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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
9 January 2003 (09.01.2003)

PCT

(10) International Publication Number
WO 03/003193 A1

(51) International Patent Classification[7]: G06F 9/00

(21) International Application Number: PCT/US02/20510

(22) International Filing Date: 27 June 2002 (27.06.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/896,057 29 June 2001 (29.06.2001) US

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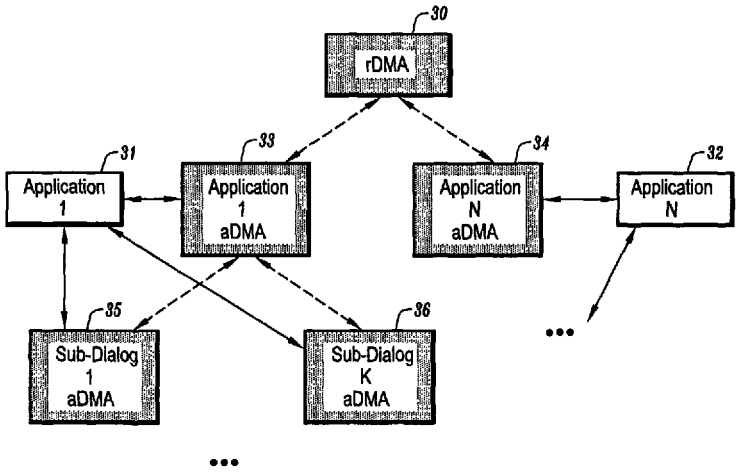
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(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, 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, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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(54) Title: SYSTEM AND METHOD FOR PROVIDING DIALOG MANAGEMENT AND ARBITRATION IN A MULTI-MODAL ENVIRONMENT



(57) Abstract: A system and method for providing conversational computing via a protocol for automatic dialog management and arbitration between a plurality of conversational applications, and a framework for supporting such protocol, in a multi-modal and/or multi-channel environment. A DMAF (dialog manager and arbitrator facade) comprises a hierarchical DMA architecture that enables arbitration across a plurality of applications and within the same application between various sub-dialogs. A top-level DMA (30) instance (or "root DMA instance or rDMA) arbitrates between a plurality of applications (31, 32). Each application (31, 32) creates at least one instance of a DMA to manage its main dialog. For instance, application (31) creates a DMA instance (33) and application (32) creates a DMA instance (34). These DMA instances (33, 34) (or "application DMA instance" or "aDMA") are children of the top-level DMA instance (30). The hierarchical architecture can be further expanded to create new instances (e.g., within an application's sub dialog) of a given aDMA. For instance, new aDMA instances (35, 36) of aDMA (33) are generated to manage sub dialogs. These aDMA instances (35, 36) are children of the aDMA (33) that manages the main dialog of the application (31).

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Published:
— *with international search report*

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