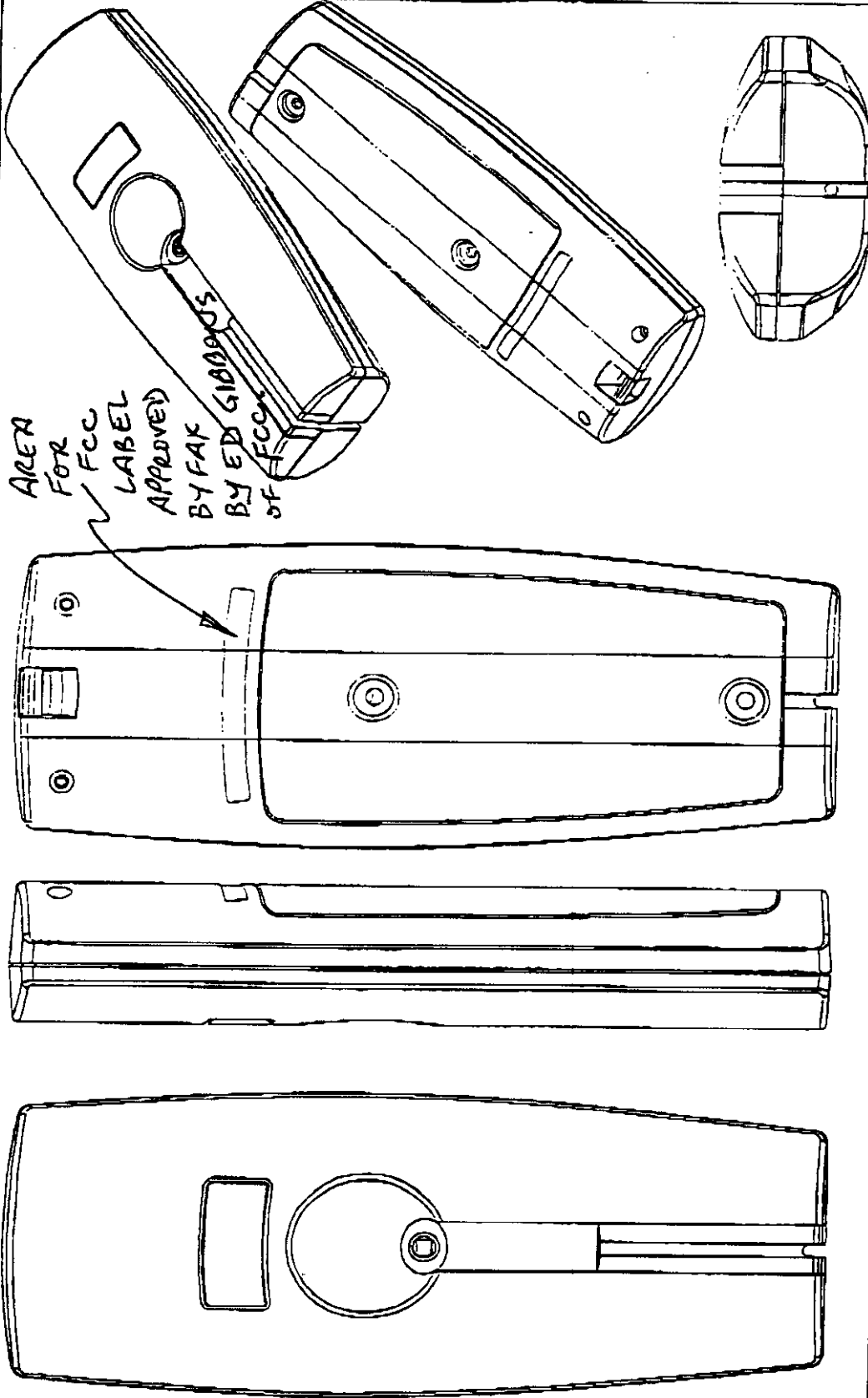




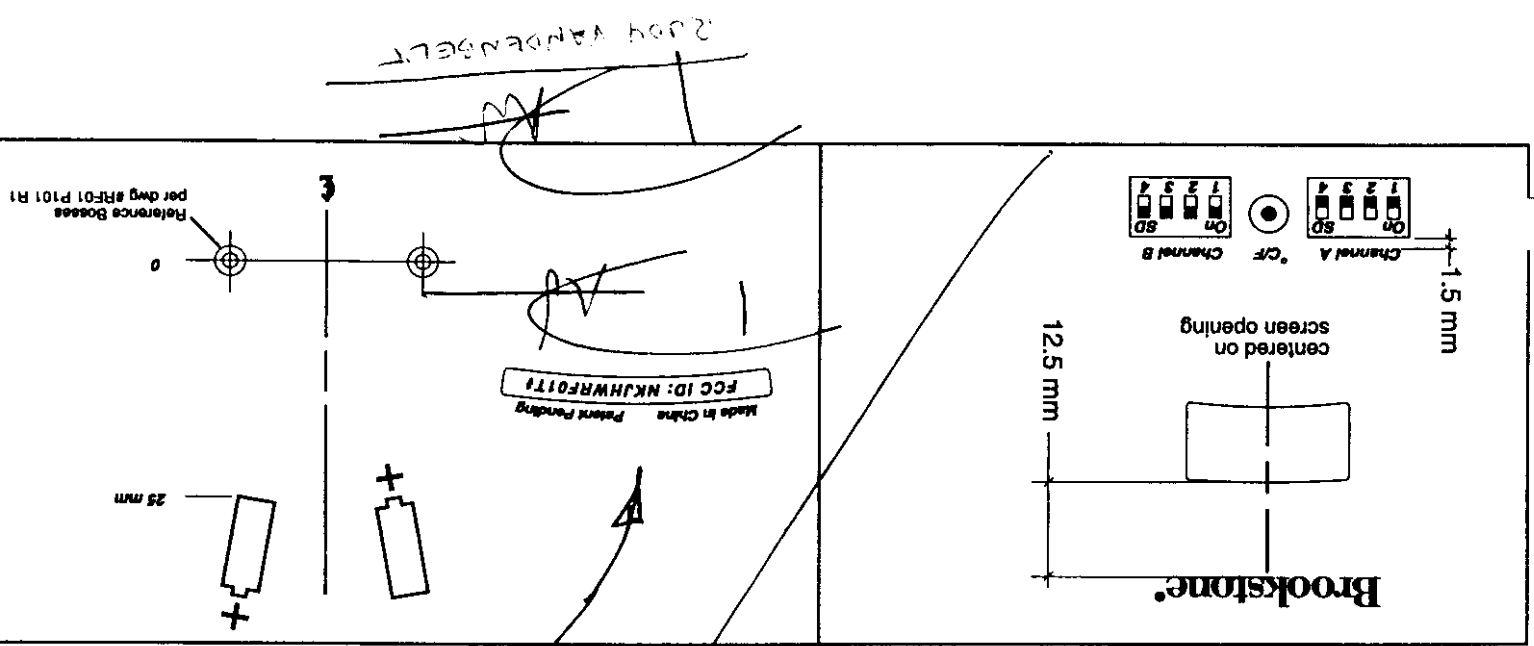
