

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
4 March 2004 (04.03.2004)

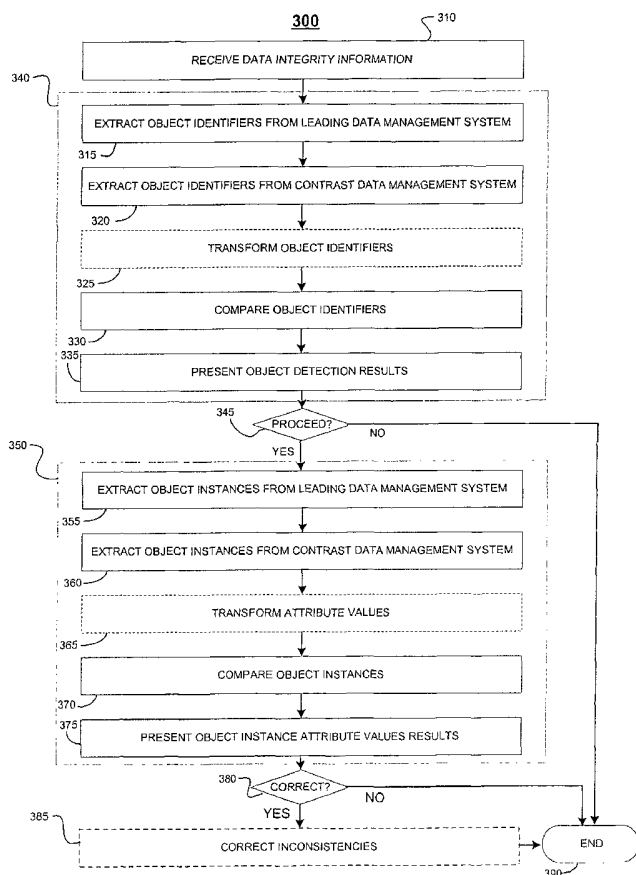
PCT

(10) International Publication Number  
WO 2004/019221 A3

- (51) International Patent Classification<sup>7</sup>: G06F 17/30
- (21) International Application Number: PCT/EP2003/008992
- (22) International Filing Date: 13 August 2003 (13.08.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
10/219,929 15 August 2002 (15.08.2002) US  
10/222,757 16 August 2002 (16.08.2002) US
- (71) Applicant: SAP AKTIENGESELLSCHAFT [DE/DE];  
Neurottstrasse 16, 69190 Walldorf (DE).
- (72) Inventors: GOETZ, Martina; Eichenstrasse 18, 67365  
Schwegenheim (DE). SCHMITT, Michael; Panoramastrasse 19, 64385 Reichelsheim (DE). LUTZ, Steffen;  
Neuhofstrasse 6, 66976 Rodalben-Neuhof (DE).
- (74) Agent: SCHIUMA, Daniele; Müller-Boré & Partner,  
Grafinger Strasse 2, 61671 München (DE).
- (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, 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, 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, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: MANAGING DATA INTEGRITY



(57) Abstract: Techniques are provided to manage the integrity of data stored in two or more data management systems by detecting inconsistencies between the data management systems. The techniques identify missing records in one or more data management systems by comparing the records in the data management systems. For records that exist in two or more data management systems, the techniques identify records that are not identical in the data management systems. A user checkpoint is provided between the identification of missing records and the identification of records that are not identical. The detected inconsistencies also may be corrected.

WO 2004/019221 A3



**Published:**

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

*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.*

**(88) Date of publication of the international search report:**

1 July 2004

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 03/08992A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 G06F17/30

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, IBM-TDB, INSPEC, COMPENDEX

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category ° | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|------------|--|-----------------------|
| X          | US 5 796 999 A (AZAGURY ALAIN CHARLES ET AL) 18 August 1998 (1998-08-18)<br>abstract<br>column 4, line 17 -column 4, line 48<br>figure 3 | 1-60                  |
| X          | US 5 751 958 A (PETTUS CHRISTOPHE E ET AL) 12 May 1998 (1998-05-12)<br>abstract<br>column 1, line 50 -column 1, line 57<br>figure 3A     | 1-60                  |
| A          | US 6 304 882 B1 (WYATT NATHANIEL G ET AL) 16 October 2001 (2001-10-16)<br>column 9, line 46 -column 9, line 60                           | 1,11,21,<br>25,41,57  |

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

° Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \* & \* document member of the same patent family

Date of the actual completion of the international search

8 April 2004

Date of mailing of the international search report

03/05/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Schmidt, A

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/08992

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|--|------------------|-------------------------|------------------|
| US 5796999                             | A                | 18-08-1998 JP 7295871 A | 10-11-1995       |
| US 5751958                             | A                | 12-05-1998              | NONE             |
| US 6304882                             | B1               | 16-10-2001              | NONE             |