

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

---

<b>In re Starkey Laboratories, Inc. and Micro Ear Technology, Inc.</b>	)	
	)	
	)	
<b>Request for Waiver of Section 15.247(a)(2) of the Commission's Rules</b>	)	<b>ET Docket No. 09-38</b>
	)	
	)	
<b>Petition for Rulemaking to Amend the Minimum Bandwidth Requirements in Section 15.247(a)(2) for the 902-928 MHz Band</b>	)	<b>RM-11523</b>
	)	
	)	

---

**REPLY COMMENTS OF USA MOBILITY, INC.**

USA Mobility, Inc. ("USA Mobility") hereby submits these reply comments in connection with the above-captioned Request for Waiver<sup>1</sup> and Petition for Rulemaking<sup>2</sup> submitted by Starkey Laboratories, Inc. and Micro Ear Technology, Inc. (collectively, "Starkey"). USA Mobility is a leading provider of paging products and other wireless services to the business, government and healthcare sectors. The company offers traditional one-way and advanced two-way paging services via its nationwide networks, which operate in the 900 MHz band.

The Waiver Request and Petition each seek the relaxation of Section 15.247(a)(2) of the Commission's rules, which requires unlicensed operators using digital modulation techniques to maintain a 6 dB bandwidth of at least 500 kHz.<sup>3</sup> As discussed below, the record establishes no

---

<sup>1</sup> See Starkey Laboratories, Inc., Request for Waiver, ET Docket 09-38 (Apr. 11, 2008); Amended Request for Waiver, ET Docket 09-38 (Nov. 12, 2008) ("Waiver Request").

<sup>2</sup> See Starkey Laboratories, Inc., Petition for Rulemaking, RM-11523 (Apr. 11, 2008) ("Petition").

<sup>3</sup> See 47 C.F.R. § 15.247(a)(2).

“special circumstances” justifying waiver of Section 15.247(a)(2), and also fails to demonstrate that Section 15.247(a)(2) could be relaxed without creating an unacceptable risk of harmful interference to licensed and unlicensed users in the 902-928 MHz band or adjacent bands, including USA Mobility’s wireless messaging services operating at 900-902 MHz. Moreover, the record provides no justification for relaxing Section 15.247(a)(2) given the availability of alternative spectrum to support Starkey’s operations. Accordingly, USA Mobility urges the Commission to deny both the Waiver Request and the Petition.

## **DISCUSSION**

### **I. STARKEY’S WAIVER REQUEST IS MISPLACED**

Starkey’s Waiver Request seeks waiver of Section 15.247(a)(2) of the Commission’s rules to permit Starkey to operate devices using digital modulation techniques with a 6 dB bandwidth of only 100 kHz, instead of 500 kHz. Waiver is appropriate only “if special circumstances warrant a deviation from the general rule and such deviation will serve the public interest.”<sup>4</sup> Further, grant of a waiver request may not undermine the underlying policy objectives of the rule in question.<sup>5</sup> Consequently, the Commission has routinely acknowledged that waiver requests face “a high hurdle even at the starting gate.”<sup>6</sup> Starkey fails to justify such extraordinary relief.

#### **A. The Record Establishes No “Special Circumstances” Justifying Waiver.**

Neither Starkey nor any other commenter establishes “special circumstances” justifying grant of the Waiver Request. The mere fact that Starkey wishes to operate devices in a manner

---

<sup>4</sup> *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990); *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969). *See also* 47 C.F.R. § 1.3 (permitting waiver for “good cause shown”).

<sup>5</sup> *WAIT Radio*, 418 F.2d at 1157.

<sup>6</sup> *Id.*

inconsistent with Section 15.247(a)(2) does not provide a basis for waiving that rule; if it did, the Commission's technical rules would be rendered meaningless. While Starkey attempts to justify waiver by claiming it would lead to more efficient spectrum use, this claim is unfounded; Section 15.247(a)(2) prevents harmful interference from unlicensed operations using digital modulation techniques, and thus makes use of the 902-928 MHz band and adjacent bands *more* efficient (see Section II, *infra*).

