ACLAP7M71

APPLICATION FOR CERTIFICATION

MODEL NO.	BRAND NAME	FCC ID
MCES	Thermador	ACLAP7M71
MCEB	Thermador	
MCEW	Thermador	
HMB7050	BOSCH	
HMB7060	BOSCH	
HMB7020	BOSCH	

LIST OF EXHIBITS

EXHIBIT 1: TECHNICAL REPORT

EXHIBIT 2: PHOTOGRAPHS OF EQUIPTMENT

EXHIBIT 3: SAMPLE AND LOCATION OF FCC ID LABEL

EXHIBIT 4: SCHEMATIC DIAGRAM

EXHIBIT 5: REPORT OF MEASUREMENTS

(Radiated and Line Conductance Emissions)

EXHIBIT 6: LIST OF MEASURING EQUIPMENT AND CALIBRATION

(Radiated and Line Conductance Emissions)

EXHIBIT 7: OPERATING INSTRUCTIONS & INSTALLATION INSTRUCTIONS

TECHNICAL REPORT

1. DESCRIPTION OF MEASUREMENT FACILITY:

The description of the measurement facility is on file with the FCC laboratory. Please refer to the commission's reference 31040/SIT 1300F2 and 950523A 1300F2

2. OPERATING INSTRUCTIONS & INSTALLATION INSTRUCTIONS:

See EXHIBIT 7.

3. APPLICANT:

PANASONIC HOME APPLIANCE COMPANY of AMERICA, MICROWAVE TECHNICAL LAB., E-Zip E2J-16 1707 N. Randall Road Elgin, Illinois 60123-7847

4. MANUFACTURER:

Matsushita Electric Industrial Co., Ltd. Microwave Oven Business Unit 800 Tsutsui-cho, Yamatokoriyama City, Nara, Japan Zip Code: 639-1188

5. MEASUREMENT SITE: (Radiated and Line Conducted Emissions)

Japan Quality Assurance Organization (JQA) Kita-Kansai Testing Center 7-7, Ishimaru 1-Chome, Minoh-shi, Osaka, Japan

Zip Code: 562-0027

Japan Quality Assurance Organization (JQA) Kameoka EMC Branch

9-1, Ozaki, Inukanno, Nishibetsuin-Cho, Kameoka-Shi, Kyoto, Japan

Zip Code: 621-0126

6. EQUIPTMENT IDENTIFICATION:

Model	MCES	MCEB	MCEW	HMB7050	HMB7060	HMB7020
No.						
Brand	Thermador	Thermador	Thermador	BOSCH	BOSCH	BOSCH
Name						
FCC	ACLAP7M71	ACLAP7M71	ACLAP7M71	ACLAP7M71	ACLAP7M71	ACLAP7M71
ID.						

7. EQUIPMENT SPECIFICATIONS:

Electrical Power Requirement: 120Vac, 60Hz, 12.8A

Nominal Operating Frequency: 2450 MHz

Maximum RF Energy Generated: 1000 W (IEC 705)

Magnetron Type: 2M236-M1

Feed Type and Location: Through the wave guide on the right side of the oven.

Stirrer: Turn Table (Ceramic Tray)

Cabinet Dimensions: (W) 606 x (H) 376 x (D) 491(mm)

Oven Cavity Dimensions: (W) 412 x (H) 242 x (D) 426 (mm)

Door Viewing Area Dimensions: (W) 320 x (H) 182 (mm)

Door Seal Type: Slit Choke seal and capacitive seal method

8. DESCRIPTION OF DIFFERENCES:

Model No.	Input Power	Output Power	Magnetron	Brand
		(IEC 705)		Name
MCES	120Vac, 12.8A	1000W	2M236-M1	Thermador
MCEB	120Vac, 12.8A	1000W	2M236-M1	Thermador
MCEW	120Vac, 12.8A	1000W	2M236-M1	Thermador
HMB7050	120Vac, 12.8A	1000W	2M236-M1	BOSCH
HMB7060	120Vac, 12.8A	1000W	2M236-M1	BOSCH
HMB7020	120Vac, 12.8A	1000W	2M236-M1	BOSCH

