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**Mitra et al.**(10) **Pub. No.: US 2023/0231716 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **AUTONOMOUS MACHINE OPERATION  
WITH BLOCKCHAIN AUTHENTICATION**(52) **U.S. Cl.**CPC ..... *H04L 9/3213* (2013.01); *G06F 21/602*  
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(57)

**ABSTRACT**

A computer is configured to receive a request from an autonomous machine to perform an action, authenticate the autonomous machine according to a smart contract blockchain program, generate encrypted commands to actuate one or more components of the autonomous machine to perform the action in response to authenticating the autonomous machine, transmit the encrypted commands to an external server configured to authenticate the request according to a blockchain program, receive decrypted commands from the external server based on authentication of the request, and actuate the one or more components of the autonomous machine to perform the action according to the decrypted commands.

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