22) * figures 1,2,10,11 * * column 8, line 59 - line 68 * * figures 1,2,10 *	3-6,13	H05B
A	----- * column 3, line 52 - line 61 * * column 4, line 4 - line 37 * * column 4, line 67 - column 5, line 5 *	1,8,11, 12	
Y	-----	11	
A	US 5 206 478 A (LEE ET AL) 27 April 1993 (1993-04-27) * abstract * * figures 6,7 * * column 1, line 67 - column 2, line 1 * * column 3, line 6 - line 19 *	1,7-10	
5 The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		27 January 2006	Galaxy, G
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			

ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

27-01-2006

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
JP 01184332	A	24-07-1989	NONE		
US 3943318	A	09-03-1976	AU 7865275 A GB 1494522 A JP 50116133 U JP 53002349 Y2		02-09-1976 07-12-1977 22-09-1975 21-01-1978
US 5365918	A	22-11-1994	AU 669956 B2 AU 5405594 A CA 2125986 A1 DE 69327648 D1 DE 69327648 T2 DK 634897 T3 EP 0634897 A1 ES 2140470 T3 GR 3033024 T3 JP 3393384 B2 JP 7502175 T WO 9408459 A1		27-06-1996 09-05-1994 28-04-1994 24-02-2000 29-06-2000 13-06-2000 25-01-1995 01-03-2000 31-08-2000 07-04-2003 09-03-1995 28-04-1994
US 5206478	A	27-04-1993	BR 9104688 A CA 2054047 A1 GB 2249245 A JP 2701185 B2 JP 4351880 A TR 27445 A		16-06-1992 25-04-1992 29-04-1992 21-01-1998 07-12-1992 24-05-1995