

United States Patent [19]

Shaw et al.

[54] METHOD OF DISPLAYING AN APPLICATION ON A VARIETY OF CLIENT DEVICES IN A CLIENT/SERVER NETWORK

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Related U.S. Application Data

- [60] Provisional application No. 60/065,521, Nov. 13, 1997.
- [51] Int. Cl.⁷ G06F 7/00

[56] References Cited

U.S. PATENT DOCUMENTS

5,740,801 4/1998 Branson 709/311

US006104392A

[11] Patent Number: 6,104,392

[45] Date of Patent: Aug. 15, 2000

5,754,830	5/1998	Butts et al 370/466
5,796,942	8/1998	Esbensen 709/207
5,999,882	12/1999	Simpson et al 702/3

OTHER PUBLICATIONS

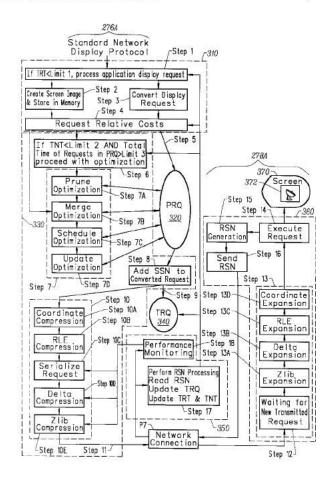
The Santa Cruz Operation Technical White Paper, Tarantella — The Universal Application Server, Jul. 1997.

Primary Examiner—Raymond J. Bayerl Assistant Examiner—Cao H. Nguyen Attorney, Agent, or Firm—Wilson Sonsini Goodrich & Rosati

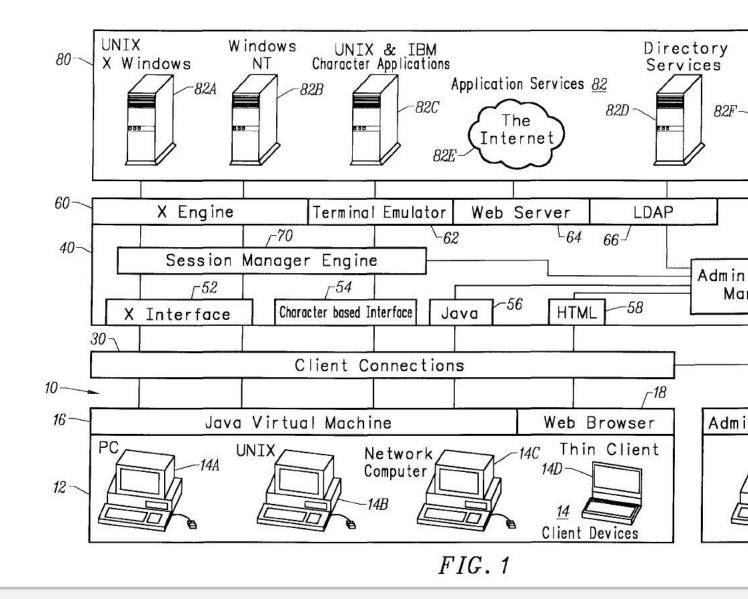
[57] ABSTRACT

In a client-server architecture, an Adaptive Internet Protocol (AIP) system, comprised of a display engine operating on a server and a protocol engine operating on a server, provides means to support standard graphics based computer applications connected to clients of varying capability via a network of varying bandwidth and latency by automatically varying the type and number of graphic requests and their networking encoding to provide near optimum performance while maintaining the correct visual representation.

34 Claims, 6 Drawing Sheets

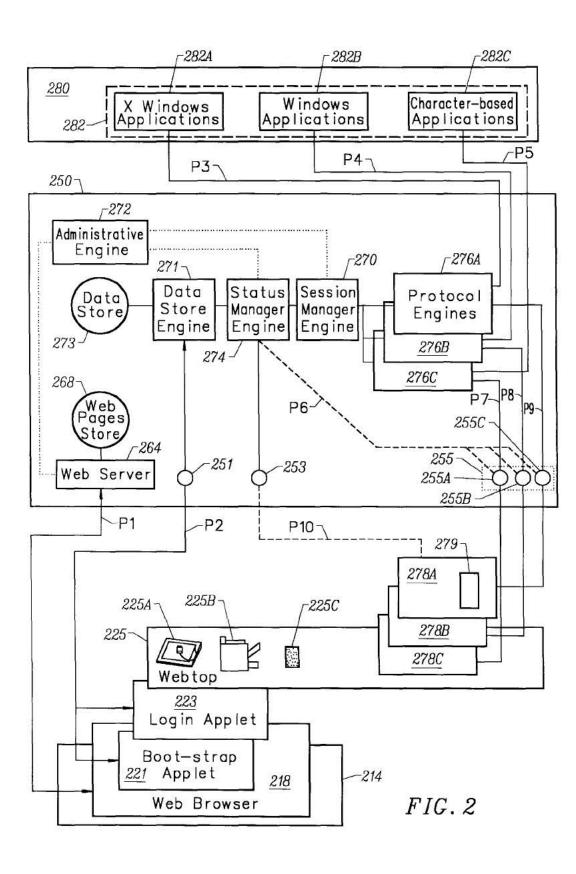


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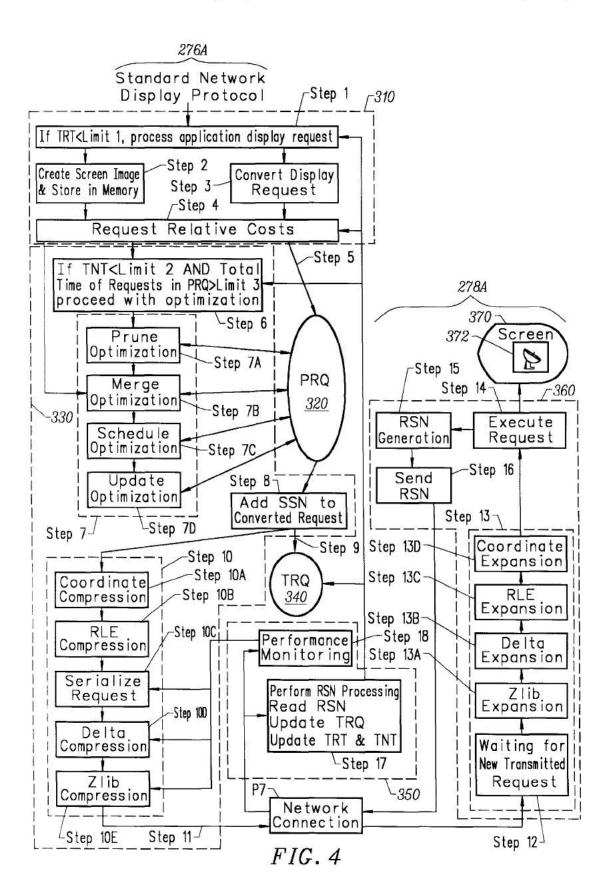
Α

Standard Network

Display Request 312 276A 278A Request Transformation -310 and Costing Process 320 Pending Request -370 Queue (PRQ) Screen Display -330 340 ∟350 -360 Request Performance Graphics Transmitted Monitoring Display Optimization Request and TRQ and and Queue Encoding Updating Update (TRQ) Process Process Process P7-

FIG.3

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