Further, Starkey's "justification" for waiver contains no limiting principle. Starkey's reasoning could be extended to *any* party wishing to operate in a manner inconsistent with Section 15.247(a)(2)—or, for that matter, any party wishing to operate in a manner inconsistent with any technical rule. Because Starkey fails to establish specific benefits justifying waiver of the rule for Starkey (as opposed to any other party), granting the Waiver Request would "invite numerous other waiver requests which, if granted, would effectively circumvent the Commission's rulemaking function"—a result the Commission has sought to avoid for good reason.<sup>7</sup> Consistent with its waiver precedent, the Commission should not "tolerate evisceration" of Section 15.247(a)(2) here,<sup>8</sup> where the "practical effect of granting the waiver request[] would be to establish a policy of general applicability" inconsistent with the rule.<sup>9</sup>

**B. The Record Demonstrates that Grant of the Waiver Request Would Be Inconsistent with the Purposes Underlying Section 15.247(a)(2).**

Granting the Waiver Request also would undermine the purposes for which Section 15.247(a)(2) was adopted. Section 15.247(a)(2) is designed to permit unlicensed operators using digital modulation techniques to operate at power levels higher than those permitted under

---

<sup>7</sup> *Verilink Corp.*, Memorandum Opinion and Order, 10 FCC Rcd. 8915, at ¶ 6 (1995).

<sup>8</sup> *WAIT Radio*, 418 F.2d at 1159.

<sup>9</sup> *Nextel Communications, Inc.; Requests for Waiver of 47 C.F.R. Secs. 90.617(c) and 90.619(b)*, Order, 14 FCC Rcd 1828, at ¶ 31 (1999).

Section 15.249 of the Commission's rules,<sup>10</sup> provided those users spread their signals over enough spectrum to prevent their transmissions from interfering with licensees and other operators.<sup>11</sup> As discussed in greater detail below, grant of the Waiver Request would create an unacceptable risk of harmful interference into both licensed and unlicensed operations in the 902-928 MHz band and adjacent bands. Since Section 15.247(a)(2) was adopted principally to mitigate interference, grant of the Waiver Request would undermine the precise purpose underlying the rule. Accordingly, the Waiver Request should be denied.

**C. The Waiver Request Is Merely an Attempt to Achieve Through Waiver What Starkey and Others Have Failed to Achieve Through Rulemaking.**

The Commission traditionally has placed a heavy burden on a party seeking a waiver to demonstrate that its arguments are substantially different from those considered in connection with a related rulemaking proceeding.<sup>12</sup> Starkey utterly fails to sustain its burden in this regard. The Commission is considering the technical rules governing the 902-928 MHz band in several proceedings, including the proceeding initiated by Starkey's Petition.<sup>13</sup> Notably, Starkey and its supporters make the same arguments in attempting to justify the Waiver Request and the Petition. Starkey's Waiver Request acknowledges as much, and essentially asks the Commission to prejudge the outcome of the Petition by granting a "temporary" waiver—which would remain

---

<sup>10</sup> See 47 C.F.R. § 15.249.

<sup>11</sup> See *Amendment of the Commission's Part 90 Rules in the 904-909.75 and 919.75-928 MHz Bands*, Notice of Proposed Rulemaking, 21 FCC Rcd 2809, at ¶ 30 (2006) ("Section 15.247 generally permits a higher than normal transmitting power for Part 15 devices that use frequency hopping or digital emissions which cause the transmitted energy to be spread out across the band rather than concentrated in a relatively narrow bandwidth. Spread spectrum emissions mitigate potential interference . . .").

<sup>12</sup> See *Industrial Broadcasting Co. v. FCC*, 437 F.2d 680 (D.C.Cir. 1970) (indicating the need to articulate special circumstances beyond those considered during regular rulemaking). See also, e.g., *WAIT Radio*, 418 F.2d at 1156.

<sup>13</sup> See also *Amendment of the Commission's Part 90 Rules in the 904-909.75 and 919.75-928 MHz Bands*, Notice of Proposed Rulemaking, 21 FCC Rcd 2809 (2006).

in effect until the rules are changed on a “permanent” basis. However, the Waiver Request and the Petition are fundamentally inconsistent. The “justification” for relaxing Section 15.247(a)(2) must either be specific to Starkey—making it unnecessary and potentially harmful to change the generally applicable rule—or applicable to all unlicensed users—making waiver inappropriate given the absence of any “special circumstances” meriting relaxation of the rule for Starkey and Starkey alone. Starkey cannot have it both ways.