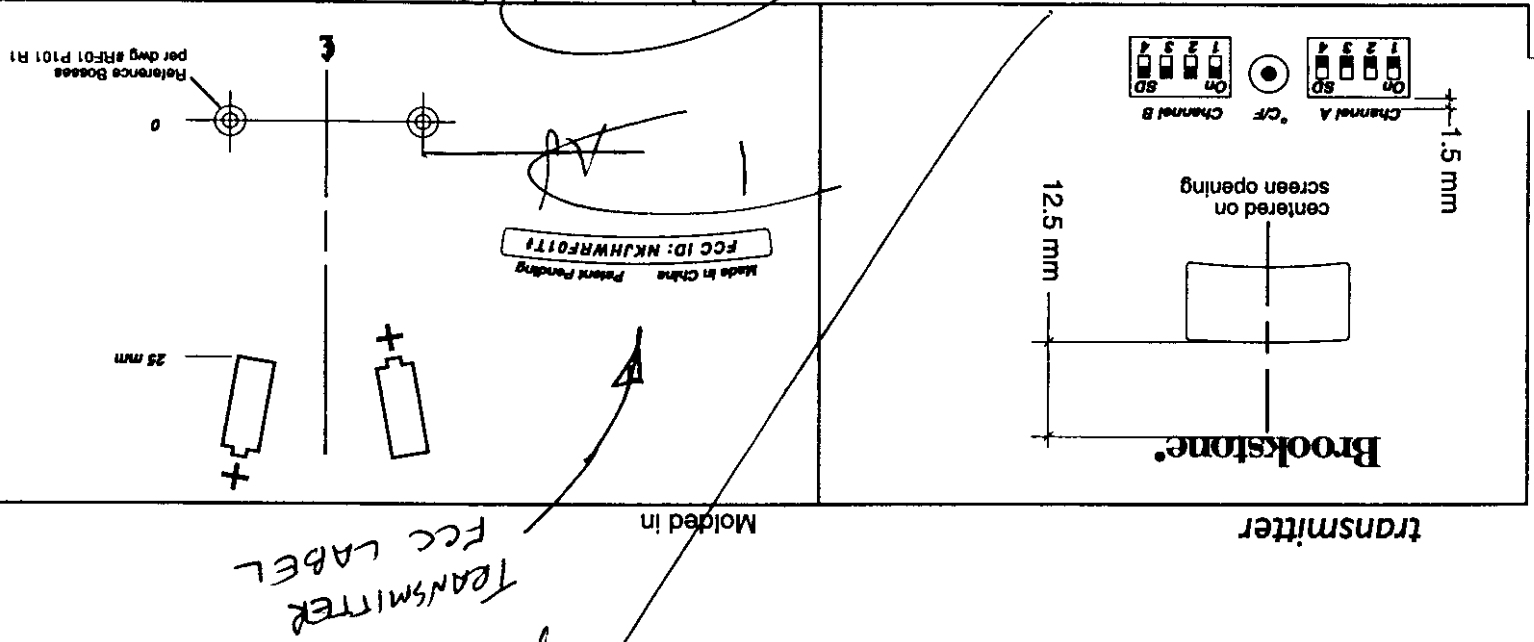
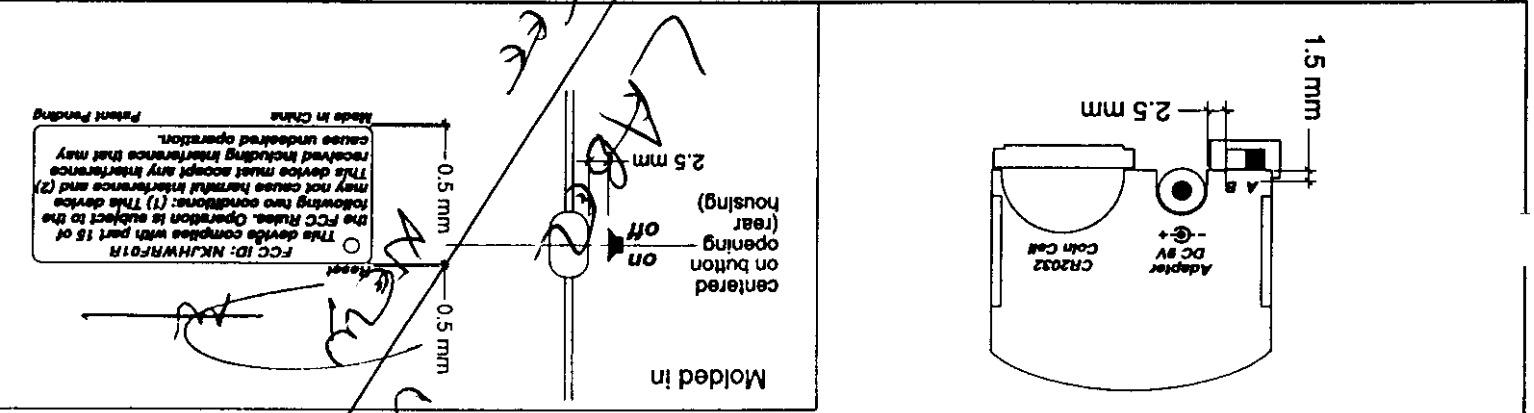
