

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : G06F 9/38	A1	(11) International Publication Number: WO 00/41072 (43) International Publication Date: 13 July 2000 (13.07.00)
(21) International Application Number: PCT/US99/30882 (22) International Filing Date: 23 December 1999 (23.12.99) (30) Priority Data: 09/224,414 31 December 1998 (31.12.98) US (71) Applicant (for all designated States except US): INTEL CORPORATION [US/US]; 2200 Mission College Boulevard, Santa Clara, CA 95052 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): GROCHOWSKI, Edward, T. [US/US]; 5565 Yale Drive, San Jose, CA 95118 (US). MULDER, Hans, J. [NL/US]; 199 Montcalm Street, San Francisco, CA 94110 (US). HUMMEL, Vincent, E. [US/US]; 22 Roseland Street, Apt. #2, Cambridge, MA 02140 (US). (74) Agents: MILLIKEN, Darren, J. et al.; Blakely, Sokoloff, Taylor & Zafman LLP, 12400 Wilshire Boulevard, 7th Floor, Los Angeles, CA 90025 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, 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, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, 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 <i>With international search report.</i>
(54) Title: A METHOD AND APPARATUS FOR IMPROVED PREDICATE PREDICTION (57) Abstract In one method, the least significant bits (LSBs) of a first operand are compared to the LSBs of a second operand. The result of this comparison is used to determine a predicted predicate value for a predicate. A predicated instruction is then conditionally executed depending on the predicted predicate value. Confidence level is high <pre>graph TD; 100((100 Make prediction based on historical information)); 101((101 Make prediction based on LSB comparison)); 100 -- "Confidence level is high" --> 100; 101 -- "Confidence level is low" --> 101; 100 -- "Confidence level drops below a threshold" --> 101; 101 -- "Confidence level increases above a threshold" --> 100;</pre>		