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#### Akiho et al.

- (54) MAGNETIC CORE MEMBER FOR ANTENNA MODULE, ANTENNA MODULE AND PORTABLE INFORMATION TERMINAL EQUIPPED WITH ANTENNA MODULE
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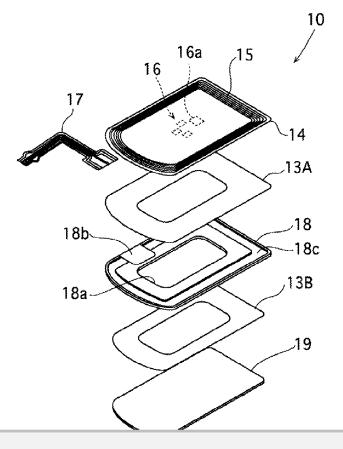
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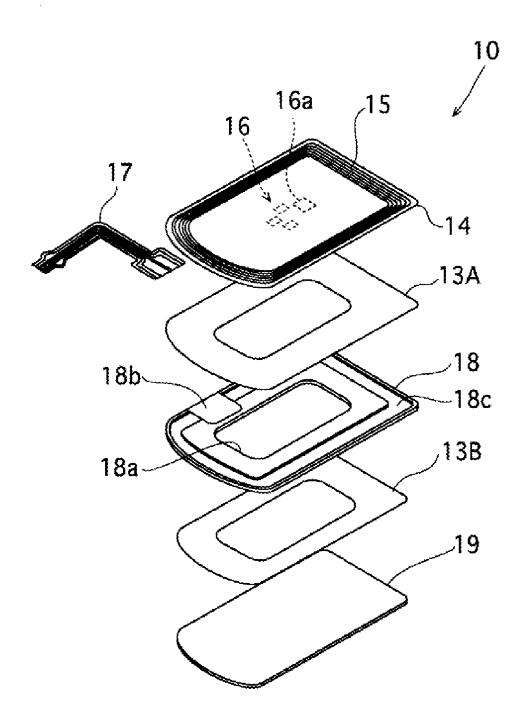
#### (57) ABSTRACT

There are provided a magnetic core member for an antenna module capable of improving a communication distance without thickening the module, an antenna module, and a portable information terminal equipped with the antenna module. A magnetic core member 18 for an antenna module 10 of the present invention has a ring groove 18c as a recess portion formed on the surface on the side stacking an antenna coil 15 in an area facing a loop portion of the antenna coil 15. An eddy current generated in the magnetic core member 18 in a high frequency magnetic field is concentrated on the surface of the magnetic core member 18 on the side stacking the antenna coil 15 in the area facing the loop portion of the antenna coil 15. According to the present invention, a ring groove 18c is provided in the area to reduce an amount of eddy currents to be generated and improve the communication distance characteristics of the antenna module.

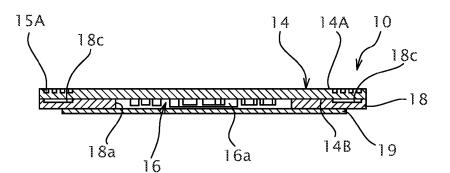


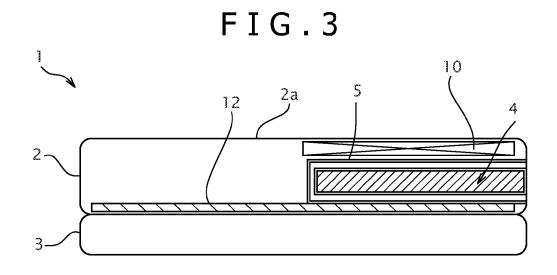
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# FIG.4

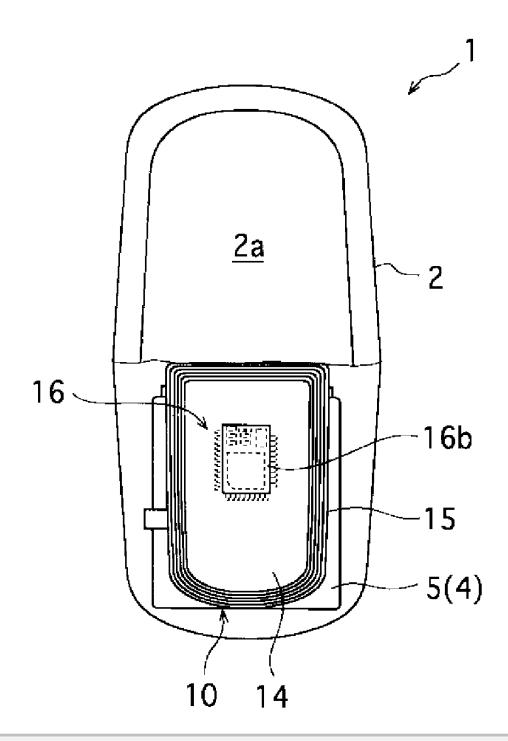
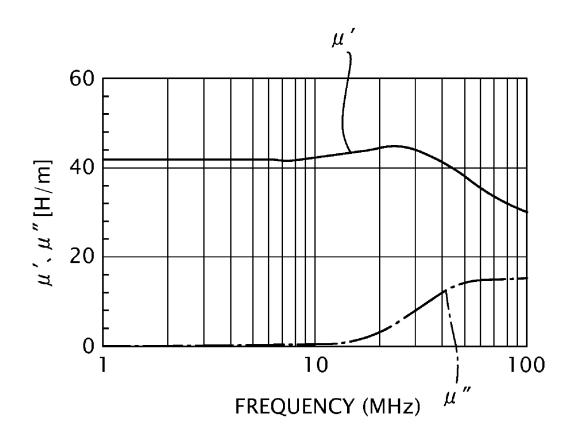


FIG.5



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