

Title (en)  
Radio communication apparatus

Title (de)  
Funkkommunikationsvorrichtung

Title (fr)  
Appareil de radiocommunication

Publication  
**EP 1562259 A1 20050810 (EN)**

Application  
**EP 04025762 A 20041029**

Priority  
JP 2004030470 A 20040206

Abstract (en)  
A radio communication apparatus has an RF current controller (5; 51; 52; 53), typically a one-fourth wavelength long conductor (5), controlling an RF current flowing over the ground plane to improve the antenna efficiency. The RF current controller (5; 51; 52; 53) is located no farther than one-fourth wavelength of a the lowest frequency in the frequency band where the apparatus is used, away from a feeding point (8) at which an antenna element (7) is fed. The RF current controller (5; 51; 52; 53) and the feeding point (8) are located within a pier-shaped portion (3) which is separated from an adjacent portion (4) by a gap (2) of the ground pattern, so that the RF current flowing over the ground plane decreases and the antenna efficiency is improved (refer to Figure 1B). <IMAGE>

IPC 1-7  
**H01Q 1/48; H01Q 1/38**

IPC 8 full level  
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**H01Q 1/242** (2013.01); **H01Q 1/38** (2013.01); **H01Q 1/48** (2013.01)

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