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Greef et al.

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(45) **Date of Patent: May 28, 2002**

(54) **METHOD FOR CREATING AND MAINTAINING A FRAME-BASED HIERARCHICALLY ORGANIZED DATABASES WITH TABULARLY ORGANIZED DATA**

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(22) Filed: **Dec. 31, 1998**

Related U.S. Application Data

(63) Continuation-in-part of application No. 09/152,186, filed on Sep. 12, 1998, now abandoned.

(51) **Int. Cl.**[7] **G06F 17/30**
(52) **U.S. Cl.** **707/102**; 707/103; 707/104.1
(58) **Field of Search** 707/102, 103, 707/104; 705/26, 27, 79

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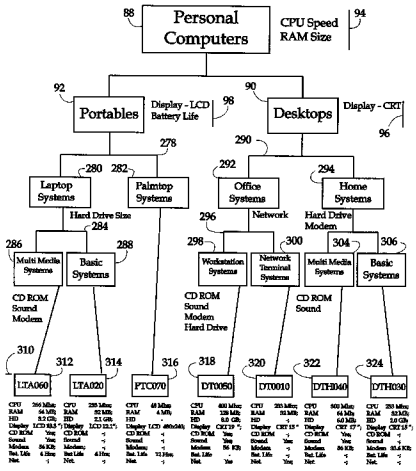
(57) **ABSTRACT**

The method includes steps for creating and or modifying the organizational structure and data content of a frame-based, hierarchical product database with the use of tabularly arranged product data. The method features steps for enabling determination of a hierarchical database organizational structure capable of accommodating importation of tabular product data. Additionally, the method feature steps for facilitating either modification of an existing organizational structure where the database already exists, or, creation of a new frame-based, hierarchical organizational structure suitable for receiving the tabular data by generating an entirely new, original structure where none is available. In a first preferred form, the method is implemented in computer software and features program steps for enabling a database administrator, or the like, to determine what frame-based, hierarchical organizational structure would be needed to enable importation of tabular product data, the term "product" embracing both goods and or services. The method features steps for displaying to the database administrator the tabularly organized product data, and, where available, the organizational structure of an existing frame-based, hierarchical database. In a second preferred form, the method features software steps for automatically generating the required frame-based, hierarchical organizational structure where the tabular data includes the product record category and subcategory information necessary to define the organizational structure required to accommodate importation of the tabular data. Further, the method includes software steps for automatically associating the tabular product record information at the lowest level of the frame-based, organizational structure generated.

