US011615390B2

(12) **United States Patent**
Fisher

(10) **Patent No.: US 11,615,390 B2**
(45) **Date of Patent: *Mar. 28, 2023**

(54) **BLAZE TRANSACTION SERVER FOR PURCHASING DIGITAL PRODUCTS**

(71) Applicant: **Michelle Fisher**, Berkeley, CA (US)

(72) Inventor: **Michelle Fisher**, Berkeley, CA (US)

(73) Assignee: **Michelle Fisher**, Berkeley, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **17/367,350**

(22) Filed: **Jul. 3, 2021**

(65) **Prior Publication Data**

US 2021/0334774 A1 Oct. 28, 2021

Related U.S. Application Data

(63) Continuation of application No. 16/913,263, filed on Jun. 26, 2020, which is a continuation of application
(Continued)

(51) **Int. Cl.**
G06Q 20/20 (2012.01)
H04W 4/21 (2018.01)
(Continued)

(52) **U.S. Cl.**
CPC ***G06Q 20/20*** (2013.01); ***G06Q 20/00*** (2013.01); ***G06Q 20/108*** (2013.01); ***G06Q 20/16*** (2013.01);
(Continued)

(58) **Field of Classification Search**
CPC G06Q 20/00–40; G06Q 30/00–02; G06Q 40/00; G06Q 10/00; G06Q 10/10;
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,038,367 A 3/2000 Abecassis
6,101,483 A * 8/2000 Petrovich G06Q 20/343
705/26.8
(Continued)

FOREIGN PATENT DOCUMENTS

EP 1503352 7/2004
WO WO 2006095212 A1 9/2006
(Continued)

OTHER PUBLICATIONS

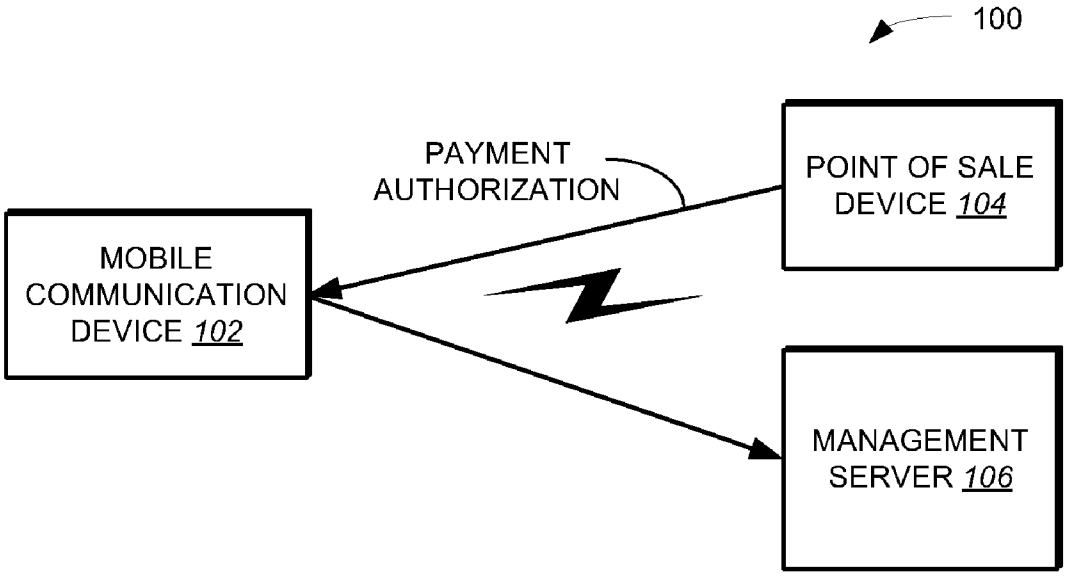
U.S. Appl. No. 14/253,648 Board Decision dated May 13, 2020, p. 7-10.
(Continued)

Primary Examiner — Olusegun Goyea

(57) **ABSTRACT**

A method and system for conducting an online payment transaction through a point of sale device. The method includes receiving input from a user selecting an item for purchase through the point of sale device; calculating a total purchase amount for the item in response to a request from the user to purchase the item; and sending payment authorization for the total purchase amount from the point of sale device to a payment entity, in which the payment authorization is sent to the payment entity via a mobile communication device of the user. The method further includes receiving a result of the payment authorization from the payment entity through the mobile communication device; and completing the payment transaction based on the result of the payment authorization.

30 Claims, 4 Drawing Sheets



Related U.S. Application Data

No. 15/076,578, filed on Mar. 21, 2016, now Pat. No. 10,699,259, which is a continuation of application No. 14/083,044, filed on Nov. 18, 2013, now abandoned, which is a continuation of application No. 13/735,337, filed on Jan. 7, 2013, now Pat. No. 8,620,754, which is a continuation of application No. 11/948,903, filed on Nov. 30, 2007, now Pat. No. 8,352,323.

(51) **Int. Cl.**

G06Q 30/0207	(2023.01)
G06Q 30/06	(2023.01)
H04M 1/72445	(2021.01)
G06Q 20/32	(2012.01)
G06Q 30/0238	(2023.01)
G06Q 30/02	(2023.01)
G06Q 20/38	(2012.01)
G06Q 20/40	(2012.01)
G06Q 20/36	(2012.01)
G06Q 20/16	(2012.01)
G06Q 20/00	(2012.01)
G06Q 20/10	(2012.01)
G06Q 30/0251	(2023.01)
G06Q 30/0601	(2023.01)
H04W 8/20	(2009.01)
H04W 4/18	(2009.01)
H04B 5/00	(2006.01)
G06Q 40/12	(2023.01)
G06Q 40/10	(2023.01)
H04W 4/80	(2018.01)
H04W 4/029	(2018.01)
H04N 21/81	(2011.01)
G07F 7/10	(2006.01)
G06Q 40/00	(2023.01)
H04W 88/02	(2009.01)
H04W 4/02	(2018.01)

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

CPC ***G06Q 20/202*** (2013.01); ***G06Q 20/204*** (2013.01); ***G06Q 20/206*** (2013.01); ***G06Q 20/32*** (2013.01); ***G06Q 20/322*** (2013.01); ***G06Q 20/325*** (2013.01); ***G06Q 20/326*** (2020.05); ***G06Q 20/3223*** (2013.01); ***G06Q 20/3226*** (2013.01); ***G06Q 20/3227*** (2013.01); ***G06Q 20/3255*** (2013.01); ***G06Q 20/3278*** (2013.01); ***G06Q 20/3674*** (2013.01); ***G06Q 20/382*** (2013.01); ***G06Q 20/3821*** (2013.01); ***G06Q 20/40*** (2013.01); ***G06Q 20/409*** (2013.01); ***G06Q 20/4012*** (2013.01); ***G06Q 20/4014*** (2013.01); ***G06Q 30/02*** (2013.01); ***G06Q 30/0222*** (2013.01); ***G06Q 30/0238*** (2013.01); ***G06Q 30/0251*** (2013.01); ***G06Q 30/0253*** (2013.01); ***G06Q 30/0255*** (2013.01); ***G06Q 30/0267*** (2013.01); ***G06Q 30/0268*** (2013.01); ***G06Q 30/06*** (2013.01); ***G06Q 30/0613*** (2013.01); ***G06Q 30/0635*** (2013.01); ***G06Q 40/10*** (2013.01); ***G06Q 40/12*** (2013.12); ***H04B 5/0025*** (2013.01); ***H04M 1/72445*** (2021.01); ***H04W 4/18*** (2013.01); ***H04W 4/21*** (2018.02); ***H04W 8/205*** (2013.01); *G06Q 20/10* (2013.01); *G06Q 20/105* (2013.01); *G06Q 40/00* (2013.01); *G07F 7/1008* (2013.01); *H04N 21/812* (2013.01); *H04W 4/02* (2013.01); *H04W 4/029* (2018.02); *H04W 4/80* (2018.02); *H04W 88/02* (2013.01)

(58) **Field of Classification Search**

CPC G06F 17/30; G06F 17/00; G06F 17/16; G06F 21/00; G06F 21/41

USPC 705/7, 16, 18, 26.1, 30–34, 39–44, 70, 705/1.1, 14.67, 14.72, 24, 28, 26.8, 27.1, 705/46, 51, 69; 235/462.46; 455/406, 455/407, 414.1, 411

