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(54) BLAZE REMOTE MANAGEMENT SERVER FOR DOWNLOADING A DIGITAL PRODUCT

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(58) Field of Classification Search

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(56) References Cited

U.S. PATENT DOCUMENTS

(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.

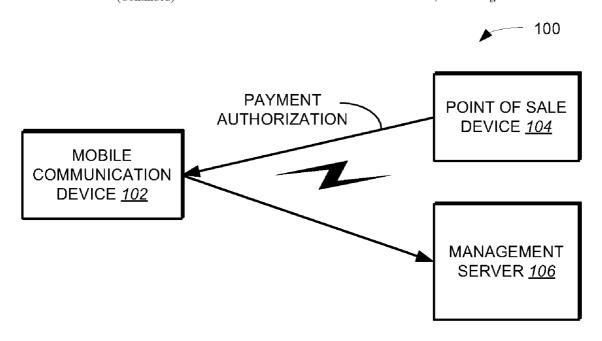
(Continued)

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(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.

26 Claims, 4 Drawing Sheets



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(56)References Cited

U.S. PATENT DOCUMENTS

C 115 CO1 A		
6,115,601 A	* 9/2000	Ferreira H04M 17/20
6,123,259 A	* 9/2000	455/406 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		Forslund G06Q 20/229
0,230,337 D1	0/2001	
6 20 4 2 44 D4	d. 5(2002	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		Freeman G06K 19/0723
0,430,407 D1	3/2002	
6 466 000 DO	40(2002	235/487
6,466,203 B2	10/2002	Van Ee
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
7,063,263 B2	3/2006	Swartz
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
7 127 226 D2	10/2006	Khan
7,127,236 B2		
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
7,308,254 B1 7,357,312 B2	12/2007 4/2008	Rissanen Gangi
7,308,254 B1 7,357,312 B2 7,379,920 B2	12/2007 4/2008 5/2008	Rissanen Gangi Leung
7,308,254 B1 7,357,312 B2	12/2007 4/2008 5/2008	Rissanen Gangi
7,308,254 B1 7,357,312 B2 7,379,920 B2	12/2007 4/2008 5/2008	Rissanen Gangi Leung
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2	12/2007 4/2008 5/2008 * 6/2008	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,522,905 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 4/2009	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 4/2009	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,522,905 B2 7,555,284 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 * 4/2009 * 6/2009	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,522,905 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 * 4/2009 * 6/2009	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,522,905 B2 7,555,284 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 * 4/2009 * 6/2009	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,522,905 B2 7,555,284 B2 7,680,824 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 * 4/2009 * 6/2009	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,522,905 B2 7,555,284 B2 7,680,824 B2 7,739,596 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 * 4/2009 * 3/2010 6/2010	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,522,905 B2 7,555,284 B2 7,680,824 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 * 4/2009 * 3/2010 6/2010	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,522,905 B2 7,555,284 B2 7,680,824 B2 7,739,596 B2 7,739,596 B2 7,783,532 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 * 6/2009 * 3/2010 * 6/2010 * 8/2010	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,522,905 B2 7,555,284 B2 7,680,824 B2 7,739,596 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 * 6/2009 * 3/2010 * 6/2010 * 8/2010	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,522,905 B2 7,555,284 B2 7,680,824 B2 7,739,596 B2 7,739,596 B2 7,783,532 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 * 6/2009 * 3/2010 * 6/2010 * 8/2010	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,522,905 B2 7,555,284 B2 7,680,824 B2 7,739,596 B2 7,739,596 B2 7,783,532 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 * 3/2010 * 3/2010 * 8/2010 * 8/2010	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,522,905 B2 7,555,284 B2 7,680,824 B2 7,739,596 B2 7,783,532 B2 7,784,684 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 * 3/2010 * 3/2010 * 8/2010 * 8/2010	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,522,905 B2 7,555,284 B2 7,680,824 B2 7,739,596 B2 7,783,532 B2 7,784,684 B2 7,792,756 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 * 3/2010 * 8/2010 * 8/2010 * 9/2010	Rissanen Gangi Leung Kight G06Q 20/10 705/40 Brown Hammad Celi et al. Bemmel G06Q 20/204 705/64 Hammad Yan G06Q 20/045 455/566 Plastina G06F 16/433 715/764 Clarke-Martin Hsu G06Q 30/0236 705/28 Labrou G06Q 20/327 705/64 Plastina H04W 12/64 Plastina H04W 12/64
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,522,905 B2 7,555,284 B2 7,680,824 B2 7,739,596 B2 7,783,532 B2 7,784,684 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 * 3/2010 * 8/2010 * 8/2010 * 9/2010	Rissanen Gangi Leung Kight G06Q 20/10
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,552,905 B2 7,555,284 B2 7,680,824 B2 7,739,596 B2 7,783,532 B2 7,784,684 B2 7,792,756 B2 7,818,284 B1	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 * 3/2010 * 3/2010 * 8/2010 * 8/2010 * 9/2010 * 10/2010	Rissanen Gangi Leung Kight G06Q 20/10
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,522,905 B2 7,555,284 B2 7,680,824 B2 7,739,596 B2 7,783,532 B2 7,784,684 B2 7,792,756 B2	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 * 3/2010 * 3/2010 * 8/2010 * 8/2010 * 9/2010 * 10/2010	Rissanen Gangi Leung Kight G06Q 20/10
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,552,905 B2 7,555,284 B2 7,680,824 B2 7,739,596 B2 7,783,532 B2 7,784,684 B2 7,792,756 B2 7,818,284 B1	12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 * 3/2010 * 3/2010 * 8/2010 * 8/2010 * 9/2010 * 10/2010	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,555,284 B2 7,680,824 B2 7,739,596 B2 7,783,532 B2 7,784,684 B2 7,792,756 B2 7,818,284 B1 7,827,056 B2	* 12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 * 3/2010 * 3/2010 * 8/2010 * 8/2010 * 9/2010 * 10/2010 * 11/2010	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,472,829 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,552,905 B2 7,555,284 B2 7,680,824 B2 7,739,596 B2 7,783,532 B2 7,784,684 B2 7,792,756 B2 7,818,284 B1	* 12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 * 3/2010 * 3/2010 * 8/2010 * 8/2010 * 9/2010 * 10/2010 * 11/2010	Rissanen Gangi Leung Kight
7,308,254 B1 7,357,312 B2 7,379,920 B2 7,383,226 B2 7,482,925 B2 7,493,284 B2 7,512,567 B2 7,555,284 B2 7,680,824 B2 7,739,596 B2 7,783,532 B2 7,784,684 B2 7,792,756 B2 7,818,284 B1 7,827,056 B2	* 12/2007 4/2008 5/2008 * 6/2008 1/2009 1/2009 2/2009 * 3/2009 * 3/2010 * 3/2010 * 8/2010 * 8/2010 * 9/2010 * 10/2010 * 11/2010	Rissanen Gangi Leung Kight G06Q 20/10 705/40 Brown Hammad Celi et al. Bemmel G06Q 20/204 705/64 Hammad Yan G06Q 20/045 455/566 Plastina G06F 16/433 715/764 Clarke-Martin Hsu G06Q 30/0236 705/28 Labrou G06Q 20/327 705/64 Plastina H04W 12/64 Walker G06Q 30/0605 705/26.2 Walker G06Q 20/387 705/14.1

