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(54) **SYSTEMS AND METHODS FOR STORAGE, GENERATION AND VERIFICATION OF TOKENS USED TO CONTROL ACCESS TO A RESOURCE**

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**ABSTRACT**

(57) A computer-implemented access method is provided. The method comprises the steps of: (i) providing a verification data item of a one-way function chain of data items; (ii) submitting, to a blockchain (such as the Bitcoin blockchain), an access blockchain transaction comprising a data item of the chain; (iii) applying the one-way function to the data item to provide an output; (iv) comparing the output of step (iii) to the verification item to provide an outcome; and (v) based on the outcome of step (iv): (a) allocating the output as a further verification data item for verifying a further data item of the chain; and (b) granting access to a resource associated with the data item.

