

Title (en)
A CONSENSUS METHOD AND FRAMEWORK FOR A BLOCKCHAIN SYSTEM

Title (de)
KONSENSUSVERFAHREN UND RAHMEN FÜR EIN BLOCKCHAIN-SYSTEM

Title (fr)
PROCÉDÉ ET CADRE DE CONSENSUS POUR UN SYSTÈME DE CHAÎNE DE BLOCS

Publication
EP 3861494 A1 20210811 (EN)

Application
EP 19787053 A 20191004

Priority
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• GB 2019052810 W 20191004

Abstract (en)
[origin: GB2577751A] A blockchain system is described implementing a method comprising receiving, at a participant node, a node participation document comprising a list of node identifiers that uniquely identify each node in the blockchain and receiving, at the participant, a true random number associated with a current time interval. Further, at the participant, a leader node is selected for the current time interval from the nodes listed in the node participation document based on a numerical disparity between the random number and the node identifiers from the node participation document; and sending, from the participant, any new transactions for inclusion in the blockchain system to the determined leader node in the current time interval. The node identifier closest to the random number may be selected as the leader node. The leader node is the only node that can generate new blocks during the corresponding time interval to be validly appended to the blockchain. A beacon may be implemented to disseminate the random numbers to the participant nodes. A second method is described (Figure 4) wherein some nodes do not store the whole blockchain by deleting blocks that do not meet a threshold (e.g. timeframe or blockchain size) but maintain block headers.

IPC 8 full level
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Citation (search report)
See references of WO 2020070515A1

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