

(12) United States Patent
Blum et al.

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- (54) **TRANSPARENT PROXY SERVER**
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- (73) Assignee: **Intel Corporation**, Santa Clara, CA (US)
- (*) Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).
- Under 35 U.S.C. 154(b), the term of this patent shall be extended for 0 days.

5,604,896	*	2/1997	Duxbury et al.	709/227 X
5,623,601	*	4/1997	Vu	395/187.01
5,699,513	*	12/1997	Feigen et al.	713/201
5,781,550	*	7/1998	Templin et al.	370/401
5,826,014	*	10/1998	Coley et al.	395/187.01
5,987,517	*	11/1999	Firth et al.	709/230

OTHER PUBLICATIONS

Rolf Oppliger, Internet security enters the Middle Ages, Oct. 1995, pp. 100-101, IEEE.*
 Steven Bellovin et al., Network Firewalls, Sep. 1994, pp. 50-57, IEEE Communications Magazine.*

* cited by examiner

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- (21) Appl. No.: **08/770,918**
- (22) Filed: **Dec. 20, 1996**
- (51) **Int. Cl.**⁷ **G06F 15/16**
- (52) **U.S. Cl.** **709/227; 709/230; 709/328**
- (58) **Field of Search** 395/187.01, 188.01, 395/200.55, 200.59, 200.47, 200.49, 684; 370/401; 709/227, 225, 229, 217, 218, 219, 230, 300, 302; 713/201

(57) ABSTRACT

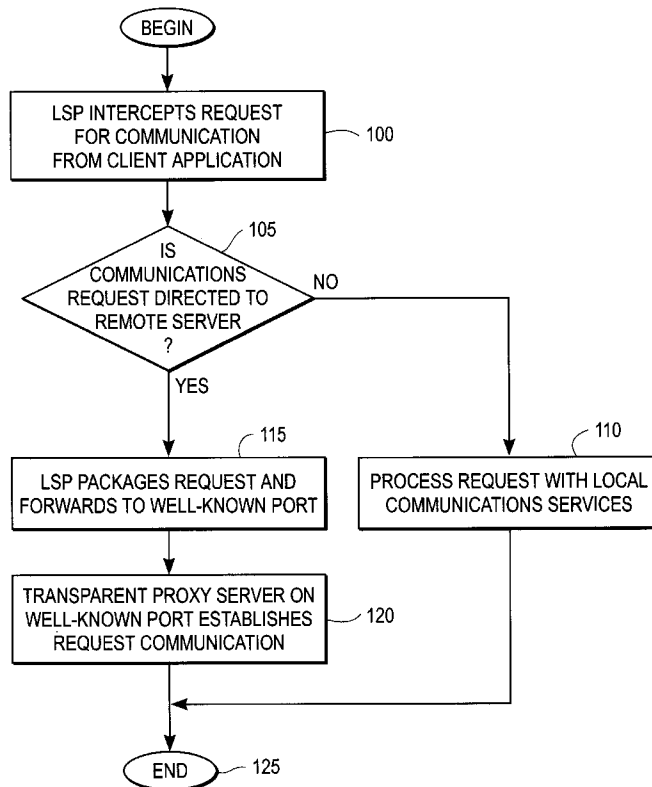
A transparent proxy. In a computer system, a layered service provider intercepts a communications request from a client application in the native protocol of the communications request wherein the communications request requests communication with a remote server. The service provider bundles and passes the communications request to a predetermined port. A transparent proxy application listening on the predetermined port receives the communications request in the native protocol of the request and establishes the requested communication.