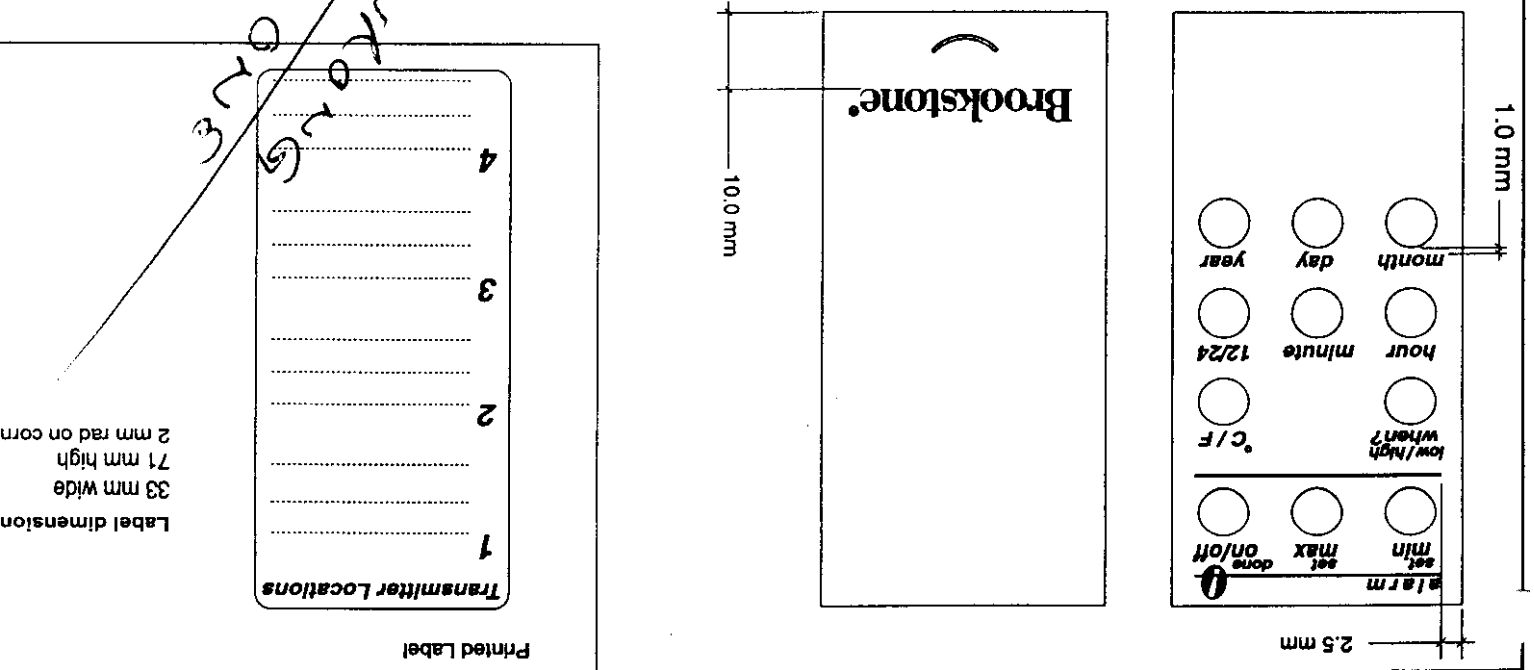
INITIAL APPLICATION	CHK'D	SCALE
RF THERMOMETER	KB	1:1
TITLE	DATE	DWG. NO.
TRANSMITTER T-100	MAY 26, 97	ASSEMBLY A1001