20 Claims, 18 Drawing Sheets



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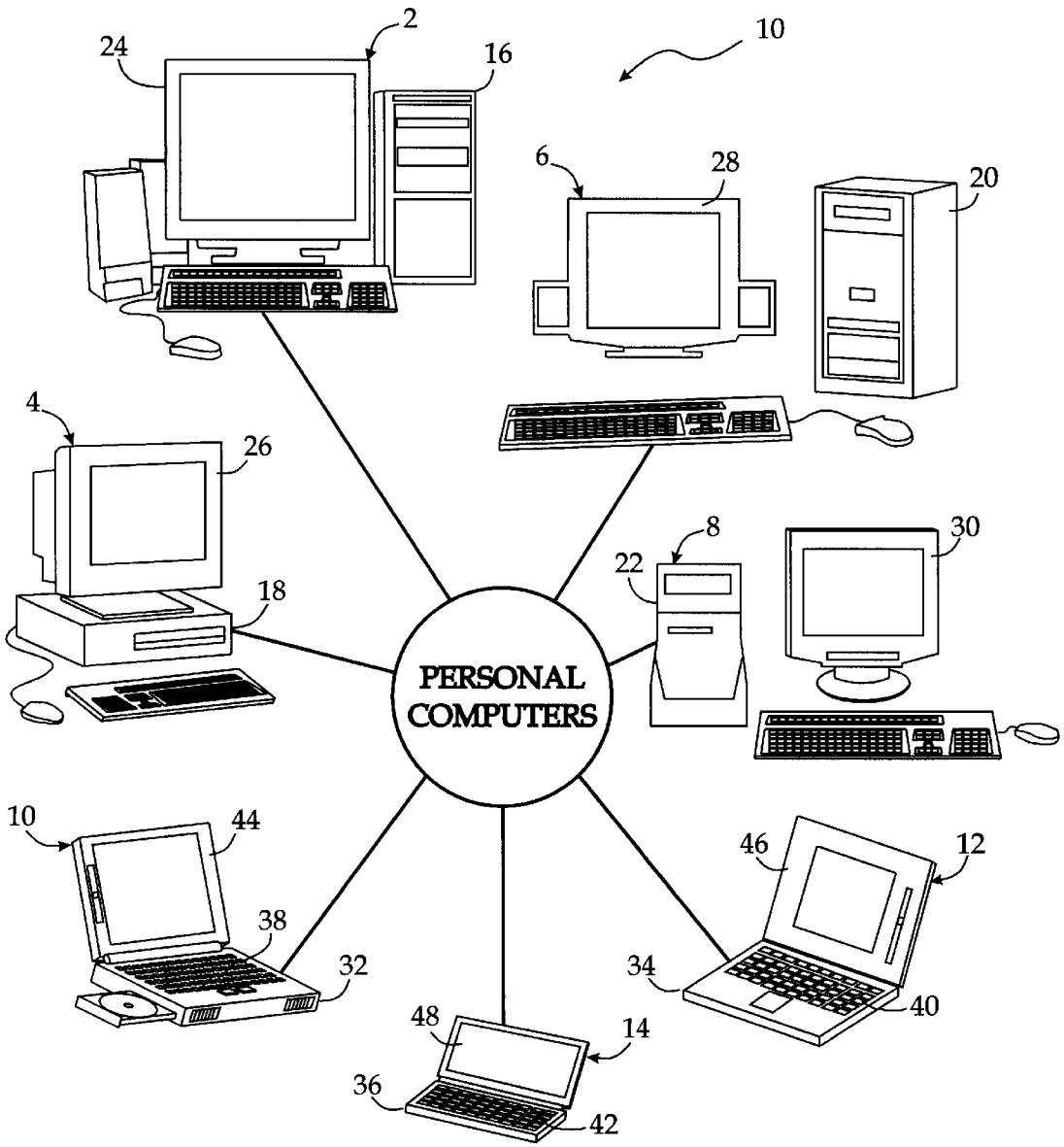

Fig. 1

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Product Table

	50 / 52 Model Number	54 CPU Speed	56 RAM Size	58 Hard Drive Size	60 Display Type	62 Audio Sup.	64 CD ROM Sup.	66 Modem Sup.	68 Bat. Life	70 Net Sup.
72	DT0050	400 Mhz	128 MB	8.0 GB	CRT 19"	Yes	Yes	56.0 KB	—	Yes
74	DT0010	233 Mhz	32 MB	—	CRT 15"	—	—	—	—	Yes
76	DTH040	300 Mhz	64 MB	4.0 GB	CRT 17"	Yes	Yes	56.0 KB	—	—
78	DTH030	233 Mhz	32 MB	2.0 GB	CRT 15"	—	—	36.6 KB	—	—
80	LTA060	266 Mhz	64 MB	3.2 GB	LCD 13.3"	Yes	Yes	56.0 KB	4 Hrs	—
82	LTA020	233 Mhz	16 MB	2.1 GB	LCD 12.1"	—	—	—	4 Hrs	—
84	PTC070	48 Mhz	4 MB	—	LCD 480x240	—	—	—	12 Hrs	—

