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

In the Matter of	)	
	)	
Implementation of Sections 716 and 717 of the Communications Act of 1934, as Enacted by the Twenty-First Century Communications and Video Accessibility Act of 2010	)	CG Docket No. 10-213
	)	
Petition for Waiver of Sections 716 and 717 of the Communications Act and Part 14 of the Commission's Rules Requiring Access to Advanced Communications Services (ACS) and Equipment by People with Disabilities	)	

To: Chief, Consumer and Governmental Affairs Bureau

COALITION OF E-READER MANUFACTURERS PETITION FOR WAIVER

Gerard J. Waldron
Daniel H. Kahn
COVINGTON & BURLING LLP
1201 Pennsylvania Avenue NW
Washington, D.C. 20004-2401
(202) 662-6000

Counsel for the Coalition of E-Reader Manufacturers

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PETITION FOR WAIVER

I. INTRODUCTION AND SUMMARY

Pursuant to 47 U.S.C. § 617(h)(1) and 47 C.F.R. §§ 1.3, 14.5, the Coalition of E-Reader Manufacturers[1] (hereinafter, "Coalition") respectfully requests that the Commission waive the accessibility requirements for equipment used for advanced communications services (ACS) for a single class of equipment: e-readers. This Petition demonstrates that e-readers are devices designed, built, and marketed for a single primary purpose: to read written material such as books, magazines, newspapers, and other text documents on a mobile electronic device. The public interest would be served by granting this petition because the theoretical ACS ability of e-readers is irrelevant to how the overwhelming majority of users actually use the devices. Moreover, the features and content available on e-readers are available on a wide range of multi-

[1] The Coalition of E-Reader Manufacturers consists of Amazon.com, Inc.; Kobo Inc.; and Sony Electronics Inc.

purpose equipment, including tablets, phones, and computers, all of which possess integrated audio, speakers, high computing processing power, and applications that are optimized for ACS.

As explained below, e-readers are a distinct class of equipment built for the specific purpose of reading. They are designed with special features optimized for the reading experience and are marketed as devices for reading. Although they have a similar shape and size to general-purpose tablet computers, e-readers lack many of tablets' features for general-purpose computing, including ACS functions. E-readers simply are not designed, built, or marketed for ACS, and the public understands the distinction between e-readers and general-purpose tablets. Granting the petition is in the public interest because rendering ACS accessible on e-readers would require fundamentally altering the devices to be more like general-purpose tablets in cost, form factor, weight, user interface, and reduced battery life, and yet the necessary changes, if they were made, would not yield a meaningful benefit to individuals with disabilities.

II. E-READERS ARE A DISTINCT CLASS OF EQUIPMENT

The Commission requires that a class waiver be applicable to a "carefully defined" class of devices that "share common defining characteristics."[2] E-readers are such a class. E-readers, sometimes called e-book readers, are mobile electronic devices that are designed, marketed and used primarily for the purpose of reading digital documents, including e-books and periodicals.[3] The noteworthy features of e-readers include electronic ink screens optimized for reading

[2] 14 C.F.R. § 14.5(b); Implementation of Sections 716 and 717 of the Communications Act of 1934, as Enacted by the Twenty-First Century Communications and Video Accessibility Act of 2010, CG Docket No. 10-213, WT Docket No. 96-168, CG Docket No. 10-145, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 14557, 14639 (2011) [hereinafter *ACS Report and Order*]; Implementation of Sections 716 and 717 of the Communications Act of 1934, as Enacted by the Twenty-First Century Communications and Video Accessibility Act of 2010, CEA, NCTA, ESA, Petitions for Class Waivers of Sections 716 and 717 of the Communications Act and Part 14 of the Commission's Rules Requiring Access to Advanced Communications Services (ACS) and Equipment by People with Disabilities, Order, 27 FCC Rcd 12970, 12973 (2012) [hereinafter *Waiver Order*].

[3] "An e-reader is an electronic reading device used to view books, magazines, and newspapers in a digital format." *What is an E-Reader?*, wiseGEEK, http://www.wisegeek.com/what-is-an-E-reader.htm (last visited May 16, 2013).

