

Title (en)

COMBINATION OF TUBE ASSEMBLY AND CLIP FOR WIRELESS ANTENNA GROUNDING

Title (de)

KOMBINATION AUS RÖHRENBAUGRUPPE UND CLIP FÜR DIE ERDUNG EINER DRAHTLOSEN ANTENNE

Title (fr)

COMBINAISON TUBES ET CLIP POUR MISE A LA TERRE DE L'ANTENNE D'UN DISPOSITIF SANS FIL

Publication

EP 1568100 A2 20050831 (EN)

Application

EP 03778190 A 20031128

Priority

- CA 0301854 W 20031128
- CA 2413360 A 20021129
- US 43008202 P 20021202

Abstract (en)

[origin: WO2004051795A2] An antenna grounding assembly for a hand-held device, the grounding assembly comprising: an antenna having an antenna shaft connected between a grounding block and a protective sheath; an antenna tube affixed within the hand-held device and holding the antenna, the antenna tube having an upper end through which the antenna shaft is extended or retracted, and an inner end opposite the upper end; and a grounding clip installed into the inner end of the antenna tube, the grounding clip having a base and at least one contact pin extending axially along the antenna tube for resilient contact with the grounding block.

IPC 1-7

H01Q 1/24; **H01Q 1/48**; **H01R 4/48**; **H01R 13/115**

IPC 8 full level

H01Q 1/24 (2006.01); **H01Q 1/48** (2006.01); **H01R 13/187** (2006.01); **H01R 4/64** (2006.01); **H01R 13/03** (2006.01)

CPC (source: EP)

H01Q 1/242 (2013.01); **H01Q 1/244** (2013.01); **H01Q 1/48** (2013.01); **H01R 13/187** (2013.01); **H01R 4/64** (2013.01); **H01R 13/03** (2013.01); **H01R 2201/02** (2013.01)

Citation (search report)

See references of WO 2004051795A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004051795 A2 20040617; **WO 2004051795 A3 20040812**; AT E384343 T1 20080215; AT E384344 T1 20080215; AT E546854 T1 20120315; AU 2003285241 A1 20040623; AU 2003285241 A8 20040623; CN 100487977 C 20090513; CN 1717841 A 20060104; DE 03778190 T1 20060323; DE 60318741 D1 20080306; DE 60318741 T2 20081224; DE 60318756 D1 20080306; DE 60318756 T2 20090122; EP 1568100 A2 20050831; EP 1568100 B1 20080116; EP 1689024 A1 20060809; EP 1689024 B1 20080116; EP 1855350 A2 20071114; EP 1855350 A3 20080227; EP 1855350 B1 20120222; HK 1081329 A1 20060512; HK 1094094 A1 20070316

DOCDB simple family (application)

CA 0301854 W 20031128; AT 03778190 T 20031128; AT 06113174 T 20031128; AT 07114799 T 20031128; AU 2003285241 A 20031128; CN 200380104526 A 20031128; DE 03778190 T 20031128; DE 60318741 T 20031128; DE 60318756 T 20031128; EP 03778190 A 20031128; EP 06113174 A 20031128; EP 07114799 A 20031128; HK 06102421 A 20060223; HK 06113850 A 20060223