US010275772B2

(12) **United States Patent**
Ronca et al.

(10) **Patent No.: US 10,275,772 B2**
(45) **Date of Patent: Apr. 30, 2019**

(54) **CRYPTOCURRENCY RISK DETECTION SYSTEM**

(71) Applicant: **Bank of America Corporation**, Charlotte, NC (US)

(72) Inventors: **James G. Ronca**, Decatur, GA (US); **Joseph B. Castinado**, Northglenn, CO (US); **Heather Dolan**, Sarasota, FL (US); **Thomas E. Durbin**, Waynesville, NC (US); **Richard H. Thomas**, Charlotte, NC (US)

(73) Assignee: **Bank of America Corporation**, Charlotte, NC (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1128 days.

(21) Appl. No.: **14/305,916**

(22) Filed: **Jun. 16, 2014**

(65) **Prior Publication Data**

US 2015/0363783 A1 Dec. 17, 2015

(51) **Int. Cl.**

G06Q 20/40 (2012.01)
G06Q 20/06 (2012.01)
G06Q 20/38 (2012.01)

(52) **U.S. Cl.**

CPC ***G06Q 20/4016*** (2013.01); ***G06Q 20/065*** (2013.01); ***G06Q 20/382*** (2013.01); ***G06Q 20/3829*** (2013.01)

(58) **Field of Classification Search**

None

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2011/0184838 A1* 7/2011 Winters G06Q 20/10 705/27.1
2012/0066763 A1* 3/2012 McHugh G06F 21/577 726/22
2014/0045456 A1* 2/2014 Ballai H04W 12/12 455/410
2014/0058949 A1* 2/2014 Ciurea G06Q 20/40 705/44
2015/0287026 A1* 10/2015 Yang G06Q 20/3678 705/69
2015/0310424 A1* 10/2015 Myers G06Q 20/3678 705/69

(Continued)

FOREIGN PATENT DOCUMENTS

WO WO 2015085393 A1 * 6/2015 ..... G06Q 20/06

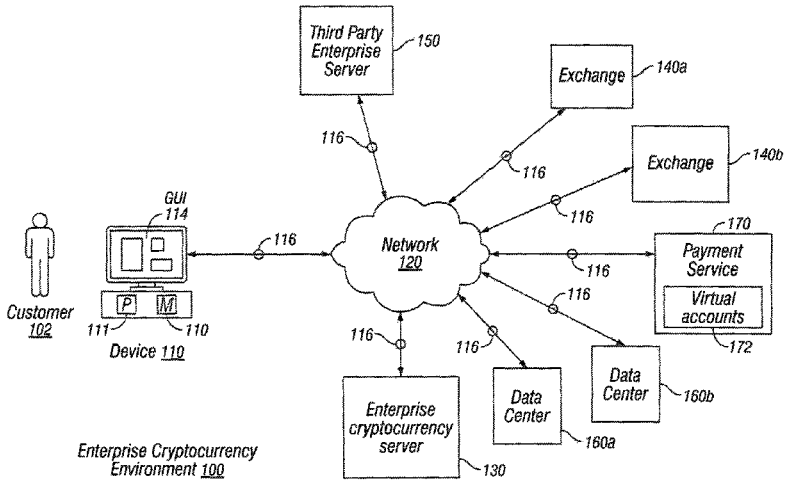
OTHER PUBLICATIONS

U.S. Appl. No. 14/305,783, filed Jun. 16, 2014, Ronca, et al.

(Continued)

Primary Examiner — John W Hayes
Assistant Examiner — Jason B Fenstermacher
(74) *Attorney, Agent, or Firm* — Baker Botts L.L.P.

(57) **ABSTRACT**

The system includes a processor operable to receive a request from a customer to perform a cryptocurrency transaction with a third party. The processor may also retrieve block chain information associated with the cryptocurrency transaction. The processor may also determine the amount of cryptocurrency associated with the cryptocurrency transaction. The processor may further calculate a risk score for performing the cryptocurrency transaction based at least in part upon the block chain information and the amount of cryptocurrency.

17 Claims, 16 Drawing Sheets