

United States Patent [19]**Heath et al.**[11] **Patent Number:** **6,006,034**[45] **Date of Patent:** **Dec. 21, 1999**[54] **SYSTEMS AND METHODS FOR
AUTOMATIC APPLICATION VERSION
UPGRADING AND MAINTENANCE**[75] Inventors: **Clifford Heath**, Mount Waverly;
Graeme Port, Surrey Hills, both of
Australia; **Steven Klos**, Nashua;
Graeme Greenhill, Londonderry, both
of N.H.[73] Assignee: **Open Software Associates, Ltd.**,
Kingwood, Australia[21] Appl. No.: **08/707,622**[22] Filed: **Sep. 5, 1996**[51] **Int. Cl.**⁶ **G06F 9/06**[52] **U.S. Cl.** **395/712**[58] **Field of Search** 395/712, 200.51,
395/200.5, 200.47, 200.49, 500, 181; 707/203,
507, 200; 380/4; 370/316[56] **References Cited****U.S. PATENT DOCUMENTS**

4,714,992	12/1987	Gladney et al.	364/200
5,005,122	4/1991	Griffin et al.	364/200
5,008,814	4/1991	Mathur	364/200
5,019,963	5/1991	Alderson et al.	364/200
5,155,847	10/1992	Kirouac et al.	395/600
5,247,683	9/1993	Holmes et al.	395/700
5,343,527	8/1994	Moore	380/4
5,440,723	8/1995	Arnold et al.	395/181
5,448,727	9/1995	Annevelink	395/600
5,495,610	2/1996	Shing et al.	395/600
5,555,416	9/1996	Owens et al.	395/700
5,577,244	11/1996	Killebrew et al.	395/703

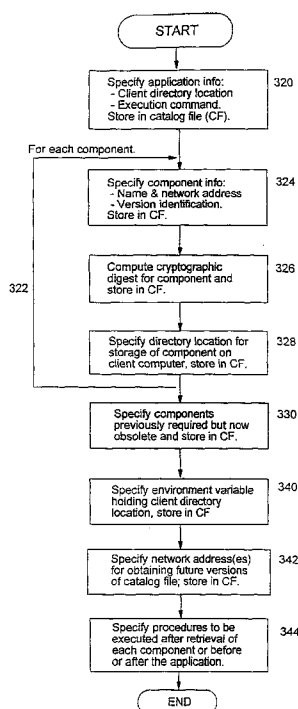
5,581,764	12/1996	Fitzgerald et al.	395/703
5,586,304	12/1996	Stupek, Jr. et al.	395/712
5,721,911	2/1998	Ha et al.	707/100
5,724,345	3/1998	Guarneri et al.	370/316
5,732,266	3/1998	Moore et al.	395/651
5,732,275	3/1998	Kullick et al.	395/712
5,734,898	3/1998	He	707/203
5,737,533	4/1998	De Hond	395/200.49
5,752,042	5/1998	Cole et al.	395/712
5,754,830	5/1998	Butts et al.	395/500
5,758,342	5/1998	Gregerson	280/602
5,768,511	6/1998	Galvin	395/200.33
5,794,259	4/1998	Kikinis	707/507
5,848,421	12/1998	Brichta et al.	707/200

OTHER PUBLICATIONS

Kirtland, Mary, "Safe Web Surfing with the Internet Component Download Service," Microsoft Systems Journal, Jul. 1996, 7 pages.

Primary Examiner—Tod R. Swann*Assistant Examiner*—Matthew Smithers*Attorney, Agent, or Firm*—Hamilton, Brook, Smith & Reynolds, P.C.[57] **ABSTRACT**

The present invention relates to methods and systems for maintaining application programs on a client computer in a client-server network environment. The task of dynamically upgrading components in the application program running on a client is greatly simplified by rendering control to the individual client rather than to a central server. The version updating procedures of the present invention further provides steps to ensure speedy and error-free transfer of the required files and components through an open network environment, such as the Internet.

