PANASONIC HOME APPLIANCE COMPANY of AMERICA, MICROWAVE TECHNICAL LABORATORY

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January 26, 2007

Federal Communications Commission Equipment Authorization Branch 7435 Oakland Mills Road Columbia, MD 21046

# SUBJECT: FILING FOR RE-CERTIFICATION - CLASS II PERMISSIVE CHANGES, GRANTEE CODE ACL.

We are sending application for models previously granted certification on 03/22/2006, under FCC Identifier ACLAP6Z01. The new submission is filed under the Class II, permissive changes provision. The main purpose for re-filing is the application for the use of a new Inverter power supply . For a quick reference to all of the exhibits submitted, please reference the Application Index and Summary on the following pages.

If there are any questions pertaining to this application, please contact me.

Sincerely,

George Vagquez

George Vazquez Engineer, Codes & Safety

Cc: S. Yamashita

### FCC ID: ACLAP6Z01 APPLICATION INDEX AND SUMMARY

# **APPLICATION FOR RE-CERTIFICATION**

MODEL NO.	FCC ID
NN-SD277S	ACLAP6Z01
NN-SD277B	ACLAP6Z01
NN-SD277W	ACLAP6Z01
NN-SD297S	ACLAP6Z01

# LIST OF EXHIBITS

EXHIBIT A: TECHNICAL REPORT

- EXHIBIT B: PHOTOGRAPHS OF EQUIPMENT
- EXHIBIT C: SAMPLE AND LOCATION OF FCC ID LABEL
- EXHIBIT D: SCHEMATIC DIAGRAM
- EXHIBIT E: TEST REPORT
- EXHIBIT F: TEST SETUP PHOTOS
- EXHIBIT G: USERS MANUAL

#### FCC ID: ACLAP6Z01 EXHIBIT: A

## **TECHNICAL REPORT**

- DESCRIPTION OF MEASUREMENT FACILITY: The description of the measurement facility is already on file with the FCC laboratory. Please refer to the commission's registration number 142171.
- 2. USER MANUAL: Reference: EXHIBIT G
- 3. APPLICANT:

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

- MANUFACTURER: PANASONIC HOME APPLIANCES MICROWAVE OVEN SHANGHAI COMPANY LTD. (PHAMOS) 898 Long Dong Road Pu Dong, Shanghai 201203 CHINA
- 6. MEASUREMENT SITE: FCC Registration Number 142171 SIMT EMC LAB 716 Yi Shan Road Shanghai City, 200233 China
- 7. EQUIPMENT SPECIFICATIONS: Electrical Power Requirement: <u>120V, 60Hz, 12.9A</u> Nominal Operating Frequency: <u>2450 MHz</u> Maximum RF Energy Generated: <u>1200 W (IEC 705)</u> Magnetron Type: <u>2M261-M32</u> Feed Type and Location: <u>Through the wave guide on the top of the oven.</u> Stirrer: <u>Turntable and Mode Stirrer Type</u> Cabinet Dimensions: (<u>W) 759 x (H) 418 x (D) 381 (mm)</u> Oven Cavity Dimensions: (<u>W) 591 x (H) 242 x (D) 367 (mm)</u> Door Viewing Area Dimensions: (<u>W) 462 x (H) 166 (mm)</u> Door Seal Type: Slit Choke seal and capacitive seal method

The models in this report are similar to previously submitted models with the grant issued 03/22/2006. The only difference will be that the models will utilize a new Inverter Power Supply.