(including in direct sunlight) and designed to minimize eye strain during extended reading sessions. They also facilitate acquisition of e-publications and their user interfaces, both hardware and software features, are designed around reading as the primary user function. As explained more fully below, another important aspect of e-readers is the features they do *not* contain, which distinguishes them from general purpose devices such as tablets. Examples of e-readers include the Amazon Kindle E-Reader, the Sony Reader, and the Kobo Glo.

In 2006, Sony launched the first e-reader available in the U.S. utilizing electronic ink, and since that time the number of manufacturers and models has expanded substantially.[4] Seven years is a long time in the modern digital age, and the public understands that although e-readers may be somewhat similar in shape and size to general-purpose tablets, e-readers are aimed at a specific function.[5] The distinctions between e-readers and tablets are explored next.

III. E-READERS ARE USED PRIMARILY FOR READING

E-readers are "designed primarily for purposes other than using" ACS.[6] Specifically, they are designed to be used for reading. Moreover, they are marketed as tools for reading, and reading is their predominant use. Conversely, e-readers are not designed or marketed as tools for using ACS.

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[4] Michael Sauers, *History of eBooks & eReaders*, Technology Innovation Librarian, Nebraska Library Commission, (Oct. 14, 2011), http://www.slideshare.net/nebraskaccess/history-of-e-books-ereaders.

[5] Product buying guides commonly reflect this distinction. *See, e.g.*, Brian Barrett, *5 Ways Ereaders Are Still Better Than Tablets*, Gizmodo (Dec. 12, 2012), http://gizmodo.com/5970460/5-ways-ereaders-are-still-better-than-tablets; Paul Reynolds, *5 Reasons to Buck the Tide and Buy an E-book Reader*, ConsumerReports.org (Apr. 22, 2013), http://news.consumerreports.org/electronics/2013/04/5-reasons-to-buck-the-tide-and-buy-an-e-book-reader.html. Wikipedia, an aggregator of knowledge and therefore a useful measure of conventional understanding, differentiates e-readers from tablets, explaining that, among other differences, "[t]ablet computers . . . are more versatile, allowing one to consume multiple types of content . . . ." It states that "[a]n e-book reader, also called an e-book device or e-reader, is a mobile electronic device that is designed primarily for the purpose of reading digital e-books and periodicals." Wikipedia, *E-Book Reader*, http://en.wikipedia.org/wiki/E-reader (last visited May 16, 2013).

[6] 47 C.F.R. § 14.5(a)(ii).

A. E-Readers Are Designed and Marketed for Reading

In contrast to general-purpose tablets, the features in e-readers are designed and built around reading as the primary function. Features that e-readers possess for reading optimization include:

- Screens optimized to reduce eyestrain and prevent glare; [7]
- Low power consumption and extremely long battery life to facilitate long reading sessions and use during extended travel;[8]
- Navigation that place reading features, including e-publication acquisition, front and center;[9] and
- Built-in reading tools such as highlighting, bookmarking, and lookup features.[10]

Product reviews emphasize the centrality of reading to the design of e-readers. For instance, technology review site CNET explains that "[i]f you want to stick with 'just reading' . . . an e-ink reader is probably your best bet."[11] Similarly, popular technology blog Gizmodo explains that e-readers "do one thing well . . . reading. And that's a blessing."[12]

Consistent with these features, e-readers are marketed to readers with one activity in mind: reading. For example, on the Amazon product listing for the 5th generation Kindle E-

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[7] *See* Dr. Shirley Blanc, *E-readers: Better for Your Eyes?*, Medcan Clinic, http://www.medcan.com/articles/e-readers_better_for_your_eyes/ (last visited May 16, 2013) ("E-readers have improved the level of text/background contrast, and the matte quality of the screen can reduce glare even in bright sunlight.").

[8] *See* Greg Bensinger, *The E-Reader Revolution: Over Just as It Has Begun?*, Wall St. J., Jan. 4, 2013, http://online.wsj.com/article/SB10001424127887323874204578219834160573010.html (stating that compared to tablets, "dedicated e-readers have . . . a different style of display [that] improves their battery life").

[9] *See* John P. Falcone, *Kindle vs. Nook vs. iPad: Which E-book Reader Should You Buy?*, CNET (Dec. 17, 2012), http://news.cnet.com/8301-17938_105-20009738-1/kindle-vs-nook-vs-ipad-which-e-book-reader-should-you-buy/ (noting that an advantage of e-readers is fewer distracting features not focused on reading).