US 11,610,190 B2 Page 3

(56)			Referen	ces Cited	2003/0066883	A1*	4/2003	Yu G06Q 20/04
		U.S.	PATENT	DOCUMENTS	2003/0074259	A1*	4/2003	235/382 Slyman, Jr G06Q 30/0221 705/17
,	7,979,519	B2 *	7/2011	Shigeta H04L 69/329 709/224	2003/0085286	A1*	5/2003	Kelley G07F 7/1008 235/492
:	8,005,426	B2 *	8/2011	Huomo G06Q 20/20 235/441	2003/0087601	A1*	5/2003	Agam H04W 12/06 455/39
;	8,019,362	B2 *	9/2011	Sweatman H04W 88/184 455/466	2003/0093311	A1*	5/2003	Knowlson H04M 15/58 705/14.66
:	8,073,424	B2 *	12/2011	Sun G06Q 20/326 455/406	2003/0093695 2003/0105641		5/2003 6/2003	Lewis
;	8,086,534	B2 *	12/2011	Powell G06Q 40/02 705/64	2003/0132298	A1*		Swartz G06Q 20/3276 235/472.02
;	8,109,444	B2 *	2/2012	Jain G06K 19/07707 235/487	2003/0140004 2003/0163359			O'Leary Kanesaka G06Q 30/0204
	8,121,945 8,127,984			Rackley Zatloukal G06K 19/0723	2003/0172028 2004/0006497		9/2003	705/7.33 Abell Nestor
;	8,214,454	B1 *	7/2012	455/73 Barnes G06F 16/955	2004/0030658			Cruz G06Q 20/367 705/65
;	8,429,030	B2 *	4/2013	709/217 Walker G06Q 30/06	2004/0034544 2004/0107136		2/2004 3/2004	
;	8,429,031	B2 *	4/2013	705/26.7 Walker G06Q 30/0224 705/26.7	2004/0064407		4/2004	Kight G06Q 20/385 705/40
:	8,438,077	B2 *	5/2013	Walker G06Q 30/0601 705/26.7	2004/0064408	A1*		Kight G06Q 40/06 705/40
;	8,438,078	B2 *	5/2013	Walker G06Q 10/087 705/26.7	2004/0064409			Kight G06Q 20/04 705/40
;	8,467,766	B2 *	6/2013	Rackley, III G06Q 20/3221 455/406	2004/0064410			Kight G06Q 20/385 705/40
	8,484,058			Benson G06Q 10/02 705/26.1	2004/0073439			Shuster G07C 9/253 726/21
	8,489,067			Rackley, III G06Q 20/3223 455/406	2004/0073497 2004/0078329			Hayes
	8,510,220			Rackley, III G06Q 20/102 705/40	2004/0078325			705/40 Kight G06Q 20/0855
	8,566,239 8,693,995 9,294,917	B2	10/2013 4/2014 3/2016		2004/0093271			705/40 Walker G06Q 30/02
	9,294,917 9,996,849 0,339,556	B2	6/2018 7/2019	Fisher	2004/0111320			705/26.1 Schlieffers A47F 9/047
10	0,621,612 0,825,007	B2	4/2020 11/2020	Fisher	2004/0127256			705/16 Goldthwaite G06K 7/0073
2001	1/0011250	A1*		Paltenghe G07F 7/08 705/41	2004/0143545	A1*	7/2004	455/466 Kulakowski G06Q 20/305
				Pugliese, III G06Q 30/02 705/14.1	2004/0230489			705/39 Goldthwaite
				Hudda G06Q 30/0601 705/26.1	2004/0235450			Rosenberg H04M 1/0254 455/406
				Maritzen G06Q 20/023 705/56	2004/0243519 2004/0254836		12/2004 12/2004	Emoke Barabas
	2/0056091			Bala G06Q 30/0269 725/23	2004/0267611	A 1	12/2004	G06Q 30/0267 705/14.35 Hoerenz
	2/0059100		5/2002		2004/0267611 2004/0267618			Judicibus
	2/0063895 2/0065774		5/2002	Young G06Q 20/322	2004/0267665		12/2004	
2002	10003117	AI	3/2002	705/41	2005/0003810		1/2005	
2002	///////////////////////////////////////	A 1	6/2002		2005/0003810			Gautier G06Q 20/12
	2/0077918 2/0082879		6/2002		2003/0021470	711	1/2003	705/65
	2/0101993			Eskin H04L 67/04 380/270	2005/0037735	A1*	2/2005	Coutts G06Q 20/341 455/418
2002	2/0107756	Δ1	8/2002	Hammons	2005/0040230	A1*	2/2005	Swartz G07G 1/0072
	2/0116269			Ishida G06Q 30/0267	2005, 00 10250		2,2003	235/383
2002	0110207	1	5, 2002	719/318	2005/0043994	A1*	2/2005	Walker G06Q 30/0217
2002	2/0160761	A1*	10/2002	Wolfe H04M 3/493 455/566	2005/0060536			705/14.19 Iga G06Q 20/367
2002	2/0169664	A1*	11/2002	Walker G06Q 30/0207 705/26.1	2005/0202385			713/155 Coward
2002	2/0169984	A1	11/2002		2005/0076210			Thomas
	3/0069812		1/2003		2005/0131837			Sanctis G06Q 20/12
	3/0033272			Himmel G06Q 20/047				705/64
	3/0061113			Petrovich	2005/0150945	A1*	7/2005	Choi G06Q 20/108 235/379
2003	3/0149662	A1	3/2003		2005/0165646	A1*	7/2005	Tedesco B42D 15/00
	3/0065805			Barnes	2000000		2000	705/14.1

