

1 TELEPHONE COMMUNICATION METHOD CAPABLE OF RELATING
A TELEPHONE TERMINAL AND A SPEECH CHANNEL IP ADDRESS
AT THE TIME OF CALL CONNECTION

5 A telephone communication method capable of promoting the
efficient use of the limited number of IP (Internet Protocol)
addresses is disclosed. When a call is originated on a first telephone
terminal (11), a first gateway (12) accommodating the terminal
accesses a DNS (Domain Name System) server (16) via a UDP (User
10 Datagram Protocol) channel (141) of Internet or Intranet (13). The
gateway (12) inquires the DNS server (16) of the IP address of a
second gateway (14) accommodating a telephone terminal (15) to
be called, using an office number assigned to the telephone terminal
(15) as a host name. The DNS server (16) returns the IP address of
15 the gateway (14) to the gateway (12) via the UDP channel (141). In
response, the gateway (12) selects its own IP address for speech
transfer and sends a call connection request to the gateway (14) on
a TCP (Transmission Control Protocol) channel (142) of Internet. On
receiving the request, the gateway (14) determines whether or not
20 the telephone terminal (15) is busy, and selects the IP address for
speech transfer if it is idle. The IP address selected is returned to
the gateway (12) in the form of a response message (206). As a
result, a connection is set up between the two telephone terminals
11 and 15.

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FIG. 1