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,115,601	A *	9/2000	Ferreira	H04M 17/20 455/406
6,123,259	A *	9/2000	Ogasawara	G06Q 30/0267 705/14.1
6,128,655	A	10/2000	Fields	
6,141,666	A	10/2000	Tobin	
6,199,082	B1	3/2001	Ferrel	
6,250,557	B1 *	6/2001	Forslund	G06Q 20/229 235/375
6,394,341	B1 *	5/2002	Makipaa	G06Q 20/322 235/379
6,415,156	B1	7/2002	Stadelmann	
6,450,407	B1 *	9/2002	Freeman	G06K 19/0723 235/487
6,587,835	B1 *	7/2003	Treyz	G06Q 30/0633 705/14.64
6,605,120	B1	8/2003	Fields	
6,771,981	B1	8/2004	Zalewski	
6,772,396	B1	8/2004	Cronin	
6,886,017	B1	4/2005	Jackson	
6,950,939	B2	9/2005	Tobin	
7,031,945	B1	4/2006	Donner	
7,069,248	B2	6/2006	Huber	
7,096,003	B2	8/2006	Joao	
7,110,744	B2	9/2006	Freeny	
7,110,792	B2 *	9/2006	Rosenberg	G06Q 20/085 455/406
7,127,236	B2	10/2006	Khan	
7,200,578	B2 *	4/2007	Paltenghe	G06Q 20/3574 705/26.1
7,289,810	B2	10/2007	Jagadeesan	
7,308,254	B1	12/2007	Rissanen	
7,357,312	B2	4/2008	Gangi	
7,379,920	B2	5/2008	Leung	
7,383,226	B2 *	6/2008	Kight	G06Q 20/10 705/40
7,472,829	B2	1/2009	Brown	
7,482,925	B2	1/2009	Hammad	
7,493,284	B2	2/2009	Celi et al.	
7,512,567	B2 *	3/2009	Bemmel	G06Q 20/204 705/64
7,522,905	B2	4/2009	Hammad	
7,555,284	B2 *	6/2009	Yan	G06Q 20/045 455/566
7,680,824	B2 *	3/2010	Plastina	G06F 16/433 715/764
7,739,596	B2	6/2010	Clarke-Martin	
7,783,532	B2 *	8/2010	Hsu	G06Q 30/0236 705/28
7,784,684	B2 *	8/2010	Labrou	G06Q 20/327 705/64
7,792,756	B2 *	9/2010	Plastina	H04W 12/64 707/630
7,818,284	B1 *	10/2010	Walker	G06Q 30/0605 705/26.2
7,827,056	B2 *	11/2010	Walker	G06Q 20/387 705/14.1
7,870,077	B2 *	1/2011	Woo	G06Q 30/06 705/16

(56) **References Cited**

U.S. PATENT DOCUMENTS

7,979,519 B2 * 7/2011 Shigeta H04L 69/329 709/224
8,005,426 B2 * 8/2011 Huomo G06Q 20/20 235/441
8,019,362 B2 * 9/2011 Sweatman H04W 88/184 455/466
8,073,424 B2 * 12/2011 Sun G06Q 20/326 455/406
8,086,534 B2 * 12/2011 Powell G06Q 40/02 705/64
8,109,444 B2 * 2/2012 Jain G06K 19/07707 235/487
8,121,945 B2 2/2012 Rackley
8,127,984 B2 * 3/2012 Zatloukal G06K 19/0723 455/73
8,214,454 B1 * 7/2012 Barnes G06F 16/955 709/217
8,429,030 B2 * 4/2013 Walker G06Q 30/06 705/26.7
8,429,031 B2 * 4/2013 Walker G06Q 30/0224 705/26.7
8,438,077 B2 * 5/2013 Walker G06Q 30/0601 705/26.7
8,438,078 B2 * 5/2013 Walker G06Q 10/087 705/26.7
8,467,766 B2 * 6/2013 Rackley, III G06Q 20/3221 455/406
8,484,058 B2 * 7/2013 Benson G06Q 10/02 705/26.1
8,489,067 B2 * 7/2013 Rackley, III G06Q 20/3223 455/406
8,510,220 B2 * 8/2013 Rackley, III G06Q 20/102 705/40
8,566,239 B2 10/2013 Arthur
8,693,995 B2 4/2014 Fisher
9,294,917 B2 3/2016 Nystrom
9,996,849 B2 6/2018 Fisher
10,339,556 B2 7/2019 Fisher
10,621,612 B2 4/2020 Fisher
10,825,007 B2 11/2020 Fisher
2001/0011250 A1 * 8/2001 Paltenghe G07F 7/08 705/41
2001/0044751 A1 * 11/2001 Pugliese, III G06Q 30/02 705/14.1
2001/0049636 A1 * 12/2001 Hudda G06Q 30/0601 705/26.1
2002/0026423 A1 * 2/2002 Maritzen G06Q 20/023 705/56
2002/0056091 A1 * 5/2002 Bala G06Q 30/0269 725/23
2002/0059100 A1 5/2002 Shore
2002/0063895 A1 5/2002 Agata
2002/0065774 A1 * 5/2002 Young G06Q 20/322 705/41
2002/0077918 A1 6/2002 Lerner
2002/0082879 A1 6/2002 Miller
2002/0101993 A1 * 8/2002 Eskin H04L 67/04 380/270
2002/0107756 A1 8/2002 Hammons
2002/0116269 A1 * 8/2002 Ishida G06Q 30/0267 719/318
2002/0160761 A1 * 10/2002 Wolfe H04M 3/493 455/566
2002/0169664 A1 * 11/2002 Walker G06Q 30/0207 705/26.1
2002/0169984 A1 11/2002 Kumar
2003/0033272 A1 * 2/2003 Himmel G06Q 20/047
2003/0061113 A1 * 3/2003 Petrovich G06Q 10/087 705/26.43
2003/0065805 A1 4/2003 Barnes
2003/0066883 A1 * 4/2003 Yu G06Q 20/04 235/382
2003/0074259 A1 * 4/2003 Slyman, Jr. G06Q 30/0221 705/17
2003/0085286 A1 * 5/2003 Kelley G07F 7/1008 235/492
2003/0087601 A1 * 5/2003 Agam H04W 12/06 455/39
2003/0093311 A1 * 5/2003 Knowlson H04M 15/58 705/14.66
2003/0093695 A1 5/2003 Dutta
2003/0105641 A1 6/2003 Lewis
2003/0132298 A1 * 7/2003 Swartz G06Q 20/3276 235/472.02
2003/0140004 A1 7/2003 O'Leary
2003/0149662 A1 8/2003 Shore
2003/0163359 A1 * 8/2003 Kanesaka G06Q 30/0204 705/7.33
2003/0172028 A1 9/2003 Abell
2004/0006497 A1 1/2004 Nestor
2004/0030658 A1 * 2/2004 Cruz G06Q 20/367 705/65
2004/0034544 A1 2/2004 Fields
2004/0064407 A1 * 4/2004 Kight G06Q 20/385 705/40
2004/0064408 A1 * 4/2004 Kight G06Q 40/06 705/40
2004/0064409 A1 * 4/2004 Kight G06Q 20/04 705/40
2004/0064410 A1 * 4/2004 Kight G06Q 20/385 705/40
2004/0073439 A1 * 4/2004 Shuster G07C 9/253 726/21
2004/0073497 A1 * 4/2004 Hayes G06Q 30/0601 705/26.1
2004/0078329 A1 * 4/2004 Kight G06Q 20/0855 705/40
2004/0083167 A1 * 4/2004 Kight G06Q 20/0855 705/40
2004/0093271 A1 * 5/2004 Walker G06Q 30/02 705/26.1
2004/0107136 A1 6/2004 Nemirofsky
2004/0111320 A1 * 6/2004 Schlieffers A47F 9/047 705/16
2004/0127256 A1 * 7/2004 Goldthwaite G06K 7/0073 455/466
2004/0143545 A1 * 7/2004 Kulakowski G06Q 20/305 705/39
2004/0230489 A1 11/2004 Goldthwaite
2004/0235450 A1 * 11/2004 Rosenberg H04M 1/0254 455/406
2004/0243519 A1 12/2004 Perttila
2004/0254836 A1 * 12/2004 Emoke Barabas G06Q 30/0267 705/14.35
2004/0267618 A1 12/2004 Judicibus
2004/0267665 A1 12/2004 Nam
2005/0003810 A1 1/2005 Chu
2005/0021478 A1 * 1/2005 Gautier G06Q 20/12 705/65
2005/0037735 A1 * 2/2005 Coutts G06Q 20/341 455/418
2005/0040230 A1 * 2/2005 Swartz G07G 1/0072 235/383
2005/0043994 A1 * 2/2005 Walker G06Q 30/0217 705/14.19
2005/0202385 A1 2/2005 Coward
2005/0060536 A1 * 3/2005 Iga G06Q 20/367 713/155
2005/0076210 A1 4/2005 Thomas
2005/0131837 A1 * 6/2005 Sanctis G06Q 20/12 705/64
2005/0150945 A1 * 7/2005 Choi G06Q 20/108 235/379
2005/0165646 A1 * 7/2005 Tedesco B42D 15/00 705/14.1
2005/0187873 A1 * 8/2005 Labrou G06Q 20/326 705/40

