Title (en)

METHOD FOR DIRECTLY TRANSMITTING ELECTRONIC COIN DATASETS BETWEEN TERMINALS, PAYMENT SYSTEM, PROTECTION SYSTEM, AND MONITORING UNIT

Title (de)

VERFAHREN ZUM DIREKTEN ÜBERTRAGEN VON ELEKTRONISCHEN MÜNZDATENSÄTZEN ZWISCHEN ENDGERÄTEN, BEZAHLSYSTEM, WÄHRUNGSSYSTEM UND ÜBERWACHUNGSEINHEIT

Title (fr)

PROCÉDÉ DE TRANSMISSION DIRECTE DE JEUX DE DONNÉES ÉLECTRONIQUES CONCERNANT DES PIÈCES DE MONNAIE ENTRE DES TERMINAUX, SYSTÈME DE PAIEMENT, SYSTÈME MONÉTAIRE ET UNITÉ DE SURVEILLANCE

Publication

EP 4111349 A1 20230104 (DE)

Application

EP 21707979 A 20210224

Priority

- DE 102020104906 A 20200225
- EP 2021054544 W 20210224

Abstract (en)

[origin: WO2021170645A1] The invention relates to a method for directly transmitting electronic coin datasets between terminals in order to make a payment in a payment system, wherein a first terminal has at least one electronic coin dataset, and the at least one electronic coin dataset has a monetary value and a concealment value as coin data set elements. The method has the steps of: masking a first coin dataset element of the electronic coin dataset, preferably in the first terminal, by applying a one-way function, which is homomorphic for example, to the first coin dataset element of the electronic coin dataset, preferably to the concealment value thereof, in order to obtain a masked electronic coin dataset element; adding a second coin dataset element of the electronic coin dataset to the semi-masked electronic coin dataset, preferably in the first terminal, in order to obtain a semi-masked electronic coin dataset; and transmitting the semi-masked electronic coin dataset to a monitoring entity in order to register the electronic coin dataset. The invention additionally relates to a payment system with a monitoring layer with a database, in which masked electronic coin datasets are stored, and a direct transaction layer, which uses at least two terminals and in which the method can be carried out.

IPC 8 full level

G06F 21/64 (2013.01); **G06Q 20/06** (2012.01); **G06Q 20/36** (2012.01)

CPC (source: EP US)

G06F 21/64 (2013.01 - EP US); **G06Q 20/02** (2013.01 - EP); **G06Q 20/065** (2013.01 - US); **G06Q 20/0655** (2013.01 - EP); **G06Q 20/10** (2013.01 - US); **G06Q 20/327** (2013.01 - EP US); **G06Q 20/3678** (2013.01 - EP US); **G06Q 20/3823** (2013.01 - EP US); **G06Q 20/3825** (2013.01 - EP US); **G06Q 20/3827** (2013.01 - EP); **G06Q 20/3829** (2013.01 - US); G06Q 2220/00 (2013.01 - US)

Citation (search report)

See references of WO 2021170646A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

DE 102020104906 A1 20210826; CN 115427959 A 20221202; EP 4111348 A1 20230104; EP 4111348 B1 20240103; EP 4111349 A1 20230104; US 2023093581 A1 20230323; US 2023103038 A1 20230330; WO 2021170645 A1 20210902; WO 2021170646 A1 20210902

DOCDB simple family (application)

DE 102020104906 A 20200225; CN 202180030576 A 20210224; EP 2021054543 W 20210224; EP 2021054544 W 20210224; EP 21707978 A 20210224; EP 21707979 A 20210224; US 202117801973 A 20210224; US 202117802246 A 20210224