US 11,610,190 B2 Page 4

(56)		Referen	ces Cited	2007/0015060			Angelica
				2007/0095892		5/2007	
	U.S. I	PATENT	DOCUMENTS	2007/0125838	Al*	6/2007	Law G06Q 20/3223 705/65
2005/0187873	A1*	8/2005	Labrou G06Q 20/326 705/40	2007/0125840	A1*	6/2007	Law G06Q 20/326 705/65
2005/0190970		9/2005	Griffin	2007/0138299	A1*	6/2007	Mitra G06Q 20/341
2005/0203959 2005/0210387			Muller G06Q 30/06 Alagappan H04L 9/40	2007/0145135	A1	6/2007	Jogand-Coulomb 235/492
2005/021050/		3/2003	715/700	2007/0131759		7/2007	
2005/0215231	A1	9/2005	Bauchot	2007/0156436	A1*	7/2007	Fisher G06Q 20/425
2005/0222961	A1*	10/2005	Staib H04M 1/0254 705/64	2007/0175978	A1*	8/2007	705/40 Stambaugh G06Q 40/12
2005/0240484	A1*	10/2005	Yan G07B 15/00	2007/0179883			235/379
2005/0278377	A1*	12/2005	455/411 Mirrashidi G06Q 30/02	2007/0175005	711	0/2007	705/39
			Ekberg H04L 9/3242 705/67	2007/0210155	A1*	9/2007	Swartz G06Q 20/20 235/383
2006/0000900	A 1	1/2006	Fernandes	2007/0235519	A1	10/2007	
2006/0008256			Khedouri	2007/0235539			Sevanto G07F 7/1008
2006/0014518			Huh H04M 15/06				235/451
			455/406	2007/0255662		11/2007	Tumminaro
2006/0031752	A1*	2/2006	Surloff G06F 3/0213	2007/0262139			Fiebiger
			707/E17.112	2007/0266130		11/2007	
2006/0044153	A1*	3/2006	Dawidowsky G06K 19/0723	2007/0270166	Al*	11/2007	Hampel H04L 51/222 455/456.3
2006/0089874	A1*	4/2006	710/10 Newman G06Q 10/10	2007/0288966	A1*	12/2007	Javid H04N 21/4755
2006/0089949	A 1 *	4/2006	705/14.32 Robbin G06Q 30/0601	2007/0293155	A1*	12/2007	348/E7.071 Liao G06Q 20/3229
2006/0089949			Hayashi G06Q 30/0601	2001/0255155	***	12/2007	455/41.2
		0.200	705/26.8	2008/0004952	A1*	1/2008	Koli G06Q 30/0267
2006/0100924	A1*	5/2006	Tevanian G06Q 30/0222 705/14.23	2008/0006685	A1*	1/2008	705/14.55 Rackley, III G06Q 40/00
2006/0123052	A1*	6/2006	Robbin G06Q 30/00				235/379
2006/0135156	A1*	6/2006	Malu H04W 8/18	2008/0010190	A1*	1/2008	Rackley, III G06Q 20/3223
2006/0143091	A1*	6/2006	455/432.3 Yuan G06Q 30/0601	2008/0010191	A1*	1/2008	705/39 Rackley, III G06Q 20/363
2006/0165060	A1*	7/2006	705/26.1 Dua G06Q 20/401	2008/0010192	A1*	1/2008	705/39 Rackley, III G06Q 20/10
2006/0173701	A 1 *	8/2006	705/76 Gurvey G06Q 20/3674	2008/0010193	A1*	1/2008	705/39 Rackley, III G06Q 20/325
			705/902	2008/0010196			705/39 Rackley, III G06Q 40/00
2006/0180660			Gray G06Q 20/322 455/414.1				705/40
2006/0184398	Al*		Kasagi G06Q 50/182 705/309	2008/0010204			Rackley, III G06Q 20/14 705/45
2006/0184431	A1*	8/2006	Rosenberg H04N 21/42684 705/26.8	2008/0010215	A1*	1/2008	Rackley, III G06Q 20/326 705/70
2006/0191995	A1*	8/2006	Stewart G06Q 20/02 235/382	2008/0011825	A1*	1/2008	Giordano G06Q 20/04 235/383
2006/0206709	A1*	9/2006	Labrou G06Q 20/18	2008/0017704	A1*	1/2008	VanDeburg G07F 7/025 235/380
2006/0212401	A1*	9/2006	713/167 Ameerally G06Q 30/02	2008/0027795	A1*	1/2008	Medlin G06Q 20/387
2006/0218092	A1*	9/2006	705/51 Tedesco G06Q 20/14	2008/0294556	A1	1/2008	705/14.23 Anderson
2000,0210032		3,2000	705/40	2008/0040265			Rackley, III G06Q 20/102
2006/0219780	A1*	10/2006	Swartz G07F 7/02 235/383	2008/0045172	A1*	2/2008	705/40 Narayanaswami G06Q 30/02
2006/0229998	A1	10/2006	Harrison				455/187.1
			Hotelling G06Q 30/0603	2008/0046366	A1*	2/2008	Bemmel G06Q 40/12
2006/0242267 2006/0247976			Grossman Posokhow G06Q 30/06	2008/0048022	A1*	2/2008	705/44 Vawter G06Q 20/425
2006/0248113	A1*	11/2006	705/26.81 Leffert G06Q 40/04	2008/0051059	A1*	2/2008	235/380 Fisher G06Q 20/327
			Anderson G06Q 30/06				455/410
			Perkins G06Q 30/02 707/999.107	2008/0051142	A1*	2/2008	Calvet H04W 88/02 455/558
2006/0294025	A1*	12/2006	Mengerink G06Q 30/0601	2008/0052192	A1*	2/2008	Fisher G06Q 10/02
2007/0004391	A1	1/2007	705/77 Maffeis	2008/0052233	A1*	2/2008	705/5 Fisher G06Q 20/327
2007/0011099			Sheehan G06Q 20/322				705/40
2007/0021969	A1*	1/2007	705/65 Homeier-Beals G06Q 20/326	2008/0059329	A1*	3/2008	Luchene G06Q 30/0603 705/26.81
2007/00220		1/2005	705/16	2008/0116264			Hammad et al.
2007/0022058	Al*	1/2007	Labrou G06Q 20/322 705/67	2008/0126145	Al*	5/2008	Rackley, III G06Q 20/102 455/406