(56) **References Cited**

U.S. PATENT DOCUMENTS

2005/0190970 A1 9/2005 Griffin
2005/0203959 A1* 9/2005 Muller G06Q 30/06
2005/0210387 A1* 9/2005 Alagappan H04L 9/40 715/700
2005/0215231 A1 9/2005 Bauchot
2005/0222961 A1* 10/2005 Staib H04M 1/0254 705/64
2005/0240484 A1* 10/2005 Yan G07B 15/00 455/411
2005/0278377 A1* 12/2005 Mirrashidi G06Q 30/02
2005/0283444 A1* 12/2005 Ekberg H04L 9/3242 705/67
2006/0000825 A1 1/2006 Khedouri
2006/0000900 A1 1/2006 Fernandes
2006/0014518 A1* 1/2006 Huh H04M 15/06 455/406
2006/0031752 A1* 2/2006 Surloff G06F 3/0213 707/E17.112
2006/0044153 A1* 3/2006 Dawidowsky G06K 19/0723 710/10
2006/0089874 A1* 4/2006 Newman G06Q 10/10 705/14.32
2006/0089949 A1* 4/2006 Robbin G06Q 30/0601
2006/0095339 A1* 5/2006 Hayashi G06Q 30/0641 705/26.8
2006/0100924 A1* 5/2006 Tevanian G06Q 30/0222 705/14.23
2006/0123052 A1* 6/2006 Robbin G06Q 30/00
2006/0135156 A1* 6/2006 Malu H04W 8/18 455/432.3
2006/0143091 A1* 6/2006 Yuan G06Q 30/0601 705/26.1
2006/0165060 A1* 7/2006 Dua G06Q 20/401 705/76
2006/0173701 A1* 8/2006 Gurvey G06Q 20/3674 705/902
2006/0180660 A1* 8/2006 Gray G06Q 20/322 455/414.1
2006/0184398 A1* 8/2006 Kasagi G06Q 50/182 705/309
2006/0184431 A1* 8/2006 Rosenberg H04N 21/42684 705/26.8
2006/0191995 A1* 8/2006 Stewart G06Q 20/02 235/382
2006/0206709 A1* 9/2006 Labrou G06Q 20/18 713/167
2006/0212401 A1* 9/2006 Ameerally G06Q 30/02 705/51
2006/0218092 A1* 9/2006 Tedesco G06Q 20/14 705/40
2006/0219780 A1* 10/2006 Swartz G07F 7/02 235/383
2006/0229998 A1 10/2006 Harrison
2006/0235864 A1* 10/2006 Hotelling G06Q 30/0603
2006/0242267 A1 10/2006 Grossman
2006/0247976 A1* 11/2006 Posokhow G06Q 30/06 705/26.81
2006/0248113 A1* 11/2006 Leffert G06Q 40/04
2006/0248114 A1* 11/2006 Anderson G06Q 30/06
2006/0287920 A1* 12/2006 Perkins G06Q 30/02 707/999.107
2006/0294025 A1* 12/2006 Mengerink G06Q 30/0601 705/77
2007/0004391 A1 1/2007 Maffeis
2007/0011099 A1* 1/2007 Sheehan G06Q 20/322 705/65
2007/0021969 A1* 1/2007 Homeier-Beals G06Q 20/326 705/16
2007/0022058 A1* 1/2007 Labrou G06Q 20/322 705/67
2007/0095892 A1 5/2007 Lyons
2007/0015060 A1 6/2007 Angelica
2007/0125838 A1* 6/2007 Law G06Q 20/3223 705/65
2007/0125840 A1* 6/2007 Law G06Q 20/326 705/65
2007/0138299 A1* 6/2007 Mitra G06Q 20/341 235/492
2007/0145135 A1 6/2007 Jogand-Coulomb
2007/0131759 A1 7/2007 Cox
2007/0156436 A1* 7/2007 Fisher G06Q 20/425 705/40
2007/0175978 A1* 8/2007 Stambaugh G06Q 40/12 235/379
2007/0179883 A1* 8/2007 Questembert G06Q 20/10 705/39
2007/0210155 A1* 9/2007 Swartz G06Q 20/20 235/383
2007/0235519 A1 10/2007 Jang
2007/0235539 A1* 10/2007 Sevanto G07F 7/1008 235/451
2007/0255662 A1 11/2007 Tumminaro
2007/0262139 A1 11/2007 Fiebiger
2007/0266130 A1 11/2007 Mazur
2007/0270166 A1* 11/2007 Hampel H04L 51/222 455/456.3
2007/0288966 A1* 12/2007 Javid H04N 21/4755 348/E7.071
2007/0293155 A1* 12/2007 Liao G06Q 20/3229 455/41.2
2008/0004952 A1* 1/2008 Koli G06Q 30/0267 705/14.55
2008/0006685 A1* 1/2008 Rackley, III G06Q 40/00 235/379
2008/0010190 A1* 1/2008 Rackley, III G06Q 20/3223 705/39
2008/0010191 A1* 1/2008 Rackley, III G06Q 20/363 705/39
2008/0010192 A1* 1/2008 Rackley, III G06Q 20/10 705/39
2008/0010193 A1* 1/2008 Rackley, III G06Q 20/325 705/39
2008/0010196 A1* 1/2008 Rackley, III G06Q 40/00 705/40
2008/0010204 A1* 1/2008 Rackley, III G06Q 20/14 705/45
2008/0010215 A1* 1/2008 Rackley, III G06Q 20/326 705/70
2008/0011825 A1* 1/2008 Giordano G06Q 20/04 235/383
2008/0017704 A1* 1/2008 VanDeburg G07F 7/025 235/380
2008/0027795 A1* 1/2008 Medlin G06Q 20/387 705/14.23
2008/0294556 A1 1/2008 Anderson
2008/0040265 A1* 2/2008 Rackley, III G06Q 20/102 705/40
2008/0045172 A1* 2/2008 Narayanaswami G06Q 30/02 455/187.1
2008/0046366 A1* 2/2008 Bemmel G06Q 40/12 705/44
2008/0048022 A1* 2/2008 Vawter G06Q 20/425 235/380
2008/0051059 A1* 2/2008 Fisher G06Q 20/327 455/410
2008/0051142 A1* 2/2008 Calvet H04W 88/02 455/558
2008/0052192 A1* 2/2008 Fisher G06Q 10/02 705/5
2008/0052233 A1* 2/2008 Fisher G06Q 20/327 705/40
2008/0059329 A1* 3/2008 Luchene G06Q 30/0603 705/26.81
2008/0116264 A1 5/2008 Hammad et al.
2008/0126145 A1* 5/2008 Rackley, III G06Q 20/102 455/406
2008/0133336 A1* 6/2008 Altman H04W 4/21 705/14.1

(56) **References Cited**

U.S. PATENT DOCUMENTS

2008/0139155 A1 6/2008 Boireau
2008/0140520 A1* 6/2008 Hyder G06Q 30/0207 705/14.1
2008/0148040 A1* 6/2008 Machani G06F 21/6245 713/193
2008/0167017 A1* 7/2008 Wentker G06Q 30/0224 455/406
2008/0167961 A1* 7/2008 Wentker G06Q 20/3278 705/14.25
2008/0167988 A1* 7/2008 Sun G06Q 20/3278 455/406
2008/0172274 A1* 7/2008 Hurowitz H04L 67/61 455/433
2008/0172285 A1* 7/2008 Hurowitz G06Q 30/02 725/23
2008/0172291 A1* 7/2008 Hurowitz G06Q 30/02 705/14.1
2008/0172292 A1* 7/2008 Hurowitz G06Q 30/02 725/23
2008/0177668 A1 7/2008 Delean
2008/0207234 A1* 8/2008 Arthur G07F 17/16 455/466
2008/0208681 A1 8/2008 Hammad
2008/0208743 A1* 8/2008 Arthur G06Q 40/00 705/41
2008/0208744 A1* 8/2008 Arthur G06Q 20/32 705/41
2008/0208762 A1* 8/2008 Arthur G06Q 20/20 705/79
2008/0221997 A1* 9/2008 Wolfe G06Q 30/02 705/14.39
2008/0242274 A1* 10/2008 Swanburg H04L 67/306 455/414.1
2008/0249938 A1* 10/2008 Drake-Stoker H04W 12/106 726/2
2008/0255947 A1* 10/2008 Friedman G06Q 20/327 455/414.2
2008/0262928 A1* 10/2008 Michaelis G06Q 30/02 705/14.39
2008/0274794 A1* 11/2008 Mathieson G06Q 30/02 463/25
2008/0275779 A1* 11/2008 Lakshminarayanan G06Q 20/325 705/39
2008/0305774 A1 12/2008 Ramakrishna
2009/0000618 A1 1/2009 Hameen-Anttila
2009/0018913 A1* 1/2009 Sarukkai H04M 3/53383 705/14.56
2009/0061884 A1* 3/2009 Rajan G06Q 30/0225 455/445
2009/0063312 A1* 3/2009 Hurst G06Q 20/40 705/41
2009/0075592 A1 3/2009 Nystrom
2009/0076912 A1* 3/2009 Rajan G06Q 30/0267 705/14.64
2009/0098825 A1 4/2009 Huomo
2009/0106112 A1* 4/2009 Dalmia G06Q 40/12 709/204
2009/0112747 A1* 4/2009 Mullen G06Q 40/02 705/35
2009/0124234 A1* 5/2009 Fisher H04B 5/0031 455/406
2009/0132362 A1* 5/2009 Fisher G06Q 30/06 705/16
2009/0143104 A1* 6/2009 Loh G06Q 20/352 340/10.1
2009/0144161 A1* 6/2009 Fisher G06Q 20/3821 705/16
2009/0177587 A1* 7/2009 Siegal G06Q 20/10 705/67
2009/0227281 A1* 9/2009 Hammad G06K 19/07309 340/10.1
2010/0057619 A1* 3/2010 Weller G06Q 20/04 455/414.1
2010/0063895 A1* 3/2010 Dominguez G06Q 20/40 705/26.1
2010/0082491 A1* 4/2010 Rosenblatt G06Q 20/10 705/13
2010/0145835 A1* 6/2010 Davis G06Q 20/1085 705/30
2010/0312694 A1* 12/2010 Homeier-Beals G06Q 30/02 705/39
2011/0055038 A1* 3/2011 Mengerink G06Q 20/085 705/26.1
2011/0320316 A1* 12/2011 Randazza G06Q 30/0617 705/26.43
2012/0030044 A1* 2/2012 Hurst G06Q 20/326 705/16
2012/0150744 A1* 6/2012 Carlson G06Q 20/12 705/44
2012/0215573 A1* 8/2012 Sussman H04L 43/0894 705/5
2012/0220314 A1* 8/2012 Altman H04L 67/306 455/456.3
2012/0265677 A1* 10/2012 Rackley, III G06Q 20/325 705/41
2013/0013501 A1* 1/2013 Rackley, III G06Q 20/32 705/41
2013/0054470 A1* 2/2013 Campos G06Q 20/36 705/67
2013/0212016 A1* 8/2013 Davis G06Q 40/12 705/42
2015/0012440 A1 1/2015 Kelley