[10] *See* Levy Smith, *Using a Kindle or eReader as a Leadership Tool* (Sept. 13, 2010), http://www.itsworthnoting.com/productivity/using-a-kindle-or-ereader-as-a-leadership-tool/ ("With an eReader, you can effortlessly highlight and comment as you read and either share quotes or musings real time. . . .").

[11] Falcone, *supra* note 9.

[12] *See* Barrett, *supra* note 5.

Reader, all nine bullets at the top of the page describing the device contain phrases referring to books or reading, including "lighter than a paperback," "for easier reading," "[r]eads like paper," "[d]ownload books," "[h]olds over 1,000 books," "[m]assive book selection," "books by best-selling authors," "[s]upports children's books," and "[l]ending [l]ibrary."[13] Among the headlines on the same page as the shopper scrolls down are "[p]erfect for reading," "[r]ead anywhere on Kindle," and "[d]esigned for readers."[14] Headlines on the Kobo Aura HD product listing include "[e]nhanced eReading," "[r]ead in the ideal light," "[d]esigned for readers," "[a] mobile library," and "[e]njoy millions of eBooks."[15] Not only does the Sony Reader have "read" in its name, it brands itself as "Your Personal Library" and is featured in the "ebookstore" section of the Sony website.[16] Sony also describes the Reader as a "Digital Book" and as "[t]he e-Reader that reads like a real book."[17]

Not surprisingly based on this design and marketing, e-readers are used overwhelmingly for reading. An Ofcom analysis on the communications marketplace in the U.K. states that "almost all consumers use their e-reader to read books."[18] Indicative of the utility of e-readers

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[13] Amazon Kindle 5th Generation E-Ink Product Listing, http://www.amazon.com/gp/product/B007HCCNJU/ (last visited May 16, 2013).

[14] *Id.*

[15] Kobo Aura HD Overview, http://www.kobo.com/koboaurahd (last visited May 16, 2013).

[16] Sony Reader, https://ebookstore.sony.com/reader/ (last visited May 16, 2013).

[17] Sony Reader Product Listing, http://store.sony.com/webapp/wcs/stores/servlet/CategoryDisplay?catalogId=10551&storeId=10151&langId=-1&identifier=S_Portable_Reader (last visited May 16, 2013).

[18] Ofcom, *Communications Market Report 2012*, at 7 (July 18, 2012), http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr12/CMR_UK_2012.pdf.

for reading, multiple studies show that reading electronically on an e-reader increases the amount of time individuals spend reading.[19]

B. E-Readers Are Not Designed or Marketed for ACS

E-readers are not general-purpose devices and lack the features and broad capabilities of tablets. Instead, as discussed above, they are optimized only for reading and obtaining reading material. Features common to tablets that e-readers consistently lack include:

- Color screens;[20]
- Screens with fast refresh rates sufficient for interaction and video;[21]
- Cameras;[22]
- High-capacity storage sufficient for multimedia files;[23] and
- Higher-powered CPU processors and GPU processors for accelerated graphics.[24]

Additionally, e-readers typically do not possess microphones or quality speakers.

Examination of an e-reader establishes that these devices are not designed with ACS as an intended feature, even on a secondary basis. These purposeful hardware limitations drive e-

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[19] *See id.* ("E-readers have a positive impact on the amount people read."); Lee Rainie et al., Pew Internet & American Life Project, *The Rise of E-Reading*, Apr. 4, 2012, http://libraries.pewinternet.org/2012/04/04/the-rise-of-e-reading/ ("On any given day 56% of those who own e-book reading devices are reading a book, compared with 45% of the general book-reading public who are reading a book on a typical day."); Geoffrey A. Fowler & Marie C. Baca, *The ABCs of E-Reading*, Wall St. J., Aug. 24, 2010, http://online.wsj.com/article/SB10001424052748703846604575448093175758872.html (explaining that a study of 1,200 e-reader owners by Marketing and Research Resources Inc. concludes that "[p]eople who buy e-readers tend to spend more time than ever with their nose in a book.").

[20] Bensinger, *supra* note 8.

