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(54) **Title:** SECURE MONITORING USING BLOCK CHAIN

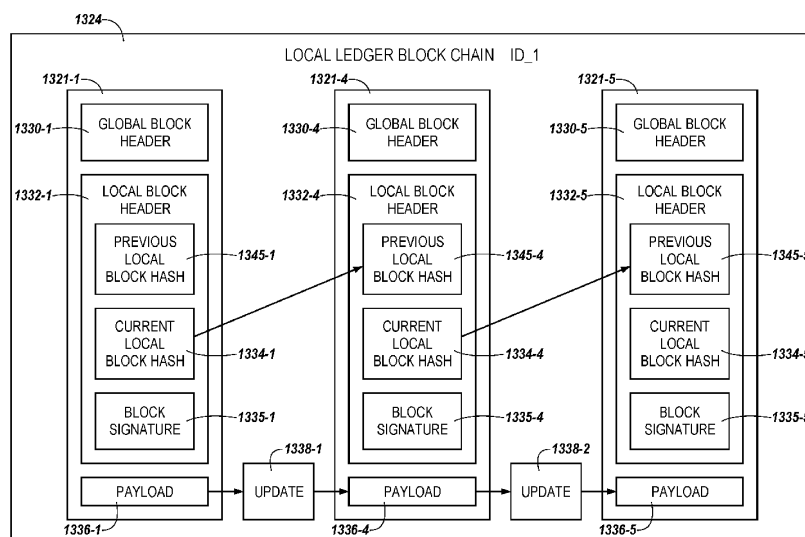


Fig. 13

(57) **Abstract:** The present disclosure includes apparatuses, methods, and systems for using a local ledger block chain for secure updates. An embodiment includes a memory, and circuitry configured to receive a global block to be added to a local ledger block chain for validating an update for data stored in the memory, where the global block to be added to the local ledger block chain includes a cryptographic hash of a current local block in the local ledger block chain, a cryptographic hash of the data stored in the memory to be updated, where the current local block in the local ledger block chain has a digital signature associated therewith that indicates the global block is from an authorized entity.

[Continued on next page]

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