96 Claims, 13 Drawing Sheets

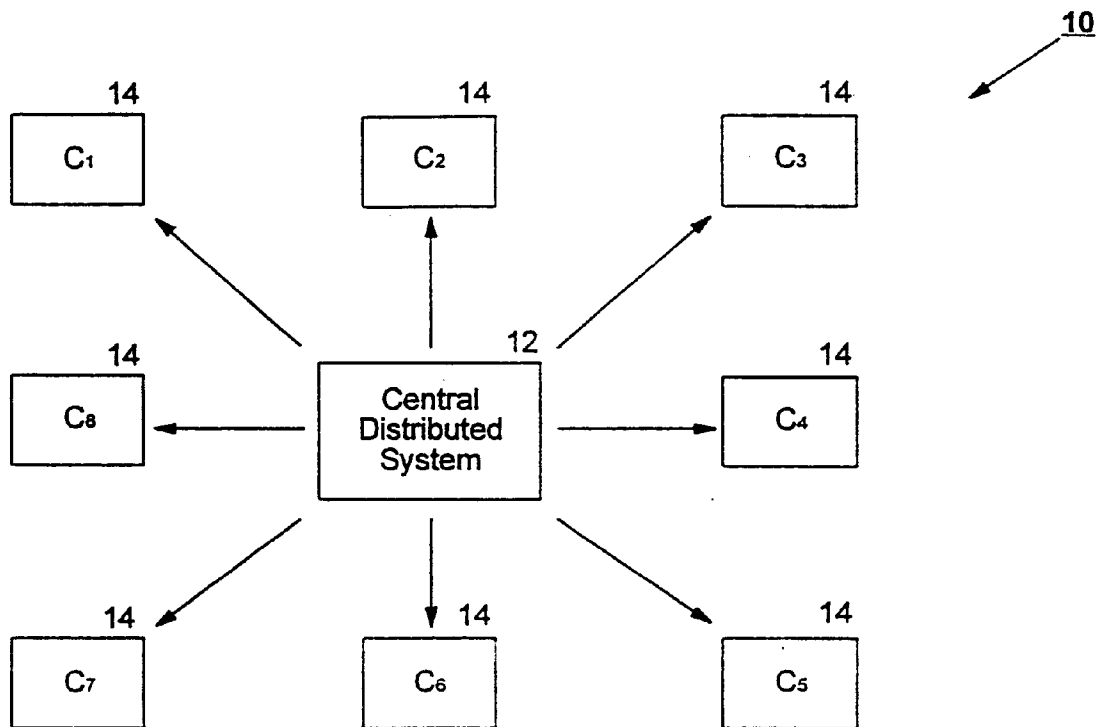


Figure 1

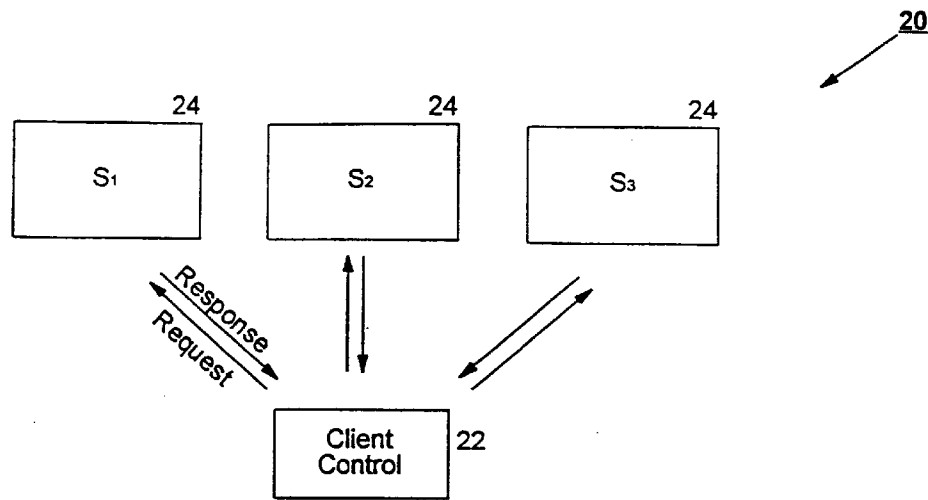


