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[Continued on next page]

(54) Title: OBFUSCATION OF INTENT IN TRANSACTIONS USING CRYPTOGRAPHIC TECHNIQUES

(57) Abstract: Methods and systems described herein prevent traders from using order intent and hardware solutions to advance their order position by obfuscating the order until execution and by using a digital ledger to assign priority of the orders. As described herein, using a series of cryptographic key pairs, one side of a transaction can be created, matched, and executed while a public record is recorded and maintained but obfuscated (i.e., not publicly transparent) until after the transaction is completed.

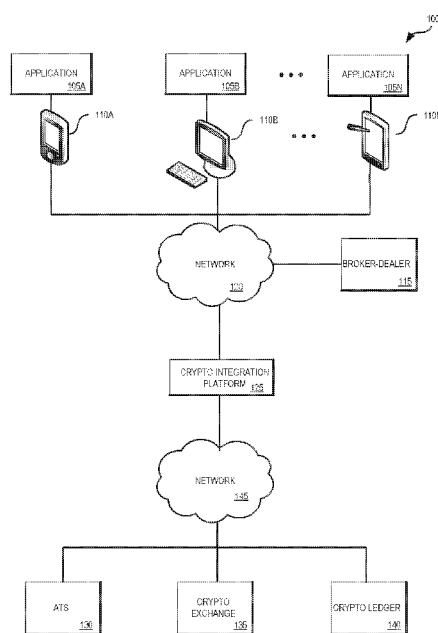


FIG. 1



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 16/34130

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G06Q 20/38 (2016.01)

CPC - G06Q 20/3821, G06Q 20/401, G06Q 20/382

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)

IPC(8) - G06Q 20/38 (2016.01)

CPC - G06Q 20/3821, G06Q 20/401, G06Q 20/382

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

IPC(8) - G06Q 20/38 (2016.01) (text search); USPC - 705/76, 705/50, 705/37 (text search)

CPC - G06Q 20/3821, G06Q 20/401, G06Q 20/382, G06Q 20/40, G06Q 20/04 (text search)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PatBase, Google Patents, Google Scholar; Search terms used: trade digital media order encrypt sign decrypt transaction ledger priority verify public key

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2007/0106892 A1 (ENGBERG) 10 May 2007 (10.05.2007), entire document, especially Fig. 3; para [0029], [0044], [0068], [0071], [0141], [0144], [0207], [0376], [0381], [0385], [0398], [0410]	1-20
A	US 6,668,325 B1 (COLLBERG et al.) 23 December 2003 (23.12.2003), entire document	1-20
A	US 2013/0086393 A1 (POGMORE) 04 April 2013 (04.04.2013), entire document	1-20

☐ Further documents are listed in the continuation of Box C.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

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later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

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16 January 2017

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