

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

24341 7590 10/23/2020
Morgan, Lewis & Bockius LLP (PA)
1400 Page Mill Road
Palo Alto, CA 94304-1124

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

(Typed or printed name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/878,352	01/23/2018	Paresh K. Patel	104402-5035-US	1006

TITLE OF INVENTION: METHOD AND SYSTEM FOR AN OFFLINE-PAYMENT OPERATED MACHINE TO ACCEPT ELECTRONIC PAYMENTS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$600	\$0.00	\$0.00	\$600	01/25/2021

EXAMINER	ART UNIT	CLASS-SUBCLASS
HOLLY, JOHN H	3696	705-044000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-09 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,

1 _____

(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. Fees submitted: ☐ Issue Fee ☐ Publication Fee (if required) ☐ Advance Order - # of Copies _____

4b. Method of Payment: (Please first reapply any previously paid fee shown above)

☐ Electronic Payment via EFS-Web ☐ Enclosed check ☐ Non-electronic payment by credit card (Attach form PTO-2038)

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. _____

5. Change in Entity Status (from status indicated above)

☐ Applicant certifying micro entity status. See 37 CFR 1.29

☐ Applicant asserting small entity status. See 37 CFR 1.27

☐ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____

Petitioner Exhibit 1002-0521



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/878,352	01/23/2018	Paresh K. Patel	104402-5035-US	1006
24341	7590	10/23/2020	EXAMINER	
Morgan, Lewis & Bockius LLP (PA)			HOLLY, JOHN H	
1400 Page Mill Road			ART UNIT	
Palo Alto, CA 94304-1124			PAPER NUMBER	
			3696	
DATE MAILED: 10/23/2020				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 15/878,352	Applicant(s) Patel, Paresh K.	
	Examiner JOHN H HOLLY	Art Unit 3696	AIA (FITF) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment field July 24, 2020.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

3. ☒ The allowed claim(s) is/are 1-20. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a) ☐ All b) ☐ Some *c) ☐ None of the:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892) 2. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date <u>01/24/2020</u> . 3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material _____. 4. ☐ Interview Summary (PTO-413), Paper No./Mail Date. _____.	5. ☐ Examiner's Amendment/Comment 6. ☒ Examiner's Statement of Reasons for Allowance 7. ☐ Other _____.
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/John H. Holly/
Primary Examiner, Art Unit 3696

Notice of Pre-AIA or AIA Status

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

This communication is in response to an Amendments filed July 24, 2020.

Information Disclosure Statement

The Information Disclosure Statement (IDS) submitted on January 24, 2020 was filed in compliance with the provisions of 37 CFR 1.97. Accordingly, this Information Disclosure Statement is being considered by the Examiner.

Allowable Subject Matter

Claims 1– 20 are allowed over prior art of record.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

The prior art of record neither anticipates nor renders obvious the claimed subject matter of the instant application as a whole either taken alone or in combination, in particular, prior art of record does not teach storing, in the memory of the payment module, a number of the electrical pluses that must be received by the control unit to initiate an operation of the offline payment operating machine; receiving a wireless request via the short-range wireless transceiver from a respective mobile device of the one or more mobile devices to initiate a cashless operation of the offline-payment operated machine; and in response to the wireless request: determining a first number of electrical pulses to output via the first interface module to the control unit of the offline

payment-operated machine; causing the offline payment-operated machine to initiate the requested cashless operation by issuing the first number of electrical pulses to the control unit via the first interface module; and sending operation information corresponding to the initiated operation of the offline payment-operated machine to the respective mobile device via the short-range wireless transceiver.

The following prior art references have been deemed most relevant to the allowed claim(s):

The closest prior art Philip B. Dixon et al. (Pub. # US 2009/0171682 A1) teaches transaction processing in an offline environment for a prepaid product comprising a portable consumer device includes responding to presentation of the prepaid product at a reader for offline processing by initiating operation of the prepaid product, receiving data from the prepaid product at the reader that indicates the prepaid product is associated with a prepaid account balance, determining that the prepaid product is in a negative balance condition, and taking preventive action in response to the negative balance condition such that future acceptance of the prepaid product at a reader is prevented.

The closest prior art Paul R. Davis (Pat. # US 8,600,899 B1) teaches vending machine circuitry adapted to interface with vending machine electronics so as to provide data communications between a handheld device, preferably a wireless handheld device operated by a potential consumer, and the vending machine electronics, with the handheld device providing the network communications connectivity for transmitting and receiving information to and from remote data centers, data bases, and/or servers.

The arguments presented by the Applicant along with the combination of elements, such as, the claims recite at least the steps to cause an offline payment-operated machine to receive a wireless request from a mobile device and emulate a signal sequence that would be issued by a coin receiving switch in response to receiving a preset number of coins of a predetermined type. These steps enable alternative ways

to use a payment-operated machine by practically applying analog signal emulation in a way that adds wireless communication capabilities to legacy systems, thus improving the technology of payment-operated machines. The claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks and recite significantly more than an abstract idea.

Conclusion

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John H. Holly whose telephone number is 571.270.3461. The examiner can normally be reached on MON. - FRI 10 AM - 8 PM p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Namrata Boveja can be reached on (571)-272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/John H. Holly/
Primary Examiner, Art Unit 3696

<i>Notice of References Cited</i>	Application/Control No. 15/878,352		Applicant(s)/Patent Under Reexamination Patel, Paresh K.	
	Examiner JOHN H HOLLY		Art Unit 3696	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-7848980-B2	12-2010	Carlson; Mark	G06Q40/00	705/35
*	B	US-20090119190-A1	05-2009	Realini; Carol	G06Q20/04	705/30
*	C	US-20090306818-A1	12-2009	Slagle; David O.	G07F9/002	700/232
*	D	US-20090171682-A1	07-2009	Dixon; Philip B.	G06Q20/3278	705/346
*	E	US-8600899-B1	12-2013	Davis; Paul R.	G06Q20/3278	705/75
	F					
	G					
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
*	U	NPL Search History
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

<i>Search Notes</i> 	Application/Control No. 15/878,352	Applicant(s)/Patent Under Reexamination Patel, Paresh K.
	Examiner JOHN H HOLLY	Art Unit 3696

CPC - Searched*		
Symbol	Date	Examiner
G06Q 20/40	01/15/2020	John H. Holly

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner
705	44, 1.1, 30, 39, 41	01/15/2020	John H. Holly
705	70, 75, 34, 26, 81	10/19/2020	John H. Holly
455	466, 412, 557, 407	10/19/2020	John H. Holly
700	235, 242	10/19/2020	John H. Holly

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
EAST, PLUS, IP.COM	01/15/2020	John H. Holly
Updated PE2E SEARCH & IP.COM searches	10/19/2020	John H. Holly
Conducted Forward & Backward citation searches of most pertinent prior art.	10/19/2020	John H. Holly
Text limited search within the following CPC subgroups: G07C 9/00; G06Q 20/32; D06F 37/42; D06F 33/02	10/19/2020	John H. Holly
NPL Search History	10/19/2020	John H. Holly

/John H. Holly/ Primary Examiner, Art Unit 3696	Petitioner Exhibit 1002-0529
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<i>Search Notes</i> 	Application/Control No. 15/878,352	Applicant(s)/Patent Under Reexamination Patel, Paresh K.
	Examiner JOHN H HOLLY	Art Unit 3696

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner
	Interference Databases	10/19/2020	John H. Holly

/John H. Holly/ Primary Examiner, Art Unit 3696	Petitioner Exhibit 1002-0530
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Issue Classification 	Application/Control No. 15/878,352	Applicant(s)/Patent Under Reexamination Patel, Paresh K.
	Examiner JOHN H HOLLY	Art Unit 3696

CPC		
Symbol	Type	Version
G06Q / 20 / 327	F	2013-01-01

CPC Combination Sets				
Symbol	Type	Set	Ranking	Version
/ /				

NONE (Assistant Examiner) (Date)		Total Claims Allowed: 20	
/John H. Holly/ Primary Examiner, Art Unit 3696 (Primary Examiner) (Date)		19 October 2020 O.G. Print Claim(s)	O.G. Print Figure 18

Issue Classification 	Application/Control No. 15/878,352	Applicant(s)/Patent Under Reexamination Patel, Paresh K.
	Examiner JOHN H HOLLY	Art Unit 3696

INTERNATIONAL CLASSIFICATION			
CLAIMED			
G06Q	/	30	/ 00
NON-CLAIMED			
/		/	

US ORIGINAL CLASSIFICATION	
CLASS	SUBCLASS
705	44

CROSS REFERENCES(S)						
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)					
705	30	39	40	34	70	1.1

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	20	
/John H. Holly/ Primary Examiner, Art Unit 3696 (Primary Examiner)	19 October 2020 (Date)	O.G. Print Claim(s) 7	O.G. Print Figure 18

Issue Classification 	Application/Control No. 15/878,352	Applicant(s)/Patent Under Reexamination Patel, Paresh K.
	Examiner JOHN H HOLLY	Art Unit 3696

☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47
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CLAIMS															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	1	10	10	19	19										
2	2	11	11	20	20										
3	3	12	12												
4	4	13	13												
5	5	14	14												
6	6	15	15												
7	7	16	16												
8	8	17	17												
9	9	18	18												

NONE (Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 20	
/John H. Holly/ Primary Examiner, Art Unit 3696 (Primary Examiner) _____ (Date) 19 October 2020		O.G. Print Claim(s) 7	O.G. Print Figure 18

<i>Index of Claims</i> 	Application/Control No. 15/878,352	Applicant(s)/Patent Under Reexamination Patel, Paresh K.
	Examiner JOHN H HOLLY	Art Unit 3696

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS										
☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47										
CLAIM		DATE								
Final	Original	01/15/2020	10/19/2020							
1	1	✓	=							
2	2	✓	=							
3	3	✓	=							
4	4	✓	=							
5	5	✓	=							
6	6	✓	=							
7	7	✓	=							
8	8	✓	=							
9	9	✓	=							
10	10	✓	=							
11	11	✓	=							
12	12	✓	=							
13	13	✓	=							
14	14	✓	=							
15	15	✓	=							
16	16	✓	=							
17	17	✓	=							
18	18	✓	=							
19	19	✓	=							
20	20	✓	=							

INFORMATION DISCLOSURE STATEMENT BY APPLICANT Substitute for Form 1449-PTO				Electronically filed January 24, 2020		
				Application Number	15/878,352	
				Filing Date	January 23, 2018	
				First Named Inventor	Paresh K. Patel	
				Art Unit	3696	
				Examiner Name	Holly, John H.	
Sheet	1	of	3	Attorney Docket Number		104402-5035US

