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Binder

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(54) **NETWORK FOR TELEPHONY AND DATA COMMUNICATION**

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(58) **Field of Search** 370/465, 463, 370/493, 494, 495, 487, 476, 488, 497, 498, 466, 467, 480; 379/90.01, 93.01, 93.05, 93.09

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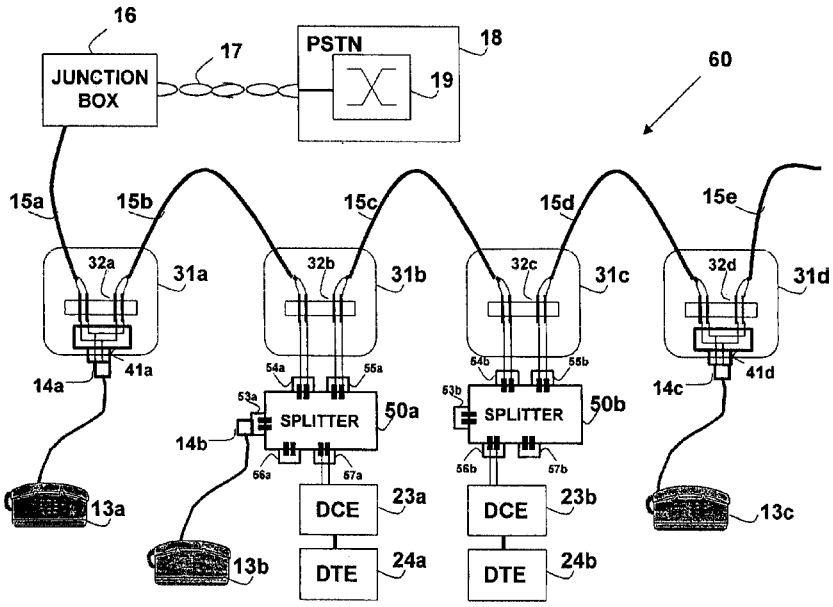
(57) **ABSTRACT**

A local area network using the telephone wiring within a residence or other building simultaneously with telephony signals. The local area network uses high pass filters to access the high-frequency band across the media, whereas the standard telephone service uses low pass filters to access the low-frequency voice/analog telephony band across the same media. The electrically-conducting media connecting telephone/data outlets are split, or separated at each outlet, and the outlets are modified to provide access to both ends of the resulting segments. The low pass filters at each segment end join the segments together, allowing analog telephony signals to travel throughout the network, thus supporting normal telephone service. The high pass filters at each segment end are connected to modems or other Data Communication Equipment, thus supporting data communication networks of various topologies, including point-to-point topologies.

28 Claims, 11 Drawing Sheets