FOREIGN PATENT DOCUMENTS

WO WO2006/114601 11/2006
WO WO 2007/129081 11/2007

OTHER PUBLICATIONS

U.S. Appl. No. 14/253,648 Notice of Allowance dated Sep. 10, 2020, 9 p.
"Web mail" https://en.wikipedia.ora/wiki/Webmail).
Ajax https://techterms.com/defnition/ajax.
U.S. Appl. No. 15/076,578, Board Decision dated Mar. 2, 2020.
U.S. Appl. No. 15/076,578 Notice of Allowance dated Jun. 17, 2020.
U.S. Appl. No. 14/253,648 Board Decision dated May 13, 2020.
U.S. Appl. No. 14/253,648 Notice of Allowance dated Sep. 18, 2020.
"Text Messaging" https://en.m.wikipedia.org/wiki/Text_messaging.
"Text Based User Interface" https://en.wikipedia.org/wiki/User_interface.
"WAP" https://en.wikipedia.org/wiki/Wireless_Application_Protocol.
"Multimedia messaging" https://en.wikipedia.org/wiki/Multimedia_Messaging_Service#Technical_description.
Web based user interface https://en.wikipedia.org/wiki/User_interface.
Ajax https://techterms.com/definition/ajax.
Java script https://techterms.com/definition/javascript.
"Browser games" www.60freegames.com/Free-to-Play/Browser-Games.
"Text-based games" https://en.wikipedia.org/wiki/Text-based_game.
"Online shopping" https://en.wikipedia.org/wiki/Online_shopping.
"Social networking services" https://en.wikipedia.org/wiki/Social_networking_service.
"Web mapping" https://en.wikipedia.org/wiki/Web_mapping.
"Mobile browser" https://en.wikipedia.org/wiki/Mobile_browser.
"Voice browser" https://en.wikipedia.org/wiki/Voice_browser.
"Email" https://techterms.com/definition/email.
"Web mail" https://en.wikipedia.org/wiki/Webmail).

(56) **References Cited**

OTHER PUBLICATIONS

"WAP Browser" https://en.m.wikipedia.org/wiki/Wireless_Application_Protocol.
"Binary application" https://en.m.wikipedia.org/wiki/Application_binary_interface.
IPR2021-01529.
IPR2021-01530.
Board denial of institution of IPR2021-01529.
Board denial of institution of IPR2021-01530.
Request for Ex Parte Reexamination of U.S. Pat. No. 10,699,259.
Request for Ex Parte Reexamination of U.S. Pat. No. 10,825,007.

* cited by examiner

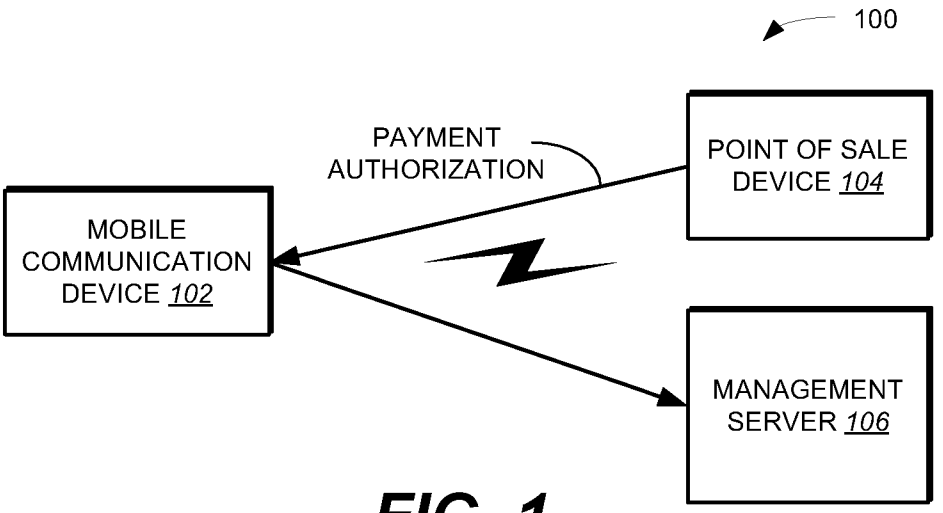

100
PAYMENT AUTHORIZATION
POINT OF SALE DEVICE 104
MOBILE COMMUNICATION DEVICE 102
MANAGEMENT SERVER 106

FIG. 1

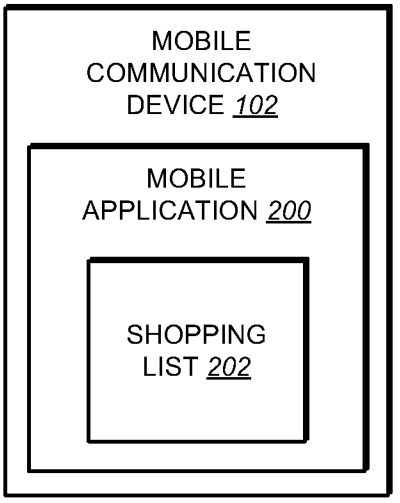

MOBILE COMMUNICATION DEVICE 102
MOBILE APPLICATION 200
SHOPPING LIST 202

FIG. 2

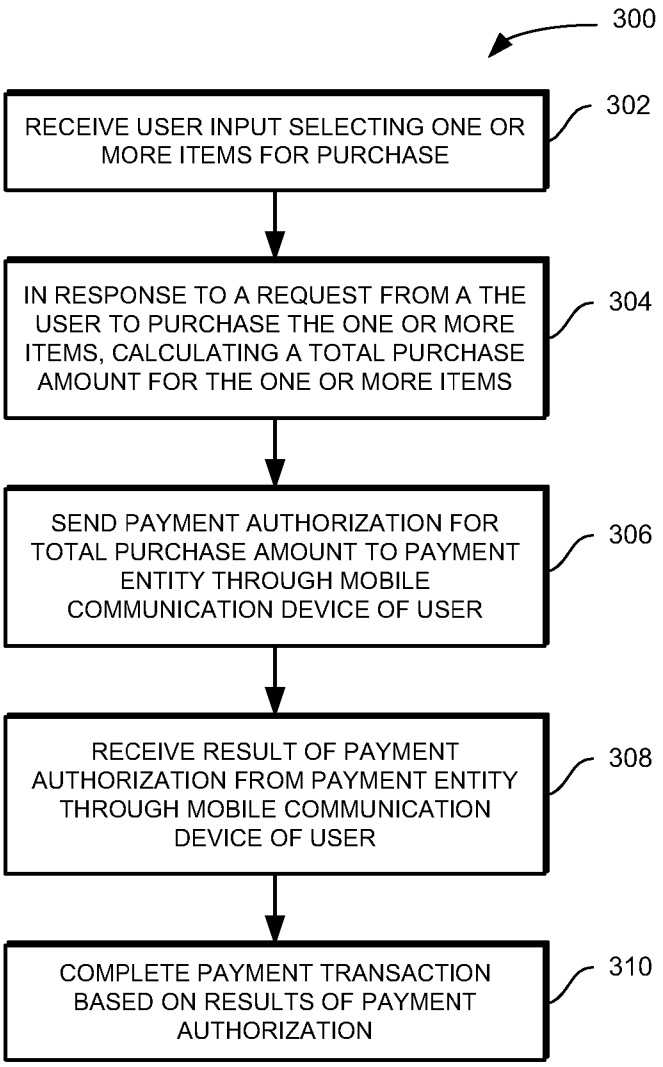

300
RECEIVE USER INPUT SELECTING ONE OR MORE ITEMS FOR PURCHASE
302
IN RESPONSE TO A REQUEST FROM A THE USER TO PURCHASE THE ONE OR MORE ITEMS, CALCULATING A TOTAL PURCHASE AMOUNT FOR THE ONE OR MORE ITEMS
304
SEND PAYMENT AUTHORIZATION FOR TOTAL PURCHASE AMOUNT TO PAYMENT ENTITY THROUGH MOBILE COMMUNICATION DEVICE OF USER
306
RECEIVE RESULT OF PAYMENT AUTHORIZATION FROM PAYMENT ENTITY THROUGH MOBILE COMMUNICATION DEVICE OF USER
308
COMPLETE PAYMENT TRANSACTION BASED ON RESULTS OF PAYMENT AUTHORIZATION
310