Figure 2A

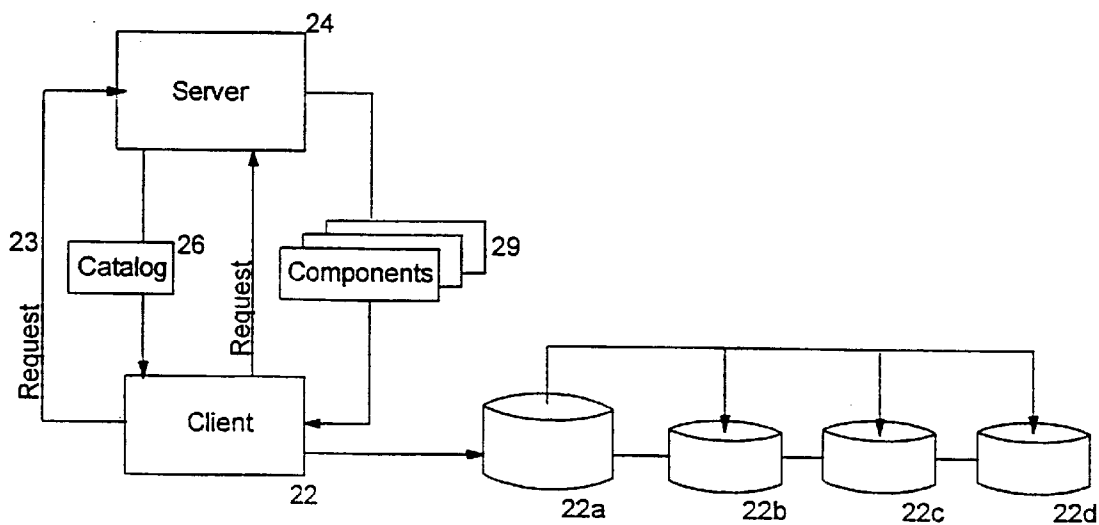


Figure 2B

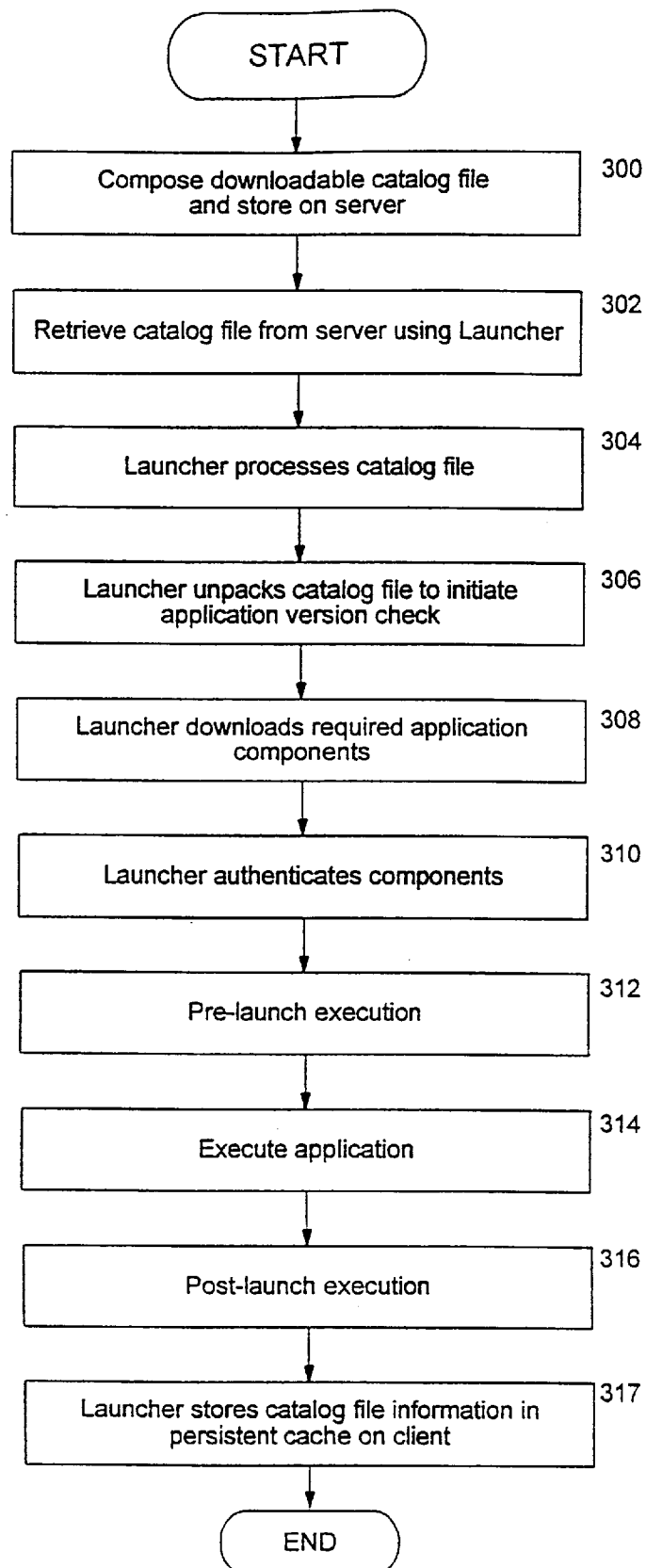


