

June 12, 2017

Ex Parte

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

*Re: Amendment of Parts 0, 1, 2, 15 and 18 of the Commission's Rules Regarding
Authorization of Radiofrequency Equipment, ET Docket No. 15-170*

Dear Ms. Dortch:

On June 8, 2017, Mark Neumann and Erika Obuhanych of Apple Inc., and Paul Margie and Rob Carter on behalf of Apple, met telephonically with Julius Knapp, Chief of the Office of Engineering and Technology, and Bruce Romano, Jamison Prime, William Hurst, Axel Rodriguez, Brian Butler, and Steve Jones of OET to discuss the above-referenced proceeding. During the meeting, Apple expressed support for the Commission's efforts to modernize its equipment authorization procedures to enable device manufacturers more efficiently to demonstrate compliance with the Commission's equipment rules and bring devices to market. Apple made the following specific observations.

First, Apple expressed support for implementing the Enhance Labeling, Accessing, and Branding of Electronic Licenses Act (E-LABEL Act) by codifying portions of the optional electronic device labeling practices already permitted under existing OET guidance.¹ However, Apple observed that the Commission should not limit optional e-labeling to devices with "integrated" displays. Instead, the Commission should clarify that manufacturers of all devices that require a digital display to perform their intended functions—whether integrated or exterior—have the option of using the e-labeling rules. For example, because a consumer connects an Apple TV to a television or other display, this device would have "the capability to digitally display required labeling and regulatory information,"² just as a device with an integrated display would. As multiple parties in this proceeding have explained, optional electronic labeling for devices that have the capability to digitally display information, regardless of whether the display is integrated, will have numerous benefits, including (1) promoting innovation by allowing greater design flexibility; (2) permitting consumer-friendly presentation

¹ *Amendment of Parts 0, 1, 2, 15 and 18 of the Commission's Rules Regarding Authorization of Radiofrequency Equipment*, Notice of Proposed Rulemaking, 30 FCC Rcd. 7725, 7758 ¶¶ 93-95 (2015) ("NPRM").

² See 47 U.S.C. § 622(a)(2)(B).

of regulatory information; and (3) creating consistency with the Canadian electronic labeling requirements.³

In addition, Apple supported the Commission's proposal to modify permissive change requirements to include the concept of a "family of products" that could be authorized under a single FCC ID.⁴ This is a much-needed change that would reflect how many of today's RF devices are designed and marketed. It would also improve efficiency when certifying multiple versions of substantially similar products. Apple agreed with the Commission that the rules should afford discretion to a manufacturer to determine which devices belong to a family of products.⁵ But the rules should require that devices be substantially similar for inclusion within the same family. For example, devices should share a common use case, equipment type (*e.g.* tablets), and internal components. However, the Commission should clarify that devices with fundamental functional similarities that have variations in transmit frequency bands / air interfaces (*e.g.* LTE, Wi-Fi) are eligible for inclusion within the same product family. Apple recommended that the Commission's rules require each device within the product family to have a unique identifier to distinguish among devices authorized using the same FCC ID.

³ See, *e.g.*, Comments of the Consumer Electronics Association at iii,4,8, ET Docket No. 15-170 & RM-11673 (filed Oct. 9, 2015) ("CEA Comments"); Reply Comments of the Consumer Electronics Association at 3, ET Docket No. 15-170 & RM-11673 (filed Nov. 9, 2015); Comments of Garmin International, Inc. at 5, ET Docket No. 15-170 & RM-11673 (filed Oct. 9, 2015) ("Garmin Comments"); Comments of Google Inc. at 19, ET Docket No. 15-170 & RM-11673 (filed Oct. 9, 2015) ("Google Comments"); Comments of Sony Electronics, Inc. and Sony Mobile Communications (USA) Inc. at 3, ET Docket No. 15-170 & RM-11673 (filed Oct. 9, 2015) ("Sony Comments"). See also Comments of the Telecommunications Industry Association at 26, ET Docket No. 15-170 & RM-11673 (filed Oct. 9, 2015) ("TIA Comments") ("[T]he Commission should seriously consider an eLabeling option for 'devices that rely on a wireless or remote connection and have no display have a physical label.'").

⁴ See NPRM at 7746 ¶ 55. See also, *e.g.*, Comments of Alcatel-Lucent at 4 ¶ 6, ET Docket No. 15-170 & RM-11673 (filed Oct. 9, 2015); Comments of Cisco Systems, Inc. at 4, ET Docket No. 15-170 & RM-11673 (filed Oct. 9, 2015); CEA Comments at 14; Comments of CTIA-The Wireless Association at 3-4, ET Docket No. 15-170 & RM-11673 (filed Oct. 9, 2015); Google Comments at 11-12; Comments of the Information Technology Industry Council (ITI) at 8, ET Docket No. 15-170 & RM-11673 (filed Oct. 9, 2015) ("ITI Comments"); Comments of Lectrosonics, Inc. at 2, ET Docket No. 15-170 & RM-11673 (filed Oct. 6, 2015); Comments of the TCB Council Inc. at 6, ET Docket No. 15-170 & RM-11673 (filed Oct. 5, 2015); TIA Comments at 16; Comments of Samsung Electronics America, Inc. at 5, ET Docket No. 15-170 & RM-11673 (filed Oct. 9, 2015); Comments of the Wi-Fi Alliance at ii, ET Docket No. 15-170 & RM-11673 (filed Oct. 9, 2015) ("Comments of the Wi-Fi Alliance").

