

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

DOCKET FILE COPY ORIGINAL

In the Matter of )  
Amendment of Parts 2 and 15 of the )  
Commission's Rules to Further )  
Ensure That Scanning Receivers )  
Do Not Receive Cellular Radio )  
Signals )

ET Docket 98-76 RECEIVED

JUL 27 1998

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

To: The Commission

REPLY COMMENTS OF KENWOOD COMMUNICATIONS CORPORATION

Kenwood Communications Corporation (Kenwood), a manufacturer of electronic products, including land mobile, marine and amateur transceivers and receivers, by counsel and pursuant to Section 1.415 of the Commission's Rules (47 C.F.R. §97.415), hereby respectfully submits its reply comments in the captioned proceeding. This proceeding was initiated by the *Notice of Proposed Rule Making* (the Notice), FCC 98-100, released June 3, 1998. The Notice proposes to strengthen, improve and clarify its rules prohibiting scanning receivers from receiving transmissions in the Cellular Radiotelephone Service. In response to comments filed earlier, relative to the impact of the proposed regulations on amateur and other Kenwood products, the following is respectfully submitted:

1. Scanning receivers in Kenwood products are configured at present so that they are not able to unlawfully intercept cellular transmissions. Nor can they be readily modified to do so. Kenwood is and has been concerned that the Commission has largely failed to enforce its present rules regarding devices capable of cellular intercept. Those rules are generally adequate, if enforced. The result is unfair competition: some manufacturers of electronic equipment surreptitiously tout the ability of their equipment, through internet sites or otherwise, to be easily

No. of Copies rec'd  
List ABCDE

014

modified, often through front-panel commands, to receive cellular frequencies. Manufacturers such as Kenwood, which do not incorporate such features in their products, suffer competitively as the result. Kenwood would suggest at the outset that increased enforcement of the Commission's existing receiver certification standards is the proper regulatory response to concerns about cellular intercept, not changed regulations.

2. Kenwood participated in the Commission's prior proceedings implementing the Telephone Disclosure and Dispute Resolution Act, Pub. L. 102-556, in ET Docket 93-1.<sup>1</sup> In that proceeding, the Commission first enacted regulations intended to increase the privacy protection of cellular users without unduly restricting the legitimate uses of scanning receivers. Kenwood noted at the time that its equipment incorporating scanning receivers could not readily be configured or modified to enable that capability. The rules adopted in ET Docket 93-1 are sufficient protection, if complied with, to insure cellular privacy. Some of the rules proposed in this proceeding, however, are superfluous, and do not address the enforcement issue, which should be paramount.

3. The Notice proposes, first of all, to impose an image frequency rejection of 38 dB. All Kenwood scanning receivers meet this standard now. In fact, an image frequency rejection standard of minus 38 dB is extremely liberal: Kenwood amateur and land mobile radio specifications for image rejection are between minus 60 dB to minus 80 dB. Consumer scanning receivers not incorporated in transceivers, to keep manufacturing costs low, operate with degraded specifications. The proposed standard is therefore adequate from Kenwood's perspective.

---

<sup>1</sup> See the *Report and Order*, FCC 93-201, 8 FCC Rcd 2911 (1993); request for extension denied, 75 RR 2d 982 (1994).

4. The Notice asks what measurement techniques should be used to determine compliance with the minus 38 dB rejection level for image frequencies. It proposes to assume a 12 dB signal to noise ratio as a typical sensitivity threshold for determining compliance. Kenwood uses the standard in the industry for measurement, the 12 dB SINAD, which should be specified as the standard for determining image rejection.

5. The Commission currently defines scanning receivers which are "capable of readily being altered" as including those which are cellular-enabled by "clipping the leads of, or installing, a simple component such as a diode, resistor or jumper wire; replacing a semiconductor chip; or programming a semiconductor chip using special access codes or an external device, such as a personal computer." This is inclusive enough, and simply needs to be enforced in order to protect effective, fair competition among manufacturers. Kenwood utilizes in its scanning receiver products a masked ROM in its microprocessor, which incorporates firmware that *cannot* be modified. Nor can a user modify a receiver in any other way, save for the addition of an outboard converter of another manufacturer. If a device uses an EPROM, or flash memory, a user could load new firmware, or download the incorporated firmware, decompile it, modify the program, recompile it and reload it, but that is not a likely avenue for the vast majority of users of scanning receivers. That effort would be far beyond what would be accomplished other than by a professional programmer or skilled computer "hacker". The Commission could require use of a masked ROM, as Kenwood already does, but the present rule regarding what constitutes an "easily modified" device is adequate.

6. Given the above, it is obvious that a requirement that the tuning and control circuitry be made inaccessible, such as via epoxy sealing or use of non-removable metal compartments,

is unnecessary. Such a requirement is superfluous, and at least 20 years behind the times. Everything is removable. If it can be built, it can be "unbuilt" depending on what the owner is willing to do to accommodate cellular intercept. Non-modifiable firmware, which Kenwood presently uses, is completely adequate to prevent, to every reasonable extent, user modifications. "Potting" of the equipment is surplusage, and adds cost, without benefit, to the devices.

7. Under the Notice proposal, certification applications would, have to include a description of the testing method to determine compliance with the image rejection requirement. This would add minimal cost to the certification application. It does not appear a problem for Kenwood, and in any case, the descriptions would be similar in the case of each device and each new generation of a device, from test to test.

8. The Commission's "scanning receiver" definition currently includes the ability to scan 4 or more frequencies in the 30-960 MHz range. The definition could be modified to include manual tuning receivers and not just scanners, without any detrimental effect on Kenwood. "Scanning" is unnecessary relative to prohibiting cellular intercept. Any receiver can, and should, be incapable of cellular intercept. Only a cellular telephone need be capable of receiving a cellular call, intended for the registered (activated) user. Listening to a call not intended for the recipient is already prohibited, and the devices made for legitimate electronics users need not, and in Kenwood's case, do not, have cellular intercept capability. All manufacturers have the ability to utilize the same type technology used by Kenwood. That some choose not to use that technology is an enforcement problem, not a problem with current standards or regulations. The Commission must be willing to make cellular intercept a liability, not a marketing opportunity. Increased enforcement resources are necessary in this context.

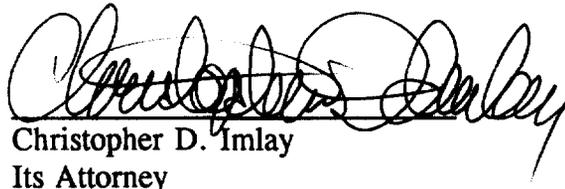
9. Finally, the Commission proposes that the new rules be effective 90 days after Federal Register publication. As all Kenwood products are compliant with any new regulations, save for the unnecessary "potting" proposal, an immediate effective date for all other regulations, is satisfactory to Kenwood.

Therefore, the foregoing considered, Kenwood Communications Corporation respectfully requests that the Commission modify the Notice Proposal and the proposed text of its rule changes in accordance with these Comments.

Respectfully submitted,

**KENWOOD COMMUNICATIONS CORPORATION**

By:



Christopher D. Imlay  
Its Attorney

BOOTH, FRERET, IMLAY & TEPPER, P.C.  
5101 Wisconsin Avenue, N.W.  
Suite 307  
Washington, DC 20016-4120  
(202) 686-9600

July 27, 1998