20000437-7

PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : G06F — A2

(11) International Publication Number: **WO 99/66381**

(43) International Publication Date: 23 December 1999 (23.12.99)

(21) International Application Number: PCT/US99/13377

(22) International Filing Date: 14 June 1999 (14.06.99)

(30) Priority Data:

60/089,394	15 June 1998 (15.06.98)	US
09/183,764	30 October 1998 (30.10.98)	US

(71) Applicant: DEJIMA CORPORATION [US/US]; Suite 3, 236 Castro Street, Mountain View, CA 94041 (US).

(72) Inventors: HODJAT, Babak; 3–26–37 (402), Yokote, Minami–ku, Fukuoka 811–1311 (JP). SAVOIE, Christopher, J.; 21297 Glen Place #2, Cupertino, CA 95014 (US). AMAMIYA, Makoto; 2–15–10, Takamiya Minami–ku, Fukuoka–shi 815–0083 (JP).

(74) Agent: WOLFELD, Warren, S.; Fliesler Dubb Meyer and Lovejoy LLP, Suite 400, Four Embarcadero Center, San Francisco, CA 94111–4156 (US).

(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, 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, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, 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), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

Without international search report and to be republished upon receipt of that report.

(54) Title: ADAPTIVE INTERACTION USING AN ADAPTIVE AGENT–ORIENTED SOFTWARE ARCHITECTURE

(57) Abstract

Method and agent network architecture for processing a subject message, where each agent has a view of its own domain of responsibility. An initiator agent which receives a user–input request and does not itself have a relevant interpretation policy, queries its down-chain agents whether the queried agent considers such message to be in its domain of responsibility. Each queried agent recursively determines whether it has an interpretation policy of its own that applies to the request, and if not, further queries its own further down-chain neigboring agents. The further agents eventually respond to such further queries, thereby allowing the first–queried agents to respond to the initiator agent. The recursive invocation of this procedure ultimately determines one or more paths through the network from the initiator agent to one more more leaf agents. The request is then transmitted down the path(s), with each agent along the way taking any local action thereon and passing the message onto the next agent in the path. In the event of a contradiction, the network is often able to resolve many of such contradictions according to predetermined algorithms. If it cannot resolve a contradiction automatically, it learns new interpretation policies necessary to interpret the subject message properly. Such learning preferably includes interaction with the user (but only to the extent necessary), and preferably localizes the learning close to the correct leaf agent in the network.

