2004020731
08 APR 2004

162162

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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
24 April 2003 (24.04.2003)

PCT

(10) International Publication Number
WO 03/034270 A1

(51) International Patent Classification[7]: G06F 17/18, 15/18

(21) International Application Number: PCT/AU02/01417

(22) International Filing Date: 17 October 2002 (17.10.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

PR 8321	17 October 2001 (17.10.2001)	AU
PS 0556	15 February 2002 (15.02.2002)	AU
PS 1844	19 April 2002 (19.04.2002)	AU

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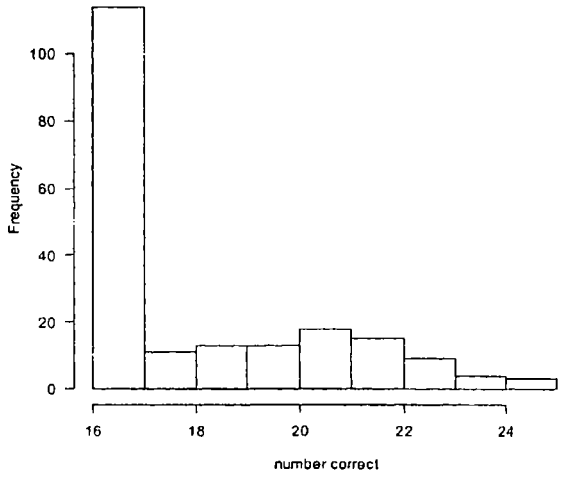
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT,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

Published:
— *with international search report*

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR IDENTIFYING DIAGNOSTIC COMPONENTS OF A SYSTEM



(57) Abstract: A method and apparatus is described for identifying a subset of components of a system, the subset being capable of predicting a feature of a test sample. The method comprises generating a linear combination of components and component weights in which values for each component are determined from data generated from a plurality of training samples, each training sample having a known feature. A model is defined for the probability distribution of a feature wherein the model is conditional on the linear combination and wherein the model is not a combination of a binomial distribution for a two class response with a probit function linking the linear combination and the expectation of the response. A prior distribution is constructed for the component weights of the linear combination comprising a hyperprior having a high probability density close to zero, and the prior distribution and the model are combined to generate a posterior distribution. A subset of components is identified having component weights that maximise the posterior distribution.

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ACTION

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