(56)	Re	eferen	ces Cited	2009/022	7281	A1*	9/2009	Hammad		
	U.S. PA	TENT	DOCUMENTS	2010/005	7619	A1*	3/2010	Weller	340/10.1 G06Q 20/04 455/414.1	
2008/0133336	A1* 6	5/2008	Altman H04W 4/21 705/14.1	2010/006	3895	A1*	3/2010	Dominguez		
2008/0139155 2008/0140520			Boireau Hyder G06Q 30/0207	2010/008	32491	A1*	4/2010	Rosenblatt		
2008/0148040	A1* 6	5/2008	705/14.1 Machani G06F 21/6245	2010/014				Davis	705/30	
2008/0167017	A1* 7	//2008	713/193 Wentker G06Q 30/0224	2010/031				Homeier-Beals .	705/39	
2008/0167961	A1* 7	7/2008	455/406 Wentker G06Q 20/3278	2011/005				Mengerink Randazza	705/26.1	
2008/0167988	A1* 7	7/2008	705/14.25 Sun G06Q 20/3278 455/406	2011/032				Hurst	705/26.43	
2008/0172274			Hurowitz H04L 67/61 455/433	2012/015				Carlson	705/16	
2008/0172285	A1* 7	7/2008	Hurowitz G06Q 30/02 725/23	2012/021	.5573	A1*	8/2012	Sussman	705/44 H04L 43/0894	
2008/0172291			Hurowitz G06Q 30/02 705/14.1	2012/022	20314	A1*	8/2012	Altman		
2008/0172292			Hurowitz G06Q 30/02 725/23	2012/026	55677	A1*	10/2012	Rackley, III	-	
2008/0177668 2008/0207234			Delean Arthur G07F 17/16 455/466	2013/001	3501	A1*	1/2013	Rackley, III	705/41 G06Q 20/32 705/41	
2008/0208681 2008/0208743			Hammad Arthur G06Q 40/00	2013/005	4470	A1*	2/2013	Campos		
2008/0208744			705/41 Arthur G06Q 20/32	2013/021	2016	A1*	8/2013	Davis		
2008/0208762	A1* 8	3/2008	705/41 Arthur G06Q 20/20	2015/001				Kelley		
2008/0221997	A1* 9	/2008	705/79 Wolfe G06Q 30/02					NT DOCUMEN	ITS	
2008/0242274	A1* 10	/2008	705/14.39 Swanburg H04L 67/306 455/414.1			06/11 ² 07/129		11/2006 11/2007		
2008/0249938	A1* 10	/2008	Drake-Stoker H04W 12/106 726/2	OTHER PUBLICATIONS						
			Friedman G06Q 20/327 455/414.2	U.S. Appl. No. 14/253,648 Notice Of Allowance dated Sep. 10						
			Michaelis G06Q 30/02 705/14.39					oedia.org/wiki/Mo		
			Mathieson G06Q 30/02 463/25	geeksforgeeks.org/difference-between-native-apps-and-web-apps						
2008/02/57/19	A1* 11	/2008	Lakshminarayanan	apps-are-b	etter/.		•	vwo.com/blog/10		
2008/0305774			Ramakrishna	U.S. Appl.	No.	90/019	,134, filed	l Nov. 23, 2022, I l Nov. 23, 2022, I	isher.	
2009/0000618 2009/0018913			Hameen-Anttila Sarukkai H04M 3/53383	 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 						
2009/0061884	A1* 3	/2009	705/14.56 Rajan G06Q 30/0225	2020. U.S. Appl. No. 14/253,648 Board Decision dated May 13, 2020.						
2009/0063312	A1* 3	/2009	455/445 Hurst G06Q 20/40 705/41	U.S. Appl. No. 14/253,648 Notice Of Allowance dated Sep. 18. 2020.						
2009/0075592			Nystrom et al.					ikipedia.org/wiki/ https://en.wikipedi		
2009/0076912			Rajan G06Q 30/0267 705/14.64	interface.					_	
2009/0098825 2009/0106112			Huomo Dalmia G06Q 40/12	"WAP" https://en.wikipedia.org/wiki/Wireless_Application_ Protocol. "Multimedia messaging" https://en.wikipedia.org/wiki/Multimedia						
2009/0112747	A1* 4	/2009	709/204 Mullen G06Q 40/02 705/35	Mustaging_Service#Technical_description. Web based user interface https://en.wikipedia.org/wiki/User_						
2009/0124234	A1* 5	5/2009	Fisher H04B 5/0031 455/406	interface. Ajax https://techterms.com/definition/ajax.						
2009/0132362	A1* 5	5/2009	Fisher G06Q 30/06 705/16	Java script	https	://tech	terms.con	n/definition/javasc games.com/Free-t		
2009/0143104	A1* 6	5/2009	Loh G06Q 20/352 340/10.1	Games. "Text-base	ed ga	mes"	https://ei	n.wikipedia.org/w	riki/Text-based	
2009/0144161	A1* 6	5/2009	Fisher G06Q 20/3821 705/16	game.	_		•	kipedia.org/wiki/C		
2009/0177587	A1* 7	7/2009	Siegal G06Q 20/10 705/67		twork	ing se		ps://en.wikipedia.		

