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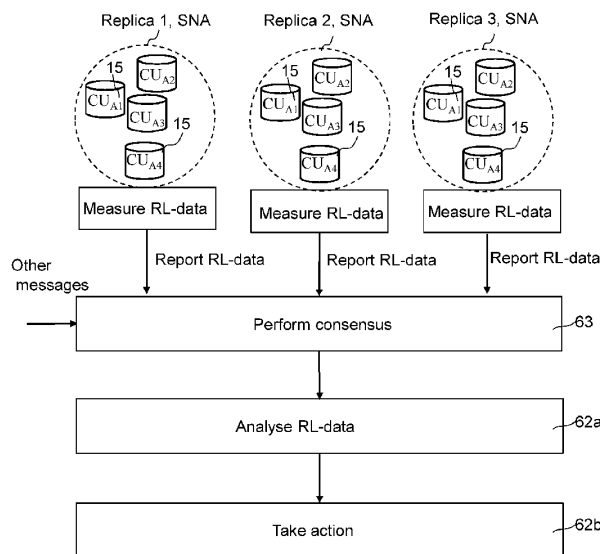


FIG. 3

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(57) Abstract: According to an embodiment of a first aspect of the invention, there is provided a computer-implemented method for operating a distributed network. The distributed network comprises a plurality of nodes. The network comprises one or more subnets. The method comprises steps of running a set of computational units and assigning each of the computational units to one of the plurality of subnets according to a subnet-assignment, thereby creating an assigned subset of the set of computational units for each of the subnets. The method further comprises running on each node of the plurality of subnets the assigned subset of the computational units, wherein the computational units are configured to execute computations in a deterministic manner, thereby replicating the assigned subsets of the computational units on replicas across the respective subnet. The method further comprises running a consensus component, the consensus component being configured to reach a consensus on input blocks to be processed by the replicas of a respective subnet.

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The method further comprises measuring, by each of the replicas of a subnet, replica-local data, reporting, by each of the replicas of a subnet, the replica-local data to the consensus component and utilizing the replica-local data for an analysis, in particular a statistical analysis, of the computations executed across the respective subnet. Further aspects of the invention relate to a corresponding distributed network, a node, a computer program product and a software architecture.