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(54) **METHOD AND SYSTEM FOR RATE SHAPING IN PACKET-BASED COMPUTER NETWORKS**

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(57) **ABSTRACT**

The flow of packet-based traffic is controlled to meet a desired rate by calculating, as a moving average, a current rate of packet-based traffic on a link, calculating the sum of the error between the calculated current rate and the desired rate, and determining whether or not packets can flow in response to the calculated sum of the error. When the sum of the error between the current rate and the desired rate indicates that the current rate is less than the desired rate, packets are allowed to flow and when the sum of the error indicates that the current rate is greater than the desired rate, packets are not allowed to flow. The magnitude of bursts can also be controlled by artificially controlling the minimum values of the current rate and the sum of the error. The flow control algorithm can be used for rate shaping or rate limiting.

**55 Claims, 9 Drawing Sheets**

