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# United States Patent [19]

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Noble et al.

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[54] **MOSAIC OBJECTS AND METHOD FOR OPTIMIZING OBJECT REPRESENTATION PERFORMANCE IN AN OBJECT-ORIENTED REPRESENTATION SYSTEM**

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

4,068,300	1/1978	Bachman	364/200
4,450,522	5/1984	Pilat et al.	395/400
4,864,497	9/1989	Lowry et al.	364/300
4,930,071	5/1990	Tou et al.	364/300
5,129,083	7/1992	Cutler et al.	395/600

[75] Inventors: **Robert E. Noble, Sunnyvale; Gregory D. Clemenson, Palo Alto, both of Calif.**

*Primary Examiner*—Gareth D. Shaw  
*Assistant Examiner*—Lucien Toplu  
*Attorney, Agent, or Firm*—Townsend and Townsend Khourie and Crew

[73] Assignee: **Intellicorp, Inc., Mountain View, Calif.**

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[57] **ABSTRACT**

Object-oriented software-based systems may be optimized by providing a data representation which is initially permitted to be completely dynamic such that at compile time representation need not be specified and thereafter the data structure and representation is progressively optimized. The invention is based on the recognition that the important data structures in object-oriented systems are not the objects but rather the slots, i.e., the attributes of objects.

**Related U.S. Application Data**

[63] Continuation of Ser. No. 589,114, Sep. 27, 1990, abandoned.

[51] Int. Cl.<sup>5</sup> ..... G06F 12/00; G06F 15/00

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[58] Field of Search ..... 395/700; 364/DIG. 1

**2 Claims, 3 Drawing Sheets**