## **II. RELAXING SECTION 15.247(A)(2) WOULD CREATE AN UNACCEPTABLE RISK OF HARMFUL INTERFERENCE INTO LICENSED OPERATIONS**

The Commission should refrain from any further consideration of Starkey’s Waiver Request or Petition because grant of either would create an unacceptable risk of harmful interference into licensed operations, as well as other unlicensed operations, in the 902-928 MHz and adjacent bands. The Commission’s rules clearly provide that unlicensed operations must protect licensees and other unlicensed users from harmful interference.<sup>14</sup> Thus, an unlicensed operator seeking relaxation of a Commission rule designed to limit interference—such as Section 15.247(a)(2)—must provide a “compelling showing” that doing so would not create an unacceptable risk of harmful interference.<sup>15</sup>

Starkey and its supporters fail to provide any such “compelling showing.” Rather, Starkey makes only vague allusions to tests purporting to show that devices operating under a

---

<sup>14</sup> Section 15.5 of the Commission’s rules prohibits unlicensed operators from causing harmful interference into licensed operations, and requires unlicensed operators to accept interference from licensed operations. 47 C.F.R. § 15.5.

<sup>15</sup> See *Greater Media Radio Co., Inc.*, Memorandum Opinion and Order, 15 FCC Red 7090 (1999) (citing *Stoner Broadcasting System, Inc.*, Memorandum Opinion and Order, 49 FCC.2d 1011, 1012 (1974)). See also, e.g., *In re Newcomb Communications, Inc.*, 11 FCC Red 3084 (1996) (granting waiver only upon showing that operations would not create increased interference); *Geostar Positioning Corporation*, 4 FCC Red 4538 (1989) (allowing certain frequencies to be used to provide RDSS only upon showing that transmissions would not cause harmful interference into authorized services); *Mobile*

relaxed 6 dB bandwidth requirement would not cause interference into “other Part 15 devices such as 900 MHz handsets . . . .”<sup>16</sup> However, Starkey provides no description of the methodology used to conduct such tests, no data gathered from such tests, and no meaningful analysis of such data.<sup>17</sup> More fundamentally, Starkey apparently has done *no* analysis whatsoever of the impact of its devices on *licensed* operations in either the 902-928 MHz band or adjacent bands, and certainly has provided no data demonstrating that relaxation of Section 15.247(a)(2) would be consistent with the protection of licensed operations. The Commission cannot and should not simply take Starkey at its word—particularly when Starkey’s conclusory position appears rooted in simplistic and incorrect technical arguments.<sup>18</sup>

In fact, the record clearly demonstrates that relaxing Section 15.247(a)(2) would create an unacceptable risk of harmful interference. As the Medical Device Manufacturers Association notes, permitting operations with a 6 dB bandwidth of only 100 kHz would threaten to overpower many low power devices—including critical medical devices—by transmitting at power levels higher than permitted by Section 15.249, but without the level of spreading required to mitigate the threat of interference presented by operations at those levels.<sup>19</sup> Further, as Itron

---

*Datacom Corporation*, 10 FCC Red 4552 (1995) (granting authorization to operate on a temporary basis in view of documented lack of interference).

<sup>16</sup> Waiver Request at 7. Similarly, Zarlink Semiconductor simply asserts, in conclusory fashion, that Starkey’s proposal “would not cause any harmful interference.” Comments of Zarlink Semiconductor, ET Docket No. 09-38 and RM-11523 (Apr. 10, 2009).

<sup>17</sup> See Opposition of Itron, Inc., ET Docket No. 09-38, at 5 n.10 (Apr. 27, 2009) (noting that Starkey provides no interference analysis, and that testing a single device in an artificial setting is without value in any event).

<sup>18</sup> For example, Starkey claims that its devices would use a narrower bandwidth than that required by Section 15.247(a)(2), thus reducing potential interference. See Waiver Request at 7. See also Comments of Williams Sound, RM-11523, at 2 (Apr. 27, 2009). This argument overlooks the fact that Section 15.247(a)(2) requires unlicensed operations to spread over a *wider* bandwidth in order to mitigate interference.