FIG. 3

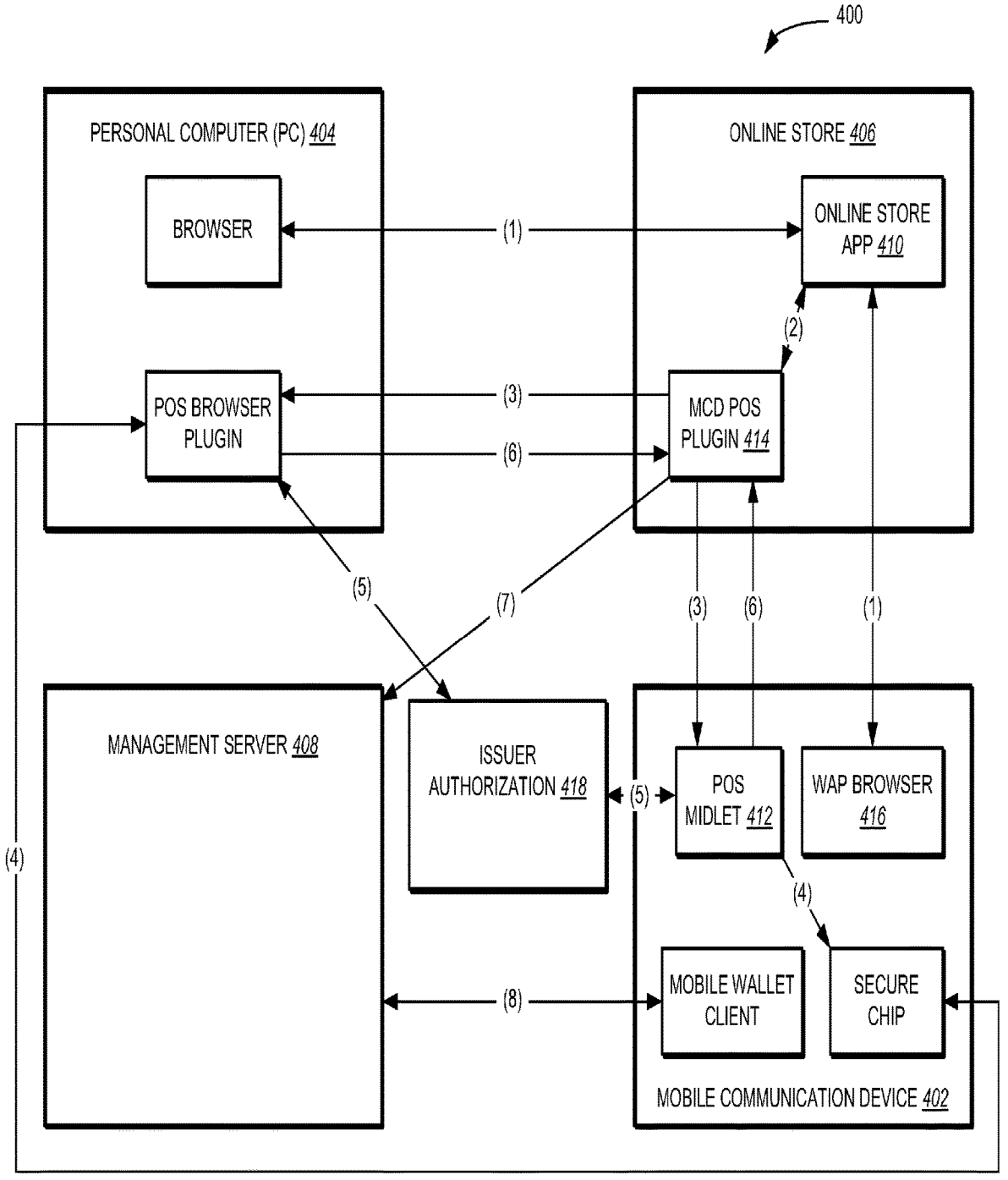

400
PERSONAL COMPUTER (PC) 404
BROWSER
POS BROWSER PLUGIN
ONLINE STORE 406
ONLINE STORE APP 410
MCD POS PLUGIN 414
(1)
(2)
(3)
(6)
(5)
(7)
(3)
(6)
(1)
MANAGEMENT SERVER 408
ISSUER AUTHORIZATION 418
(5)
POS MIDLET 412
WAP BROWSER 416
(4)
(4)
(8)
MOBILE WALLET CLIENT
SECURE CHIP
MOBILE COMMUNICATION DEVICE 402

FIG. 4

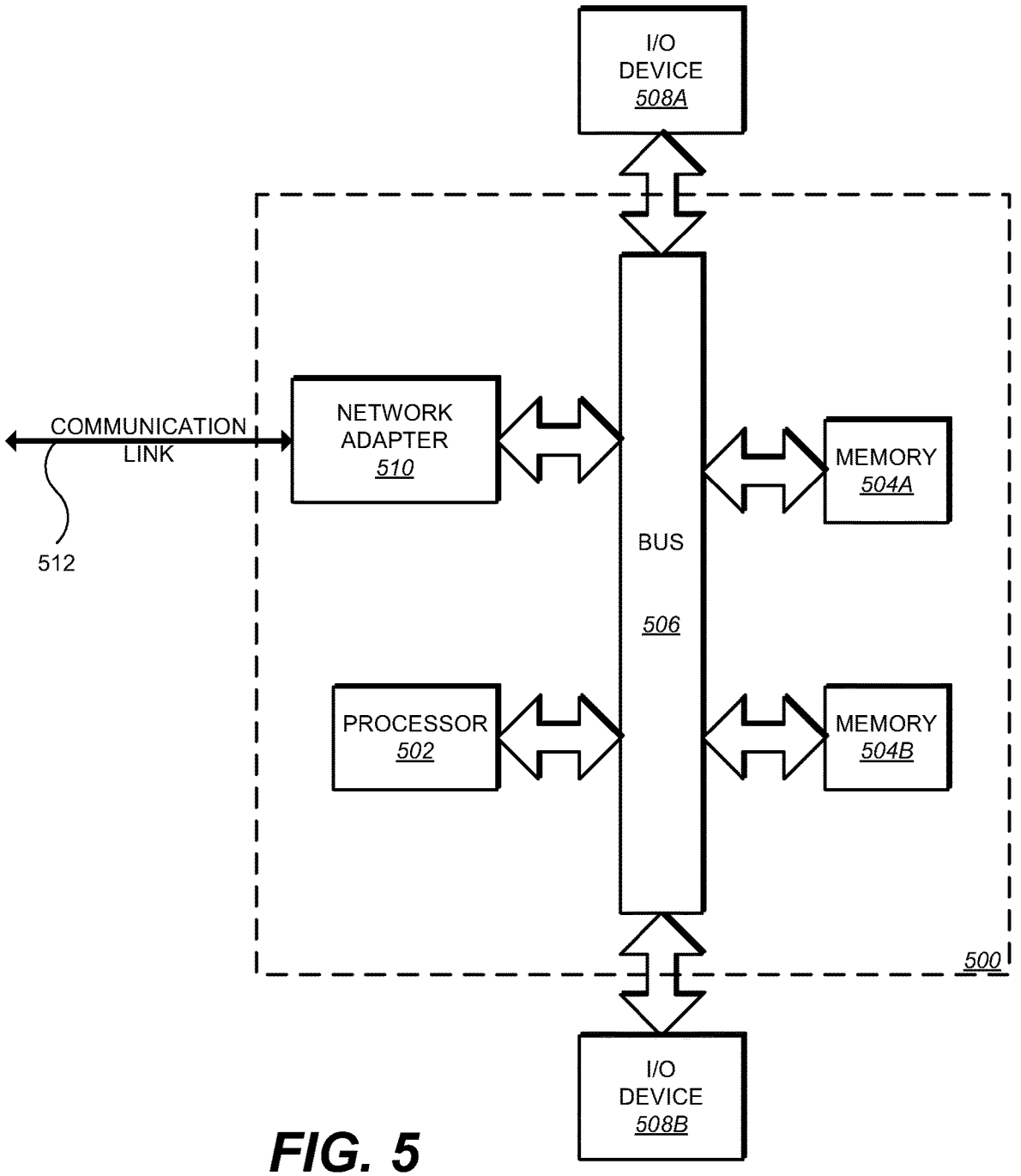

I/O
DEVICE
508A
COMMUNICATION
LINK
512
NETWORK
ADAPTER
510
BUS
506
MEMORY
504A
PROCESSOR
502
MEMORY
504B
500
I/O
DEVICE
508B

