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(54) **ELECTROMAGNETIC BANDGAP STRUCTURES**

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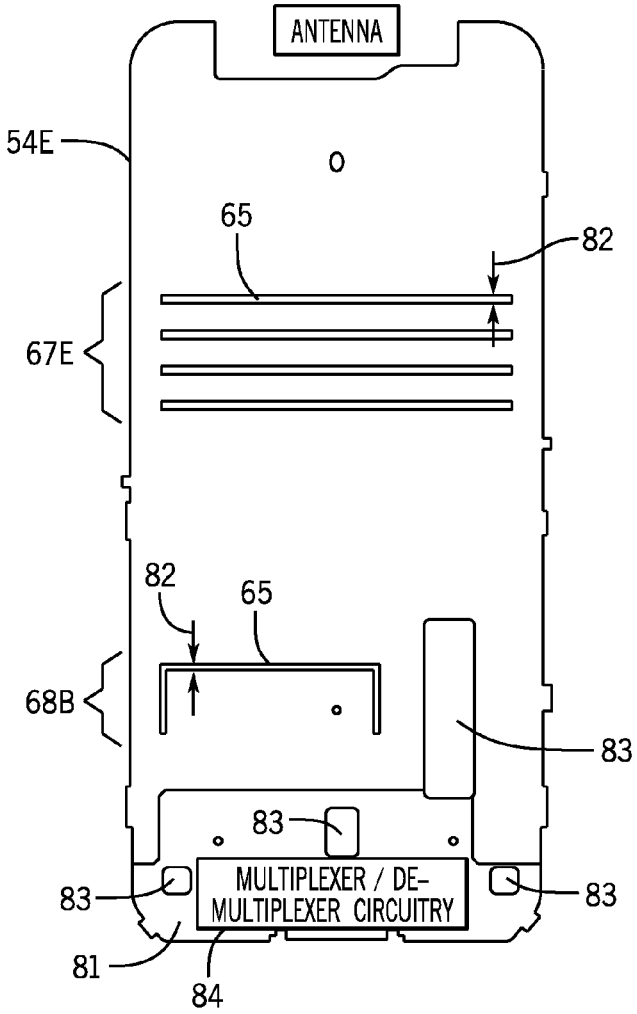
(57) **ABSTRACT**

Devices for mitigating or stopping noise or surface current on a display are provided. An electronic device including a display may include a display substrate, a mid-support plate that is adjacent to the display substrate, and a lower support plate that is adjacent to the mid-support plate. A space exists between the mid-support plate and the lower support plate. The mid-support plate includes one or more electromagnetic band gap (EBG) structures formed through the mid-support plate, one or more electromagnetic band gap structures mounted onto the mid-support plate, or both. The one or more electromagnetic band gap structures may mitigate or stop surface current flow across the display.