

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
4 November 2004 (04.11.2004)

PCT

(10) International Publication Number  
**WO 2004/095284 A2**

(51) International Patent Classification<sup>7</sup>: **G06F 12/00**

(21) International Application Number:  
PCT/GB2004/001726

(22) International Filing Date: 19 April 2004 (19.04.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
10/422,500 23 April 2003 (23.04.2003) US

(71) Applicant (for all designated States except US): **INTERNATIONAL BUSINESS MACHINES CORPORATION** [US/US]; New Orchard Road, Armonk, New York 10504 (US).

(71) Applicant (for MG only): **IBM UNITED KINGDOM LIMITED** [GB/GB]; PO Box 41, North Harbour, Portsmouth Hampshire PO6 3AU (GB).

(72) Inventors; and

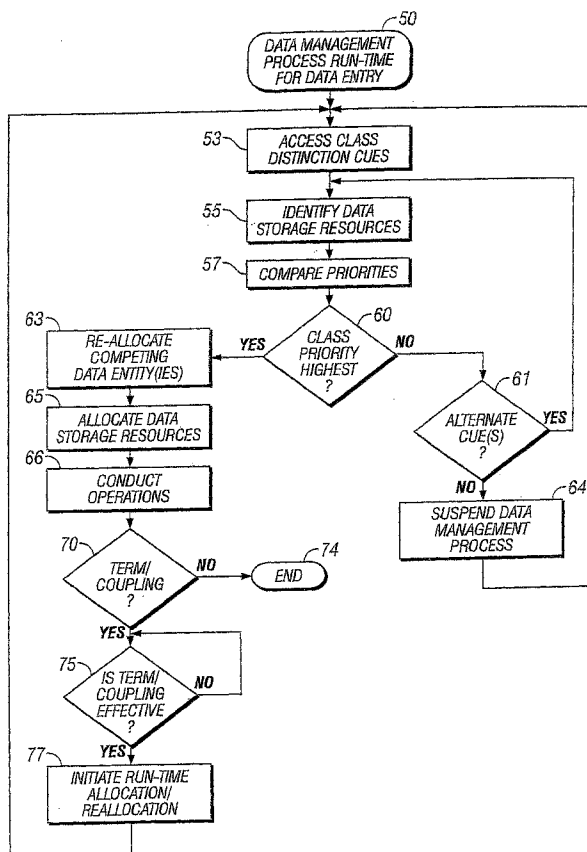
(75) Inventors/Applicants (for US only): **BOYD, Kenneth, Wayne** [US/US]; 855 North Camino Cordon, Tucson, Arizona 85748 (US). **FRISKE, Robert, Charles** [US/US]; 4684 Windberry Lane, Milford, Michigan 48380 (US). **HOOD, Robert, Allen** [US/US]; 23265 Lago Mar Circle, Boca Raton, Florida 33433 (US). **KALOS, Matthew, Joseph** [US/US]; 5435 East Heatherwood Way, Tucson, Arizona 85718 (US). **KERN, Robert, Frederic** [US/US]; 5128 N. Fairway Heights Drive, Tucson, Arizona 85749 (US).

(74) Agent: **LING, Christopher, John**; IBM United Kingdom Limited, Intellectual Property Law, Hursley Park, Winchester Hampshire SO21 2JN (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,

[Continued on next page]

(54) Title: STORAGE SYSTEM CLASS DISTINCTION CUES FOR RUN-TIME DATA MANAGEMENT



(57) Abstract: A data management system has at least one class distinction cue associated with a class of data entities. The class distinction cue comprises data management guidance information and priority information related to the associated class of data entities. For a data entity, at run-time, a data management allocation run-time system references the class distinction cue or cues prior to conducting data management allocation or access, and, based on the priority information as compared to other priority information related to the data storage resources, selectively allocates the data storage resources and provides the operations of the storage system in the data management allocation system for the data entity.

WO 2004/095284 A2



KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— without international search report and to be republished upon receipt of that report

**(84) Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*