U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code			
		D295,637 S	05-10-1988	Wells-Papanek et al.	
		D599,812 S	09-08-2009	Hirsch	
		D625,326 S	10-12-2010	Allen	
		D637,604 S	05-10-2011	Brinda	
		D649,154 S	11-22-2011	Vance et al.	
		D672,364 S	12-11-2012	Reyna et al.	
		D706,810 S	06-10-2014	Jones et al.	
		D718,779 S	12-02-2014	Hang Sik et al.	
		D730,403 S	05-26-2015	Farmer	
		D735,219 S	07-28-2015	Young-Ri et al.	
		D745,537 S	12-15-2015	Smirin et al.	
		D754,744 S	04-26-2016	Tijssen et al.	
		D763,888 S	08-16-2016	Patel	
		D763,905 S	08-16-2016	Patel	
		D765,101 S	08-30-2016	Park et al.	
		D773,480 S	12-06-2016	Zhou et al.	
		D773,508	12-06-2016	Patel	
		D795,287 S	08-22-2017	Sun	
		D806,741 S	01-02-2018	Majernik et al.	
		D808,425 S	01-23-2018	Park et al.	
		D808,998 S	01-30-2018	Wu et al.	
		D809,540 S	02-06-2018	Vedrody et al.	
		D816,701 S	05-01-2018	Ball et al.	
		5,479,602	12-26-1995	Baecker et al.	
		5,955,718 A	09-21-1999	Levasseur et al.	
		6,056,194	05-02-2000	Kolls	
		6,390,269 B1	05-21-2002	Billington et al.	
		6,505,095 B1	01-07-2003	Kolls	
		7,131,575 B1	11-07-2006	Kolls	
		8,020,763 B1	09-20-2011	Kowalchuk et al.	
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Examiner Signature	/John H. Holly/			Date Considered	10/19/2020

DB2/ 22684197.4

Petitioner Exhibit 1002-0535

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /JHH/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT Substitute for Form 1449-PTO				Electronically filed January 24, 2020	
				Application Number	15/878,352
				Filing Date	January 23, 2018
				First Named Inventor	Paresh K. Patel
				Art Unit	3696
Examiner Name	Holly, John H.				
Sheet	2	of	3	Attorney Docket Number	104402-5035US

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Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
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Examiner Signature	/John H. Holly/	Date Considered	10/19/2020
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DB2/ 22684197.4

Petitioner Exhibit 1002-0536

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /JHH/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT Substitute for Form 1449-PTO				Electronically filed January 24, 2020			
				Application Number		15/878,352	
				Filing Date		January 23, 2018	
				First Named Inventor		Paresh K. Patel	
				Art Unit		3696	
				Examiner Name		Holly, John H.	
Sheet	3	of	3	Attorney Docket Number		104402-5035US	

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Examiner Signature	/John H. Holly/	Date Considered	10/19/2020
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DB2/ 22684197.4

Petitioner Exhibit 1002-0537

EIC 3600 Search Report

To: John Holly Location: KNX-2D65 Art Unit: 3696 Case Serial Number: 15/878,352		Searcher:	Gissele Luzcando
		Location:	EIC-3600 KNOX 4B71
		Phone:	571-272-4284
		Email:	Gissele.luzcando@uspto.gov
		Date Completed:	12/30/2019
Access Search Log Number:	606760		

This search report contains the following content:

- **Search Histories**

Keyword/synonym strings and search strategies used by the EIC Searcher in completing the prior art search are included. The search history for each database or resource utilized appears at the top of each database/resource section, indicated by the database/resource section headings.

- **Search Results**

Only on-topic results are included in the search report. On-topic results include all references found that are related to the art area being searched. These references may not necessarily be useful for a rejection or other office action, but are included for the Examiner's review. Off-topic, unrelated, or irrelevant search results ("false drops" or "false hits") were removed by the Searcher. Off-topic results include all references that are unrelated to the art area being searched.

If you have any questions about this search, or about how to interpret this search report, please do not hesitate to contact the Searcher using the contact information listed above.

If you need assistance retrieving the full text of any of the references contained in this report, please contact the Searcher listed above, or the EIC 3600 Reference Desk at 571-272-3488 (x23488) or STIC-EIC3600@uspto.gov.

Thank you for using the EIC, and we look forward to your next search!

Potential References of Interest

Methods and systems for communication between a fuel dispenser and a mobile device

Publication numbers	Publication dates	Priority dates	Inventors
US20170109722	2017-04-20	2015-05-29 2014-05-30 2015-05-29	MORRIS JOHN J ([US]) TANG WEIMING ([US])

Abstract (Native or MT)

Various methods and systems for communication between a fuel **dispenser** and a **mobile device** are provided. In one embodiment, a method of operating a fuel **dispenser** to communicate with a **mobile device** is provided that includes detecting the **mobile device** in proximity to the fuel **dispenser**, and communicating with the **mobile device** to **receive input** from and/or send information to the **mobile device**. The communication can use **Bluetooth® Low Energy (BLE)**.

Description:

[0009] In another aspect, a communication system is provided that in one embodiment can include a **wireless** transceiver configured to detect a **mobile device** using a **BLE** protocol, and a processor configured to **receive input** from the **mobile device** relating to controlling **operation** of a fuel **dispenser** to deliver fuel to a vehicle and configured to provide information to the **mobile device**.

[0030] The secure two-way interaction between a fuel **dispenser** and a user **device** (e.g., a **mobile device**) can facilitate the fuel pumping and **payment** process and/or can improve overall user experience. For example, a fuel dispenser enabled with the **BLE** technology can enable a user of a **BLE**-enabled (marketed as “**Bluetooth Smart®**”) **mobile device** to interact with the **BLE**-enabled fuel **dispenser**. The **BLE**-enabled fuel dispenser can be configured to advertise itself to the **mobile device** when the **device** is in proximity to the fuel **dispenser**. For example, when a vehicle operated by the user of the **mobile device** is approaching the fuel **dispenser**, the **mobile device** can be configured to detect that the fuel **dispenser** once the **mobile device** is within a range of a **Bluetooth®** transceiver associated with the fuel **dispenser**. Once the **mobile device** and fuel dispenser pair and establish a connection (e.g., a **BLE** connection), they can interact in any number of ways, as discussed further below.

Paying system of vending machine easy to add of payment means using smart phone

Publication numbers	Publication dates	Priority dates	Inventors
KR10-2018-0128795 (KR101950581)	2018-12-04	2017-05-24	JO, HO YONG

Abstract (Native or MT)

The present invention relates to the payment system of a **vending machine**. More specifically, the present invention relates to a payment system of **vending machine** which facilitates the extension of a payment means using a **smart phone**. A **Bluetooth** module capable of data communication with a **smartphone** and a smart payment controller are installed in a conventional **vending machine** for payment using a coin or banknote. After the purchase amount of the goods of the **vending machine** is paid on a **wireless** communication network between the **smartphone** and the business server of a remote place, payment authentication information including the payment result and goods purchase information are transmitted to the smart payment controller on a **Bluetooth** communication network in order to purchase the goods from the **vending machine**. So, a payment means using the **smart phone** can be easily added to the **vending machine**.

Description:

[0014] Settlement means payment in at least one of the main controller recognizes whether or not the amount of payment is selected by the user within the scope of the article **vending machine** automatically discharges; additionally coupled to

the **vending machine** located within a predefined range of a **Bluetooth** communication network to enable data communication with the **smart phone** with a **Bluetooth** module; **smart phone** through the **Bluetooth** module in data communication with the **vending machine** and transmitting the unique code, the **smart phone** by processing on a **wireless** communication network after receiving the **payment** authentication information is transmitted to the main controller so that the main controller is electrically connected to the smart payment controller; **Bluetooth** communication network in data communication with the controller and the smart payment of the purchase and select the article **vending machine**, a **wireless** communication network connected to the article **vending machine** provider server out-of-town purchase amount of money after the payment **request**, payment authorization information is **received** on a **Bluetooth** communication network in which the smart payment transmitted to the **smart phone**; and are defined according to a request for payment on a **smart phone** connected to the financial institution's server VAN proprietors or for a certain amount from after payment approval, approval of payment information concerning payment authentication information included in the **smart phone** generates and transmits the provider server; is characterized in that it comprises.

Dialog – NPL Full Text Databases

Databases: ABI/INFORM® Professional Advanced, Abstracts in New Technology & Engineering, Aqualine, Aquatic Science & Fisheries Abstracts (ASFA), BIOSIS Previews®, British Library Inside Conferences, Business & Industry, CAB ABSTRACTS, Chemical Business Newbase, Chemical Engineering & Biotechnology Abstracts, Civil Engineering Abstracts, Current Contents® Search, DH-DATA: Health Administration, Medical Toxicology & Environmental Health, DIOGENES® FDA Regulatory Updates, Earthquake Engineering Abstracts, Ei Compendex®, Ei EnCompassLIT, EMCare®, ERIC, ESPICOM Pharmaceutical & Medical Device News, FDAnews, Gale Group Computer Database™, Gale Group Health Periodicals Database, Gale Group New Product Announcements / Plus®, Gale Group Newsletter Database™, Gale Group PharmaBiomed Business Journals, Gale Group PROMT®, Gale Group Trade & Industry Database™, Global Health, HSELINE: Health and Safety, Inspec®, Jane's Defense & Aerospace News, King's Fund, Lancet Titles, Mechanical & Transportation Engineering Abstracts, MEDLINE®, Meteorological & Geostrophysical Abstracts, NTIS: National Technical Information Service, Oceanic Abstracts, Paperbase, ProQuest Advanced Tech & Aerospace Professional, ProQuest Biological & Health Science Professional, ProQuest Dissertations and Theses Professional, ProQuest Environmental Science Professional, ProQuest Materials Research Professional, ProQuest Newsstand Professional, ProQuest Technology Research Professional, Proux Science Daily Essentials, SciSearch®: a Cited Reference Science Database, Social SciSearch®, Transport Research International Documentation, UBM Computer Full Text

