

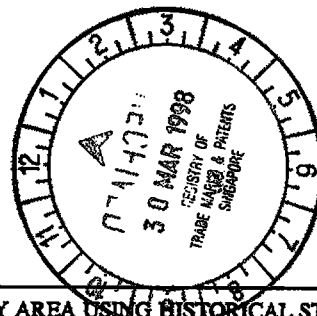
9801424-4

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G06F 12/14, 13/18, 9/46		A1	(11) International Publication Number: WO 97/05550
			(43) International Publication Date: 13 February 1997 (13.02.97)
(21) International Application Number: PCT/US96/11306			(81) Designated States: AL, AM, AT, AT (Utility model), AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).
(22) International Filing Date: 2 July 1996 (02.07.96)			
(30) Priority Data: 08/507,962 27 July 1995 (27.07.95) 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): AUCSMITH, David, W. [US/US]; 6995 S.W. Laber Road, Portland, OR 97225-3136 (US). KNAUERHASE, Robert, C. [US/US]; 19000 N.W. Evergreen Parkway, No. 259, Hillsboro, OR 97124-7047 (US). STANLEY, James, C. [US/US]; 7740 S.W. Miner Way, Portland, OR 97225 (US).			
(74) Agents: CHO, Lawrence, M. et al.; Blakely, Sokoloff, Taylor & Zafman, 7th floor, 12400 Wilshire Boulevard, Los Angeles, CA 90025-1026 (US).			

Published
With international search report.(54) Title: **PROTOCOL FOR ARBITRATING ACCESS TO A SHARED MEMORY AREA USING HISTORICAL STATE INFORMATION**

(57) Abstract

A memory marking unit in the shared memory is read to determine whether the shared memory is currently being accessed by another processor (block 802). If the shared memory is not being accessed by another processor, a processor seeking access is granted access and changes the contents of the memory marking unit to lock out other processors from the shared memory (block 803). The last task performed on the shared memory space is identified and used to determine whether a task with high priority exists. If a task with high priority exists, the task is performed (block 804). If a task with high priority doesn't exist, the processor having access to the shared memory space accesses the shared memory space for its intended purpose (block 807). After the processor is finished accessing the shared memory space, it records the identity of the task performed (block 808) and unlocks the shared memory space (block 809).