[21] Piotr Kowalczyk, *These 12 Questions Will Help You Choose Between Tablet and E-reader*, eBook Friendly (Apr. 8, 2013), http://ebookfriendly.com/2013/04/08/tablet-or-ereader-questionnaire/ ("E-paper screens are not meant for active usage – their refresh rate is too low.").

[22] Bensinger, *supra* note 8 (stating that, unlike e-readers, "ever cheaper tablet computers can be used . . . as Web browsers, game consoles and cameras").

[23] *See, e.g.*, Kindle 5th Generation E-Ink, *supra* note 13 (comparing hard drive capacities of Kindle e-reader versus tablet devices).

[24] *See, e.g., id.*

readers' primary purpose: reading. As a result, e-readers cannot display videos at an acceptable quality, and most cannot generate audio output or record audio input.[25] E-readers do not contain apps for ACS, including email, instant messaging, or other electronic messaging services; VoIP; or interoperable video conferencing services.[26] Browsers on e-readers are stripped down and not fully featured either. E-readers with browsers provide only "rudimentary" browsers that are designed to facilitate simple browsing activities directly related to reading, such as reading hyperlinks that are inserted into e-books and periodicals, looking up information in an online dictionary or other online information sources like Wikipedia, or accessing WiFi at locations such as hotels that require use of a Web-based interface to commence usage.[27] The relatively slow refresh rates on e-readers further discourages interaction, including extensive typing. Given all of these limitations, if users attempt to access ACS on an e-reader device, the user experience would not be robust and likely would not encourage future use for ACS.

E-readers are not marketed based on their ability to access ACS. The webpage listings for e-readers do not mention or describe any ACS features such as e-mail, instant messaging, calling, VoIP, or interoperable video conferencing (or video at all).[28] That is consistent with the fact that e-readers are marketed as devices for reading, not for general-purpose use. In fact,

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[25] Staples, *Tablet Versus eReader*, http://www.staples.com/sbd/cre/marketing/technology-research-centers/tablets/tablets-versus-ereaders.html (last visited May 16, 2013) ("Tablets give you far more options for multimedia as well. They can upload and play audio and of course video . . . .").

[26] *See, e.g.*, Kowalczyk, *supra* note 21 ("You can use [tablets] for other [non-reading] purposes, like emails, social media, web browsing, video, games.").

[27] Bensinger, *supra* note 8 (stating that e-readers have "more-limited capabilities, which often include monochrome screens and rudimentary Web surfing" while "[t]ablet computers . . . have . . . full Web browsing.").

[28] *See, e.g.*, Kindle 5th Generation E-Ink, *supra* note 13; Kobo Aura HD, *supra* note 15; Sony Reader Product Listing, *supra* note 17. Kindle e-readers offer a feature by which users and their pre-approved contacts can e-mail pre-existing document so that the documents can be read on the Kindle. However, this is a feature to facilitate reading of pre-existing documents in an E-Ink format; it is not marketed as or useful as a tool for real-time or near real-time text-based communication between individuals. *See* Kindle 5th Generation E-Ink, *supra* note 13.

many view the *absence* of robust communication tools on e-readers as a welcome break from distraction rather than as a limitation. For instance, Paul Reynolds of *Consumer Reports* explains that "I read with fewer interruptions (so more rapidly) on a reader--since I can't as easily distract myself by checking e-mail or news headlines with a tap or two."[29] CNET similarly states that an advantage of an e-reader is that "you won't be distracted while reading by a stream of incoming e-mails, tweets, or Facebook messages."[30] E-reader manufacturers take this focus into account. According to a GeekWire article, "[o]ne key move [for Kobo] is the introduction of the eReader Touch, which [Kobo Executive Vice President for Business Todd] Humphrey thinks will resonate with customers who want a single-purpose reading device where you can't check email or surf the Web or download apps."[31]

IV. THE REQUESTED WAIVER WILL ADVANCE THE PUBLIC INTEREST

Rendering ACS accessible on e-readers would require fundamentally altering the devices and it may not be possible to meet that requirement and maintain e-readers as inexpensive mobile reading devices, and yet the necessary changes, if they were made, would not yield a meaningful benefit to individuals with disabilities. As described above, e-readers are not designed to provide ACS features and applications. Any consumer who uses a browser on an e-reader to access ACS would have a very low-quality experience. Rendering ACS accessible for disabled persons on e-readers would impose substantial and ongoing engineering, hardware, and

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[29] Reynolds, *supra* note 5.