Set#	Searched for	Results
S1	(vending OR (parking p/0 meter\$1) OR toll\$1 OR laundromat\$1 OR game\$1 OR (photo p/0 booth\$1) OR dispens\$3 OR (payment p/0 (accept\$3 OR operat\$3)) OR auto?retail\$3 OR gaming OR slot\$1) N/7 (machine\$1 OR booth\$1 OR unit\$1 OR equipment\$1 OR device\$1 OR apparatus)	2161133*
S2	(nearfield OR wireless\$2 OR WiFi OR Wi-Fi OR Bluetooth\$1 OR (blue p/0 tooth\$1) OR short?range? OR (short p/0 range) OR short?wavelength\$1 OR BLE OR nearfield OR WAN)	15282164*
S3	(receiv\$3 OR collect\$3 OR gather\$3 OR obtain\$3 OR get\$1 OR getting OR attain\$3 OR acquir\$3) N/7 (request\$3 OR input\$3 OR interact\$4 OR attempt\$1 OR ((ask\$3 OR apply\$3) p/0 for) OR demand\$3 OR inquir\$3 OR petition\$2 OR demand\$2 OR solicit\$3 OR enquir\$3)	7953908*
S4	(mobilephone OR telephone\$1 OR ((mobile OR portable OR wireless OR handheld OR hand?held OR cell OR cellular OR smart) n/2 (device\$1 OR computer\$1 OR laptop\$1 OR tablet\$1 OR phone\$1 OR terminal\$1 OR apparatus\$2)) OR blackberr\$3 OR pda OR iphone\$1 OR ipad\$1 OR smartphone\$1 OR cellphone\$1 OR personal?digital?assistant\$1)	28251521*
S5	(wireless OR cashless OR mobile OR electronic\$2 OR virtual\$2 OR (electronic p/0 wallet\$1) OR e?wallet\$1) N/7 (payment\$1 OR money OR monies OR monetary OR fund\$3 OR dollar\$1 OR currenc\$5 OR (electronic\$1 p/1 transfer\$3) OR EFT OR (air p/1 pay\$4) OR pay\$1 OR paying)	1975252*
S6	su.exact("payment" OR "payment procedures" OR "payment requests" OR "payment requirements" OR "payment systems")	81788*
S7	su.exact("iphone" OR "cellphone" OR "cellphones" OR "smartphone" OR "smartphone application" OR "smartphone applications" OR "smartphone apps" OR "smartphone-applications" OR "smartphones" OR "mobile devices")	580992*
S8	su.exact("beverage vending machines" OR "vending machine" OR "vending machines" OR "vending machine industry" OR "vending machines industry")	41538*
S9	S1 AND S2	218804*
S10	S9 AND S3	22121*

S11	S10 AND S4	17109*
S12	S11 AND S5	1996°
S13	S12 AND PD(<=20180123)	1779°
S14	S13 AND (S6 OR S7 OR S8)	86°
S15	S1 N/10 S5	8620*
S16	S15 N/10 S4	1293°
S17	S16 AND S2	547°
S18	S17 AND (S6 OR S7 OR S8)	103°
S19	S18 AND PD(<=20180123)	80°

* Duplicates are removed from the search, but included in the result count.

° Duplicates are removed from the search and from the result count.

Design and Implementation of Automatic Vending Machine Based on the Short Message Payment

Published in: 2010 6th International Conference on Wireless Communications Networking and Mobile Computing (WiCOM)
(Page(s): 1-4)

Publication Date: 01-Sep-2010

Authors: Zhang Wen • Zhang Xin Long

Abstract:

A design of vending machine based on the short message payment with the main control module M68HC11 and GPRS module MC35 has been illustrated. This paper describes the working program of the system and especially the MDB bus and photoelectric conversing circuit and MC35 module are presented. A structure of vending machine is designed, the hardware ideas of bus conversion interface, the software protocol rules based on AT command and the way to use short message payment are given out.

Automatic mobile payment on a non-connected vending machine

Published in: Canadian Conference on Electrical and Computer Engineering 2004 (IEEE Cat. No.04CH37513) (Volume: 2,
Page(s): 731-734 Vol.2)

Authors: S.B.Z. Azami • M. Tanabian [+details]

Publication Date: 01-Jan-2004

Affiliations: Hivva Technol., Ottawa, Ont., Canada

Abstract:

This paper addresses a mobile payment solution where there is no connection required for the vending machine and while the local means of communication is through infrared (IR). It is assumed that the cellular phone has the IR feature. All the user has to do is to select the item, and point the infrared enabled cellular phone to the vending machine. The vending machine will detect the presence of the cellular phone through IR, and the communication will take place by sending a message to the back-end server. Detailed inventory and telemetric information can be added to the transaction data. Data compression, segmentation and reassembly schemes are implemented. The message gets decoded in the back-end server where the transaction is processed, billing is done, and inventory information is sent to the vending machine operators. Another program in the vending machine operator side optimizes the route management of the truck fleet, responsible for replenishing the vending machines. An intelligent route management saves on the operational costs, by reducing the number of times each vending machine needs to be visited. The proposal is a hybrid of three payment methods: currency (coin), manual mobile, and infrared mobile. The advantages of using the system for the users and the operators are indicated in this paper.

A wireless payment system

Published In: Second International Conference on Embedded Software and Systems (ICESS'05) (Page(s): 8 pp.)

Authors: J. Gao • J. Cai • K. Patel • S. Shim [+details]

Publication Date: 01-Jan-2005

Affiliations: Comput. Eng., San Jose State Univ., USA

Abstract:

The swift advance of wireless networking, communication, and mobile technology is making a big impact to daily life. The significant increase of mobile device users in the recent years causes a strong demand on secured wireless information services and reliable mobile commerce (m-commerce) applications. Since mobile payment (m-payment) is a critical part of most wireless information services and applications, how to generate secured m-payment systems has become a hot research topic. This paper proposes a peer-to-peer m-payment system, known as P2P-Paid to allow mobile users to conduct wireless payments over the Bluetooth communications and to perform related secured transactions with the server. This paper introduces backgrounds, related work, and the system communication protocol, and provides system overview, security solution as well as implementation report.

Orbit.com – Questel

Search Step	Result(s)	Query	Base
1	1	(US20180181945)/PN	FAMPAT
2	463697	..SIMILARITY SS 1 RANKED 1	FAMPAT
3	2307	(G06Q-020/327)/CPC	FAMPAT
4	861154	(VENDING OR (PARKING W METER?) OR TOLL? OR LAUNDROMAT? OR GAME? OR (PHOTO W BOOTH?) OR DISPENS??? OR (PAYMENT W (ACCEPT??? OR OPERAT???)) OR AUTO?RETAIL??? OR GAMING OR SLOT?) 7D (MACHINE? OR BOOTH? OR UNIT? OR EQUIPMENT? OR DEVICE? OR APPARATUS)	FAMPAT
5	1285680	(NEARFIELD OR (NEAR W FIELD) OR WIRELESS?? OR WIFI OR WI-FI OR BLUETOOTH? OR (BLUE W TOOTH?) OR SHORT?RANGE? OR (SHORT W RANGE) OR SHORT?WAVELENGTH? OR BLE OR NEARFIELD OR WAN)	FAMPAT
6	1544162	(RECEIV??? OR COLLECT??? OR GATHER??? OR OBTAIN??? OR GET? OR GETTING OR ATTAIN??? OR ACQUIR???) 7D (REQUEST??? OR INPUT??? OR INTERACT???? OR ATTEMPT? OR ((ASK??? OR APPLY???) W FOR) OR DEMAND??? OR INQUIR??? OR PETITION?? OR DEMAND?? OR SOLICIT??? OR ENQUIR???)	FAMPAT
7	2160298	(MOBILEPHONE OR TELEPHONE? OR ((MOBILE OR PORTABLE OR WIRELESS OR HANDHELD OR HAND?HELD OR CELL OR CELLULAR OR SMART) 2D (DEVICE? OR COMPUTER? OR LAPTOP? OR TABLET? OR PHONE? OR TERMINAL? OR APPARATUS??)) OR BLACKBERR??? OR PDA OR IPHONE? OR IPAD? OR SMARTPHONE? OR CELLPHONE? OR PERSONAL?DIGITAL?ASSISTANT?)	FAMPAT
8	59092	(WIRELESS OR CASHLESS OR MOBILE OR ELECTRONIC?? OR VIRTUAL?? OR (ELECTRONIC W WALLET?) OR E?WALLET?) 7D (PAYMENT? OR MONEY OR MONIES OR MONETARY OR FUND??? OR DOLLAR? OR CURRENC+ OR (ELECTRONIC? 1W TRANSFER???) OR EFT OR (AIR 1W PAY????) OR PAY? OR PAYING)	FAMPAT
9	21606	4 P 5	FAMPAT
10	2015	9 P 6	FAMPAT
11	1509	10 AND 7	FAMPAT
12	172	11 AND 8	FAMPAT
13	162	12 AND PRD<=2018-01-23	FAMPAT
14	18	13 AND 3	FAMPAT
15	97	2 AND 12	FAMPAT
16	90	15 AND PRD<=2018-01-23	FAMPAT

Methods and systems for communication between a fuel dispenser and a mobile device

Publication numbers	Publication dates	Priority dates	Inventors
US20170109722	2017-04-20	2015-05-29 2014-05-30 2015-05-29	MORRIS JOHN J ([US]) TANG WEIMING ([US])

Abstract (Native or MT)

Various methods and systems for communication between a fuel **dispenser** and a **mobile device** are provided. In one embodiment, a method of operating a fuel **dispenser** to communicate with a **mobile device** is provided that includes detecting the **mobile device** in proximity to the fuel **dispenser**, and communicating with the **mobile device** to **receive input** from and/or send information to the **mobile device**. The communication can use **Bluetooth® Low Energy (BLE)**.

Description:

[0009] In another aspect, a communication system is provided that in one embodiment can include a **wireless** transceiver configured to detect a **mobile device** using a **BLE** protocol, and a processor configured to **receive input** from the **mobile device** relating to controlling **operation** of a fuel **dispenser** to deliver fuel to a vehicle and configured to provide information to the **mobile device**.

[0030] The secure two-way interaction between a fuel **dispenser** and a user **device** (e.g., a **mobile device**) can facilitate the fuel pumping and **payment** process and/or can improve overall user experience. For example, a fuel dispenser enabled with the **BLE** technology can enable a user of a **BLE**-enabled (marketed as “**Bluetooth Smart®**”) **mobile device** to interact with the **BLE**-enabled fuel **dispenser**. The **BLE**-enabled fuel dispenser can be configured to advertise itself to the **mobile device** when the **device** is in proximity to the fuel **dispenser**. For example, when a vehicle operated by the user of the **mobile device** is approaching the fuel **dispenser**, the **mobile device** can be configured to detect that the fuel **dispenser** once the **mobile device** is within a range of a **Bluetooth®** transceiver associated with the fuel **dispenser**. Once the **mobile device** and fuel dispenser pair and establish a connection (e.g., a **BLE** connection), they can interact in any number of ways, as discussed further below.

