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(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2022/0399877 A1**  
(43) **Pub. Date: Dec. 15, 2022**(54) **DYNAMIC BAND STEERING FILTER BANK  
MODULE WITH PASSBAND ALLOCATIONS**(71) Applicant: **Qorvo US, Inc.**, Greensboro, NC (US)(72) Inventors: **Gangadhar Burra**, Fremont, CA (US);  
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(57)

**ABSTRACT**

Disclosed is a filter bank module having a substrate, an antenna port terminal, and a filter bank die. The filter bank die is fixed to the substrate and includes a first acoustic wave (AW) filter having a first antenna terminal coupled to the antenna port terminal and a first filter terminal, wherein the first AW filter is configured to pass a first passband and attenuate frequencies outside the first passband, and a second AW filter having a second filter terminal, and a second antenna terminal coupled to the first antenna terminal to effectively diplex signals that pass through the first AW filter and the second AW filter, wherein the second AW filter is configured to pass a second passband that is spaced from the first passband to minimize interference between first band-pass and the second bandpass while attenuating frequencies outside the second passband.