FIG. 5

BLAZE TRANSACTION SERVER FOR PURCHASING DIGITAL PRODUCTS

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation and claims priority to U.S. patent application Ser. No. 16/913,263 filed Jun. 26, 2020, titled, "METHOD AND SYSTEM FOR PURCHASING A PRODUCT USING A NON-BROWSER BASED APPLICATION" which is a continuation and claims priority to U.S. patent application Ser. No. 15/076,578 filed Mar. 21, 2016, titled, "REMOTE TRANSACTION PROCESSING USING A MOBILE DEVICE" now U.S. Pat. No. 10,699,259 which is a continuation and claims priority to U.S. patent application Ser. No. 14/083,344 filed Nov. 18, 2013, titled, "REMOTE TRANSACTION PROCESSING AT A SERVER FROM A LIST USING A PAYMENT METHOD" now U.S. Pat. No. 9,311,659, issued on Apr. 12, 2016 which is a continuation and claims priority to U.S. patent application Ser. No. 13/735,337, filed Jan. 7, 2013, titled REMOTE TRANSACTION PROCESSING USING AUTHENTICATION INFORMATION now U.S. Pat. No. 8,620,754, issued on Dec. 31, 2013, which is a continuation and claims priority to U.S. patent application Ser. No. 11/948,903, filed Nov. 30, 2007, titled METHOD AND SYSTEM FOR CONDUCTING AN ONLINE PAYMENT TRANSACTION USING A MOBILE COMMUNICATION DEVICE, now U.S. Pat. No. 8,352,323, issued on Jan. 8, 2013, both of which are incorporated by reference herein in their entirety.

FIELD OF INVENTION

The present invention relates to data communications and wireless devices.

BACKGROUND OF THE INVENTION

Mobile communication devices—e.g., cellular phones, personal digital assistants, and the like—are increasingly being used to conduct payment transactions as described in U.S. patent application Ser. No. 11/933,351, entitled "Method and System For Scheduling A Banking Transaction Through A Mobile Communication Device", and U.S. patent application Ser. No. 11/467,441, entitled "Method and Apparatus For Completing A Transaction Using A Wireless Mobile Communication Channel and Another Communication Channel, both of which are incorporated herein by reference. Such payment transactions can include, for example, purchasing goods and/or services, bill payments, and transferring funds between bank accounts.

BRIEF SUMMARY OF THE INVENTION

In general, this specification describes a method and system for conducting an online payment transaction through a point of sale device. The method includes receiving input from a user selecting an item for purchase through the point of sale device; calculating a total purchase amount for the item in response to a request from the user to purchase the item; and sending payment authorization for the total purchase amount from the point of sale device to a payment entity, in which the payment authorization is sent to the payment entity via a mobile communication device of the user. The method further includes receiving a result of the payment authorization from the payment entity through

the mobile communication device; and completing the payment transaction based on the result of the payment authorization.

Particular implementations can include one or more of the following features. The point of sale device can be a desktop computer, a laptop computer, or a terminal. The mobile communication device can be a cellular phone, a wireless personal digital assistant (PDA), or a laptop computer. The cellular phone can be an NFC-enabled phone. Sending payment authorization for the total purchase amount from the point of sale device to a payment entity can include sending the payment authorization securely to the payment entity. The payment entity can be a person, a computer system, or a bank. The method can further include maintaining a shopping list on the mobile communication device of the user, in which the shopping list includes a listing of one or more items to be purchased by the user. The payment authorization can be an authorization for payment with a credit card, a debit card, or a prepaid card.

The details of one or more implementations are set forth in the accompanying drawings and the description below. Other features and advantages will be apparent from the description and drawings, and from the claims.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** illustrates a block diagram of a communication system including a wireless mobile communication device and a management server in accordance with one implementation.

FIG. **2** illustrates one implementation of the wireless mobile communication device of FIG. **1**.

FIG. **3** is a method for conducting a payment transaction using a point of sale device in accordance with one implementation.

FIG. **4** illustrates a block diagram of a communication system including a wireless mobile communication device and an online store in accordance with one implementation.

FIG. **5** is a block diagram of a data processing system suitable for storing and/or executing program code in accordance with one implementation.

Like reference symbols in the various drawings indicate like elements.

DETAILED DESCRIPTION OF THE INVENTION

FIG. **1** illustrates one implementation of a communication system **100**. The communication system **100** includes a hand-held, wireless mobile communication device **102** a point-of-sale device **104** and a management server **106**. In one implementation, the mobile communication device **102** includes a mobile application (discussed in greater detail below) that permits a user of the mobile communication device **102** to conduct payment transactions. Payment transactions can include, for example, using contactless payment technology at a retail merchant point of sale (e.g., through point of sale device **104**), using mobile/internet commerce (e.g., purchase tickets and products, etc.), storage of payment information and other digital artifacts (e.g., receipts, tickets, coupons, etc.), storage of banking information (payment account numbers, security codes, PIN's, etc.), and accessing banking service (account balance, payment history, bill pay, fund transfer, etc.), and so on. The mobile communication device **102** can be a cellular phone, a wireless personal digital assistant (PDA), a laptop computer, or other wireless communication device. The point of sale

device **104** can be a desktop computer, laptop computer, terminal, or other device that is configured to receive user input selecting items for purchase or other transaction.

In one implementation, authorizations for payment transactions that are made through the point of sale device **104** are sent from the point of sale device **104** to an issuer authorization (e.g., management server **106**) through the mobile communication device **102** (as shown in FIG. **1**). In one implementation, an issuer authorization is a payment entity that either approves or disapproves a payment transaction. An issuer authorization can be, e.g., a person, computer system, bank (or other third party). One potential benefit of having payment authorizations flow through the mobile communication device **102** is that sensitive user information (e.g. account numbers, pin numbers, and/or identity information) need only be sent from the mobile communication device **102** directly to an issuer authorization. Such operation reduces the potential for identity theft and/or fraudulent purchases made through a point of sale device. For example, (in one implementation) payment authorizations cannot be sent to an issuer authorization if the mobile communication device **102** is turned off.

FIG. **2** illustrates one implementation of the mobile communication device **102**. The mobile communication device **102** includes a mobile application **200** that (in one implementation) is provided to the mobile communication device **102** through a remote server (e.g., management server **106**). In one implementation, the mobile application is a Mobile Wallet application available from Mobile Candy Dish, Inc., of Alameda, Calif. In one implementation, the mobile application is a hosted service, as described in U.S. patent application Ser. No. 11/939,821, entitled "Method and System For Securing Transactions Made Through a Mobile Communication Device", which is incorporated herein by reference. In one implementation, the mobile application **200** is configured to send requests to the management server for artifacts based on user input, e.g., received through a keypad (not shown) of the mobile communication device **102**. Requests to the management server **106** can also be automated, via proximity-based services, e.g., consumer tapping (or in close proximity) an LBS/contactless/RFID enabled phone against a smart poster (RFID/Bluetooth/LBS enabled, etc.), kiosk, or other device.

In one implementation, the mobile application **200** running on the mobile communication device **102** is configured to receive artifacts (e.g., advertisements, receipts, tickets, coupons, media, content, and so on) from the management server **106**. In one implementation, the management server **106** sends artifacts to the mobile application based on user profile information and/or a transaction history (or payment trends) associated with a user of the mobile communication device **102** as described in U.S. patent application Ser. No. 11/944,267, entitled "Method and System For Delivering Information To a Mobile Communication Device Based On Consumer Transactions", which is incorporated herein by reference.

In one implementation, the mobile communication device **102** is an NFC-enabled phone. The mobile communication device **102** can be NFC-enabled, for example, through an embedded chip or a sticker that is affixed to the cellular phone, as described in U.S. application Ser. No. 11/933,321, entitled "Method and System For Adapting a Wireless Mobile Communication Device For Wireless Transactions", which is incorporated herein by reference. In one implementation, the NFC chip (or sticker) on the cellular phone can be used in conjunction with a merchant's point of sale device as described in greater detail below.