(56) References Cited

U.S. PATENT DOCUMENTS

5,218,699 * 6/1993 Brandle et al. 395/684

25 Claims, 5 Drawing Sheets



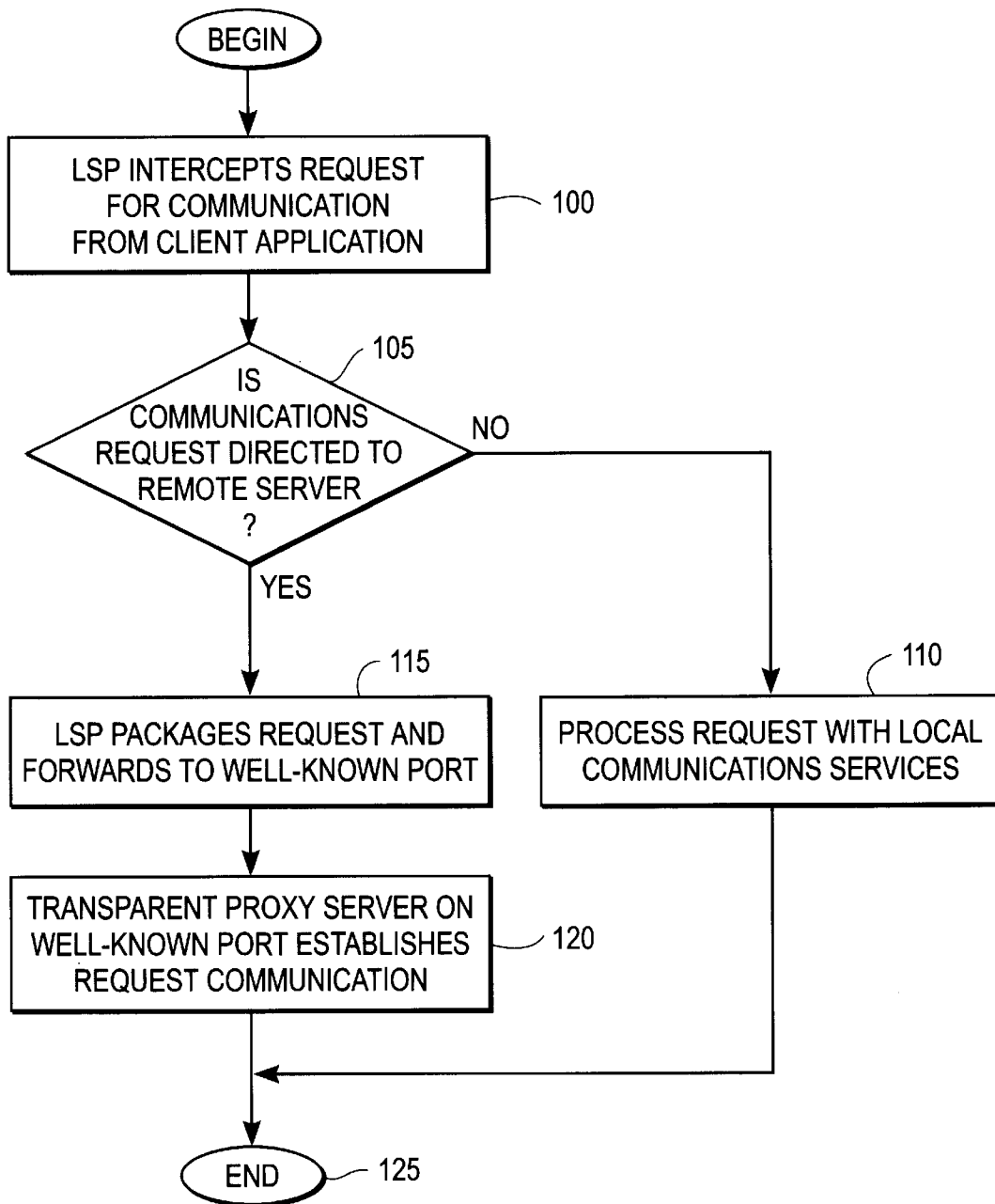


FIG. 1