(56)**References Cited**

OTHER PUBLICATIONS

"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).

"WAP Browser" https://en.m.wikipedia.org/wiki/Wireless_Application_ Protocol.

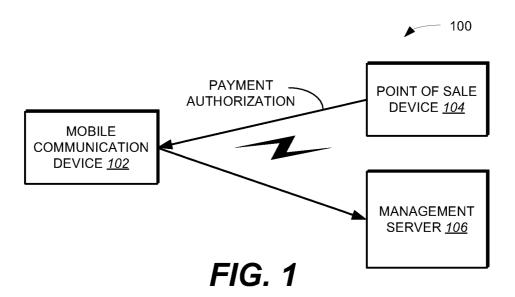
"Binary application" https://en.m.wikipedia.org/wiki/Application_ binary_interface. IPR2021-01529.

PTAB Decision Denying institution of IPR2021-01529.

IPR2021-01530.

PTAB Decision Denying institution of IPR2021-01530.

^{*} cited by examiner



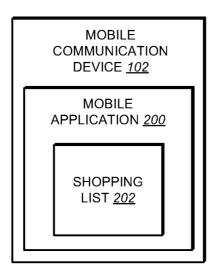


FIG. 2

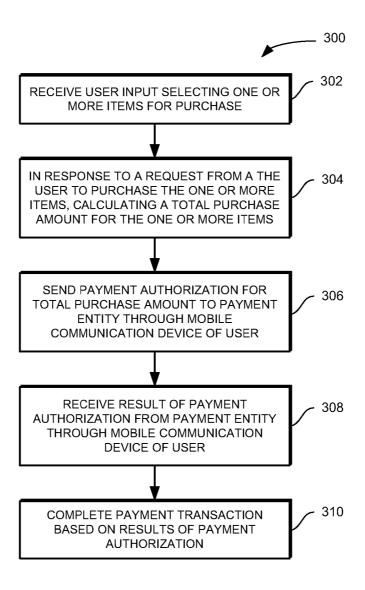


FIG. 3

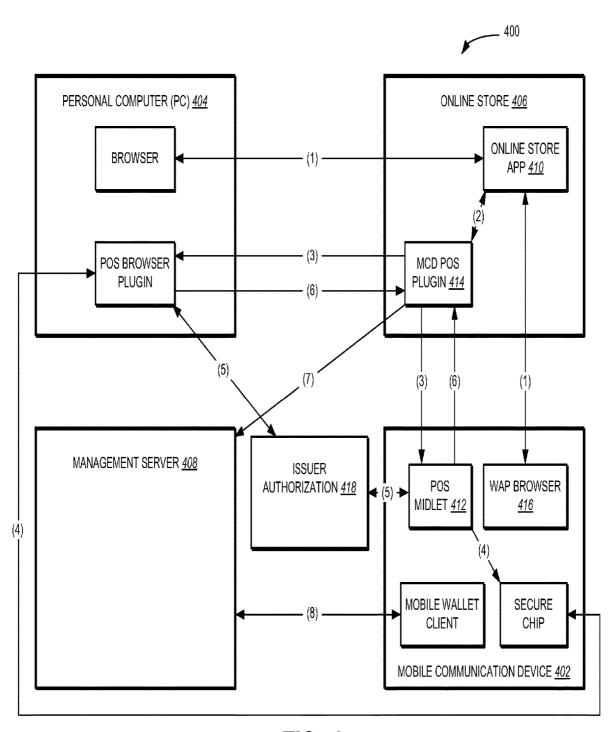
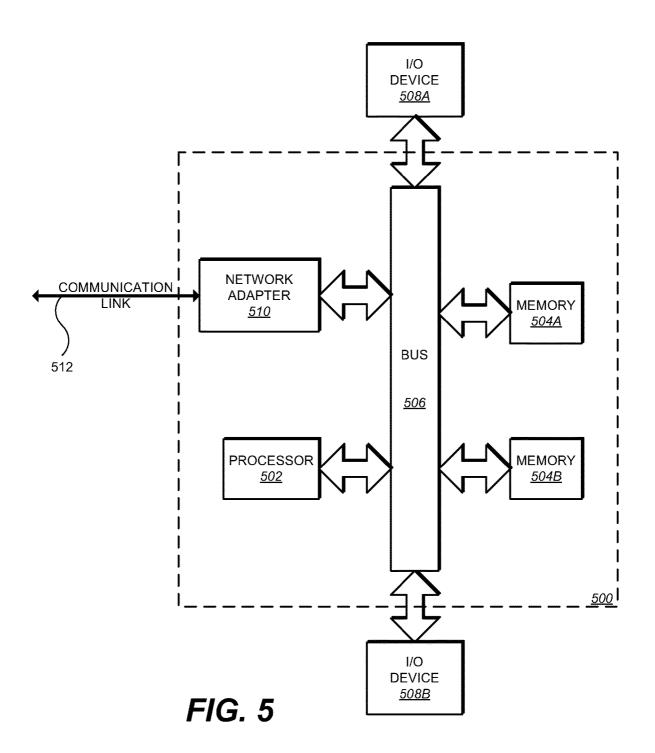


FIG. 4



BLAZE REMOTE MANAGEMENT SERVER FOR DOWNLOADING A DIGITAL PRODUCT

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 PURCHAS-ING 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 20 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 AUTHENTICA-TION INFORMATION now U.S. Pat. No. 8,620,754, issued on Dec. 31, 2013, which is a continuation and claims priority 25 to U.S. patent application Ser. No. 11/948,903, filed Nov. 30, 2007, titled METHOD AND SYSTEM FOR CONDUCT-ING 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 30 incorporated by reference herein in their entirety.

FIELD OF INVENTION

The present invention relates to data communications and ³⁵ mentation. wireless devices. FIG. 4

BACKGROUND OF THE INVENTION

Mobile communication devices—e.g., cellular phones, 40 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 45 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 50 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 65 the user. The method further includes receiving a result of the payment authorization from the payment entity through

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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 5 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 trans- 10 action. 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 15 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 20 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 imple- 25 mentation) 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 appli- 30 cation 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 35 **200** is configured to send requests to the management server for artifacts based on user input, e.g., received though 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 40 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 60 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 65 can be used in conjunction with a merchant's point of sale device as described in greater detail below.

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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 multifactor 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 5 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 10 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 15 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 25 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 30 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 35 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 40 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 45 302). 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 50 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 55 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 60 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 authoriza- 65 tion (step 310). If the payment transaction was authorized by the payment entity, then the sale of the items through the