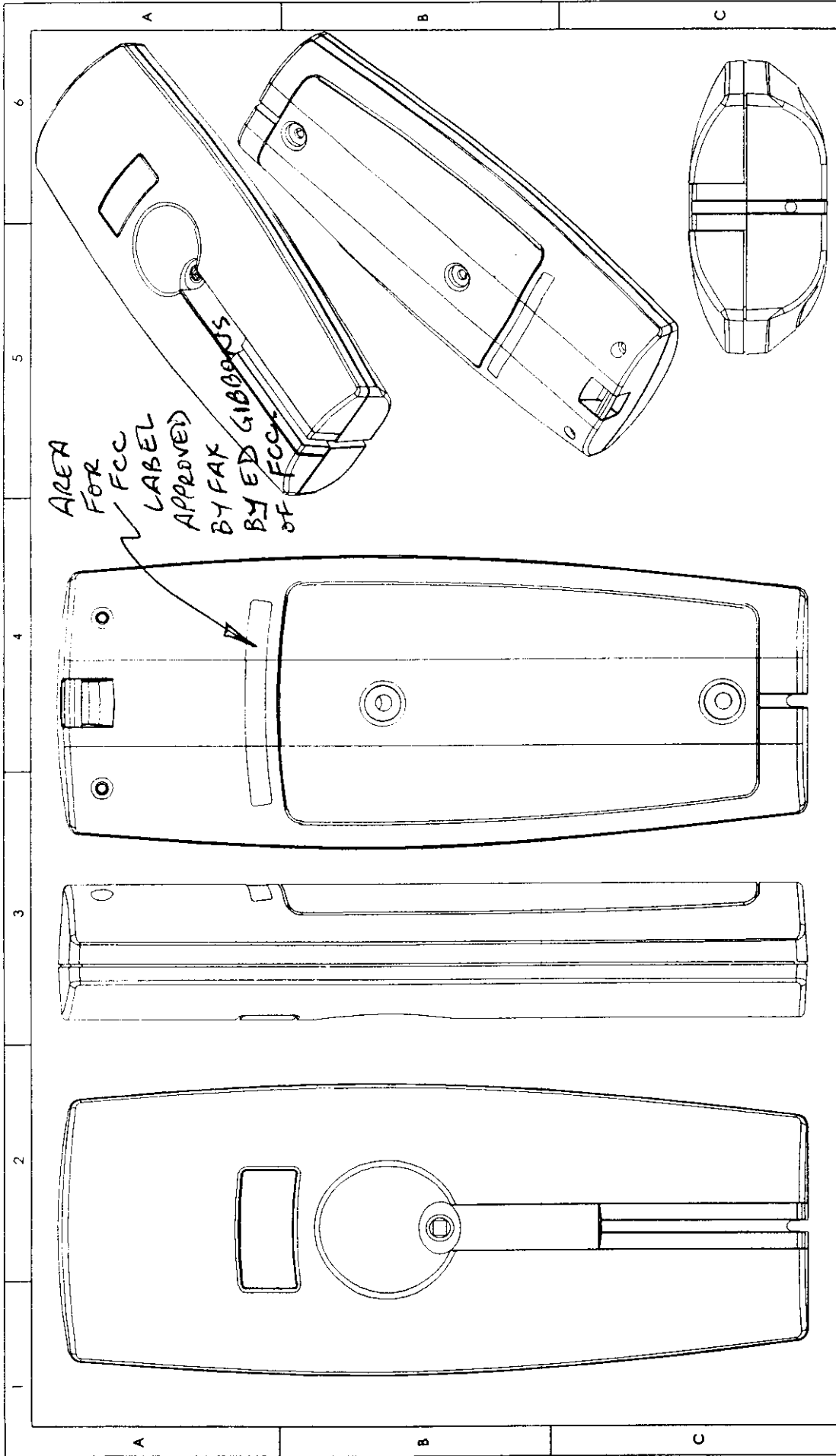


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FCC ID: NKJHWRFO1T1

receiver





 HEADWATERS NEW PRODUCTS FOR WORLD MARKETS	INITIAL APPLICATION	CHK'D		SCALE
	RF THERMOMETER	KB		1:1
	TITLE	DATE	DWG. NO.	ASSEMBLY A1001
	TRANSMITTER T -100	MAY 26, 97		