Vending machine payment system using smart device

Publication numbers	Publication dates	Priority dates	Inventors
KR101772864	2017-08-30	2016-11-18	CHA, KYUNG JIN CHOI, MUN YUNG

Abstract (Native or MT)

The present invention relates to a payment system for a **vending machine** using a **smart device**, capable of compatibly paying a price for goods or a service provided from the **vending machine**. According to the present invention, the system comprises: a user terminal including an **electronic payment** application capable of inputting a price for goods or services provided from the **vending machine**, and capable of transmitting an amount input signal and a **payment** signal to pay the price through **wireless** communication; a **payment** signal **transfer device** including a **wireless** communication unit to **receive** the amount **input** signal, a conversion unit to convert the amount input signal to an amount signal capable of being recognized and used by the **vending machine**, a wired communication **unit** to transmit the converted amount input signal to a microprocessor embedded in the **vending machine**, a storage **unit**, and installed between the microprocessor the **vending machine** and a price recognition **device**; and a management server including a data storage unit, and a payment unit receiving the payment signal transmitted from the user terminal to perform payment.

Description:

[0011] In order to achieve the above object to provide a **smart device** according to the present invention an unmanned **vending machine payment** system using an unmanned **vending** machine is provided that provides the price for the goods or services can be input, the input amount of money corresponding to the input signal and the charge payment

of money for a **payment** signal can be transmitted via **wireless** communication the user terminal including the **electronic payment** application; transferred amount from the user **terminal** and a **wireless** communication unit for **receiving** an **input** signal, the **wireless** communication unit **receiving** an **input** signal to the received amount of money that can be used to recognize an unmanned **vending machine** configured to convert a conversion **unit**, which is converted by the conversion section converts the input signal on the **vending machine** to an unmanned money on an embedded microprocessor for transmission to a wired communication unit, a device name for identifying each commodity unmanned aerial vehicle, a storage unit which stores an identification code, and comprises, unmanned **vending machine** vending goods or services with no internal microprocessor provided with the price for the coins or bills into the bill recognition device can recognize a payment is provided between the signal transmission **device**; and user information, point information, an unmanned **vending** location, type, **device** name, including an unmanned **vending** machine sales history information, identification code, the cryptographic information including the encryption key data storage unit, and transmitted from the user terminal and **receives** the payment **request** to pay the price for performing a payment unit includes a management server.

[0031] The user then inputs the money in the user terminal (1000) and transmits it via **wireless** communication, an unmanned **vending machine** installed in the **payment** signal transfer **apparatus** (2000) is an unmanned **vending machine** **receiving** an **input** signal corresponding to the amount of money transferred amount of money to be able to recognize the input signal is converted to an unmanned **vending machine** indicates the amount of the display **device**.

Paying system of vending machine easy to add of payment means using **smart phone**

Publication numbers	Publication dates	Priority dates	Inventors
KR10-2018-0128795 (KR101950581)	2018-12-04	2017-05-24	JO, HO YONG

Abstract (Native or MT)

The present invention relates to the payment system of a **vending machine**. More specifically, the present invention relates to a payment system of **vending machine** which facilities the extension of a payment means using a **smart phone**. A **Bluetooth** module capable of data communication with a **smartphone** and a smart payment controller are installed in a conventional **vending machine** for payment using a coin or banknote. After the purchase amount of the goods of the **vending machine** is paid on a **wireless** communication network between the **smartphone** and the business server of a remote place, payment authentication information including the payment result and goods purchase information are transmitted to the smart payment controller on a **Bluetooth** communication network in order to purchase the goods from the **vending machine**. So, a payment means using the **smart phone** can be easily added to the **vending machine**.

Description:

[0014] Settlement means payment in at least one of the main controller recognizes whether or not the amount of payment is selected by the user within the scope of the article **vending machine** automatically discharges; additionally coupled to the **vending machine** located within a predefined range of a **Bluetooth** communication network to enable data communication with the **smart phone** with a **Bluetooth** module; **smart phone** through the **Bluetooth** module in data communication with the **vending machine** and transmitting the unique code, the **smart phone** by processing on a **wireless** communication network after receiving the **payment** authentication information is transmitted to the main controller so that the main controller is electrically connected to the smart payment controller; **Bluetooth** communication network in data communication with the controller and the smart payment of the purchase and select the article **vending machine**, a **wireless** communication network connected to the article **vending machine** provider server out-of-town purchase amount of money after the payment **request**, payment authorization information is **received** on a **Bluetooth** communication network in which the smart payment transmitted to the **smart phone**; and are defined according to a request for payment on a **smart phone** connected to the financial institution's server VAN proprietors or for a certain amount from after payment approval, approval of payment information concerning payment authentication information included in the **smart phone** generates and transmits the provider server; is characterized in that it comprises.

Method and system for a wireless universal mobile product interface

Publication numbers	Publication dates	Priority dates	Inventors
US20030055735	2003-03-20	2001-04-23 2000-04-25	CAMERON RICHARD N ([FR]) FEINBIER LOIC J ([FR])

Abstract (Native or MT)

The present invention provides a solution to the needs described above through a system and method for a wireless universal mobile product interface (WUMPI). Generally, products/objects have their own interface, or man-machine-interface (MMI). Technically, the wireless universal mobile product interface of the present invention (WUMPI) innovates this space by replacing the product's MMI by implementing reverse software control via wireless transmission channel and or Bluetooth wireless technologies to control the mobile device's screen—replacing the local software component on the mobile device which controls what is shown on the screen in terms of a man-machine-interface (MMI). This enables a product/object within the area of the mobile device to take over control via the wireless transmission channel or other wireless capability of the mobile device and to “extend” the product interface to the mobile device that came within its control range, or the product/object's personal area network (PAN).

Description:

[0234] The starting-point is the basic proximity device, a Bluetooth chip that can be incorporated in the smallest, lightest mobile phone. With any Bluetooth-enabled machine—a drinks dispenser, photocopy machine, petrol pump or parking meter, for instance—the user can place an order, receive the goods and pay for them electronically via a hand-held device.

[0269] Turning now to FIG. 9 a system comprising the following pieces is shown: a vending machine 301 of type Sielaff FK 185 EC with a RS232 interface 305 connected to a Compaq Laptop 307 with Digianswer Bluetooth card. The laptop computer 307 runs custom-written software that simulates a virtual vending machine, sends commands to the real physical one (if connected) and handles transactions with a Qpass service center 311. The Qpass service center 311 is itself connected to the consumer's bank by way of of the user's credit card account 313. Finally, an Ericsson T28s mobile phone 309 with a wireless transmission channel adapter and a SIM card running custom-written software and using SIM Application Toolkit features is provided. With this exemplary configuration, the Compaq laptop 307 has an wireless transmission channel adapter (or in the future a special component to be integrated into the vending machine) and runs custom-written software (WUMPI logic of the present invention) that simulates a virtual vending machine and sends commands to the real machine 301, and handles transactions with Qpass 311. In this simple exemplary application, the vending machine 301 transmits its advertising/offer via its wireless transmission channel to mobile devices in range 315 which causes the mobile device 309 to display the advertising/offer. The user identifies himself (via a PIN) and selects one of the offered products 317. A SIM Toolkit Application on the mobile device 309 sends the selection and the WUMPI logic on the laptop 307 forwards transaction information throughout the network 319 to the operator payment provider 311. The payment provider 311 logs the transaction and adds it to the consumer's bill or deducts amount from the consumer's prepaid account 323 and returns a grant of payment signal to the virtual vender (laptop in this case) 321 who in turn signals 325 the vending machine to dispense the selected product.

Inventor Search - Patents

Databases: Argentina Patents Fulltext, Australia Patents Fulltext, Austria Patents Fulltext, Belgium Patents Fulltext, Brazil Patents Fulltext, Canada Patents Fulltext, China Patents Fulltext, Denmark Patents Fulltext, Derwent World Patents Index®, Eurasia Patents Fulltext, European Patents Fulltext, Finland Patents Fulltext, France Patents Fulltext, Germany Patents Fulltext, Global Patents Bibliographic, Great Britain Patents Fulltext, India Patents Fulltext™, Ireland Patents Fulltext, Italy Patents Fulltext, Japan Patents Fulltext, JAPIO - Patent Abstracts of Japan, Korea Patents Fulltext, Luxembourg Patents Fulltext, Mexico Patents Fulltext, Monaco Patents Fulltext, Netherlands Patents Fulltext, Norway Patents Fulltext, Portugal Patents Fulltext, Russia Patents Fulltext, Spain Patents Fulltext, Sweden Patents Fulltext, Switzerland Patents Fulltext, United States Patents Fulltext, WIPO PCT Patents Fulltext

Set#	Searched for	Results
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S2	(vending OR (parking p/0 meter\$1) OR toll\$1 OR laundromat\$1 OR game\$1 OR (photo p/0 booth\$1) OR dispens\$3 OR (payment p/0 (accept\$3 OR operat\$3)) OR auto?retail\$3 OR gaming OR slot\$1) N/7 (machine\$1 OR booth\$1 OR unit\$1 OR equipment\$1 OR device\$1 OR apparatus)	6661635
S3	S1 AND S2	373
S4	S1 AND S2	317°
S5	(wireless OR cashless OR mobile OR electronic\$2 OR virtual\$2 OR (electronic p/0 wallet\$1) OR e?wallet\$1) N/7 (payment\$1 OR money OR monies OR monetary OR fund\$3 OR dollar\$1 OR currenc\$5 OR (electronic\$1 p/1 transfer\$3) OR EFT OR (air p/1 pay\$4) OR pay\$1 OR paying)	522236*
S6	S5 AND S4	51°

* Duplicates are removed from the search, but included in the result count.

° Duplicates are removed from the search and from the result count.

MOBILE PAYMENT MODULE WITH DUAL FUNCTION RADIO TRANSMITTER

Inventor: Patel, PareshK. Portland, OR, US Patent rights: US Only

Application number: US 2018956741 (18 April 2018)

Priority number: US 2018956741 (18 April 2018)

Abstract (English): An electronic communication module broadcasts a first stream of alternating packets by alternating between a plurality of first packets and a plurality of second packets from a transceiver. Each of the first and second packets is associated with a first and second service, respectively, and includes a header with information identifying a first and second device, respectively as its source of transmission. The electronic communication module receives from a first mobile device a request for the first device to perform an operation associated with the first service, and concurrently establishing a connection with the first mobile device and transmitting first packets associated with a response to the first request, while continuing to broadcast second packets indicating presence of the second device, where the first and second packets are transmitted in an alternating pattern.

REFUND CENTERS FOR PROCESSING AND DISPENSING VENDING MACHINE REFUNDS VIA AN MDB ROUTER

Inventor: Patel, PareshK. Portland, OR, US Patent rights: US Only Sokol, Chris Portland, OR, US Patent rights: US Only

Application number: US 2018893514 (09 February 2018)

Priority number: US 2018893514 (09 February 2018)

First available: 2018-06-20

Abstract (English): A method is performed at an electronic payment module with one or more processors, memory, a slave interface that couples the module with an unattended machine via a multi-drop bus (MDB), and one or more host interfaces that couple the module with at least one payment peripheral of the unattended machine. The method also includes: receiving, from a refund center, a request to issue an approved refund of a predetermined amount and one or more criteria that must be satisfied before dispensing the predetermined amount. In accordance with a determination that the one or more criteria are met, the method includes issuing (i) a signal to the unattended machine, via the slave interface, that the at least one payment peripheral is unavailable and (ii) a signal to the at least one payment peripheral, via the one or more host interfaces, to dispense the predetermined amount.