<sup>19</sup> See Comments of the Medical Device Manufacturers Association, RM-11523, at 2 (May 5, 2009).

notes, relaxing Section 15.247(a)(2) would exacerbate existing problems caused by the 100 percent duty cycle of many digitally modulated devices operating in the 902-928 MHz band, which essentially allows those devices to “crowd out” other users.<sup>20</sup>

The interference threat posed by relaxing Section 15.247(a)(2) would not be limited to the 902-928 MHz band, but rather would create an unacceptable risk of harmful interference into out-of-band operations—including USA Mobility’s operations in the 900-902 MHz band. Grant of either the Waiver Request or Petition would invite the ubiquitous deployment of Part 15 devices throughout the band,<sup>21</sup> many of which would operate with a 100 percent duty cycle and without conforming to an emissions mask designed to cabin the threat of out-of-band interference.<sup>22</sup> Consequently, even a small number of such *unlicensed* devices operating at the lower edge of the 902-928 MHz band could raise the noise floor to the point at which USA Mobility’s *licensed* network could not function in the 900-902 MHz band.

Such interference would be particularly unacceptable given the vital role that the 900-902 MHz band plays in supporting the public safety communications services provided by USA Mobility. That band supports reverse channels for USA Mobility’s two-way paging service, which is used by police, fire, and emergency medical personnel, as well as other first responders. The importance of USA Mobility’s public safety communications services has been recognized by the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications

---

<sup>20</sup> See Opposition of Itron, Inc, ET Docket No. 09-38,, at 5 (Apr. 27, 2009).

<sup>21</sup> *Id.* at 6-7.

<sup>22</sup> Notably, the proposed change in the rules would permit widespread operations of a variety of device types other than assistive listening devices. See Comments of IEEE 802.18, RM-11523, at 2 (May 4, 2009).

Networks, as well as the Commission itself.<sup>23</sup> Therefore, the Commission should be especially vigilant in ensuring that those licensed operations are protected.

### III. RELAXING SECTION 15.247(A)(2) IS UNNECESSARY GIVEN THE AVAILABILITY OF ALTERNATIVE SPECTRUM

Another factor that undermines the Waiver Request and Petition is the availability of adequate alternative spectrum for the operation of assistive listening devices. As Starkey itself acknowledges, the 902-928 MHz band itself is available for hearing aid operations, subject to limitations set forth in Section 15.249 of the Commission's rules.<sup>24</sup> This spectrum is only unusable by Starkey in the sense that Starkey is unwilling to comply with the Commission's technical rules. Starkey's refusal to comply with rules designed to curb harmful interference is hardly a justification for relaxing those rules—particularly when doing so would cause harmful interference.

Starkey also acknowledges that the 217 MHz band—which is specifically allocated for auditory assistance systems<sup>25</sup>—is available.<sup>26</sup> As the Commission has explained, auditory assistance systems can operate in that band “with minimal potential for harmful interference because of their low power and the channelization flexibility . . . .”<sup>27</sup> As Starkey admits, this spectrum could be used by Starkey with modest waivers or rule changes. Arguing that the need for rule changes makes the 217 MHz band unavailable makes no sense, as Starkey is perfectly

---

<sup>23</sup> See *Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks*, Order, 22 FCC Rcd 10541, 10544-45 (2007); see also *Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks*, Report and Recommendations to the FCC, at 10, 24, 32, 37-38, 40 (2006).

<sup>24</sup> See Waiver Request at 3-4.

<sup>25</sup> See *Amendment of the Commission's Rules Concerning Low Power Radio and Automated Maritime Telecommunications System Operations in the 216-217 MHz Band*, Report and Order, 11 FCC Rcd 18517, at ¶ 6 (1996) (“217 MHz Order”).

<sup>26</sup> See Waiver Request at 4-5.

willing to propose changes to the Commission's Part 15 rules to facilitate operation in the 902-928 MHz band.

Starkey does not adequately explain why it could not operate in either of these bands. Moreover, Starkey has failed to consider a number of other available bands allocated for auditory assistance devices.<sup>28</sup> Simply put, there is no basis for relaxing Section 15.247(a)(2) and endangering the ability of licensed and other unlicensed users of the 902-928 MHz band and adjacent bands to operate—especially in the absence of any demonstrated need.