#### **EXHIBIT: B**

### PHOTOGRAPHS OF EQUIPMENT

External: Reference EXHIBIT B Internal: Reference EXHIBIT B

### FCC ID: ACLAP6Z01 EXHIBIT: E

# **TEST REPORT SUMMARY: Radiated Emissions**

1. MODEL NO.: <u>NN-SD297</u>

SERIAL NO.: PP07001

MAGNETRON TYPE NO.: 2M261-M32

- 2. MEASUREMENT DATE: 12/18/06
  - 3. TEST REPORT: Reference EXHIBIT E
    - 4. TEST SETUP PHOTOS: Reference EXHIBIT F
      - 5. INVESTIGATED FREQUENCY RANGE: 100 MHz to 5th Harmonic

6. TEST DATA SUMMARY:

Safety Check : <0.0663 MW/cm2

Radiated Field St	rength	(dBµV/m @ 300m)	Limit (DbµV/m)	Margin (dB)
2nd. Harmonic	4918.2 MHz	4.05	35.66	31.61
3rd. Harmonic	7345.6 MHz	9.51		26.15
4th. Harmonic	9822.4 MHz	7.83		27.83
5th. Harmonic	12280.8 MHz	7.38		28.28
Spurious	7901.6 MHz	11.44		24.22
Emission Sideband	2214.7 MHz	11.74		23.92
Emission Sideband	2698.9 MHz	16.46		19.21

Greater than 5th Harmonic not measurable

Maximum Frequency Variation: 2454.64 to 2498.02 MHz (96V ~ 150V/ 1500ml water load)

Maximum Frequency Variation: <u>2454.64 to 2490.38 MHz</u> (1500ml - 300ml water load)

Total Power Input to Oven: 1264.8 watts

Power Developed in Dummy Load: 1017.07 watts

Supply Voltage: 120 Volts, 60Hz, 10.54A

## FCC ID: ACLAP6Z01 EXHIBIT: E

# **TEST REPORT SUMMARY: Line Conductance**

1. MODEL NO.: <u>NN-SD297</u>

SERIAL NO.: <u>PP07001</u>

MAGNETRON TYPE NO.: 2M261-M32

- 2. MEASUREMENT DATE: 12/18/06
  - 3. TEST REPORT: Reference EXHIBIT E
    - 4. TEST SETUP PHOTOS: Reference EXHIBIT F
      - 5. INVESTIGATED FREQUENCY RANGE: 150 kHz to 30 MHz
        - 6. TEST DATA SUMMARY:

Selected Peak Readings (Reference Spectrum Analyzer plot EXHIBIT E for complete readings).

Power Line Live Side

Frequency	QP Level	QP Limit	QP Delta
MHz	dBµV	dBµV	db
20.881	46.50	60.00	13.50
21.448	44.70		15.30
22.393	45.40		14.60
22.443	43.70		16.30
23.964	43.30		16.70
25.125	44.90	" "	15.10
Frequency	AV Level	AV Limit	AV Delta
Frequency MHz	AV Level dBµV	AV Limit dBµV	AV Delta db
MHz	dBµV	dBµV	db
MHz 20.652	dBμV 35.30	dBµV 50.00	db 14.70
MHz 20.652 21.381	dBµV 35.30 35.60	dBµV 50.00 ````	db 14.70 14.40
MHz 20.652 21.381 22.141	dBµV 35.30 35.60 36.00	dBµV 50.00 """	db 14.70 14.40 14.00

Power Line Neutral Side

Frequency MHz	QP Level dBµV	QP Limit dBµV	QP Delta db
21.588	50.70	60.00	9.30
22.348	52.90		7.10
23.046	52.40		7.60
23.163	52.30	" "	7.70
23.910	54.90	" "	5.10
26.002	52.20	" "	7.80
Frequency MHz	AV Level dBµV	AV Limit dBµV	AV Delta db
		AV Limit dBµV 50.00	
MHz	dBµV	dBµV	db
MHz 21.588	dBµV 33.10	dBμV 50.00	db 16.90
MHz 21.588 22.348	dBµV 33.10 38.70	dBµV 50.00	db 16.90 11.30
MHz 21.588 22.348 23.046	dBµV 33.10 38.70 36.70	dBµV 50.00 " "	db 16.90 11.30 13.30