Figure 3A

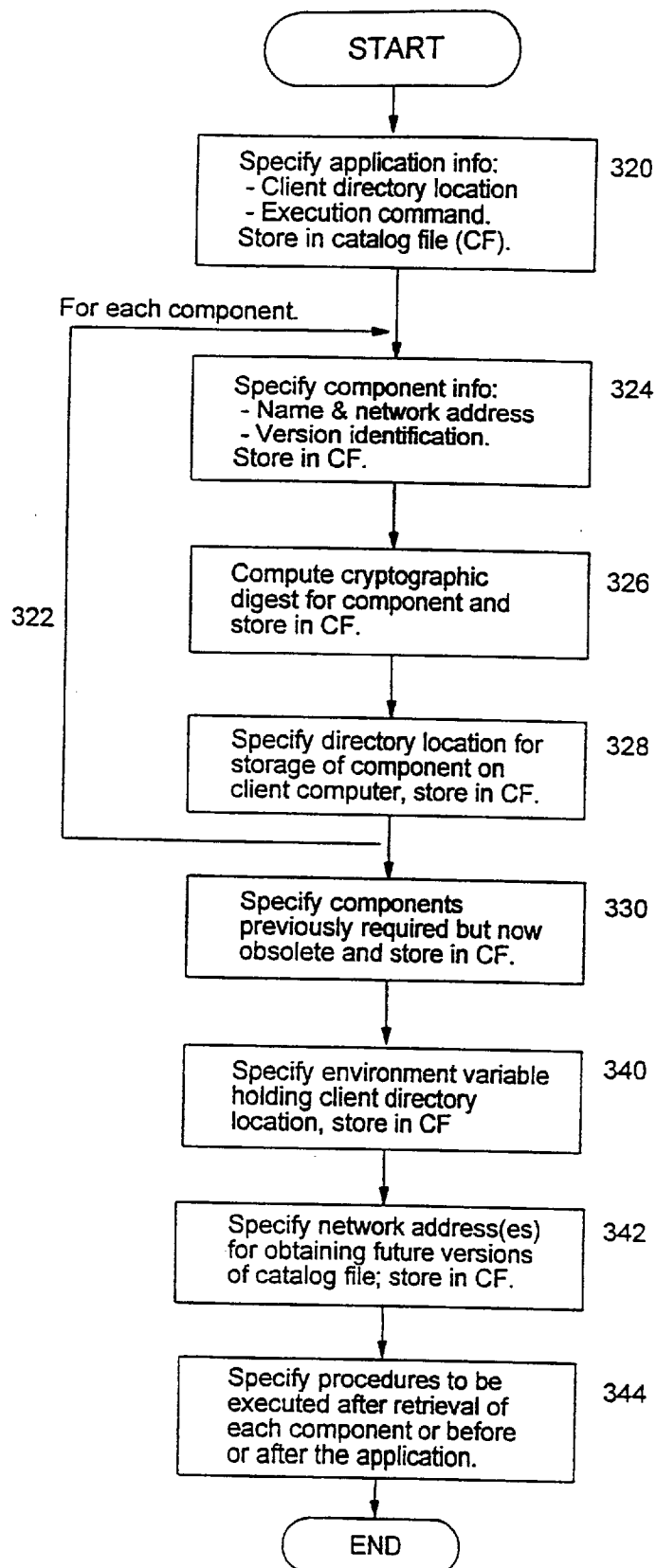


Figure 3B

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