Method and system for providing offers for automated retail machines via mobile devices

Inventor: Patel, PareshK. Portland, OR, US Patent rights: US Only

Application number: US 2015614336 (04 February 2015)

Priority number: US 2015614336 (04 February 2015)

Abstract (English): A mobile device with a display, processor(s), and memory: displays promotional offers; detects a user input selecting one of the promotional offers; and initiates performance of a transaction with an automatic retail machine to purchase a product stocked by the automatic retail machine. The mobile device also: receives a transaction completion notification from the payment module indicating that the product corresponding to the selected promotional offer was vended by the automatic retail machine; and, in response to receiving the transaction completion notification, provides a prompt to the user of the mobile device to obtain a product code for the vended product to validate the promotional offer. The mobile device further: obtains the product code for the vended product; transmits the product code to the server; and, in response: receives promotion validation information from the server; and displays the promotion validation information indicating whether the respective promotion offer was validated.

Method and Device for Retrofitting an Offline-Payment Operated Machine to Accept Electronic Payments

Inventor: Patel, PareshK. Portland, OR, US Patent rights: US Only Doan, Chau M. Beaverton, OR, US Patent rights: US Only

Application number: US 2014456683 (11 August 2014)

Priority number: US 2014456683 (11 August 2014)

Abstract (English): A payment module includes: one or more processors, memory, a first interface module configured to couple the payment module with a control unit of an offline-payment operated machine, and a short-range communication capability for communicating with one or more mobile devices each including a complimentary short-range communication capability and a long-range communication capability. The payment module receives a transaction request via the short-range communication capability from a mobile device to perform a transaction with the offline-payment operated machine. The payment module validates the transaction request to verify that the mobile device is authorized to initiate payment for

the transaction by a remote server via the long-range communication capability. In accordance with a determination that the transaction request is valid, the payment module causes the offline-payment operated machine to perform the requested transaction by issuing a signal, via the first interface module, to the control unit to perform the transaction.

Mobile-device-to-machine payment systems

Inventor: Patel, PareshK. Portland, OR, US Patent rights: US Only Doan, Chau M. Beaverton, OR, US Patent rights: US Only

Application number: US 2014214644 (14 March 2014)

Priority number: US 2014214644 (14 March 2014)

Abstract (English): Described herein is a mobile-device-to-machine payment system and method for facilitating a cashless transaction for purchase of at least one product or service by a user from a payment accepting unit.

Inventor Search - Non-Patent Literature

Databases: ABI/INFORM® Professional Advanced, Abstracts in New Technology & Engineering, Aqualine, Aquatic Science & Fisheries Abstracts (ASFA), BIOSIS Previews®, British Library Inside Conferences, Business & Industry, CAB ABSTRACTS, Chemical Business Newbase, Chemical Engineering & Biotechnology Abstracts, Civil Engineering Abstracts, Current Contents® Search, DH-DATA: Health Administration, Medical Toxicology & Environmental Health, DIOGENES® FDA Regulatory Updates, Earthquake Engineering Abstracts, Ei Compendex®, Ei EnCompassLIT, EMCare®, ERIC, ESPICOM Pharmaceutical & Medical Device News, FDAnews, Gale Group Computer Database™, Gale Group Health Periodicals Database, Gale Group New Product Announcements / Plus®, Gale Group Newsletter Database™, Gale Group PharmaBiomed Business Journals, Gale Group PROMT®, Gale Group Trade & Industry Database™, Global Health, HSELINE: Health and Safety, Inspec®, Jane's Defense & Aerospace News, King's Fund, Lancet Titles, Mechanical & Transportation Engineering Abstracts, MEDLINE®, Meteorological & Geostrophysical Abstracts, NTIS: National Technical Information Service, Oceanic Abstracts, Paperbase, ProQuest Advanced Tech & Aerospace Professional, ProQuest Biological & Health Science Professional, ProQuest Dissertations and Theses Professional, ProQuest Environmental Science Professional, ProQuest Materials Research Professional, ProQuest Newsstand Professional, ProQuest Technology Research Professional, Prouis Science Daily Essentials, SciSearch®: a Cited Reference Science Database, Social SciSearch®, Transport Research International Documentation, UBM Computer Full Text

Set#	Searched for	Results
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S2	(vending OR (parking p/0 meter\$1) OR toll\$1 OR laundromat\$1 OR game\$1 OR (photo p/0 booth\$1) OR dispens\$3 OR (payment p/0 (accept\$3 OR operat\$3)) OR auto?retail\$3 OR gaming OR slot\$1) N/7 (machine\$1 OR booth\$1 OR unit\$1 OR equipment\$1 OR device\$1 OR apparatus)	2160509*
S3	S1 AND S2	11°

* Duplicates are removed from the search, but included in the result count.

° Duplicates are removed from the search and from the result count.

The hidden cost of cash

Author: Patel, Paresh, PhD.

Publication info: Automatic Merchandiser 56.2: 32-34,36-38,40. SouthComm Business Media LLC. (Mar 2014)

First available: 2014-05-22

Abstract (summary): I strongly argue that cash in vending will become much less important. If the primary reason operators have not expanded cashless options is because of the cost of cashless, then these operators must in fairness recognize that "cash is free" is an illusionary argument we told ourselves to keep us from undertaking what needed to be done. In the future, there will be vending machines that don't accept cash.

The Future Of Money

Author: Patel, Paresh.

Publication info: VendingMarketWatch.com SouthComm Business Media LLC. (Oct 9, 2013)

Abstract (summary): Cyriac Roeding, CEO of shopkick, argued that mobile wallets are a solution in search of a problem. He said, "Most consumers don't really like "pay". It's necessary, but not what people want to do. What people want to do is "shop." Mobile payment by itself is not the solution. Mobile wallet is trying to replace something that is working." His point was that mobile wallets need to more than just enable payment for it to become enticing for consumers to switch from plastic to mobile.

In another session, Rick Kanemasu of Coca-Cola spoke about its partnership with [Isis] and Coca-Cola's mobile wallet strategy. Coca-Cola conducted a pilot test of 200 machines in Austin, Texas, and then later deployed Near Field Communication (NFC) readers on tens of thousands of machines. Kanemasu said that Coca-Cola looked at the long-term strategy and it made a "bet" on NFC and Isis. Coca-Cola believes NFC provides "the best customer experience."

Neither Isis nor Coca-Cola addressed how scalable and practical Isis on vending machines would be given the Apple iPhone does not support NFC. An earlier speaker had mentioned more iPhones are sold every day than babies are born. Moreover, about 70 percent of mobile commerce occurs from Apple devices. With NFC required, consumers' problem about having incorrect denomination would simply be replaced by having the incorrect device. A large base of vending consumers still would have frustrations paying, thus making any NFC-based solution much less than ideal.

SMART VENDING: A new definition of vending

Author: Patel, Paresh.

Publication info: Automatic Merchandiser 54.3: 30-32,34-36,38. SouthComm Business Media LLC. (Apr 2012)

Abstract (summary): Intuitively, the operator knows a completely empty machine has resulted in lost sales. But the magnitude is not known. Now let's go to a more likely scenario with what an operator may strive for with dynamic scheduling - a system in which machines are scheduled to be serviced not based on a regular schedule but rather based on forecasting when the machine will need to be filled (using historical information) , or based on real-time telemetry data when a certain level of inventory has sold out.

Full text: ... how the technology improves our experience. But it is much more - it is about creating a unique, engaging experience for the consumer using the vending machine. It incorporates not only how they interact with the machine, but also everything that leads up to their interaction. For example, there could be ... could also involve their personal mobile device. Imagine this: you work on the sixth floor of a building. Using your phone, you locate the nearest vending machines.

SMART PHONES AND TABLETS: GAME CHANGERS for managing a vending business

Author: Patel, Paresh.

Publication info: Automatic Merchandiser 54.1: 26-28,30. SouthComm Business Media LLC. (Feb 2012)

Abstract (summary): At my company, we use MEI Easitrax for our VMS. I don't know of any VMS that has an iPad or iPhone app - wouldn't that be useful if they did? But look at the picture on the opposite page below - I am running the full version of MEI Easitrax on my iPad. How's this possible?

PE2E SEARCH - Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
L1	12906	705/44	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/18 10:00 PM
L2	7942	705/1.1	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/18 10:00 PM
L3	70	(paresh.in. and patel.in.)	US-PGPUB; USPAT	OR	ON	ON	2020/01/18 10:01 PM
L4	48	("9875473" "20150170131" "20180181945" "8805739" "20100036720" "20100153267" "20120290332" "20140236771" "20140279309" "7877295" "7877295" "8276814" "8775273" "9875493" "10078700" "10354249" "10496979" "20060277111" "20120179553" "20120191572" "20120191610" "20120254025" "20150339318" "20170109550" "20170178090" "20180330354" "4359631" RE32115 "5580310" "5898155" "5992570" "6634481" "7853481" "7985129" "7985129" "8126776" "8249927" "8449377" "8931694" "9020886" "9514609" "9595044" "9747753" "9754310" "9830610" "10252149" "10304057" "10360596" "10362114" "10368187") .pn.	US-PGPUB; USPAT	OR	ON	ON	2020/01/18 10:03 PM
L5	49	("6058373" "6253193" "6363488" "6389402" "6427140" "8595091" "8615449" "8682742" "8768758" "8874653" "8972598" "9045324" "9098874" "9134994"	US-PGPUB; USPAT	OR	ON	ON	2020/01/18 10:05 PM
Petitioner Exhibit 1002-0553							

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L6	1	"20180181945"	US-PGPUB; USPAT	OR	ON	ON	2020/01/18 10:13 PM
L7	39	("20180181945" "9875473" "20170161706" "20150170131" "20170255933" "20150170132" "9659296" "20150170130" "9256873" "20150227928" "20150170129" "20150170136" "9547859" "20170193508" "20160098711" "20150170145" "20150169312" "10438208" "9134994" "8856045" "20180165908" "20150178702" "20020156727" "20020156704" "20120323670" "7805338" "20100044444" "20150095235"	US-PGPUB; USPAT	OR	ON	ON	2020/01/18 10:22 PM
				Petitioner	Exhibit 1002-0554		