[30] Falcone, *supra* note 9. Another reviewer states, "I'm not interested in the tablet e-readers; I want a dedicated reading device without the distraction of Twitter or games or email. I want the contrast and readability of e Ink. I want access to the best and most varied content. I want a battery life the length of *War and Peace* (months). I want a device that is light in the hand . . . ." Laura Jane, *This is My Next: Kindle Paperwhite*, The Verge (Sept. 6, 2012), http://www.theverge.com/2012/9/6/3298500/this-is-my-next-kindle-paperwhite.

[31] John Cook, *Kobo Opens a New Chapter, Introduces 'Touch' To E-reader*, Geekwire (May 23, 2011), http://www.geekwire.com/2011/chapter-electronic-readers-kobo-introduces-touch-electronic-readers/.

licensing costs because the devices would first have to be redesigned and optimized for ACS. It would be necessary to add hardware such as speakers, more powerful processors, and faster-refreshing screens. It also would be necessary to revise the software interface in e-readers to build in infrastructure for ACS and then render that infrastructure accessible. In short, the mandate would be to convert e-readers into something they are not: a general purpose device.

It is not merely cost but the very nature of a specialized e-reader device that is at issue. Adding a substantial range of hardware and new software changes the fundamental nature of e-reader devices. A requirement to make these changes would alter the devices' form factor, weight, and battery life and could undercut the distinctive features, advantages, price point, and viability of e-readers. In particular, the higher power consumption necessary to support a faster refresh rate necessary for high-interaction activities such as email would put e-reader power consumption on par with that of a tablet, whereas today the lower power consumption and resulting far-longer battery life of e-readers is a key selling point.

As a result of all of these changes, e-readers would be far more similar to general-purpose tablets in design, features, battery life, and cost, possibly rendering single-purpose devices redundant. Today, many Americans choose to own both a tablet and an e-reader. According to a recent Pew study, as of November 2012, 19% of Americans age 16 and older own an e-reader, 25% own a tablet, and 11% own *both* an e-reader and a tablet.[32] Consistent with this purchasing pattern, Gizmodo warns its readers, "don't assume that because you have [a tablet], you don't

[32] Lee Rainie & Maeve Duggan, *E-book Reading Jumps; Print Book Reading Declines*, Pew Internet & American Life Project, Dec. 27, 2012, http://libraries.pewinternet.org/2012/12/27/e-book-reading-jumps-print-book-reading-declines/.

need [an e-reader]."[33] This loss of distinctive products would harm the reading public and inhibit innovations particular to e-readers, such as improvements in electronic ink technologies.[34] Requiring such fundamental changes—effectively dictating manufacturers' product offerings—is undesirable and contrary to established Commission policy.[35]

In enacting the CVAA, Congress did not intend to mandate the effective elimination of a niche product primarily designed for non-ACS uses merely because of the presence of an ancillary browser purpose-built to support reading activities on some devices within the class. As both the Senate and House Reports explained in describing the primary purpose waiver provision embodied in Section 716(h), "[f]or example, a device designed for a purpose unrelated to accessing advanced communications might also provide, on an incidental basis, access to such services. In this case, the Commission may find that to promote technological innovation the accessibility requirements need not apply."[36] The example of e-readers is just the "incidental basis" ACS that Congress intended for the waiver provision to encompass.

Finally, rendering e-readers accessible would not substantially benefit individuals with disabilities. Persons with disabilities, including individuals who are blind and wish to access e-

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[33] Barrett, *supra* note 5. As explained below, this quote does not apply to individuals who are blind or have low vision, for whom e-readers do not provide additional functionality that is not available from a more versatile smartphone or tablet.

[34] Innovations developed for e-readers in recent years include that "[t]he devices looked sleeker, they were easier to read, they weighed less, their pages turned faster, and they held more books. Wireless capability allowed users to download novels, magazines and newspapers wherever they were, whenever they wanted, and now the devices allow for reading in the dark." Bensinger, *supra* note 8. More recently, "[t]here have also been major improvements in e-readers, including touch-screen technology and self-lighting screens." *Id.*

[35] The Commission has recognized that "if the inclusion of an accessibility feature in a product or service results in a fundamental alteration of that product or service, then it is *per se* not achievable to include that accessibility function." *ACS Report and Order*, 26 FCC Rcd at 14610. The House Report similarly states that "if the inclusion of a feature in a product or service results in a fundamental alteration of that service or product, it is *per se* not achievable to include that feature." H.R. Rep. No. 111-563, at 24-25 (2010) ("House Report"). While the achievability and primary purpose waiver analyses differ, this demonstrates that Congress and the Commission recognize that requiring a fundamental alteration is not in the public interest or consistent with the CVAA.

