

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
29 December 2004 (29.12.2004)

PCT

(10) International Publication Number  
**WO 2004/114457 A3**

(51) International Patent Classification<sup>7</sup>: **H04B 1/00**

(21) International Application Number:  
PCT/US2004/019324

(22) International Filing Date: 18 June 2004 (18.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/479,701 19 June 2003 (19.06.2003) US  
10/870,702 17 June 2004 (17.06.2004) US

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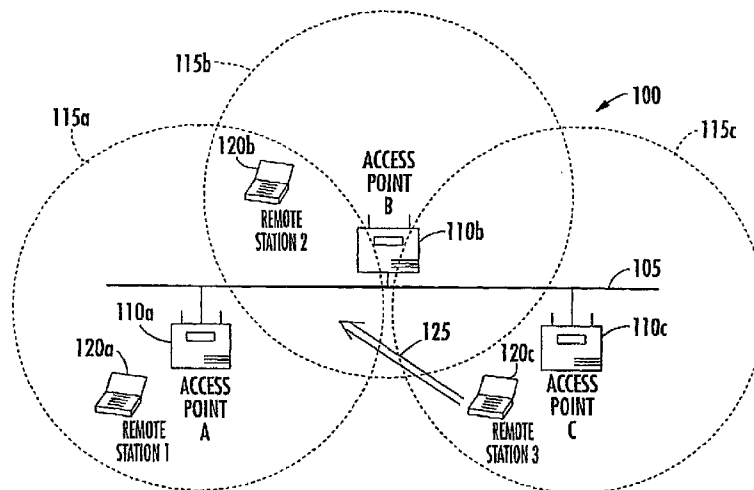
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: ANTENNA STEERING AND HIDDEN NODE RECOGNITION FOR AN ACCESS POINT



(57) Abstract: A method for operating an access point (A) in a wireless local area network (WLAN) is provided. The access point (A) includes a directional antenna (200a) for communicating with a plurality of remote stations (120), and the directional antenna (200a) includes a plurality of antenna patterns. The method includes creating an antenna database by associating between the access point (A) and each remote station (120) a respective measured signal quality corresponding to the plurality of antenna patterns. The respective measured signal qualities are determined by the access point (A) based upon communications with each remote station (120). The method further includes determining for each remote station (120) a preferred antenna pattern based upon the antenna database, and selecting a remote station (120) and the corresponding preferred antenna pattern to communicate with. It is also determined based upon the antenna database and prior to communicating with the selected remote station (120), if any non-selected remote stations (120) have the potential of not being aware when such communications actually occurs.

WO 2004/114457 A3



**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**(88) Date of publication of the international search report:**

6 May 2005