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**METHOD AND APPARATUS FOR ADAPTIVE ROUTING IN A SATELLITE-
BASED COMMUNICATION SYSTEM**

Abstract of the Disclosure

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In satellite based communication systems (30), real time monitoring of communication links (23-25) and the subsequent adaptations to overcome problems with certain links (23,25) provides the communication system (30) with the ability to adapt to changing conditions. A satellite-based communication system (30) can be adapted to provide an improved method for establishing communication links (23,25) between ground stations (14) and space-based satellite switches (11). Common earth-based termination nodes are replaced by intelligent switches (14). Alternate links are established using links (20,21) between intelligent space-based switches (11), links (24) between intelligent earth-based switches (14), and links (23,25) between intelligent space-based switches (11) and intelligent earth-based switches (14). The controller (54) in the intelligent earth-based switch (14) allows the system to automatically adapt to failure, overload, and other conditions.

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(FIG. 1 to accompany Abstract)