Fig. 2

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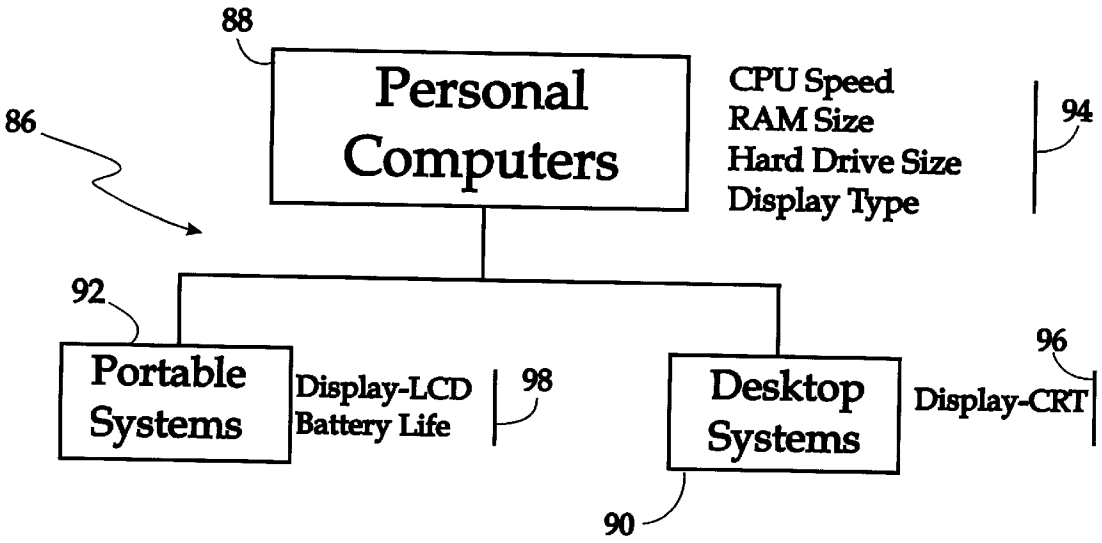

Fig. 3

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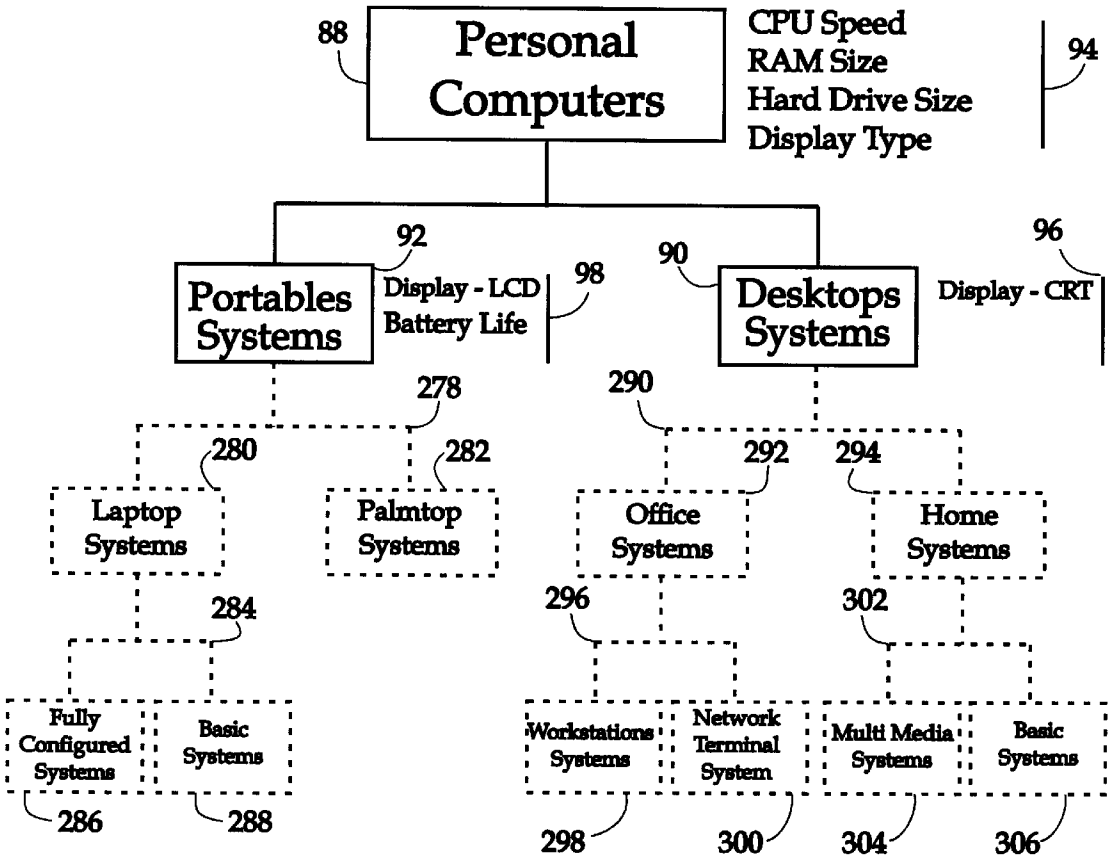

Fig. 4

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