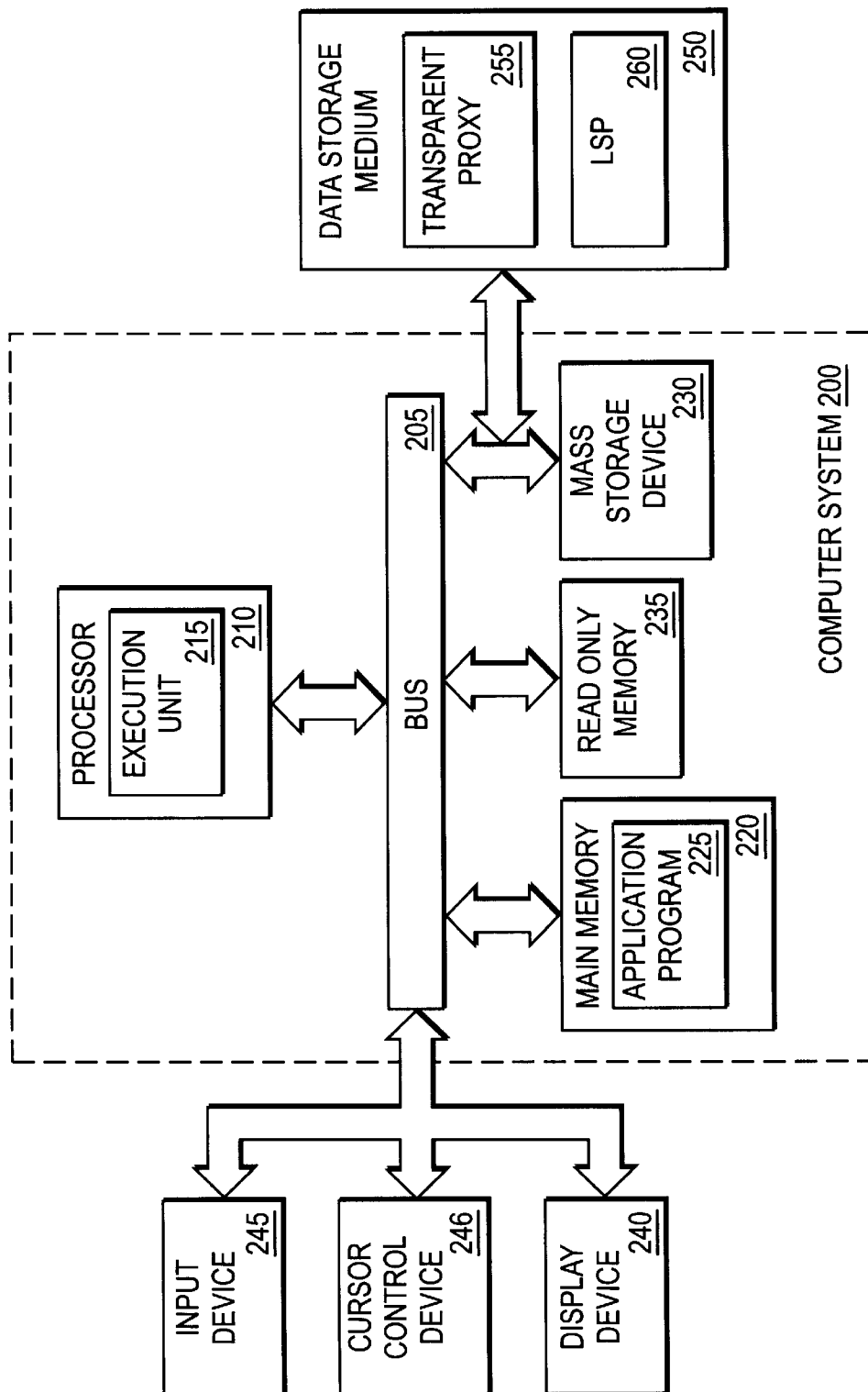


FIG. 2

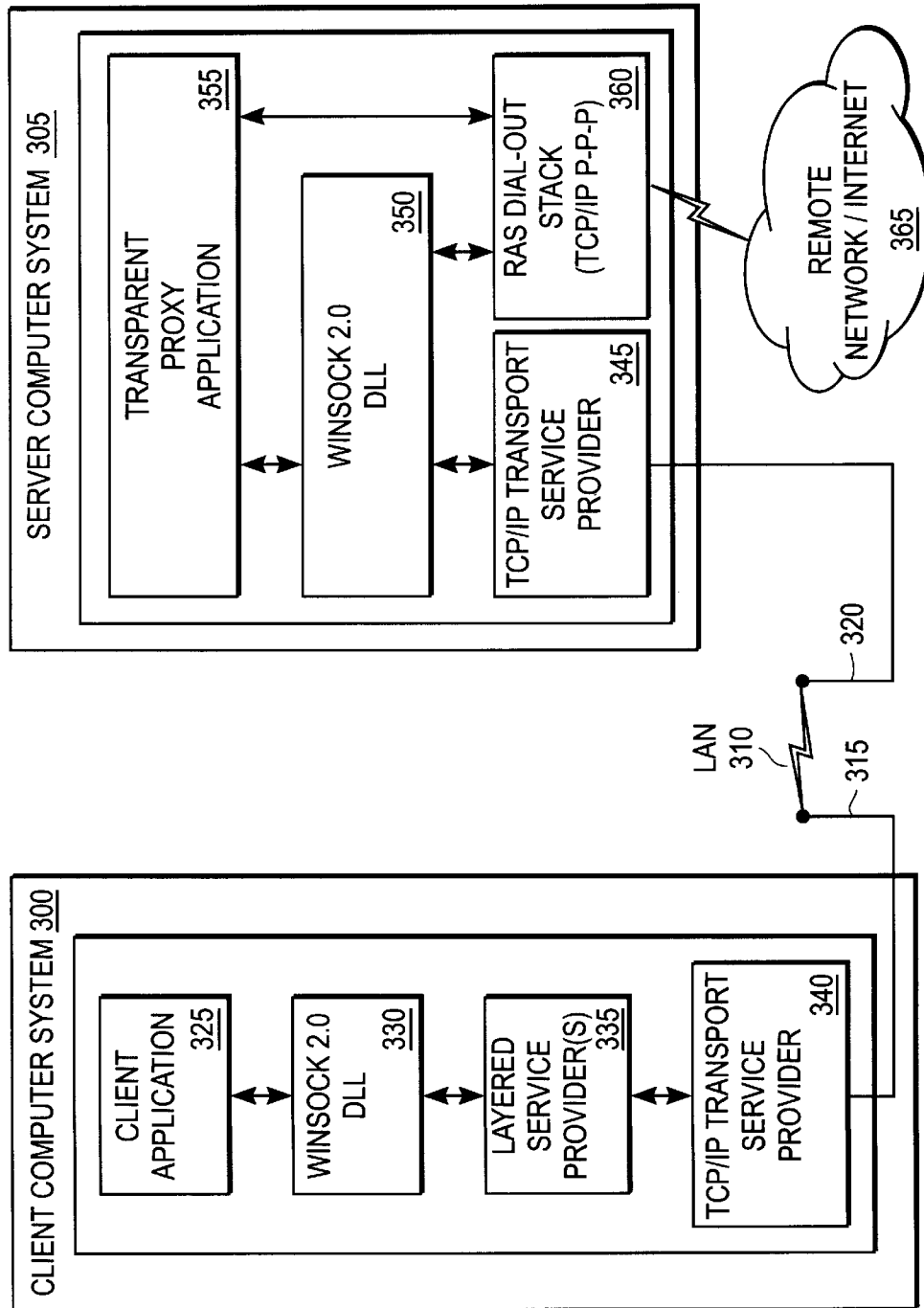


FIG. 3