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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 20 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- 5 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 15 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 20 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 25 elements 504A-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 504A-B can 30 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, 35 input/output or I/O devices 508A-B (including, but not limited to, keyboards, displays, pointing devices, etc.) are coupled to data processing system 500. I/O devices 508A-B may be coupled to data processing system 500 directly or indirectly through intervening I/O controllers (not shown). 40

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 45 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 50 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 downloading a product, comprising: maintaining a payment method at a remote management 60 server:

transmitting a list of products from the remote management server to a non-browser based application for display on a mobile device using the non-browser based application, wherein the non-browser based 65 application is a mobile operating system based application with a graphical user interface including a

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graphical icon that is preinstalled or downloaded and installed on the mobile device, the mobile device including a mobile device display, a mobile device processor, a mobile device wireless radio transceiver that supports voice and data interactions through a first wireless communication channel, and a mobile device wireless fidelity (Wi-Fi) transceiver;

receiving, at the remote management server, an identification of the product selected from the list of products from the non-browser based application, wherein the non-browser based application receives the identification of the product selected from the list of products through user input via the mobile device display of the mobile device;

receiving, at the remote management server, a transaction purchase request for the product selected from the list of products from the non-browser based application, wherein the non-browser based application receives the transaction purchase request through the user input via the mobile device display of the mobile device;

after receiving the transaction purchase request from the non-browser based application, receiving, at the remote management server, user input login information including information related to a userID from the non-browser based application;

authenticating, at the remote management server, the user based on the user input login information;

