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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
3 March 2005 (03.03.2005)

PCT

(10) International Publication Number
WO 2005/020039 A2

(51) International Patent Classification[7]: G06F

(21) International Application Number:
PCT/US2004/005475

(22) International Filing Date: 25 February 2004 (25.02.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/494,234	11 August 2003 (11.08.2003)	US
60/494,255	11 August 2003 (11.08.2003)	US
10/778,709	12 February 2004 (12.02.2004)	US

(71) Applicant *(for all designated States except US)*: **TEAMON SYSTEMS, INC.** [US/US]; 1180 NW Maple Street, Suite 201, Issaquah, Washington 98027 (US).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **CLARKE, David James** [US/US]; 9463 221st PL NE, Redmond, Washington 98053-2049 (US).

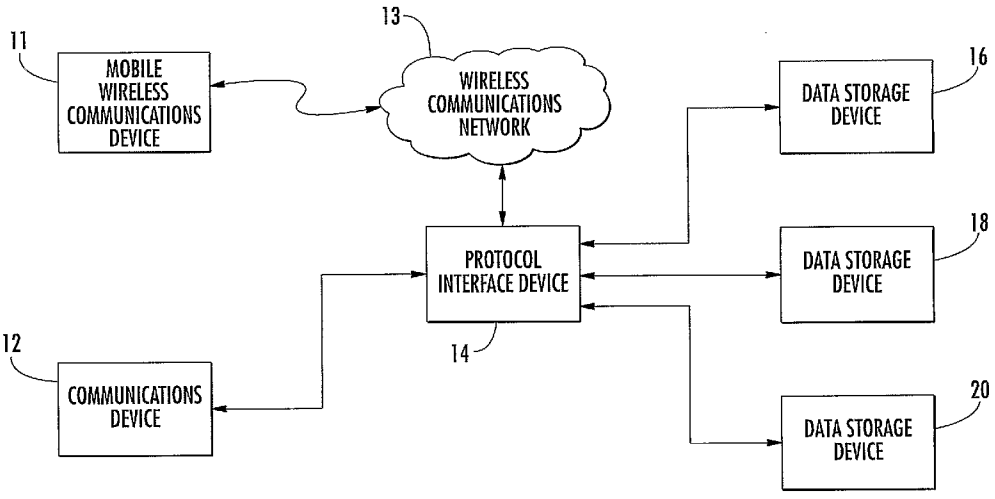
(74) Agents: **REGAN, Christopher F.** et al.; ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST, P.A., 255 S Orange Avenue Suite 1401, Orlando, FL 32801 (US).

(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, 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, 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: COMMUNICATIONS SYSTEM PROVIDING MULTI-LAYERED EXTENSIBLE PROTOCOL INTERFACE AND RELATED METHODS



(57) Abstract: A communications system may include data storage devices each using at least one of a plurality of different operating protocols, and mobile wireless communications devices (MWCDs) for accessing the data storage devices and each using at least one of the different operating protocols. The system may further include a protocol interface device, which may include a protocol engine module for communicating with the data storage devices using respective operating protocols. The protocol interface device may further include a front-end proxy module coupled to the protocol engine. The front-end proxy module may include a respective proxy module for communicating with the MWCDs using each different operating protocol. The front-end proxy module may also include one or more common core service modules coupled to the proxy modules and communicating therewith at a first layer, and communicating with the protocol engine module at a second layer lower than the first layer.

WO 2005/020039 A2

Published:
— *without international search report and to be republished upon receipt of that report*

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.