

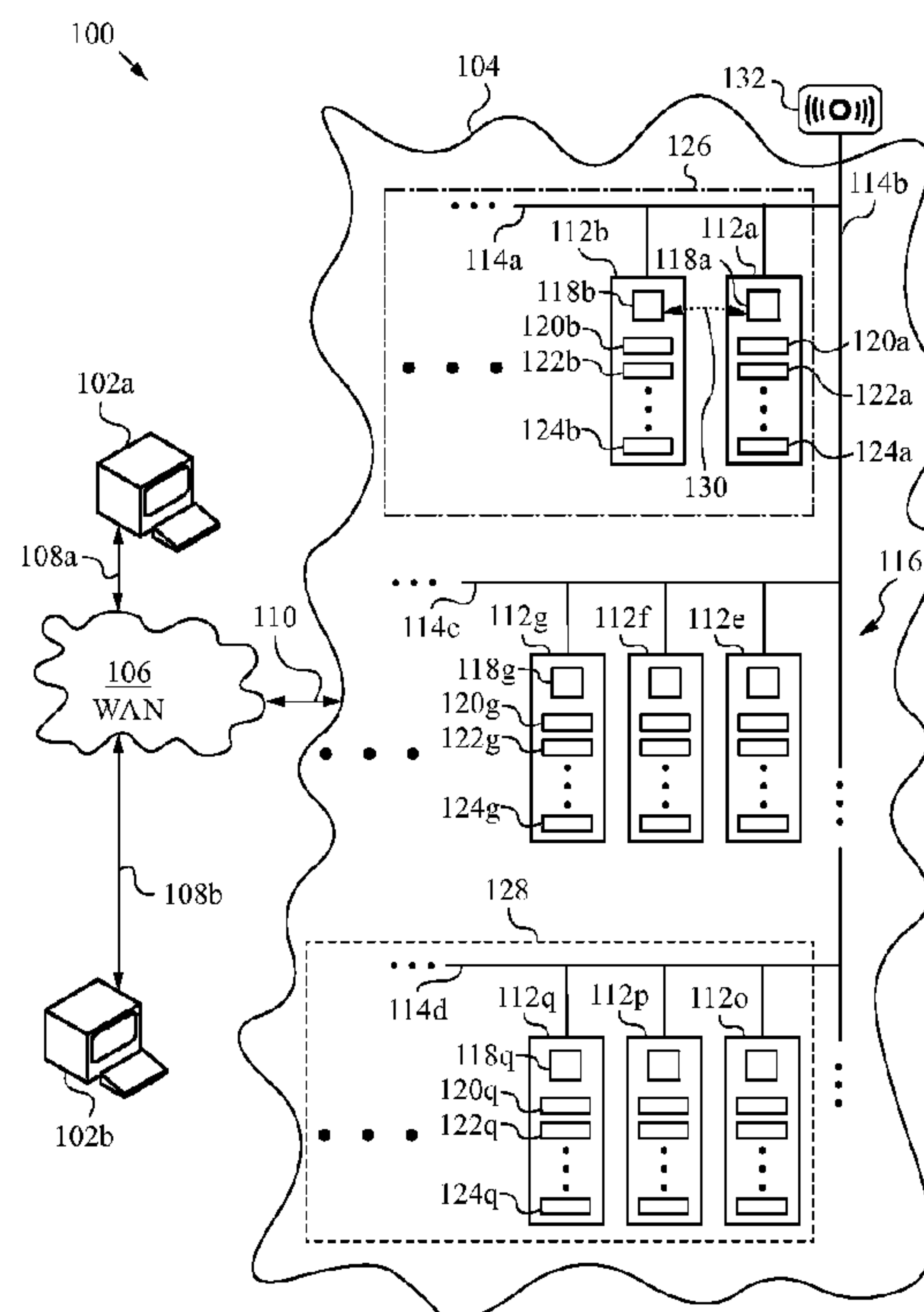


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(54) Title: SPLIT BRAIN RESISTANT FAILOVER IN HIGH AVAILABILITY CLUSTERS



(57) Abrégé/Abstract:

Method and high availability clusters that support synchronous state replication to provide for failover between nodes, and more precisely, between the master candidate machines at the corresponding nodes. There are at least two master candidates ($m=2$) in the high availability cluster and the election of the current master is performed by a quorum-based majority vote among quorum machines, whose number n is at least three and odd ($n \geq 3$ and n is odd). The current master is issued a current time-limited lease to be measured off by the current master's local clock. In setting the duration or period of the lease, a relative clock skew is used to bound the duration to an upper bound, thus ensuring resistance to split brain situations during failover events.



