

other by wireless means, to create the closest possible (and therefore fastest) connections.

FIG. 12 is a simplified diagram of a section of a computer network, such as the Internet, showing an embodiment of a system architecture for connecting PC's to a satellite by wireless means.

FIG. 13 is a simplified diagram of a section of a computer network, such as the Internet, showing an embodiment of a system architecture providing a cluster of networked PC's with complete interconnectivity by wireless means.

FIG. 14A is a simplified diagram of a section of a computer network, such as the Internet, showing an embodiment of a transponder means whereby a PC can identify one or more of the closest available PC's in a network cluster to designate for shared processing by wireless means. FIG. 14B shows clusters connected wirelessly; FIG. 14C shows a wireless cluster with transponders and with a network wired connection to Internet; FIG. 14D shows a network client/server wired system with transponders.

FIG. 15 is a simplified diagram of a section of a computer network, such as the Internet, showing an embodiment of a routing means whereby a PC request for shared processing can be routed within a network using preferably broad bandwidth connection means to another area in a network with one or more idle PC's available.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The new network computer will utilize PC's as providers of computing power to the network, not just users of network services. These connections between network and personal computer are enabled by a new form of computer/network financial structure that is rooted on the fact that economic resources being provided the network by PC owners (or leaser) are similar in value to those being provided by the network provider providing connectivity.

Unlike existing one way functional relationships between network providers such as internet service providers (often currently utilizing telecommunications networks for connectivity) and PC users, wherein the network provider provides access to a network like the Internet for a fee (much like cable TV services), this new relationship would recognize that the PC user is also providing the network access to the user's PC for parallel computing use, which has a similar value. The PC thus both provides and uses services on the network, alternatively or potentially even virtually simultaneously, in a multitasking mode.

This new network would operate with a structural relationship that would be roughly like that which presently exists between an electrical power utility and a small independent power generator connected to the utility, wherein electrical power can flow in either direction depending on the operating decisions of both parties and at any particular point in time each party is in either a debt or credit position relative to the other based on the net direction of that flow for a given period, and is billed accordingly. In the increasingly deregulated electrical power industry, electrical power (both its creation and transmission) is becoming a commodity bought and sold in a competitive marketplace that crosses traditional borders. With the structural relationship proposed here for the new network, parallel free market structures should develop over time in a new computer power industry dominated by networks of personal computers in all their forms providing shared processing.

For this new network and its structural relationships, a network provider is defined in the broadest possible way as

any entity (corporation or other business, government, not-for-profit, cooperative, consortium, committee, association, community, or other organization or individual) that provides personal computer users (very broadly defined below) with initial and continuing connection hardware and/or software and/or firmware and/or other components and/or services to any network, such as the Internet and Internet II or WWW or their present or future equivalents, coexistors or successors, like the MetaInternet, including any of the current types of Internet access providers (ISP's) including telecommunication companies, television cable or broadcast companies, electrical power companies, satellite communications companies, or their present or future equivalents, coexistors or successors. The connection means used in the networks of the network providers, including between personal computers or equivalents or successors, would preferably be very broad bandwidth, by such means as fiber optic cable or wireless for example, but not excluding any other means, including television coaxial cable and telephone twisted pair, as well as associated gateways, bridges, routers, and switches with all associated hardware and/or software and/or firmware and/or other components and their present or future equivalents or successors. The computers used by the providers include any computers, including mainframes, minicomputers, servers, and personal computers, and associated their associated hardware and/or software and/or firmware and/or other components, and their present or future equivalents or successors.

Other levels of network control beyond the network provider will also exist to control any aspect of the network structure and function, any one of which levels may or may not control and interact directly with the PC user. For example, at least one level of network control like the World Wide Web Consortium (W3C) or Internet Society (ISOC) or other ad hoc industry consortia would establish and ensure compliance with any prescribed network standards and/or protocols and/or industry standard agreements for any hardware and/or software and/or firmware and/or other component connected to the network. Under the consensus control of these consortia/societies, other levels of network control would deal with administration and operation of the network. These other levels of network control might be constituted by any network entity, including those defined immediately above for network providers.

The principal defining characteristic of the network provided being communication connections (including hardware and/or software and/or firmware and/or other component) of any form, including electromagnetic (such as light and radio or microwaves) and electrochemical (and not excluding biochemical or biological), between PC users, optimally connecting (either directly or indirectly) the largest number of users possible, like the Internet (and Internet II) and WWW and equivalents and successors, like the MetaInternet. Multiple levels of such networks will likely coexist with different technical capabilities, like Internet and Internet II, but would have interconnection and therefore would communicate freely between levels, for such standard network functions as electronic mail.

And a personal computer (PC) user is defined in the broadest possible way as any individual or other entity using a personal computer, which is defined as any computer, digital or analog or neural, particularly including microprocessor-based personal computers having one or more microprocessors (each including one or more parallel processors) in their general current form (hardware and/or software and/or firmware and/or any other component) and their present and future equivalents or successors, such as