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### (54) METHOD AND APPARATUS FOR AUTOMATIC PRICING IN ELECTRONIC COMMERCE

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U.S.C. 154(b) by 1340 days.

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(51) Int. Cl.

**G06F 17/00** (2006.01)

(52) **U.S. Cl.** ...... **705/400**; 705/1.1; 705/7.29; 705/7.35; 705/26.1; 705/26.61

See application file for complete search history.

### (56) References Cited

### U.S. PATENT DOCUMENTS

3,581,072	Α	*	5/1971	Nymeyer 705/37
5,331,544	$\mathbf{A}^{-1}$	*	7/1994	Lu et al 705/10
5,778,357	$\mathbf{A}^{-1}$	*	7/1998	Kolton et al 707/2
5,873,069	$\mathbf{A}^{-1}$	*	2/1999	Reuhl et al 705/20
6,196,458	В1		3/2001	Walker et al.
6,230,150	B1	*	5/2001	Walker et al 705/400
6,233,564	В1		5/2001	Schulze, Jr.
6,424,949	В1		7/2002	Deaton et al.
6,477,180	В1	1	1/2002	Aggarwal et al.
6,539,392	B1	*	3/2003	Rebane 707/101

### FOREIGN PATENT DOCUMENTS

WO WO 02/010961 \* 7/2001

#### OTHER PUBLICATIONS

"Navigating the Intersection of forecasting, market research and pricing" by Cook, Aug. 1995, Pharmaceutical Executive, v15, n8, p. 54-58.\*

"Pricing research for decision making" by Mohn, winter 1995, Marketing Research, a Magazine of Management & Applications, v&n1 p. 10-19.\*

\*Pricing decision in small firms: Theory and practice" by Cunningham, 1993, Management Decision, v31n& p. 46-55.\*

A guide to conducting marketing research on the Internet by Emery, Jan. 1996 in Potentials in Marketing v23, n1, p22, entire document.\*

\* cited by examiner

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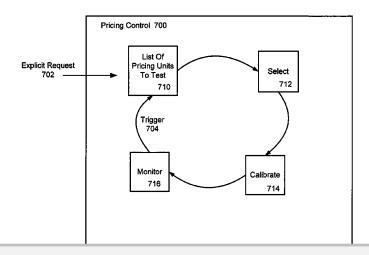
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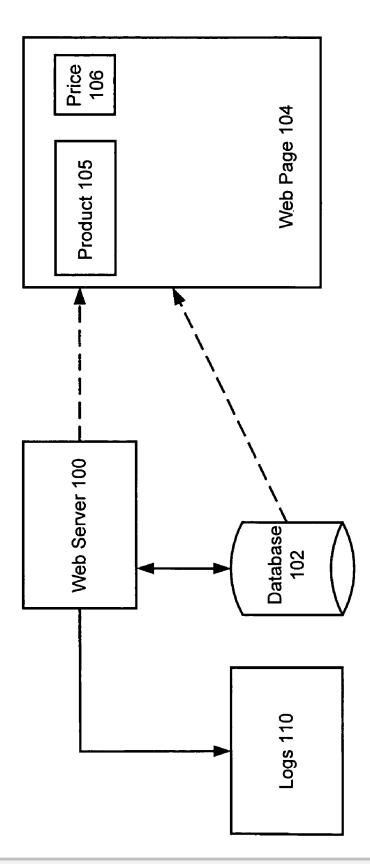
### (57) ABSTRACT

An automatic pricing method and apparatus for use in electronic commerce environments is described. Automatic pricing uses live price testing to estimate and measure demand for specific products—taking into account where appropriate, a vendor selected segmentation scheme. The results of live price testing are compared using a vendor selected goal function, e.g. profit maximization, to select a new price. A goal function that balances short term gains versus long term gains based on customer lifetime value is described. The live price testing approach used is designed to minimize losses due to price testing through statistical methods. Additionally, methods for distributing price testing across time so as to avoid problems caused by too many ongoing tests as well as side effects from testing are described. The selected price is a win for both purchasers and vendors as the automatic price will approximate the efficiency of a reverse auction without the inconvenience of the auction format while being goal maximizing for the vendor. For example, a vendor that normally sets prices of items for sale to customers can use embodiments of the invention to great effect.

