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(54) **SYSTEM AND METHOD FOR CONTROLLING TIME DILATION IN TIME-SENSITIVE NETWORKS**

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(57) **ABSTRACT**

A system and method determine a clock drift and a clock variance of each node in plural nodes of a time-sensitive Ethernet network. An accumulated clock offset along a time-sensitive network path in the time-sensitive network is determined based on the clock drifts and the clock variances. A guard band having a dynamic size is determined based on the accumulated clock offset. The times at which Ethernet frames are communicated through the nodes are restricted by communicating the guard band with the dynamic size to one or more of the nodes.