[36] House Report at 26; S. Rep. No. 111-386, at 8 (2010).

books and other electronic publications, would have a poor ACS experience even on accessible e-reader devices. Because of the inherent limitations of browsers in e-readers, a fact that will not change without a wholesale redesign of e-readers, the ACS experience on such devices is suboptimal whether a user has disabilities or not.

Further, individuals with disabilities have accessible options today, and these options will soon expand significantly even if the waiver is granted. For the niche purpose of reading, high-quality free alternatives to e-readers are available. The free Kindle Reading, Sony Reader, and Kobo eReading apps, which provide access to the same range of e-publications available to the owners of the respective companies' e-readers (and in some cases a greater range), are available for free on an array of mobile phones, tablets, PCs, and Macs.[37] Makers of tablets, smartphones, and computers are working actively to make their general-purpose audio-enabled devices accessible, consistent with the CVAA. As required by the CVAA, ACS will be accessible on these devices, all of which have integrated audio, speakers, high computing processing power, and applications that are optimized for ACS. Moreover, the accessibility that is required by the CVAA will ensure that many of the "layers" of these devices will support and provide accessibility features and capabilities that are of value beyond the purely ACS context.[38] Put simply, individuals with disabilities have better ACS options on devices other than e-readers.

A waiver of the Commission's rule is justified because, in contrast to other classes of equipment for which temporary waivers have been granted, e-readers are a well-established class

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[37] Falcone, *supra* note 9. Additionally, users can read books via the Web on all of the services but Sony Reader. *Id.*

[38] *See ACS Report and Order*, 26 FCC Rcd at 14584-85 (identifying eight key "layers" of devices and explaining that "[f]or individuals with disabilities to use an advanced communications service, *all* of these components may have to support accessibility features and capabilities").

that is not experiencing "convergence" toward becoming a multipurpose device.[39] In fact, as detailed throughout this Petition, the functional differences between tablets and e-readers have been clear and steady for a number of years.[40] The Commission can use the definition of devices set forth above to ensure it covers only true e-readers and not tablets, thereby addressing the concern that genuine multipurpose devices would be exempt.[41]

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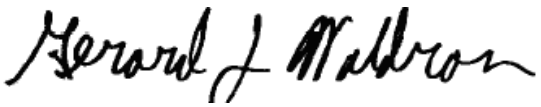
For the reasons set forth above, and consistent with Section 716 of the Act and the Commission's rules, the Coalition requests that the Commission grant the e-reader class waiver, as is consistent with the public interest.

Respectfully submitted,



Gerard J. Waldron
Daniel H. Kahn
COVINGTON & BURLING LLP
1201 Pennsylvania Avenue NW
Washington, D.C. 20004-2401
(202) 662-6000

Counsel for Amazon.com, Inc.; Kobo Inc.; and Sony Electronics Inc.

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[39] *Cf. Waiver Order*, 27 FCC Rcd at 12977-78, 12981, 12990-91 (describing possibility of convergence in classes of devices for which waivers were granted).

[40] Moreover, it is generally expected that demand for e-readers will continue well into the future. One study by the Market Intelligence & Consulting Institute projects 23.0 million units of e-reader sales worldwide in 2016. *See* eMarketer, *Ereader Shipments on the Rise* (Nov. 8, 2012), http://www.emarketer.com/Article/Ereader-Shipments-on-Rise/1009471. A different study by IHS iSuppli projects worldwide sales of e-readers at 7.1 million units in 2016. *See* Barrett, *supra* note 5. Assessing the more pessimistic of these studies, Gizmodo concludes that e-readers are "great, they're cheap, and they're not going anywhere." *Id.*

[41] Accordingly, a waiver that extends across multiple generations is justified. *See ACS Report and Order*, 26 FCC Rcd at 14640.