

Antenna With Multiple-Band Patch and Slot Structures

ABSTRACT

A multiple-band antenna having a plurality of operating frequency bands is provided. The antenna includes a plurality of structures configured for operation in respective ones of the plurality of operating frequency bands, and a plurality of structures configured for operation in more than one of the plurality of operating frequency bands. In one embodiment, a multiple-band antenna has first, second, and third operating frequency bands, and comprises a first patch structure associated with the first operating frequency band, a second patch structure connected to the first patch structure and associated with the second operating frequency band and the third operating frequency band, a first slot structure disposed between a first portion of the first patch structure and the second patch structure and associated with the first operating frequency band and the second operating frequency band, a second slot structure disposed between a second portion of the first patch structure and the second patch structure and associated with the second operating frequency band, and a third slot structure disposed between a third portion of the first patch structure and the second patch structure and associated with the first operating frequency band and the third operating frequency band.

(Fig. 1)