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(54) **MULTI-PROTOCOL TELECOMMUNICATIONS ROUTING OPTIMIZATION**

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(52) **U.S. Cl.** ..... **370/238; 370/252; 370/463; 370/465**

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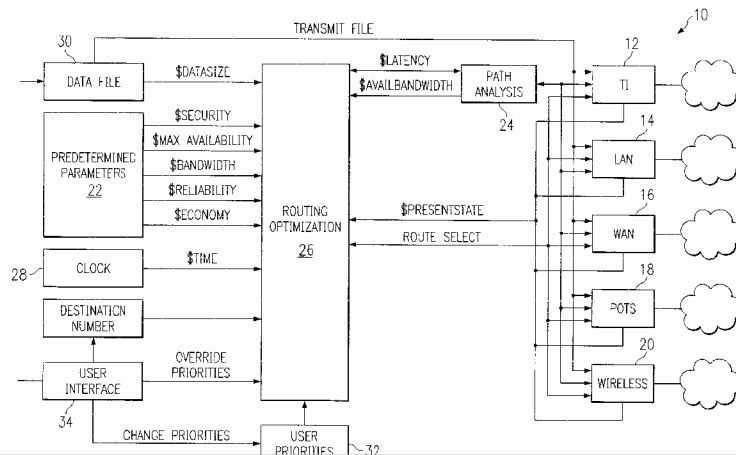
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(57) **ABSTRACT**

A telecommunications switching system employing multi-protocol routing optimization which utilizes predetermined and measured parameters in accordance with a set of user priorities in determining the selection of a telecommunications path to be utilized for transmitting a data file to a remote destination. The switching system has a first memory for storing the data file to be transferred, a second memory for storing predetermined parameters such as cost data associated with each of the telecommunications paths, a third memory for storing a set of user priorities regarding the transmission of data files, and means for measuring the value of variable parameters such as file transfer speed associated with each of the telecommunications paths. Processor means are operatively associated with the second and third memories and the variable parameter measuring means for determining which of the plurality of telecommunications paths should be utilized for transferring the data file in accordance with the set of user priorities, the predetermined telecommunications path parameters, and the measured variable parameters. The switching system further comprises input means for allowing a user to change the user priorities in the third memory prior to transmitting a file.

**69 Claims, 2 Drawing Sheets**



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