after the user authentication, transmitting, from the remote management server, the payment method that corresponds to the userID to a transaction server which processes the transaction using the payment method that corresponds to the userID;

downloading, the product from the remote management server to the mobile device; and

transmitting a digital artifact from the remote management server 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 and further wherein the sensitive data comprises information related to the payment method.
- **4**. The method of claim **1**, further wherein the user login information includes information related to a password.
- 5. The method of claim 1, further, wherein the user input login information includes information related to biometric data.
- 6. The method of claim 1, further wherein the transmission of the transaction 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 transaction purchase request directly to the remote management server reduces the potential for identity theft or fraudulent purchases made through the point-of-sale device.
- 7. The method of claim 1, wherein the remote management server is configured to store a single userID for a plurality of the user's mobile devices which means the remote management server scales.
- **8**. The method of claim **1**, wherein the digital artifact is media, content, ticket, receipt, advertisement, or a coupon.
- **9**. The method of claim **1**, further wherein the non-browser based application displays the digital artifact while the mobile device maintains a connection to a wireless network; and

further comprises:

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

in an offline mode, after losing the connection, continuing to display the digital artifact within the non-browser based application.

- 10. The method of claim 1, further wherein the digital artifact is stored in the mobile device memory to improve the mobile device performance.
- 11. The method of claim 1, further wherein the non-browser based application triggers a call to action using metadata associated with the digital artifact and further wherein the call to action comprises redeeming a coupon, entering an email address, accepting a coupon, accepting a reward, receiving alerts, or receiving notifications.
- 12. 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.
- 13. The method of claim 1, further wherein the non-browser based application sends a request to the remote management server for retransmission of the product if it has not received the product from the remote management server within a certain period of time.
- 14. A remote management server for downloading a product, comprising:

a remote management server transceiver that:

transmits a list of products from a remote management server to a non-browser based application for display on a mobile device using the non-browser based application stored on the mobile device, wherein the non-browser based application is a mobile operating system based application with a graphical user interface including a graphical icon that is preinstalled or downloaded and installed on the mobile device, the mobile device including a mobile device display, a mobile 45 device processor, a mobile device radio wireless transceiver that supports voice and data interactions through a first wireless communication channel and a mobile device wireless fidelity (Wi-Fi) transceiver;

receives an identification of the product selected from the 50 list of products from the non-browser based application, wherein the non-browser based application receives the identification of the product selected from the list of products through user input via the mobile device display of the mobile device; 55

receives a transaction purchase request for the product selected from the list of products from the non-browser based application wherein the non-browser based application receives the transaction purchase request through the user input via the mobile device display of 60 the mobile device;

after receiving the transaction purchase request from the non-browser based application, receives user input login information including information related to a userID from the non-browser based application;

after the user authentication, transmits, from the remote management server, a payment method that corre-

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sponds to the userID to a transaction server which processes the transaction using a payment method that corresponds to the userID;

downloads, the product to the mobile device; and

transmits a digital artifact to the non-browser based application; and

- a remote management server processor that authenticates the user based on the user input login information; and a remote management server memory that maintains the payment method.
- 15. The remote management server of claim 14, 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.
- **16**. The remote management server of claim **14**, further wherein no sensitive data is stored on the mobile device and further wherein the sensitive data comprises information related to the payment method.
- 17. The remote management server of claim 14, further wherein the user login information includes information related to a password.
- 18. The remote management server of claim 14 further, wherein the user input login information includes information related to biometric data.
- 19. The remote management server of claim 14, 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.
- 20. The remote management server of claim 14, wherein the remote management server is configured to store a single userID for a plurality of the user's mobile devices which means the remote management server scales.
 - 21. The remote management server of claim 14, wherein the digital artifact is media, content, ticket, receipt, advertisement, or coupon.
 - 22. The remote management server of claim 14, further wherein the non-browser based application displays the digital artifact while the mobile device maintains a connection to a wireless network; and

further comprises:

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

in an offline mode, after losing the connection, continuing to display the digital artifact within the non-browser based application.

- 23. The remote management server of claim 14, further wherein the digital artifact is stored in the mobile device memory to improve the mobile device performance.
- 24. The remote management server of claim 14, further wherein the non-browser based application triggers a call to action using metadata associated with the digital artifact and further wherein the call to action comprises redeeming a coupon, entering an email address, accepting a coupon, accepting a reward, receiving alerts, or receiving notifications.
 - 25. The remote management server of claim 14, 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.

26. The remote management server of claim 14, further

26. The remote management server of claim **14**, further wherein the non-browser based application sends a request to the remote management server for retransmission of the 5 product if it has not received the product from the remote management server within a certain period of time.

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