For example, with reference to FIG. **4**, in one implementation, the NFC chip (or sticker) on the cellular phone can communicate with NFC chips that are installed on the front of PC's (TV's, Kiosks, or any other device) and serve as scanners/readers. In this implementation a mobile candy dish applet (e.g., MCD POS plugin **414**) is installed on the consumer's computer (e.g., PC **404**) which interfaces with the NFC chip on the PC. When a consumer (or user) is shopping online and they are ready to pay for their products, the consumer opens his mobile wallet and selects one of the payment methods (e.g., credit card, debit card, prepaid card, etc.) from their mobile wallet. If a default card has been selected already, this step is not necessary. The consumer then waves their phone over the NFC reader present on the PC **404**. The consumer's payment credentials are transferred from the phone to the merchant website (e.g., online store application **410**) using a communication protocol between the chip in the phone and the chip in the PC, which can be radio frequency for example. If the consumer has coupons in their mobile wallet the consumer can either elect to manually apply the coupon, save the coupon for a future use (against a larger purchase for example), or have the coupon automatically applied during the transaction and the transaction amount is updated. After the consumer enters any necessary validation information (e.g., pin) to provide a multi-factor authentication and confirms the transaction, the online purchase is processed as normal by the merchant's online processor. The mobile wallet can retrieve transaction data, account balance from the management server **408**.

In one implementation, the mobile communication device **102** is a non NFC-enabled phone. In this implementation, the consumer connects his phone to the PC **404** via some non radio frequency method (e.g., IR, Bluetooth, USB cable, etc.). When a consumer is shopping online and they are ready to pay for their products, the consumer opens his mobile wallet and selects one of the payment methods (e.g., credit card, debit card, prepaid card, etc.) from their mobile wallet. If a default card has been selected already, this step is not necessary. The consumer then pushes, e.g., a "Buy now" button and the consumer's payment credentials are transferred from the phone to the merchant website (e.g., online store application **410**) using the protocol between the phone and the PC **404** which can be radio frequency, for example. If the consumer has coupons in their mobile wallet the consumer can either elect to manually apply the coupon, save the coupon for a future use, or have the coupon automatically applied during the transaction and the transaction amount is updated. After the consumer enters any necessary validation information (e.g., pin) to provide multi-factor authentication and confirms the transaction, the online purchase is processed as normal by the merchant's online processor. The mobile wallet can retrieve transaction data and account balance from the management server **408**.

In one implementation, the management server **408** and merchant portal (e.g., online store **408**) are maintained by trusted parties and use an encrypted tunnel to transfer financial data. When the consumer is ready to pay for their online product, they enter their cell phone number on the merchant portal. The merchant portal (which has an MCD applet (e.g., MCD POS plugin **414**) installed on its server) securely connects to the management server **408** (that in one implementation is maintained by Mobile Candy Dish (MCD)). In one implementation, the management server **408** identifies the consumer through their cell phone number, and verifies the consumer's authenticity by sending a unique transaction code to the consumer mobile wallet on their cell phone. The consumer then enters this unique transaction

code onto the merchant's web portal. The merchant portal sends this transaction number to the management server **408** for authentication. Upon authentication, the consumer's virtual wallet and payment methods (e.g., credit card, debit card, prepaid card, etc.) are securely retrieved from the management server **408** and are displayed to the consumer in a window on a website associated with the merchant portal. The consumer selects one of these payment methods to pay for their transaction. If a default card has been selected already, this step is not necessary. If the consumer has coupons in their mobile wallet the consumer can either elect to manually apply the coupon, save the coupon for a future use, or have the coupon automatically applied during the transaction and the transaction amount is updated. After the consumer enters any necessary validation information to provide a multi-factor authentication and confirms the transaction, the online purchase is processed as normal by the merchant's online processor. The mobile wallet can retrieve transaction data, account balance from the management server **408**.

Referring to FIG. **2**, in one implementation, the mobile application **200** maintains a shopping list **202** for a consumer. Accordingly, consumers have the ability to store their shopping list in their mobile wallet and add, delete, or change items on their shopping list either in offline or online mode. In one implementation, consumers are sent coupons based on items on their shopping list, preferences, previous shopping history, proximity to the physical retail store, or a combination of these parameters, as discussed in application Ser. No. 11/944,267, which is incorporated by reference above. If the consumer has coupons in their mobile wallet the consumer can either elect to manually apply the coupon, save the coupon for a future use, or have the coupon automatically applied during the transaction and the transaction amount is updated. When a consumer wants to order the items on their shopping list via an on online merchant (in contrast to a physical retail store), the consumer can logon to the merchant portal and electronically transmit their shopping list to the merchant portal either by waving their phone over NFC enabled PC's or some other connection such as IR, bluetooth, USB, or the like.

FIG. **3** illustrates a method **300** for conducting a payment transaction using a point of sale device (e.g., point of sale device **104**). User input is received selecting one or more items for purchase (e.g., at the point of sale device) (step **302**). In general, the transaction being made at the point of sale device can be any type of transaction that involves the exchange or transfer of funds—e.g., the transaction can be a payment transaction, a fund transfer, or other type of transaction. In response to a request from the user to purchase the one or more items, a total purchase amount for the one or more items is calculated (e.g., by the point of sale device) (step **304**). If the user has coupons in their mobile wallet the user can either manually apply the coupon or have the coupon automatically applied during the transaction and the transaction amount is updated. The user request to purchase an item can be received, e.g., by a user clicking on a "buy now" icon that is displayed on a graphical user interface of the point of sale device. Payment authorization for the total purchase amount is sent to a payment entity through a mobile communication device of the user (step **306**). A result of the payment authorization is received at the point of sale device from the payment entity via the mobile communication device (step **308**). The payment transaction is completed based on the result of the payment authorization (step **310**). If the payment transaction was authorized by the payment entity, then the sale of the items through the point of sale device is completed. Otherwise, if the payment transaction was not authorized by the payment entity, then the point of sale device terminates the payment transaction.

FIG. **4** illustrates an example payment transaction being made in a communication system **400** in accordance with one implementation. The communication system **400** includes a mobile communication device **402**, a personal computer (PC) **404**, an online store **406**, and a core (or datastore) **408**. As indicated by interaction (1), a user (or customer), using a phone (e.g., mobile communication device **402** or personal computer **404**), browses an online store website (online store application **410**) and finds an item that the customer wishes to purchase. This could also be a purchase made through a midlet application (POS midlet **412**) residing on the mobile communication device **402**. The user then goes to, e.g., a checkout of the online store **406** make a purchase. If the user has coupons in their mobile wallet the user can either manually apply the coupon or have the coupon automatically applied during the transaction and the transaction amount is updated. When it comes time to authorize the purchase, (in one implementation) the user is given an option to purchase with the mobile communication device **402**. In one implementation, the mobile communication device **402** is an NFC-equipped phone (or NFC phone).

In interaction (2), when the user chooses to purchase with the mobile communication device **402**, the online store application **410** sends the transaction information for authorization to the POS vendor plugin (e.g., MCD POS plugin **414**). In one implementation, the POS vendor plugin is installed in the merchant's online store and enables the merchant to accepts MCD Blaze payments as an alternative form of payment, similar to accepting credit cards for payment. As shown by interaction (3), the POS vendor plugin formats, encrypts, and cryptographically signs the purchase authorization request which is sent via a secure SSL link (e.g., HTTPS, Bluetooth, IR, USB, or other suitable protocol) established by the browser/web application **416** back to the mobile communication device **402**. As with the first scenario, all communications is over secure channels. (It may be required that the mobile wallet application be opened prior to beginning a phone online purchase.) The POS midlet **412** is a component of the mobile wallet application that executes PayPass or other payment authorization protocol between itself and the SE payment applications on the mobile communication device **402** (interaction (4)). The results of the request are sent back to the POS vendor plugin.

As shown by interaction (5), the POS midlet **412** then forwards the properly formatted authorization request to a payment entity (e.g., issuer authorization **418**) for authorization. The results of the request are then sent back to the POS component of the mobile wallet. Through interaction (6), the POS midlet **412** then forwards the results back to the MCD POS plugin **414** to complete the purchase. The MCD POS plugin **414** then forwards the purchase transaction information to the management server **408** for later customer viewing (interaction (7)). As indicated by interaction (8), users (or customers) will then be able to query the management server **408** and immediately obtain purchase information, either by phone or PC.

One or more of method steps described above can be performed by one or more programmable processors executing a computer program to perform functions by operating on input data and generating output. Generally, the invention can take the form of an entirely hardware embodiment, an entirely software embodiment or an embodiment containing

both hardware and software elements. In one implementation, the invention is implemented in software, which includes but is not limited to firmware, resident software, microcode, etc. Furthermore, the invention can take the form of a computer program product accessible from a computer-usable or computer-readable medium providing program code for use by or in connection with a computer or any instruction execution system. For the purposes of this description, a computer-usable or computer readable medium can be any apparatus that can contain, store, communicate, propagate, or transport the program for use by or in connection with the instruction execution system, apparatus, or device. The medium can be an electronic, magnetic, optical, electromagnetic, infrared, or semiconductor system (or apparatus or device) or a propagation medium. Examples of a computer-readable medium include a semiconductor or solid state memory, magnetic tape, a removable computer diskette, a random access memory (RAM), a read-only memory (ROM), a rigid magnetic disk and an optical disk. Current examples of optical disks include compact disk-read only memory (CD-ROM), compact disk-read/write (CD-R/W) and DVD.