L8	144	"8915447" "20130018742" "20120267437" "20120323653" "9384480" "20150006386" "20150066760" "8925827" "20130013352" "8275312" "20090070272").pn. ("20080167991" "20080255947" "7127236" "7721958" "8583496" "8769643" "20120029691" "20120276845" "20130030931" "20130185150" "8438066" "8479190" "20020164953" "20150073980" "D599806" "D651608" "D662942" "D692456" "D716339" "D720765" "D727337" "D746866" "20070187491" "20080033880" "20080154735" "20080201226" "6584309" "7848980" "8412626" "8615445" "8838481" "20050101295" "20110276636" "8707276" "20030110097" "20130297422" "20140067542" "8712893" "D496370" "D640282" "D644240" "D705244" "D735236" "20120254631" "20040049454" "20080183480" "8548426" "8700530" "20090171682" "8600899" "20090099961" "20100094456" "20130278622" "20150105901" "8898620" "20090306818" "20050177798" "20110289023" "7672680" "9001047" "D578135" "20130346305" "20030158891" "8645971" "20080141033" "20140136301" "8600899" "20060123335" "20080254853" "20160019604" "9210247" "D614640" "D640284" "D656947" "D662508" "D681660" "D727341" "20140085046" "6462644" "8346670" "8396589" "8489140" "8517766" "8856045" "20070050083" "20080126213" "20090306818" "20090313132" "20140074714" "20150081462" "200	US-PGPUB; USPAT	OR	ON	ON	2020/01/20 08:56 AM
Petitioner Exhibit 1002-0555							

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L12	212	("20030126078" "20030212642" "20040049455" "20040260653" "20050075958" "20050177510" "20060202025" "20060218086" "20070005613" "20070005774" "20070203836" "20070276764" "20080167991" "5659165" "5991749" "6029151" "6227447" "6267292" "6341724" "6488203" "6747547" "6868391" "7089208" "7099850" "7194437" "7231372" "7407094" "RE39736").PN. OR ("7848980").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	ON	2020/01/20 11:27 AM
L13	2	"20090119190"	US-PGPUB; USPAT	OR	ON	ON	2020/01/20 11:39 AM

Petitioner Exhibit 1002-0558

L14	1	"20170109722"	US-PGPUB; USPAT	OR	ON	ON	2020/01/20 01:06 PM
L15	2379885	(vending OR (parking adj meter\$1) OR toll\$1 OR laundromat\$1 OR game\$1 OR (photo adj booth\$1) OR dispens\$3 OR (payment adj (accept\$3 OR operat\$3)) OR gaming OR slot\$1) near10 (machine\$1 OR booth\$1 OR unit\$1 OR equipment\$1 OR device\$1 OR apparatus)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 03:01 PM
L16	96654	L15 AND ((H04W72/042 OR H04W72/0446 OR H04W72/0453 OR H04W72/1289 OR H04W76/27 OR H04W24/10 OR H04W72/0413 OR H04W72/1268 OR H04W72/044 OR H04W74/0833 OR H04W76/11 OR H04W24/08 OR H04W36/0085 OR H04W4/40 OR H04W68/02 OR H04W72/082 OR H04W72/1205 OR H04W16/14 OR H04W28/0236 OR H04W28/0278 OR H04W36/08 OR H04W48/16 OR H04W4/021 OR H04W4/023 OR H04W4/029 OR H04W4/70 OR H04W52/146 OR H04W56/001 OR H04W72/1231 OR H04W72/1273 OR H04W72/1284 OR H04W72/14 OR H04W76/28 OR H04W80/08 OR H04W88/06 OR H04W8/18 OR H04W12/06 OR H04W16/18 OR H04W16/28 OR H04W24/02 OR H04W28/021 OR H04W36/0069 OR H04W36/00837 OR H04W36/305 OR H04W40/20 OR	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 03:02 PM
Petitioner Exhibit 1002-0559							

		H04W48/02 OR H04W48/10 OR H04W4/027 OR H04W4/46 OR H04W52/143 OR H04W52/243 OR H04W52/365 OR H04W52/367 OR H04W72/005 OR H04W72/0406 OR H04W72/046 OR H04W72/048 OR H04W72/085 OR H04W72/121 OR H04W72/1242 OR H04W72/1257 OR H04W74/0808 OR H04W76/14 OR H04W76/15 OR H04W76/19 OR H04W84/12 OR H04W88/04 OR H04W88/08 OR H04W8/005 OR H04W8/26 OR H04W92/18 OR H04W12/00512 OR H04W12/04 OR H04W12/0401 OR H04W12/08 OR H04W12/0802 OR H04W16/12 OR H04W16/26 OR H04W24/04 OR H04W28/0205 OR H04W28/0242 OR H04W28/0268 OR H04W28/0284 OR H04W28/0289 OR H04W28/06 OR H04W28/14 OR H04W28/26 OR H04W36/0016 OR H04W36/0033 OR H04W36/0055 OR H04W36/0058 OR H04W36/0061 OR H04W36/0072 OR H04W36/0079 OR H04W36/0088 OR H04W36/04 OR H04W36/14 OR H04W36/22 OR H04W36/30 OR H04W48/06 OR H04W48/18 OR H04W4/02 OR H04W4/08 OR H04W4/21 OR H04W4/24 OR H04W4/44 OR					
						Petitioner	Exhibit 1002-0560

		H04W4/80 OR H04W52/0216 OR H04W52/228 OR H04W52/241 OR H04W52/242 OR H04W52/244 OR H04W52/325 OR H04W52/343 OR H04W52/346 OR H04W52/362 OR H04W52/38 OR H04W52/386 OR H04W52/48 OR H04W52/54 OR H04W56/0015 OR H04W56/004 OR H04W64/00 OR H04W64/003 OR H04W64/006 OR H04W68/005 OR H04W72/02 OR H04W72/04 OR H04W72/0473 OR H04W72/0486 OR H04W72/0493 OR H04W72/10 OR H04W72/12 OR H04W72/1215 OR H04W72/1226 OR H04W74/0816 OR H04W74/0825 OR H04W74/0841 OR H04W76/10 OR H04W76/12 OR H04W76/16 OR H04W76/18 OR H04W76/30 OR H04W76/34 OR H04W84/005 OR H04W84/18 OR H04W88/02 OR H04W88/023 OR H04W88/12 OR H04W8/08 OR H04W8/183 OR H04W8/205 OR H04W8/30 OR H04W92/10).CPC.)					
L17	4908180	(nearfield OR wireless\$2 OR WiFi OR Wi-Fi OR Bluetooth\$1 OR (blue adj tooth\$1) OR NFC OR (short adj range) OR short adj wavelength\$1 OR BLE OR nearfield OR WAN)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 03:06 PM
L18	634494	L17 AND ((H04W72/042 OR H04W72/0453 OR H04W72/1268 OR	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 03:07 PM
				Petitioner Exhibit 1002-0561			

		H04W72/0446 OR H04W76/27 OR H04W72/1273 OR H04W74/0808 OR H04W74/0833 OR H04W76/15 OR H04W80/02 OR H04W4/80 OR H04W72/1289 OR H04W76/11 OR H04W88/08 OR H04W48/16 OR H04W72/0413 OR H04W84/12 OR H04W16/14 OR H04W72/1284 OR H04W76/10 OR H04W76/16 OR H04W76/19 OR H04W88/06 OR H04W24/10 OR H04W72/04 OR H04W72/0493 OR H04W72/082 OR H04W72/085 OR H04W72/1205 OR H04W76/12 OR H04W76/14 OR H04W76/20 OR H04W76/25 OR H04W76/28 OR H04W84/045 OR H04W84/18 OR H04W88/02 OR H04W88/04 OR H04W16/26 OR H04W16/28 OR H04W28/0236 OR H04W28/0268 OR H04W28/0278 OR H04W28/12 OR H04W36/14 OR H04W36/30 OR H04W40/24 OR H04W4/40 OR H04W4/44 OR H04W4/70 OR H04W56/001 OR H04W72/046 OR H04W72/0466 OR H04W72/048 OR H04W72/10 OR H04W72/12 OR H04W72/121 OR H04W72/1231 OR H04W72/1242 OR H04W72/1257 OR H04W72/1263 OR H04W72/14 OR H04W74/006 OR H04W74/02 OR					
						Petitioner	Exhibit 1002-0562

		H04W74/0866 OR H04W76/30 OR H04W80/10 OR H04W88/023 OR H04W88/10 OR H04W88/16 OR H04W8/08 OR H04W92/10 OR H04W92/20 OR H04W12/04 OR H04W12/0401 OR H04W12/04031 OR H04W24/08 OR H04W28/00 OR H04W28/021 OR H04W28/0252 OR H04W28/06 OR H04W28/085 OR H04W28/10 OR H04W28/14 OR H04W28/18 OR H04W36/0005 OR H04W36/0069 OR H04W36/0077 OR H04W36/06 OR H04W36/08 OR H04W36/22 OR H04W36/24 OR H04W40/20 OR H04W48/18 OR H04W4/027 OR H04W4/029 OR H04W4/21 OR H04W4/46 OR H04W4/48 OR H04W4/90 OR H04W52/02 OR H04W52/0216 OR H04W52/0229 OR H04W52/0235 OR H04W52/146 OR H04W52/367 OR H04W52/54 OR H04W56/00 OR H04W68/005 OR H04W68/02 OR H04W72/0426 OR H04W72/044 OR H04W72/0486 OR H04W72/1215 OR H04W72/1226 OR H04W74/002 OR H04W74/0816 OR H04W74/0825 OR H04W74/0841 OR H04W76/22 OR H04W76/34 OR H04W76/36 OR H04W76/45 OR H04W80/04 OR H04W80/08 OR					
						Petitioner	Exhibit 1002-0563

		H04W88/085 OR H04W88/12 OR H04W88/14 OR H04W88/18 OR H04W8/005 OR H04W8/02 OR H04W8/04 OR H04W8/24 OR H04W92/18).CPC.)					
L19	542308	L15 and L17	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 03:10 PM
L20	5026013	(receiv\$3 OR collect\$3 OR gather\$3 OR obtain\$3 OR get\$1 OR getting OR attain\$3 OR acquir\$3) near10 (request\$3 OR input\$3 OR interact\$4 OR attempt\$1 OR ((ask\$3 OR apply\$3) adj for) OR demand\$3 OR inquir\$3 OR petition\$2 OR demand\$2 OR solict\$3 OR enquir\$3)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 03:13 PM
L21	289445	L20 AND ((H04W72/042 OR H04W76/27 OR H04W72/0413 OR H04W72/0446 OR H04W74/0833 OR H04W80/02 OR H04W72/0453 OR H04W72/1268 OR H04W68/02 OR H04W76/11 OR H04W72/04 OR H04W72/044 OR H04W72/1273 OR H04W72/1284 OR H04W72/1289 OR H04W76/15 OR H04W88/02 OR H04W16/14 OR H04W48/16 OR H04W4/80 OR H04W72/048 OR H04W76/10 OR H04W76/14 OR H04W88/04 OR H04W88/08 OR H04W24/10 OR H04W52/0229 OR H04W52/146 OR H04W72/02 OR H04W72/0466 OR H04W72/082 OR H04W72/085 OR H04W72/10 OR	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 03:15 PM
				Petitioner Exhibit 1002-0564			

