

Title (en)
METHOD FOR EXECUTING SMART CONTRACTS THROUGH ELECTRONIC PROCESSING MEANS USING THE BLOCKCHAIN TECHNOLOGY

Title (de)
VERFAHREN ZUM AUSFÜHREN VON INTELLIGENTEN VERTRÄGEN DURCH ELEKTRONISCHE VERARBEITUNGSMITTEL UNTER VERWENDUNG DER BLOCKKETTENTECHNOLOGIE

Title (fr)
PROCÉDÉ D'EXÉCUTION DE CONTRATS INTELLIGENTS PAR L'INTERMÉDIAIRE D'UN MOYEN DE TRAITEMENT ÉLECTRONIQUE UTILISANT LA TECHNOLOGIE DE CHAÎNE DE BLOCS

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EP 3688717 A1 20200805 (EN)

Application
EP 18789219 A 20180924

Priority
• IT 201700107125 A 20170925
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Abstract (en)
[origin: WO2019058340A1] A method is described for executing, via electronic processing means using the blockchain technology, a smart contract 1 associated with a contract which involves a computer transaction between two or more contracting parties (P1, P2). The method comprises the step of publishing (S1), by storage on a shared computer infrastructure, a software code 10 of the smart contract 1; then establishing a computer connection (S2) between the software code 10 and an electronic copy of the text version 11, readable by humans, of the associated contract, so that the smart contract 1 comprises a set of digital data comprising the software code 10 of the smart contract and the electronic copy of the text version 11, available on a distributed blockchain platform 2; then publishing (S3), on the distributed blockchain platform, digital execution data 12 required for executing actions associated with the software code 10 of the smart contract 1. The method then envisages either granting or not granting, automatically, a validation (S4) based on the digital execution data 12 published on the distributed blockchain platform by each of a plurality of validation computer programs (C, D, E); and of calculating (S5), using an algorithm executed by electronic processing means, a result RV of the validation results obtained, in order to enable or not enable the continuation of the transaction on the basis of such a result. If the continuation is enabled, each of the contracting parties (P1, P2) carries out an evaluation (S6) of the execution data published on the distributed blockchain platform, by means of a respective associated approval computer program, to either approve or reject the transaction. In case of approval by all contracting parties, the method provides proceeding with the transaction execution (S7) by performing the steps of publishing on the distributed blockchain platform digital approval data (13) of the transaction; and executing the computer transaction by the distributed blockchain platform. In case of rejection by at least one of the contracting parties, the method involves carrying out an arbitration evaluation procedure (S8). Such arbitration evaluation procedure comprises evaluating the electronic text version 11 associated with the smart contract 1, by one or more Arbitrators (G, H, L); then either approving or rejecting the transaction, on the basis of the evaluation of the electronic text version 11, by the one or more Arbitrators, using a digital signature or authentication procedure; finally, proceeding with the computer transaction execution (S7), by the distributed blockchain platform 2, only in case of approval by the arbitration evaluation procedure.

IPC 8 full level
G06Q 50/18 (2012.01)

CPC (source: EP)
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Citation (search report)
See references of WO 2019058340A1

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Designated extension state (EPC)
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