PHOTOGRAPHS OF EQUIPMENT

EXHIBIT 2-A: FRONT VIEW OF MODEL MCEW

EXHIBIT 2-B: FRONT VIEW OF MODEL MCEW WITH THE DOOR OPENED

EXHIBIT 2-C1: LEFT SIDE VIEW OF MODEL MCEW

EXHIBIT 2-C2: LEFT SIDE VIEW OF MODEL MCEW WITH ENCLOSURE REMOVED

EXHIBIT 2-D1: RIGHT SIDE VIEW OF MODEL MCEW

EXHIBIT 2-D2: RIGHT SIDE VIEW OF MODEL MCEW WITH ENCLOSURE REMOVED

EXHIBIT 2-E1: TOP VIEW OF MODEL MCEW

EXHIBIT 2-E2: TOP VIEW OF MODEL MCEW WITH ENCLOSURE REMOVED

EXHIBIT 2-F: BOTTOM VIEW OF MODEL MCEW

EXHIBIT 2-G: REAR VIEW OF MODEL MCEW

EXHIBIT 2-H: VIEW OF POWER INVERTER

EXHIBIT 2-I: VIEW OF POWER LINE FILTER

EXHIBIT 2-J: VIEW OF MAGNETRON TYPE 2M236-M1

EXHIBIT 2-K: VIEW OF CONTROL

REPORT OF MEASUREMENTS (Radiated Emissions)

1. MODEL NUMBER: <u>HMB7050</u>

SERIAL NUMBER: FD 8609 PP09

MAGNETRON TYPE NO.: 2M236-M1

2. MEASUREMENT DATE: From: 5/19/2006

To end of testing: 5/25/2006

3. LIST OF MEASURING EQUIPMENT AND CALIBRATION (Radiated and Line Conductance Emissions)

REFER TO EXHIBIT 6

4. INVESTIGATED FREQUENCY RANGE: 0.15MHz to 9th Harmonic

5. DATA SUMMARY:

Safety Check: 0.05 MW/cm2

Radiated Field Strength:	Frequency (ι	ıV/m @ 300m)	Limit
2nd. Harmonic:	4953.9 MHz	22.5uv/m	30.1
3rd. Harmonic:	7457.2 MHz	<u>14.0uv/m</u>	"
4th. Harmonic:	9926.9 MHz	28.2uv/m	"
6th. Harmonic:	14894.3 MHz	26.6uv/m	"
8th. Harmonic:	19860.9 MHz	1.90uv/m	"
9th. Harmonic:	22306.8 MHz	2.10uv/m	"
Spurious:	2350.0 MHz	<u>19.8uv/m</u>	"
Spurious:	2380.5 MHz	<u>19.3uv/m</u>	"
Emission Sideband:	2387.8 MHz	21.3uv/m	"
Emission Sideband:	2505.0 MHz	18.1uv/m	"

Maximum Frequency Variation: 2478.7 to 2499.0 MHz

(96V ~ 150V/ 1000 ml water load)

Total Power Input to Oven: 1720 watts
Power Developed in Dummy Load: 828 watts

Supply Voltage: <u>120 Volts, 60Hz, 14.6A</u>

REPORT OF MEASUREMENTS (Line Conductance)

1. MODEL NO.: <u>HMB7050</u> SAMPLE NO. <u>FD 8609 PP09</u>

MAGNETRON TYPE NO.: 2M236-M1

2. MEASUREMENT DATE: From: 5/19/2006

To end of testing: 5/25/2006

3. LIST OF MEASURING EQUIPMENT AND CALIBRATION (Radiated and Line Conductance Emissions) REFER TO ATTACHED EXHIBIT 6

4. INVESTIGATED FREQUENCY RANGE: 0.17MHz to 30MHz

5. DATA SUMMARY: Selected Peak Readings

Power Line High Side

Frequency MHz	QP Level dBuV	QP Limit dBuV	QP Delta dB	Ave. Level dBuV	Ave. Limit dBuV	Ave. Delta dB
0.17	49.2	65.1	15.9		55.1	
0.22	49.2	62.7	13.5		52.7	
0.45	45.1	56.8	11.7	35.0	46.8	11.8
0.77	41.1	56.0	14.9		46.0	
2.28	36.2	56.0	19.8		46.0	
12.40	33.6	60.0	26.4		50.0	
17.00	47.7	60.0	12.3		50.0	
17.70	48.7	60.0	11.3	36.0	50.0	14.0
18.00	36.7	60.0	23.3		50.0	
27.00	21.9	60.0	38.1		50.0	

Power Line Neutral Side

Frequency MHz	QP Level dBuV	QP Limit dBuV	QP Delta dB	Ave. Level dBuV	Ave. Limit dBuV	Ave. Delta dB
0.17	51.2	65.1	13.9		55.1	
0.22	52.2	62.7	10.5	40.0	52.7	12.7
0.45	46.1	56.8	10.7	34.0	46.8	12.8
0.77	42.1	56.0	13.9		46.0	
2.28	38.2	56.0	17.8		46.0	
12.40	29.6	60.0	30.4		50.0	
17.00	44.7	60.0	15.3		50.0	
17.70	48.7	60.0	11.3	37.0	50.0	13.0
18.00	44.7	60.0	15.3		50.0	
27.00	23.9	60.0	36.1		50.0	