PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : G06F 17/30	A1	(11) International Publication Number: WO 99/38094
		(43) International Publication Date: 29 July 1999 (29.07.99)

(21) International Application Number: PCT/IL99/00038

(22) International Filing Date: 22 January 1999 (22.01.99)

(30) Priority Data:
PCT/IL98/00029 22 January 1998 (22.01.98) IL

ORIS

(71) Applicant *(for all designated States except US)*: ORI SOFTWARE DEVELOPMENT LTD. [IL/IL]; Yavetz Street 30, 65258 Tel Aviv (IL).

(72) Inventor; and
(75) Inventor/Applicant *(for US only)*: SHADMON, Moshe [IL/IL]; Lunz Street 15, 65221 Tel Aviv (IL).

(74) Agent: REINHOLD COHN AND PARTNERS; P.O. Box 4060, 61040 Tel Aviv (IL).

(81) Designated States: 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, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, 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
With international search report.
Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: DATABASE APPARATUS

(57) Abstract

A database file management system for accessing data records is being executed on data processing system, the data records are linked to a trie index that is arranged in blocks (402, 405, 406 and 407) and being stored in a storage medium. The trie index (A, B and I, element 402) enables accessing or updating the data records by key or keys and being susceptible to an unbalanced structure of blocks. There is provided a method for constructing a layered index arranged in blocks, which includes the steps of providing the trie index and constructing a representative index over the representative keys of the trie index. The layered index enables accessing or updating the data records by key or keys and it constitutes a balanced structure of blocks.



162162



G00002