US005857195A

# United States Patent [19]

**Hayashi et al.**

[11] **Patent Number: 5,857,195**

[45] **Date of Patent: Jan. 5, 1999**

[54] **METHOD OF DEVELOPING AND MODIFYING SELF-DESCRIBING DATABASE MANAGEMENT SYSTEM TO GENERATE A NEW DATABASE MANAGEMENT SYSTEM FROM AN EXISTING DATABASE MANAGEMENT SYSTEM**

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[21] Appl. No.: **655,311**

[22] Filed: **May 21, 1996**

**Related U.S. Application Data**

[63] Continuation of Ser. No. 295,148, Aug. 24, 1994, abandoned, which is a continuation of Ser. No. 745,491, Aug. 14, 1991, abandoned.

[30] **Foreign Application Priority Data**

Aug. 31, 1990 [JP] Japan ..... 2-231447

[51] **Int. Cl.**[6] ..... **G06F 7/00**

[52] **U.S. Cl.** ..... **707/102**; 707/203

[58] **Field of Search** ..... 395/613, 700, 395/619; 707/102, 203

[56] **References Cited**

U.S. PATENT DOCUMENTS

| | | | |
|---|---|---|---|
| 4,205,371 | 5/1980 | Feather | 395/600 |
| 4,734,854 | 3/1988 | Afshar | 395/700 |
| 4,774,661 | 9/1988 | Kumpati | 364/300 |
| 4,791,561 | 12/1988 | Huber | 364/300 |
| 4,819,160 | 4/1989 | Tanka et al. | 364/300 |
| 4,908,759 | 3/1990 | Alexander, Jr. et al. | 364/300 |
| 4,931,928 | 6/1990 | Greenfeld | 395/600 |
| 5,133,063 | 7/1992 | Naito et al. | 395/500 |
| 5,159,687 | 10/1992 | Richburg | 395/700 |
| 5,185,887 | 2/1993 | Takahashi et al. | 395/922 |
| 5,230,049 | 7/1993 | Chang et al. | 395/700 |
| 5,235,701 | 8/1993 | Ohler et al. | 395/600 |
| 5,375,237 | 12/1994 | Tanaka et al. | 395/650 |

OTHER PUBLICATIONS

Patel, K. Bhadra, Automated Tool For Database Design and Criteria For Their Selection For Aerospace Applications, Aerospace Applications, 1989 Conf. pp. 1–13.

Parsaye, Kamran et al., *Intelligent Databases*, John Wiley & Sons, Inc., pp. 35–83, 161–222 1989 Cover, Preface, Table of Content, 449–468.

*FoxBase+* User Manual (Revision 2.00), Fox Software, Inc. Jul. 1987. pp. 2–14, 2–15, Cover.

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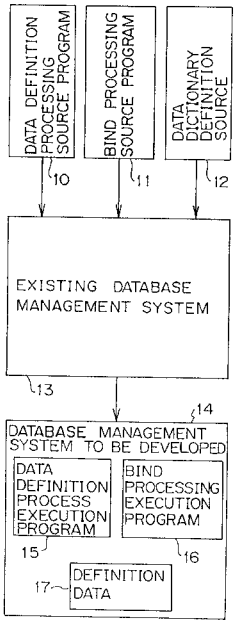
[57] **ABSTRACT**

A method of developing a self-describing database management system comprises the steps of holding definition data of a database management system to be developed as data on a database and creating a database management system to be developed by the use of an existing database management system. The database management system to be developed comprises a data definition processing execution program and a bind processing execution program. These two programs include a process to permit access to definition data which form database, and are executed based on the definition data on the database.

**2 Claims, 30 Drawing Sheets**