Federal Communications Commission 445 12th St., S.W. Washington, D.C. 20554

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DA 20-896

Released: August 20, 2020

OFFICE OF ENGINEERING AND TECHNOLOGY SEEKS COMMENT ON ROBERT BOSCH, LLC REQUEST FOR WAIVER OF CERTAIN PART 15 ULTRA-WIDEBAND (UWB) RULES

ET Docket No. 20-268

Comment Date: September 21, 2020 Reply Comment Date: October 19, 2020

On April 13, 2020, Robert Bosch, LLC (Bosch) filed a request for waiver of the Commission's Part 15 ultra-wideband (UWB) rules to allow the marketing and operations of its frequency hopped UWB wall imaging system, known as the Wallscanner D-Tect 200 Professional (D-Tect 200). Bosch states that the D-Tect 200 is a tool for skilled professional deployment in the construction trade, used for detection and inspection of ferrous and non-ferrous metals, electric cables, wooden beams, plastic pipes, and for identification of structural flaws within construction materials. According to the request the device operates between 1.8 GHz -5.7 GHz² and hops continuously over the complete operating frequency range from lowest to highest frequency. Each single hop step has a bandwidth less than 1 kHz and a maximum dwell time of 65 microseconds. The step width is between 106 megahertz and 160 megahertz and the maximum time for each hop sequence is 2.3ms.

Bosch seeks a rule waiver to permit it to use a frequency hopping configuration for its device. Specifically, Bosch seeks a waiver of section 15.503(d), which requires that a UWB transmitter at any point in time have a fractional bandwidth equal to or greater than 0.20 or an UWB bandwidth equal to or greater than 500 megahertz, regardless of the fractional bandwidth.³ Bosch also requests a related waiver of section 15.503(h), which lays out the definition for a wall imaging system, and section 15.521(d), which requires that if pulse gating is employed where the transmitter is quiescent for intervals that are long compared to the nominal pulse repetition interval, measurements shall be made with the pulse train gated on.⁴ A waiver of Sections 15.503(d), 15.503(h), and 15.521(d) of the rules is needed so that Bosch

¹ Robert Bosch, LLC Request for Waiver (Request), filed April 13, 2020.

² Robert Bosch LLC Notice of Ex Parte Presentation, non-docketed filing, filed June 23, 2020.

³ 47 CFR § 15.503(d).

^{4 47} CFR §§ 15.503(h), 15.521(d).

can perform measurements to demonstrate compliance with the rules, while the system is operating in its normal transmission mode.

The FCC's Office of Engineering and Technology (OET) is reviewing the waiver request and has concluded that to develop a complete record on the issues presented by this request, this proceeding will be treated, for *ex parte* purposes, as "permit-but-disclose" in accordance with Section 1.1200(a) of the Commission's rules, subject to the requirements under Section 1.1206(b).

Interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://fjallfoss.fcc.gov/ecfs/.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each
 filing. If more than one docket or rulemaking number appears in the caption of this proceeding,
 filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19.5
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

Parties should also send a copy of their filings to Aole Wilkins El, Office of Engineering and Technology, Federal Communications Commission, Room 7-A345, 445 12th Street, S.W., Washington, D.C. 20554, or by e-mail to Aole.Wilkinsel@fcc.gov.

Documents are available for viewing on ECFS, http://www.fcc.gov/ecfs, by entering the docket number. These documents are available for public inspection and copying during business hours at the FCC Reference Information Center, Portals II, 445 12th Street, S.W., Room CY-A257, Washington, D.C. 20554.

⁵ See FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy, Public Notice, DA 20-304 (March 19, 2020), https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy.

Office of Engineering and Technology contact: Aole Wilkins El at 202-418-2406.

By the Acting Chief, Office of Engineering and Technology

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