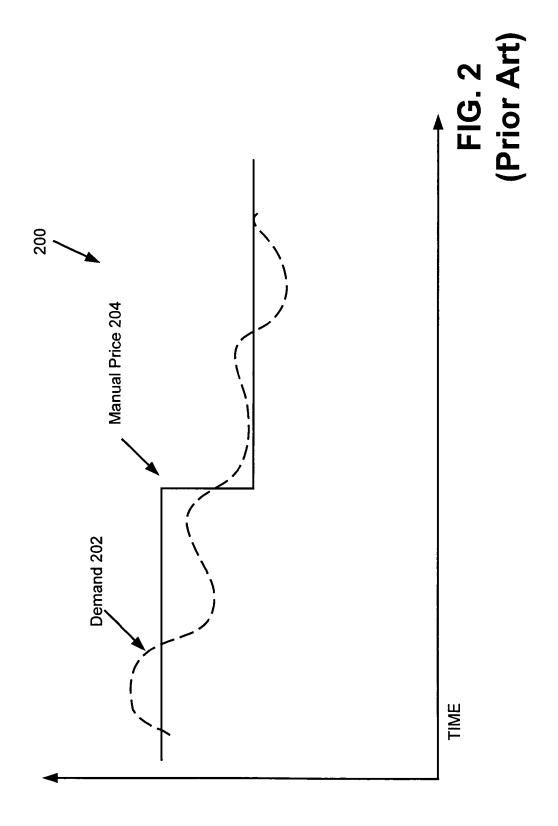
### 62 Claims, 7 Drawing Sheets







# FIG. 1 (Prior Art)





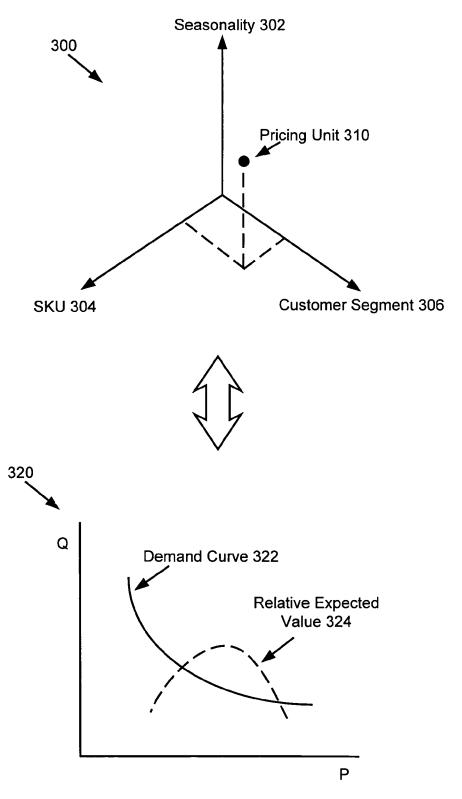
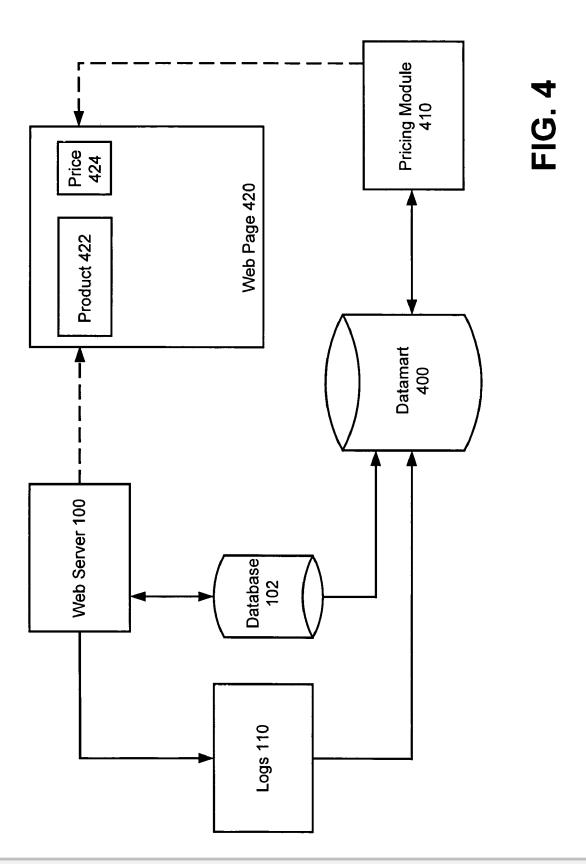


FIG. 3







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