

Title (en)

ANTENNA FOR PORTABLE RADIO EQUIPMENT

Publication

**EP 0459391 A3 19920304 (EN)**

Application

**EP 91108683 A 19910528**

Priority

JP 13712590 A 19900529

Abstract (en)

[origin: EP0459391A2] An antenna (10) for portable radio equipment serves as a  $\lambda/2$  wavelength long antenna when extended (Fig.1A) or as a less than  $\lambda/4$  wavelength long antenna such as a  $\lambda/8$  wavelength long antenna when contracted (Fig.1B). Both of such antenna configurations are matched by a single matching circuit (14) with respect to impedance. The antenna radiates power efficiently in the horizontal plane. <IMAGE> <IMAGE>

IPC 1-7

**H01Q 1/10**; **H01Q 1/24**

IPC 8 full level

**H01Q 9/14** (2006.01); **H01Q 1/10** (2006.01); **H01Q 1/24** (2006.01)

CPC (source: EP)

**H01Q 1/10** (2013.01); **H01Q 1/242** (2013.01); **H01Q 1/244** (2013.01)

Citation (search report)

- [A] US 4860024 A 19890822 - EGASHIRA YOSHIMI [JP]
- [A] GB 2213998 A 19890823 - TECHNOPHONE LTD [GB]

Cited by

EP0508836A1; EP1603310A1; FR2773289A1; GB2324658A; GB2324658B; EP0609103A1; US5455595A; US7158085B2; WO9723014A1

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**EP 0459391 A2 19911204**; **EP 0459391 A3 19920304**; **EP 0459391 B1 19970219**; AU 640787 B2 19930902; AU 7804191 A 19911205; CA 2043321 A1 19911130; CA 2043321 C 19970819; DE 69124714 D1 19970327; DE 69124714 T2 19970626; JP H0432305 A 19920204

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