		H04W72/1205 OR H04W76/12 OR H04W76/16 OR H04W76/19 OR H04W76/28 OR H04W84/045 OR H04W84/12 OR H04W84/18 OR H04W88/06 OR H04W16/28 OR H04W24/08 OR H04W28/0268 OR H04W28/0278 OR H04W28/06 OR H04W48/18 OR H04W4/70 OR H04W52/143 OR H04W60/005 OR H04W72/046 OR H04W72/0493 OR H04W72/12 OR H04W72/1263 OR H04W72/14 OR H04W74/006 OR H04W74/02 OR H04W74/0808 OR H04W76/30 OR H04W80/08 OR H04W80/10 OR H04W88/023 OR H04W88/16 OR H04W8/02 OR H04W8/08 OR H04W92/18 OR H04W92/20 OR H04W12/0401 OR H04W16/26 OR H04W28/0236 OR H04W28/0252 OR H04W28/085 OR H04W28/10 OR H04W28/12 OR H04W28/18 OR H04W36/0005 OR H04W36/0066 OR H04W36/0069 OR H04W36/0077 OR H04W36/0088 OR H04W36/06 OR H04W36/08 OR H04W36/22 OR H04W40/20 OR H04W48/08 OR H04W4/06 OR H04W4/08 OR H04W4/12 OR H04W4/21 OR H04W4/90 OR H04W52/02 OR H04W52/0216 OR H04W52/0235 OR					
						Petitioner	Exhibit 1002-0565

		H04W52/325 OR H04W52/34 OR H04W52/346 OR H04W52/367 OR H04W52/38 OR H04W52/48 OR H04W52/54 OR H04W56/001 OR H04W56/0015 OR H04W56/004 OR H04W60/00 OR H04W60/06 OR H04W64/00 OR H04W68/005 OR H04W72/0406 OR H04W72/0426 OR H04W72/0486 OR H04W72/06 OR H04W72/08 OR H04W72/121 OR H04W72/1215 OR H04W72/1226 OR H04W72/1231 OR H04W72/1242 OR H04W72/1257 OR H04W74/0816 OR H04W74/0825 OR H04W74/0866 OR H04W76/20 OR H04W76/22 OR H04W76/25 OR H04W76/36 OR H04W76/45 OR H04W80/04 OR H04W84/042 OR H04W88/10 OR H04W88/14 OR H04W88/18 OR H04W8/005 OR H04W8/04 OR H04W92/10).CPC.)					
L22	7269234	(mobile adj phone OR telephone\$1 OR ((mobile OR portable OR wireless OR handheld OR hand adj held OR cell OR cellular OR smart) near10 (device\$1 OR computer\$1 OR phone\$1)) OR blackberr\$3 OR pda OR iphone\$1 OR ipad\$1 OR smartphone\$1 OR cellphone\$1 OR personal adj digital adj assistant\$1)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 03:25 PM
L23	520653	L22 AND ((H04W72/042 OR H04W72/1268 OR H04W76/27 OR	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 03:27 PM
Petitioner Exhibit 1002-0566							

		H04W72/0446 OR H04W72/0453 OR H04W72/1273 OR H04W74/0808 OR H04W74/0833 OR H04W80/02 OR H04W72/1289 OR H04W76/15 OR H04W88/08 OR H04W48/16 OR H04W4/80 OR H04W72/0413 OR H04W76/10 OR H04W76/11 OR H04W84/12 OR H04W16/14 OR H04W72/1284 OR H04W76/16 OR H04W76/19 OR H04W88/06 OR H04W24/10 OR H04W28/0278 OR H04W72/04 OR H04W72/0493 OR H04W72/082 OR H04W72/085 OR H04W72/1205 OR H04W72/121 OR H04W72/1257 OR H04W76/12 OR H04W76/14 OR H04W76/20 OR H04W76/25 OR H04W76/28 OR H04W84/045 OR H04W88/02 OR H04W88/04 OR H04W16/26 OR H04W28/0236 OR H04W28/0268 OR H04W36/14 OR H04W36/30 OR H04W40/24 OR H04W48/18 OR H04W4/70 OR H04W56/001 OR H04W72/0466 OR H04W72/10 OR H04W72/1231 OR H04W72/1242 OR H04W72/1263 OR H04W72/14 OR H04W74/006 OR H04W74/02 OR H04W74/0866 OR H04W76/30 OR H04W80/10 OR H04W84/18 OR H04W88/023 OR H04W88/10 OR H04W88/16 OR					
						Petitioner	Exhibit 1002-0567

		H04W8/02 OR H04W92/10 OR H04W92/20 OR H04W12/04 OR H04W12/0401 OR H04W12/04031 OR H04W16/28 OR H04W24/02 OR H04W24/08 OR H04W28/0252 OR H04W28/0284 OR H04W28/06 OR H04W28/085 OR H04W28/10 OR H04W28/12 OR H04W28/18 OR H04W36/0005 OR H04W36/0069 OR H04W36/0077 OR H04W36/08 OR H04W36/22 OR H04W36/24 OR H04W40/20 OR H04W4/029 OR H04W4/06 OR H04W4/21 OR H04W4/40 OR H04W4/44 OR H04W4/48 OR H04W4/90 OR H04W52/02 OR H04W52/0216 OR H04W52/0229 OR H04W52/0235 OR H04W52/146 OR H04W52/367 OR H04W52/54 OR H04W56/00 OR H04W60/00 OR H04W68/005 OR H04W68/02 OR H04W72/0426 OR H04W72/044 OR H04W72/048 OR H04W72/0486 OR H04W72/12 OR H04W72/1215 OR H04W72/1226 OR H04W74/002 OR H04W74/0816 OR H04W74/0825 OR H04W74/0841 OR H04W76/22 OR H04W76/34 OR H04W76/36 OR H04W76/45 OR H04W80/04 OR H04W80/08 OR H04W88/14 OR H04W8/04 OR H04W8/08 OR						
								Petitioner Exhibit 1002-0568

L24	5026013	H04W8/24 OR H04W92/18).CPC.) (receiv\$3 OR collect\$3 OR gather\$3 OR obtain\$3 OR get\$1 OR getting OR attain\$3 OR acquir\$3) near10 (request\$3 OR input\$3 OR interact\$4 OR attempt\$1 OR ((ask\$3 OR apply\$3) adj for) OR demand\$3 OR inquir\$3 OR petition\$2 OR demand\$2 OR solict\$3 OR enquir\$3)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 03:29 PM
L25	7269234	(mobile adj phone OR telephone\$1 OR ((mobile OR portable OR wireless OR handheld OR hand adj held OR cell OR cellular OR smart) near10 (device\$1 OR computer\$1 OR phone\$1)) OR blackberr\$3 OR pda OR iphone\$1 OR ipad\$1 OR smartphone\$1 OR cellphone\$1 OR personal adj digital adj assistant\$1)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 03:37 PM
L26	5026013	(receiv\$3 OR collect\$3 OR gather\$3 OR obtain\$3 OR get\$1 OR getting OR attain\$3 OR acquir\$3) near10 (request\$3 OR input\$3 OR interact\$4 OR attempt\$1 OR ((ask\$3 OR apply\$3) adj for) OR demand\$3 OR inquir\$3 OR petition\$2 OR demand\$2 OR solict\$3 OR enquir\$3)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 03:37 PM
L27	1734579	L25 and L26	US-PGPUB; USPAT	OR	ON	ON	2020/01/20 03:37 PM
L28	134305	(wireless OR cashless OR mobile OR electronic\$2 OR virtual\$2 OR (electronic adj wallet\$1) OR e adj wallet\$1) near10 (payment\$1 OR money OR monies OR monetary OR fund\$3 OR dollar\$1 OR currenc\$5 OR (electronic\$1 adj	US-PGPUB; USPAT	OR	ON	ON	2020/01/20 03:58 PM
				Petitioner Exhibit 1002-0569			

		G06Q20/3227 OR G06Q20/325 OR G06Q20/327 OR G06Q20/3278 OR G06Q20/352 OR G06Q20/354 OR G06Q20/3572 OR G06Q20/3674 OR G06Q20/381 OR G06Q20/38215 OR G06Q20/3823 OR G06Q20/387 OR G06Q20/388 OR G06Q20/389 OR G06Q20/4037 OR G06Q20/425 OR G06Q30/0202 OR G06Q30/0204 OR G06Q30/0205 OR G06Q30/0214 OR G06Q30/0215 OR G06Q30/0226 OR G06Q30/0238 OR G06Q30/0241 OR G06Q30/0244 OR G06Q30/0246 OR G06Q30/0247 OR G06Q30/0248 OR G06Q30/0253 OR G06Q30/0255 OR G06Q30/0256 OR G06Q30/0267 OR G06Q30/0269 OR G06Q30/0277 OR G06Q30/0282 OR G06Q30/04 OR G06Q30/06 OR G06Q30/0607 OR G06Q30/0625 OR G06Q30/0639 OR G06Q30/0643 OR G06Q40/04 OR G06Q50/01 OR G06Q50/265 OR G07F17/3244 OR G07F17/3258 OR G07F17/3225 OR G07F17/34 OR G07F17/3211 OR G07F17/3213 OR G07F17/3223 OR G07F17/323 OR G07F17/3239 OR G07F17/3255 OR G07F17/326 OR G07F17/3288 OR G07F17/3293 OR G07F17/246 OR G07F17/32 OR G07F17/3204 OR G07F17/3206 OR					
						Petitioner Exhibit 1002-0571	

