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(54) Title: DISTRIBUTED SYSTEM OF COMPUTING DEVICES IN A STRUCTURED OVERLAY FRAMEWORK FOR RESILIENT AND RECOVERABLE OPERATION

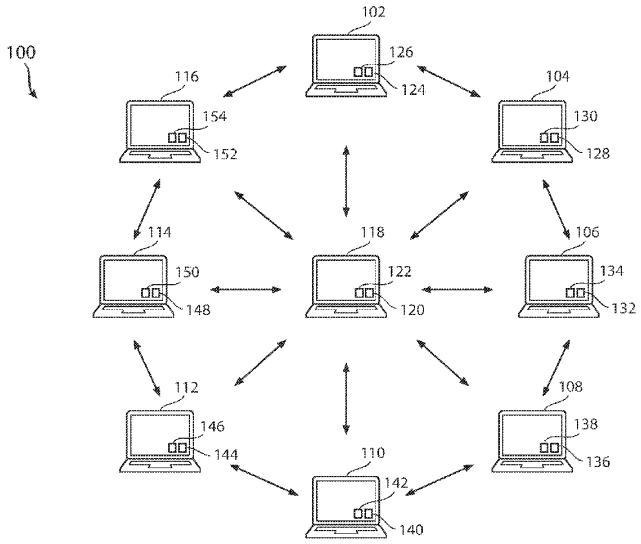


FIG. 1

(57) Abstract: A device includes a set of networked computing devices configured in a multiple-neighborhood topology, each respective computing device of the set of computing devices being configured as part of the multiple-neighborhood topology in which each respective computing device is assigned to a group of neighborhoods and follows a topology protocol. The device is configured to receive, at a first computing device in a first neighborhood, the respective transaction to be recorded on a distributed ledger, communicate the respective transaction to each neighbor of the first computing device, continue to communicate the respective transaction from neighborhood to neighborhood according to the multiple-neighborhood topolog)' until all computing devices of the set of networked computing devices have received the respective transaction. Upon approval of the respective transaction by at least a majority of the

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respective computing devices, the device is configured to record the respective transaction on the distributed ledger.