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JUN 18 1997 23:04:18 PM FCC LAB 301-344-2050 HEADWATERS P. 121 01

HEADWATERS

NEW PRODUCTS FOR WORLD MARKETS

FCC ID: NKJHWRFOITI

VIA TELEFAX

To: ED GIBBONS (FCC) FAX 301 344 2050
CC: Rudy Vandenberg, Troy Anderson (Headwaters, Boston)
From: Kevin Bailey
Date: May 26, 1997

Subject: RF Thermometer - Request for leaving the FCC statement off our new Product

Dear Ed,

Thanks for the phone discussion today (I'm that Canadian guy). I have summarized what you said on the phone for my team and included it below, please correct me if I misinterpreted anything. I have also attached the transmitter and receiver product diagrams (scale 1:1). They are hand held products that we are trying to make look good from all sides, as the receiver can be placed on your kitchen table and the transmitter can be hung up by a loose cord. My question is can we get your approval on leaving the Std Compliance Statement off these products and include it in the user guide documentation only?

Phone Notes:

1. FCC part 15.231 is the right approvals section for our RF thermometer product.

2. FCC part 15.231 paragraphs (a) to (d) deal with products who intended use is remote control. With this type of product the primary function of the product has to be control oriented and it may then have secondary data transfer capability (like sending a recognition code or its location address etc.)

3. FCC part 15.231 paragraphs (e) deals with products that are intended to have data transmission as primary function. The rules governing these products are quite clear. Transmissions are periodic and off 30 times longer than on with a minimum of 10 seconds between transmissions. The field strength must also be 8db lower. The unit must also be built so this requirement cannot be defeated by the end user. Our product conforms to all these requirements having very low power, a transmission duration of less than 1 second and a wait period of random 30-60 seconds. As well the transmission scheme is not controllable by the user.

4. Testing can be carried out with microprocessors that are identical to the final design micro except running a different SW program so that you don't have to wait until the production IC is available to run the testing. The tests must be carried out by an FCC approved test facility. The test facility can handle the entire approvals process if they are set up for it. The paper work required is a General Application Package from the FCC. The FCC approval number release process takes them about 35 days - 45 days upon receipt of the paperwork and test reports. The filing fee for the FCC is \$850 US. - \$895 *
- General Application Package can be ordered using voice mail 301-725-1565 ext 639
- Listed test labs are on the web www.fcc.gov/oet/rlta > then see 'databases' than 'contract test sites' or the list can be ordered from the same phone number as the General Application Package
We will launch the testing/approvals process with the R2 boards in early July and will have FCC numbers by Sept 5. All products must have the FCC standard compliance statement 15.19A3 If there is deemed not enough room on the product to put the statement then it can be placed in the documentation. The FCC must approve not having it on the product by sending them a drawing of the product and getting their blessing.

Best regards,

Kevin Bailey
Headwaters R&D Inc.

Regarding 15.19(A3) location:
- must go on the Base Station.
- may go in manual for Transmitter

* The associated receiver must also be approved (certified or notified depending on its design):
Superheterodyne - Notif. - \$140
Superregenerative - Cert. - \$350

Ed Anderson 6/10/97

HEADWATERS Research & Development (Canada) Inc.
CANADA: 308 Billings Avenue, Ottawa, ON, K1H 5L3. Tel: (613) 521-6715 Fax: (613) 728-3599, 521-2863
USA: 10 Rogers St., Suite 214, Cambridge MA, 02142. Tel: (617) 621-0337 Fax: (617) 621-0178