

Title (en)
ANTENNA SYSTEM AND METHOD FOR FULL DUPLEX WIRELESS TRANSMISSION WITH CHANNEL PHASE-BASED ENCRYPTION

Title (de)
ANTENNENSYSTEM UND VERFAHREN FÜR DRAHTLOSE VOLLDUPLEX-ÜBERTRAGUNG MIT KANALPHASENBASIERTER VERSCHLÜSSELUNG

Title (fr)
SYSTÈME D'ANTENNE ET PROCÉDÉ DE TRANSMISSION SANS FIL EN DUPLEX INTÉGRAL AVEC CHIFFREMENT BASÉ SUR LA PHASE DE CANAL

Publication
EP 3033806 A4 20170712 (EN)

Application
EP 14836322 A 20140813

Priority

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Abstract (en)
[origin: WO2015023801A1] An antenna assembly includes a first active antenna element and a second active antenna element, each of which may be a dipole. A first set of independently-switchable radio-frequency reflectors are positioned around at least the first active antenna element. These first switchable radio-frequency reflectors may also be positioned around the second active antenna element. Alternatively, a second set of independently-switchable radio-frequency reflectors may be positioned around the second active antenna element. The switchable reflectors enable controlled perturbation of the communication channel between the antenna assembly and a remote communications node, enabling securely encrypted communications.

IPC 8 full level
H01Q 3/44 (2006.01); **H01Q 1/52** (2006.01); **H01Q 15/14** (2006.01); **H01Q 19/30** (2006.01); **H04L 9/08** (2006.01)

CPC (source: EP)
H01Q 1/525 (2013.01); **H01Q 3/446** (2013.01); **H01Q 15/148** (2013.01); **H01Q 19/30** (2013.01); **H04L 9/0863** (2013.01); **H04L 2209/80** (2013.01)

Citation (search report)

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- [XAI] US 2005052330 A1 20050310 - MEHLTRETTER LUDWIG [DE]
- [XA] WO 2012042256 A1 20120405 - SEC DEP FOR BUSINESS INNOVATION & SKILLS OF HER MAJESTY S BRITANNIC GOVERNMENT [GB], et al
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- [A] KHANDANI AMIR K: "Two-way (true full-duplex) wireless", 2013 13TH CANADIAN WORKSHOP ON INFORMATION THEORY, IEEE, 18 June 2013 (2013-06-18), pages 33 - 38, XP032495648, DOI: 10.1109/CWIT.2013.6621588
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Designated contracting state (EPC)
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