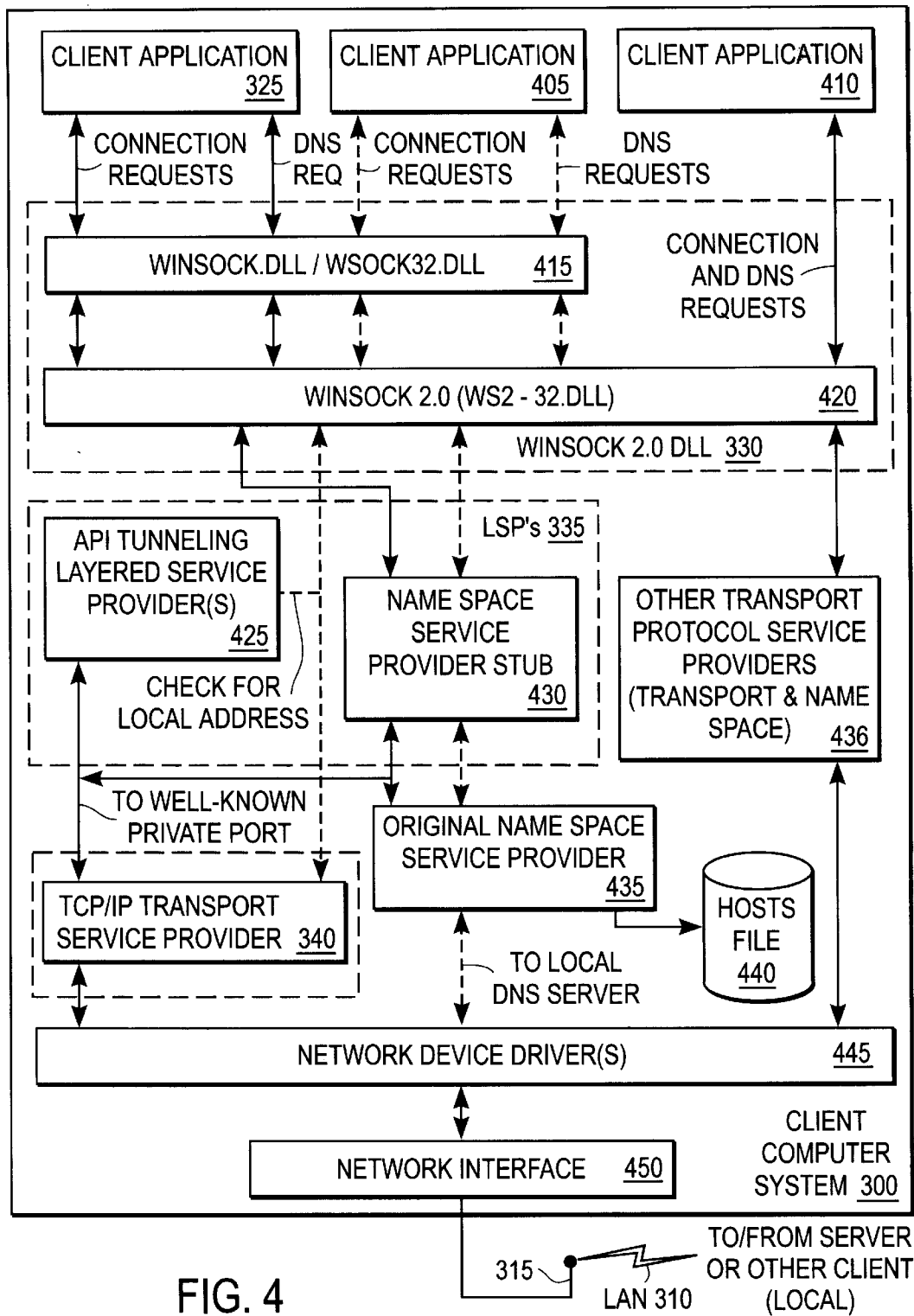


FIG. 4

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