FIG. **5** illustrates a data processing system **500** suitable for storing and/or executing program code. Data processing system **500** includes a processor **502** coupled to memory elements **504**A-B through a system bus **506**. In other implementations, data processing system **500** may include more than one processor and each processor may be coupled directly or indirectly to one or more memory elements through a system bus. Memory elements **504**A-B can include local memory employed during actual execution of the program code, bulk storage, and cache memories that provide temporary storage of at least some program code in order to reduce the number of times the code must be retrieved from bulk storage during execution. As shown, input/output or I/O devices **508**A-B (including, but not limited to, keyboards, displays, pointing devices, etc.) are coupled to data processing system **500**. I/O devices **508**A-B may be coupled to data processing system **500** directly or indirectly through intervening I/O controllers (not shown).

In one implementation, a network adapter **510** is coupled to data processing system **500** to enable data processing system **500** to become coupled to other data processing systems or remote printers or storage devices through communication link **512**. Communication link **512** can be a private or public network. Modems, cable modems, and Ethernet cards are just a few of the currently available types of network adapters.

Although the present invention has been particularly described with reference to implementations discussed above, various changes, modifications and substitutes are can be made. Accordingly, it will be appreciated that in numerous instances some features of the invention can be employed without a corresponding use of other features. Further, variations can be made in the number and arrangement of components illustrated in the figures discussed above.

What is claimed is:

1. A method for processing a transaction, comprising:

receiving, at a transaction server, a payment method that corresponds to a userID from a remote management server, wherein

prior to receiving the payment method that corresponds to the userID from the remote management server, the remote management server:

maintains the payment method;

transmits a list of products to a non-browser based application, wherein the non-browser based application is a mobile operating system platform based mobile application with a graphical user interface that is preinstalled or downloaded and installed on a mobile device, wherein the graphical user interface includes a graphical icon, the mobile device including a mobile device display, a mobile device processor, a mobile device wireless radio transceiver configured to support voice and data interactions through a first wireless communication channel, and a mobile device wireless fidelity (Wi-Fi) transceiver,

receives, from the non-browser based application, an identification of one or more products selected from the list of products wherein the non-browser based application receives the identification of the one or more products selected from the list of products through user input via the mobile device display;

receives, from-the_non-browser based application, a transaction purchase request, wherein the non-browser based application receives the transaction purchase request through the user input via the mobile device display of the mobile device,

receives, from the non-browser based application, information related to the userID and the information related to a password;

authenticates the user;

after user authentication, transmits the payment method that corresponds to the userID to the transaction server;

processing, at the transaction server, the transaction using the payment method that corresponds to the userID; and

transmitting, from the transaction server, a transaction verification to the remote management server, wherein the transaction verification indicates that the transaction has processed and further wherein after receiving the transaction verification, the remote management server downloads the one or more products to the mobile device and transmits a digital artifact to the non-browser based application.

2. The method of claim **1**, where the payment method includes information related to a credit card number, information related to a debit card number, or information related to a prepaid card number.

3. The method of claim **1**, further wherein no sensitive data is stored on the mobile device.

4. The method of claim **3**, wherein the sensitive data comprises information related to the payment method.

5. The method of claim **1**, further wherein the information related to the password is information related to a personal identification number (PIN).

6. The method of claim **1**, further, wherein the information related to the password is information related to biometric data.

7. The method of claim **1**, further wherein the user authentication is performed by the remote management server.

8. The method of claim **1**, further wherein the user authentication is performed by the mobile device based upon the condition that a transaction has been initiated and the transaction amount exceeds a payment limit for the payment method.

9. The method of claim **1**, further wherein the transmission of the purchase request is transmitted from the mobile device to the remote management server without using a point-of-sale device, wherein the transmission of the pur-

chase request directly to the remote management server reduces the potential for identity theft or fraudulent purchases made through the point-of-sale device.

10. The method of claim **1**, further wherein maintaining the payment method at the remote management server results in a more secure system.

11. The method of claim **1**, wherein the remote management server is configured to store a single userID for information associated with the user, one or more payment methods, transactional information and history and_a plurality of the user's mobile devices which means the remote management server scales.

12. The method of claim **1**, wherein the digital artifact is media, content, ticket, receipt, advertisement, or coupon.

13. The method of claim **1**, wherein the non-browser based application receives the digital artifact through a wireless connection of the mobile device to a wireless network;

the non-browser based application displays the digital artifact while the mobile device maintains the wireless connection to the wireless network; and

the method further comprises:

losing the wireless connection of the mobile device to the wireless network while the non-browser based application displays the digital artifact; and

after losing the wireless connection, continuing to display the digital artifact within the non-browser based application.

14. The method of claim **1**, further wherein the non-browser based application monitors for access to a wireless network and automatically reconnects to the wireless network when the wireless network is available.

15. The method of claim **1**, further wherein the non-browser based application is stored in a local mobile device memory during execution of the non-browser based application, a bulk storage mobile device memory for when the non-browser based application is not being executed, and a cache mobile device memory to provide temporary storage of at least some non-browser based application in order to reduce the number of times the non-browser based application must be retrieved from the bulk storage mobile device memory during the execution.

16. A transaction server for processing a transaction, comprising:

a transaction server interface configured to:

receive a payment method that corresponds to an userID from a remote management server, wherein

prior to receiving the payment method that corresponds to the userID from the remote management server, the remote management server:

maintains the payment method;

transmits a list of products to a non-browser based application, wherein the non-browser based application is a mobile operating system platform based mobile application with a graphical interface that is preinstalled or downloaded and installed on a mobile device, wherein the graphical user interface includes a graphical icon, the mobile device including a mobile device display, a mobile device processor, a mobile device wireless radio transceiver configured to support voice and data interactions through a first wireless communication channel, and a mobile device wireless fidelity (Wi-Fi) transceiver;

receives, from the non-browser based application, an identification of one or more products selected from the list of products, wherein the non-browser based application receives the identification of the one or more products selected from the list of products through user input via the mobile device display;

receives, from the non-browser based application, a transaction purchase request including information relating to the identification of the one or more products, wherein the non-browser based application receives the transaction purchase request through the user input via the mobile device display;

receives, from the non-browser based application, information related to the userID and the information related to a password;

authenticates the user;

after user authentication, transmits the payment method that corresponds to the userID to the transaction server; and

transmits a transaction verification to the remote management server, wherein the transaction verification indicates that the transaction has processed and further wherein after receiving the transaction verification, the remote management server downloads the one or more products to the mobile device and transmits a digital artifact to the non-browser based application; and

a transaction server processor that processes the transaction using the payment method that corresponds to the userID.

17. The transaction server of claim **16**, where the payment method includes information related to a credit card number, information related to a debit card number, or information related to a prepaid card number.

18. The transaction server of claim **16**, further wherein no sensitive data is stored on the mobile device.

19. The transaction server of claim **18**, wherein the sensitive data comprises information related to the payment method.

20. The transaction server of claim **16**, further wherein the information related to the password is information related to a personal identification number (PIN).

21. The transaction server of claim **16** further, wherein the information related to the password is information related to biometric data.

22. The transaction server of claim **16**, further wherein the user authentication is performed by the remote management server.

23. The transaction server of claim **16**, further wherein the user authentication is performed by the mobile device based upon the condition that a transaction has been initiated and the transaction amount exceeds a payment limit for the payment method.

24. The transaction server of claim **16**, further wherein the transmission of the purchase request is transmitted from the mobile device to the remote management server without using a point-of-sale device, wherein the transmission of the purchase request directly to the remote management server reduces the potential for identity theft or fraudulent purchases made through the point-of-sale device.

25. The transaction server of claim **16**, further wherein maintaining the payment method at the remote management server results in a more secure system.

26. The transaction server of claim **16**, wherein the remote management server is configured to store a single userID for information associated with the user, one or more payment methods, transactional information and history and a plurality of the user's mobile devices which means the remote management server scales.

27. The transaction server of claim 16, wherein the digital artifact is media, content, ticket, receipt, advertisement, or coupon.

28. The transaction server of claim 16, wherein the non-browser based application receives the digital artifact through a wireless connection of the mobile device to a wireless network;

the non-browser based application displays the digital artifact while the mobile device maintains the wireless connection to the wireless network; and

the method further comprises:

losing the wireless connection of the mobile device to the wireless network while the non-browser based application displays the digital artifact; and

after losing the wireless connection, continuing to display the digital artifact within the non-browser based application.

29. The transaction server of claim 16, further wherein the non-browser based application monitors for access to a wireless network and automatically reconnects to the wireless network when the wireless network is available.

30. The transaction server of claim 16, further wherein the non-browser based application is stored in a local mobile device memory during execution of the non-browser based application, a bulk storage mobile device memory for when the non-browser based application is not being executed, and a cache mobile device memory to provide temporary storage of at least some non-browser based application in order to reduce the number of times the non-browser based application must be retrieved from the bulk storage mobile device memory during the execution.

* * * * *