

Title (en)
CONSUMPTION METER WITH INTEGRATED DUAL BAND ANTENNA

Title (de)
VERBRAUCHSMESS MIT INTEGRIERTER DUALBANDANTENNE

Title (fr)
COMPTEUR DE CONSOMMATION EQUIPE D'UNE ANTENNE DOUBLE BANDE

Publication
EP 1733453 A1 20061220 (EN)

Application
EP 05715101 A 20050317

Priority
• DK 2005000180 W 20050317
• DK PA200400451 A 20040319

Abstract (en)
[origin: WO2005091433A1] The invention relates to a wireless readable consumption meter with an integrated microstrip dual band antenna. A resonator of the antenna exhibits a 1/4-wavelength first resonance within the frequency interval 400-500 MHz and exhibits a 3/4- wavelength second resonance within the frequency interval 800-1000 MHz. Preferably, the microstrip antenna part is formed on a printed circuit board that also forms an integral part with transmitting electronics and optionally other electronics parts of the meter so as to enable a compact design. The antenna is capable of for example a lower frequency of 434 MHz (ISM) and a higher frequency of 910 MHz (GSM) or 868 MHz (ISM). Preferably, the consumption meter is mounted within a protection casing also serving to provide a predetermined distance between the antenna and a surface on which the consumption meter is mounted. The casing may in addition have one or more electrically conductive surfaces which may form together with the antenna a resonator near the operating frequencies of the dual band antenna. The invention relates in addition to a system of consumption meters of the above type comprising wireless receiving means enabling the meters to wirelessly interchange measured quantity values.

IPC 8 full level
H01Q 1/22 (2006.01); **G01D 4/00** (2006.01); **G08C 17/02** (2006.01); **H01Q 1/38** (2006.01); **H01Q 1/48** (2006.01); **H01Q 5/00** (2006.01); **H01Q 5/357** (2015.01); **H01Q 9/42** (2006.01)

CPC (source: EP)
H01Q 1/2233 (2013.01); **H01Q 1/48** (2013.01); **H01Q 5/357** (2015.01); **H01Q 9/42** (2013.01)

Citation (search report)
See references of WO 2005091433A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2005091433 A1 20050929; EP 1733453 A1 20061220

DOCDB simple family (application)
DK 2005000180 W 20050317; EP 05715101 A 20050317