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(54) Title: PROPERTY MANAGEMENT SYSTEM UTILIZING A BLOCKCHAIN NETWORK

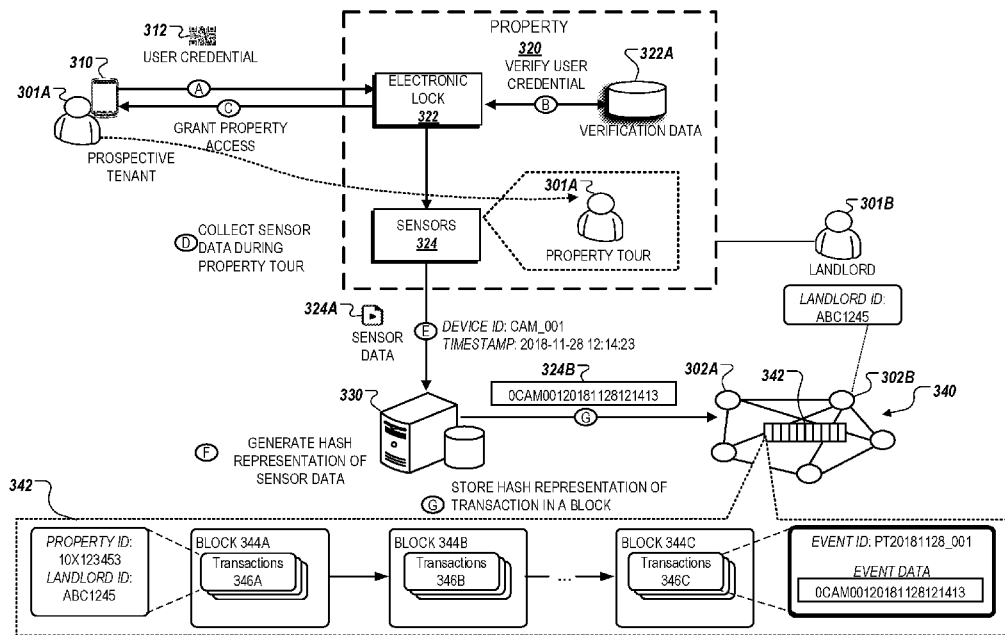


FIG. 3

(57) Abstract: Disclosed herein are methods, systems, and apparatus, including computer programs encoded on computer storage media, for controlling access to a property based on smart contract execution. One of the methods includes receiving credential data for a first entity requesting access to a property; in response to receiving the credential data, requesting execution of a smart contract associated with the property by a blockchain network, wherein the smart contract includes instructions to check a current status of a relationship between the first entity and a second entity associated with the property based on the credential data; receiving an execution result of the smart contract from the blockchain network; determining that the first entity is authorized to access the property based at least in part on the execution result; and in response to determining that the first entity authorized to access the property, enabling the first entity to access to the property.



SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN,
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G06Q 30/06(2012.01)i; G06Q 50/16(2012.01)i; G06F 21/62(2013.01)i		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) G06Q; G06F		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) CNPAT; CNKI; WPI; EPODOC; IEEE: block chain, blockchain, chain of block, smart contract, lock, house, landlord, tenant, ID, QR code, rent, property, access, sensor, camera, credential, authorize, execute, execution		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CN 108961006 A (GUANGZHOU ZHILE IOT TECHNOLOGY CO., LTD.) 07 December 2018 (2018-12-07) description, paragraphs [0016]-[0019]	1, 4-5, 7-10
Y	CN 108961006 A (GUANGZHOU ZHILE IOT TECHNOLOGY CO., LTD.) 07 December 2018 (2018-12-07) description, paragraphs [0016]-[0019]	2-3, 6
Y	CN 108711207 A (LIZHAN SHANGHAI TECHNOLOGY CO., LTD.) 26 October 2018 (2018-10-26) description, paragraphs [0039]-[0044]	2-3, 6
A	CN 108694654 A (ZHEJIANG UNIVERSITY) 23 October 2018 (2018-10-23) the whole document	1-10
A	CN 108428168 A (WANG, GUOLIANG) 21 August 2018 (2018-08-21) the whole document	1-10
A	US 2018191714 A1 (SLOCK, IT, INC.) 05 July 2018 (2018-07-05) the whole document	1-10
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
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Name and mailing address of the ISA/CN National Intellectual Property Administration, PRC 6, Xitucheng Rd., Jimen Bridge, Haidian District, Beijing 100088 China		Authorized officer XIANG, Lin
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Information on patent family members

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Patent document cited in search report			Publication date (day/month/year)	Patent family member(s)			Publication date (day/month/year)
CN	108961006	A	07 December 2018	None			
CN	108711207	A	26 October 2018	None			
CN	108694654	A	23 October 2018	None			
CN	108428168	A	21 August 2018	None			
US	2018191714	A1	05 July 2018	WO	2018126059	A1	05 July 2018