⁵ NPRM 7746 ¶ 55.

Apple also agreed with the Commission’s proposal to continue to permit Class I permissive changes to devices as long as those changes “do not degrade the device parameters normally reported in an equipment authorization application”⁶ However, Apple recommended that the Commission clarify that this standard applies equally to changes regardless of whether they are accomplished through modification of hardware or through software.

For example, the NPRM states that the new rules “would permit a decrease in the fundamental emissions that does not increase spurious emissions, an improved spurious emission performance,” and “software changes that do not affect RF parameters.”⁷ This statement could be interpreted as limiting a manufacturer’s ability to decrease fundamental emissions and/or improve spurious emission performance through software alone, because such a software change would technically “affect RF parameters.” Instead, consistent with the draft text of the proposed rules, the Commission should clarify that grantees do “not need to obtain an updated grant of certification from a TCB for changes to a certified device that do not cause the fundamental emissions to increase, the spurious emissions to deteriorate (*i.e.*, increase in amplitude), RF exposure to increase, changes any other characteristics to be reported to the Commission or that do not add new capabilities such as new frequency bands or transmission formats,”⁸ regardless of whether the grantee makes the change by modifying hardware or software.⁹

Additionally, Apple recommended that the Commission clarify the scope of changes it will permit under the category of Class 2 permissive changes (“C2PCs”). C2PCs require an updated grant of certification because they result in changes such as increases in fundamental emissions, deterioration of spurious emissions, increases in RF exposure, or changes to hearing aid compatibility ratings.¹⁰ The NPRM recognizes that C2PCs “would allow for component changes, including depopulating certain components like power amplifiers from the RF section of a device, without requiring a new FCC ID.”¹¹ Apple recommended that the Commission also make clear that the rules will permit changes to radio transmitter designs that contemplate the addition of components such as power amplifiers or filters, provided that these changes satisfy all of the other requirements to be eligible for a C2PC rather than a new grant of certification.

Finally, Apple encouraged the Commission to adopt its proposal to combine elements of the existing the Declaration of Conformity and Verification equipment authorization procedures

⁶ NPRM 7744 ¶ 53.

⁷ NPRM 7745 ¶ 53.

⁸ See NPRM 7773, Appendix A, draft section 2.1043(b)(1).

⁹ See *also, e.g.*, Sony Comments at 2 (requesting that the Commission “allow software changes that affect RF performance as Class I permissive changes, provided that the software change does not cause the fundamental emissions to increase, the spurious emissions to deteriorate, RF exposure to increase, or HAC ratings to change.”).

¹⁰ See NPRM 7773, Appendix A, draft section 2.1043(b)(2).

¹¹ NPRM 7745 ¶ 54.

Ms. Marlene H. Dortch

June 12, 2017

Page 4 of 4

to create a new, unified Supplier's Declaration of Conformity self-approval process.¹² Doing so will help reduce the cost and complexity of authorization for devices that pose a minimal risk of harmful interference. Apple also observed that the current Declaration of Conformity requirement to use accredited laboratories for device testing has a demonstrated track record of helping to ensure compliance with technical rules.¹³ Accordingly, Apple encouraged the Commission to retain this requirement when unifying the existing self-approval procedures instead of permitting manufacturers to test at unaccredited facilities.¹⁴

Pursuant to the Commission's rules, a copy of this notice is being filed electronically in the above-referenced docket. If you require any additional information please contact the undersigned.

Sincerely,



Paul Margie
Counsel for Apple Inc.

cc: meeting participants

¹² *See, e.g.*, Comments of the Boeing Company at 3, ET Docket No. 15-170 & RM-11673 (filed Oct. 9, 2015); CEA Comments at 2-3; Garmin Comments at 2; Google Comments at 2; Comments of the Hewlett-Packard Company at 2, ET Docket No. 15-170 & RM-11673 (filed Oct. 5, 2015); Comments on the Notice of Proposed Rulemaking by IBM Corporation at 2, ET Docket No. 15-170 & RM-11673 (filed Oct. 8, 2015); ITI Comments at 2-3; Sierra Wireless Comments at 1, ET Docket No. 15-170 & RM-11673 (filed Oct. 9, 2015); Sony Comments at 1; Comments of the Wi-Fi Alliance at ii.

¹³ *See, e.g.*, TIA Comments at 7.

¹⁴ *See* NPRM ¶ 26.