#### **IV. IF THE COMMISSION DOES RELAX SECTION 15.247(A)(2), IT SHOULD ENSURE THAT ADJACENT BANDS ARE ADEQUATELY PROTECTED**

While USA Mobility opposes grant of either the Waiver Request or Petition for the reasons discussed above, should the Commission nevertheless decide to relax Section 15.247(a)(2), two conditions/additional rule changes would be critical to protect licensed users from any unlicensed operations with a 6 dB bandwidth of less than 500 kHz:

- Such operations should be limited to between 908 and 922 MHz.<sup>29</sup> Such a limitation effectively would create a guard band that would help to shield users in adjacent licensed bands from out-of-band interference caused by operations in the absence of Section 15.247(a)(2)'s existing bandwidth requirement.
- Such operations should be conditioned upon compliance with a -20 dB emissions mask. That mask would help to control out-of-band interference from unlicensed users, and help to rationalize the increasingly complex interference environment likely to emerge as a result of relaxing Section 15.247(a)(2).

---

<sup>27</sup> 217 MHz Order at ¶ 34.

<sup>28</sup> See Opposition of Itron, Inc., ET Docket No. 09-38, at 8 (Apr. 27, 2009) (citing 47 C.F.R. § 15.237, which allocates the 72-73 MHz, 74.6-74.8 MHz, and 75.2-76 MHz bands for use by auditory assistance devices).

<sup>29</sup> Progeny requests that the Commission restrict operation of such devices to the non-M-LMS portion of the 902-928 MHz band, see Comments of Progeny LMS, LLC, RM-11523, at 3 (May 4, 2009), which might be acceptable provided such devices also are restricted from operating in the 902-908 MHz and 922-928 MHz bands.

These protections at least would afford some measure of comfort to licensees, should the Commission choose to modify its rules in spite of the flaws in the Waiver Request and Petition.

### **CONCLUSION**

In sum, Starkey has provided no justification for waiving or otherwise relaxing Section 15.247(a)(2), while opposing parties have demonstrated that such relaxation would create an unacceptable risk of harmful interference into both licensed and unlicensed operations in the 902-928 MHz band and adjacent bands. For these reasons, and because grant of either the Waiver Request or Petition could endanger critical public safety operations conducted over USA Mobility's network, the Commission should take no further action in these matters.

Respectfully submitted,

**USA MOBILITY, INC.**

By: /s/ Matthew A. Brill  
Matthew A. Brill  
Jarrett S. Taubman  
LATHAM & WATKINS LLP  
555 11<sup>th</sup> Street, N.W., Suite 1000  
Washington, D.C. 20004

*Its Attorneys*

May 11, 2009

**CERTIFICATE OF SERVICE**

I, Jarrett S. Taubman, do hereby certify that on this 11<sup>th</sup> day of May, 2009, I caused copies of the foregoing "Reply Comments of USA Mobility, Inc." to be served upon the following via first-class mail:

Gloria Tristani  
Spiegel & McDiarmid LLP  
1333 New Hampshire Avenue, NW  
Washington, DC 20036

Michael Lynch  
Chair, IEEE 802.18 Radio Regulatory TAG  
108 Brentwood Court  
Allen, TX 75013

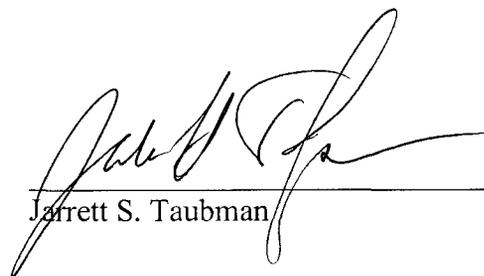
Laura A. Stefani  
Henry Goldberg  
Goldberg, Godles, Wiener & Wright  
1229 Nineteenth Street, NW  
Washington, DC 20036

Bruce A. Olcott  
Joshua T. Guyan  
Squire, Sanders & Dempsey L.L.P.  
1201 Pennsylvania Avenue, NW  
Washington, DC 20004

Stephen J. Swift  
Senior Vice President & General Manager  
Medical Communications Product Group  
Zarlink Semiconductor Inc.  
15822 Bernardo Center Drive, Suite B  
San Diego, CA 92127

Mark B. Leahey  
President & CEO  
The Medical Device Manufacturers Association  
1350 I Street, NW, Suite 540  
Washington, DC 20005

Paul Ingebrigsten  
President & CEO  
Williams Sound Corp.  
10321 West 70<sup>th</sup> Street  
Eden Prairie, MN 55344

  
Jarrett S. Taubman