

10/09/04

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
6 November 2003 (06.11.2003)

PCT

(10) International Publication Number
WO 03/092231 A1(51) International Patent Classification: H04L 12/56,
H04Q 7/36, H04B 1/713

(21) International Application Number: PCT/US03/12717

(22) International Filing Date: 24 April 2003 (24.04.2003)

(25) Filing Language: English

(26) Publication Language: English

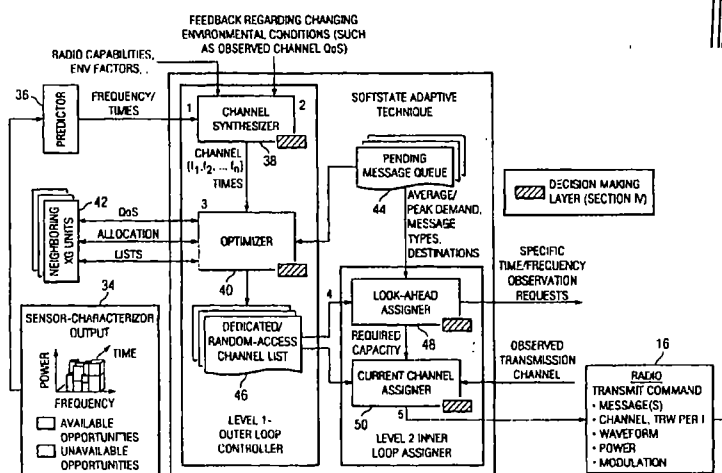
(30) Priority Data:
60/375,854 25 April 2002 (25.04.2002) US
10/421,498 22 April 2003 (22.04.2003) US(71) Applicant: RAYTHEON COMPANY [US/US]; 141
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lity model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,
CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (uti-
lity model), DE, DK (utility model), DK, DM, DZ, EC, EE
(utility model), EE, ES, FI (utility model), 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, NO, NZ, OM, PH, PL, PT, RO, RU, SC,
SD, SE, SG, SK (utility model), SK, SL, TJ, TM, TN, TR,
TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

[Continued on next page]

(54) Title: DYNAMIC WIRELESS RESOURCE UTILIZATION



(57) Abstract: In one embodiment, a method for dynamic wireless resource utilization includes monitoring a wireless communication resource, generating wireless communication resource data; using the wireless communication resource data, predicting the occurrence of on or more holes in a future time period; generating hole prediction data; using the hole prediction data, synthesizing one or more wireless communication channels from the one or more predicted holes; generating channel synthesis data; receiving data reflecting feedback from a previous wireless communication attempt and data reflecting a network condition; according to the received data and the channel synthesis data, selecting a particular wireless communication channel from the one more synthesized wireless communication channels; generating wireless communication channel selection data; using the wireless communication channel selection data, instructing a radio unit to communicate using the selected wireless communication channel; and instructing the radio unit to discontinue use of the selected wireless communication channel after the communication has been completed.

WO 03/092231 A1



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

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