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(71) Applicant: INFOGEAR TECHNOLOGY CORPORATION [US/US]; Suite 200, 2055 Woodside Road, Redwood City, CA 94061 (US).

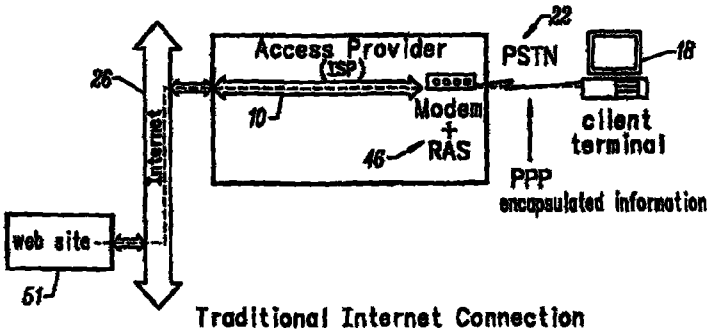
(72) Inventors: BENDELAC, Chaim; Yekutiel Adam Street 1b, 44282 Kfar-Saba (IL). BITTMAN, Ran, M.; Hakneset Hagdola Street 20, 62917 Tel Aviv (IL). SAMBURSKI, Kobi; Ig'al Alon Street 30b, 46324 Herzliya (IL).

(74) Agents: GLENN, Michael, A. et al.; Law Offices of Michael A. Glenn, P.O. Box 7831, Menlo Park, CA 94026 (US).

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(54) Title: METHOD AND SYSTEM FOR NETWORK ACCESS OVER A LOW BANDWIDTH LINK



Traditional Internet Connection

(57) Abstract

A method and system are provided for transmitting information from a faster network to a data terminal via a slower network connection. The invention is adapted for use with any Internet access device or terminal, such as an Internet-compatible telephone. A client connects to the Internet via an intermediary software program, known as the Gateway (GW). In the preferred embodiment of the invention, the GW executes on a host computer of an ISP's Local Area Network (LAN). The GW thus mediates the data transfer between the Internet, such as the Web, and the client Internet terminal. The GW employs a point-to-point Internet protocol, the Gateway Interface Protocol (GWIP) to communicate with the client over the low-bandwidth link. The invention shifts the entire overhead of the Internet protocol stack to the GW, and does not involve the Internet terminal or the slow link between Internet terminal and GW. The GW makes and negotiates multiple Internet requests, in parallel, and multiplexes the resulting data streams, allowing documents to be loaded in parallel with their associated images. The GW may also be used to conveniently customize or upgrade the Internet terminal. The GW performs off-line services and caches commonly used information fetched from the Internet. The invention is also readily adapted for use with Internet access devices that require different document formats.