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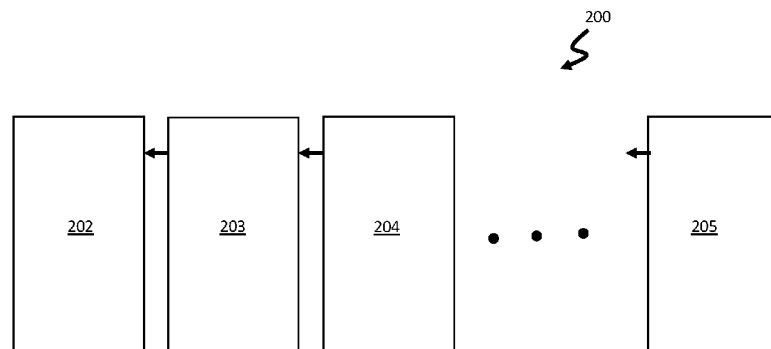


FIG. 2

(57) Abstract: Causing a block in a blockchain to be added to the blockchain includes causing an entity to receive information corresponding to a previous block, causing the entity to receive a declarative invocation of a smart contract execution on a given input, where the declarative invocation declares relevant results of the execution and other relevant data, causing the entity to verify syntactic validity of the invocation, and causing the entity to incorporate the declarative invocation in the block in response to verifying the syntactic validity of the invocation. The relevant results may specify net effects of the smart contract execution, a resulting state of the smart contract after execution, and a number of steps for execution. The other relevant data may specify a caller of the declarative invocation, time information, block information, and/or a payable fee.

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