

FHH Telecom Law
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Ultra-Wideband Powers Up

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The FCC granted manufacturers of ultra-wideband (UWB) radio transmitters a waiver that will allow them to significantly increase operating power.

The UWB industry has been split over a standards fight between a modulation called MB-OFDM, which "hops" a UWB signal from one band to another, and DS-UWB, whose signal spreads simultaneously across several gigahertz of bandwidth. FCC rules require a hopping device to be tested for compliance with the hopping turned off, so the signal stays in one frequency band. MB-OFDM proponents argued this procedure overestimates the actual average power, thus penalizing MB-OFDM relative to DS-UWB. Not so, said the DS-UWB interests. DS-UWB radios operate in short bursts, and the FCC rules require testing them with the signal locked on, so the test overestimates their power, too.

Solomon-like, the FCC granted a waiver to both groups, allowing both types of devices to be tested in their "normal operating mode." This means both categories will be able to increase their operating power several-fold, relative to the current rules. The FCC has promised to follow with a further rulemaking on UWB testing procedures and power limits.