		G07F17/3209 OR G07F17/3218 OR G07F17/322 OR G07F17/3227 OR G07F17/3232 OR G07F17/3237 OR G07F17/3241 OR G07F17/3262 OR G07F17/3267 OR G07F17/3276 OR G07F17/3279 OR G07F17/329 OR G07F17/42 OR G07F19/20).CPC.)					
L30	7269234	(mobile adj phone OR telephone\$1 OR ((mobile OR portable OR wireless OR handheld OR hand adj held OR cell OR cellular OR smart) near10 (device\$1 OR computer\$1 OR phone\$1)) OR blackberr\$3 OR pda OR iphone\$1 OR ipad\$1 OR smartphone\$1 OR cellphone\$1 OR personal adj digital adj assistant\$1)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 04:01 PM
L31	134305	(wireless OR cashless OR mobile OR electronic\$2 OR virtual\$2 OR (electronic adj wallet\$1) OR e adj wallet\$1) near10 (payment\$1 OR money OR monies OR monetary OR fund\$3 OR dollar\$1 OR currenc\$5 OR (electronic\$1 adj transfer\$3) OR EFT OR (air adj pay\$4) OR pay\$1 OR paying)	US-PGPUB; USPAT	OR	ON	ON	2020/01/20 04:01 PM
L32	118302	L30 and L31	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 04:01 PM
L33	5026013	(receiv\$3 OR collect\$3 OR gather\$3 OR obtain\$3 OR get\$1 OR getting OR attain\$3 OR acquir\$3) near10 (request\$3 OR input\$3 OR interact\$4 OR attempt\$1 OR ((ask\$3 OR apply\$3) adj for) OR demand\$3 OR inquir\$3 OR petition\$2 OR	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 04:03 PM
				Petitioner Exhibit 1002-0572			

		demand\$2 OR solicit\$3 OR enquir\$3)					
L34	104076	L33 and L31	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 04:03 PM
L35	7269234	(mobile adj phone OR telephone\$1 OR ((mobile OR portable OR wireless OR handheld OR hand adj held OR cell OR cellular OR smart) near10 (device\$1 OR computer\$1 OR phone\$1)) OR blackberr\$3 OR pda OR iphone\$1 OR ipad\$1 OR smartphone\$1 OR cellphone\$1 OR personal adj digital adj assistant\$1)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 04:06 PM
L36	134305	(wireless OR cashless OR mobile OR electronic\$2 OR virtual\$2 OR (electronic adj wallet\$1) OR e adj wallet\$1) near10 (payment\$1 OR money OR monies OR monetary OR fund\$3 OR dollar\$1 OR currenc\$5 OR (electronic\$1 adj transfer\$3) OR EFT OR (air adj pay\$4) OR pay\$1 OR paying)	US-PGPUB; USPAT	OR	ON	ON	2020/01/20 04:06 PM
L37	118302	L35 and L36	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 04:06 PM
L38	5026013	(receiv\$3 OR collect\$3 OR gather\$3 OR obtain\$3 OR get\$1 OR getting OR attain\$3 OR acquir\$3) near10 (request\$3 OR input\$3 OR interact\$4 OR attempt\$1 OR ((ask\$3 OR apply\$3) adj for) OR demand\$3 OR inquir\$3 OR petition\$2 OR demand\$2 OR solicit\$3 OR enquir\$3)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 04:06 PM
L39	104076	L38 and L36	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 04:06 PM
L40	95881	L37 and L39	US-PGPUB; USPAT;	OR	Petitioner Exhibit 1002-0570	ON	2020/01/20 2:05:03

L41	39	("20180181945" "9875473" "20170161706" "20150170131" "20170255933" "20150170132" "9659296" "20150170130" "9256873" "20150227928" "20150170129" "20150170136" "9547859" "20170193508" "20160098711" "20150170145" "20150169312" "10438208" "9134994" "8856045" "20180165908" "20150178702" "20020156727" "20020156704" "20120323670" "7805338" "20100044444" "20150095235" "8915447" "20130018742" "20120267437" "20120323653" "9384480" "20150006386" "20150066760" "8925827" "20130013352" "8275312" "20090070272").pn.	FPRS; EPO; JPO; DERWENT US-PGPUB; USPAT	OR	ON	ON	04:06 PM 2020/01/20 04:10 PM
L42	39	L40 and L41	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 04:10 PM
L43	144	("20080167991" "200802 55947" "7127236" "7721 958" "8583496" "876964 3" "20120029691" "2012 0276845" "20130030931 "20130185150" "84380 66" "8479190" "2002016 4953" "20150073980" "D 599806" "D651608" "D66 2942" "D692456" "D7163 39" "D720765" "D727337 "D746866" "200701874 91" "20080033880" "200 80154735" "2008020122 6" "6584309" "7848980" "	US-PGPUB; USPAT	OR	ON	ON	2020/01/20 04:12 PM
Petitioner Exhibit 1002-0574							

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				Petitioner	Exhibit 1002-0575	

L44	7269234	" 20150235202 "20150346994 "D631060 "D651609 "D701527 "D726757 "D735751 "D741897 "6810234").PN. (mobile adj phone OR telephone\$1 OR ((mobile OR portable OR wireless OR handheld OR hand adj held OR cell OR cellular OR smart) near10 (device\$1 OR computer\$1 OR phone\$1)) OR blackberr\$3 OR pda OR iphone\$1 OR ipad\$1 OR smartphone\$1 OR cellphone\$1 OR personal adj digital adj assistant\$1)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 04:12 PM
L45	134305	(wireless OR cashless OR mobile OR electronic\$2 OR virtual\$2 OR (electronic adj wallet\$1) OR e adj wallet\$1) near10 (payment\$1 OR money OR monies OR monetary OR fund\$3 OR dollar\$1 OR currenc\$5 OR (electronic\$1 adj transfer\$3) OR EFT OR (air adj pay\$4) OR pay\$1 OR paying)	US-PGPUB; USPAT	OR	ON	ON	2020/01/20 04:12 PM
L46	118302	L44 and L45	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 04:12 PM
L47	5026013	(receiv\$3 OR collect\$3 OR gather\$3 OR obtain\$3 OR get\$1 OR getting OR attain\$3 OR acquir\$3) near10 (request\$3 OR input\$3 OR interact\$4 OR attempt\$1 OR ((ask\$3 OR apply\$3) adj for) OR demand\$3 OR inquir\$3 OR petition\$2 OR demand\$2 OR solict\$3 OR enquir\$3)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 04:12 PM
L48	104076	L47 and L45	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 04:12 PM
L49	95881	L46 and L48	US-PGPUB; USPAT; FPRS; EPO; JPO;	OR	ON	ON	2020/01/20 04:12 PM

Petitioner Exhibit 1002-0376

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L51	39	L49 and L50	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 04:12 PM
L52	1	L43 and L51	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	ON	2020/01/20 04:12 PM
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				Petitioner Exhibit 1002-0577			

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Petitioner Exhibit 1002-0578						

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				Petitioner Exhibit 1002-0579			

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PE2E SEARCH - Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
N1	77	(paresh.in. AND patel.in.)	US-PGPUB; USPAT	OR	ON	ON	2020/10/19 07:23 PM
N2	1130321	(vending OR (parking ADJ meter\$1) OR toll\$1 OR laundromat\$1 OR game\$1 OR (photo ADJ booth\$1) OR dispens\$3 OR (payment ADJ (accept\$3 OR operat\$3)) OR gaming OR slot\$1) near10 (machine\$1 OR booth\$1 OR unit\$1 OR equipment\$1 OR device\$1 OR apparatus)	US-PGPUB; USPAT	OR	ON	ON	2020/10/19 07:24 PM
N3	2713245	(nearfield OR wireless\$2 OR WiFi OR Wi-Fi OR Bluetooth\$1 OR (blue ADJ tooth\$1) OR NFC OR (short ADJ range) OR short ADJ wavelength\$1 OR BLE OR nearfield OR WAN)	US-PGPUB; USPAT	OR	ON	ON	2020/10/19 07:25 PM
N4	3242092	(receiv\$3 OR collect\$3 OR gather\$3 OR obtain\$3 OR get\$1 OR getting OR attain\$3 OR acquir\$3) near10 (request\$3 OR input\$3 OR interact\$4 OR attempt\$1 OR ((ask\$3 OR apply\$3) ADJ for) OR demand\$3 OR inquir\$3 OR petition\$2 OR demand\$2 OR solict\$3 OR enquir\$3)	US-PGPUB; USPAT	OR	ON	ON	2020/10/19 07:25 PM
N5	3665624	(mobile ADJ phone OR telephone\$1 OR ((mobile OR portable OR wireless OR handheld OR hand ADJ held OR cell OR cellular OR smart) near10 (device\$1 OR	US-PGPUB; USPAT	OR	ON	ON	2020/10/19 07:26 PM
				Petitioner Exhibit 1002-0580			

		computer\$1 OR phone\$1)) OR blackberr\$3 OR pda OR iphone\$1 OR ipad\$1 OR smartphone\$1 OR cellphone\$1 OR personal ADJ digital ADJ assistant\$1)					
N6	144689	(wireless OR cashless OR mobile OR electronic\$2 OR virtual\$2 OR (electronic ADJ wallet\$1) OR e ADJ wallet\$1) near10 (payment\$1 OR money OR monies OR monetary OR fund\$3 OR dollar\$1 OR currenc\$5 OR (electronic\$1 ADJ transfer\$3) OR EFT OR (air ADJ pay\$4) OR pay\$1 OR paying)	US-PGPUB; USPAT	OR	ON	ON	2020/10/19 07:28 PM
N7	36	N1 AND N2 AND N3 AND N4	US-PGPUB; USPAT	OR	ON	ON	2020/10/19 07:29 PM
N8	127381	N5 AND N6	US-PGPUB; USPAT	OR	ON	ON	2020/10/19 07:30 PM



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UNITED STATES DEPARTMENT OF COMMERCE
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BIB DATA SHEET

CONFIRMATION NO. 1006

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.		
15/878,352	01/23/2018	705	3696	104402-5035-US		
RULE						
APPLICANTS Payrange Inc., Portland, OR; INVENTORS Paresh K. Patel, Portland, OR; ** CONTINUING DATA ***** This application is a CON of 14/458,192 08/12/2014 PAT 9875473 which is a CIP of 14/456,683 08/11/2014 PAT 9256873 which is a CON of 14/335,762 07/18/2014 PAT 9547859 which is a CON of 14/214,644 03/14/2014 PAT 8856045 which claims benefit of 61/917,936 12/18/2013 and is a CIP of 29/477,025 12/18/2013 PAT D755183 ** FOREIGN APPLICATIONS ***** ** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** ** SMALL ENTITY ** 02/15/2018						
Foreign Priority claimed ☐ Yes ☒ No 35 USC 119(a-d) conditions met ☒ Yes ☐ No Verified and Acknowledged <u>/JOHN H HOLLY/</u> Examiner's Signature		☐ Met after Allowance <u>JHH</u> Initials	STATE OR COUNTRY OR	SHEETS DRAWINGS 45	TOTAL CLAIMS 20	INDEPENDENT CLAIMS 4
ADDRESS Morgan, Lewis & Bockius LLP (PA) 1400 Page Mill Road Palo Alto, CA 94304-1124 UNITED STATES						
TITLE METHOD AND SYSTEM FOR AN OFFLINE-PAYMENT OPERATED MACHINE TO ACCEPT ELECTRONIC PAYMENTS						
FILING FEE RECEIVED 1015	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:			☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit		

To: padocketingdepartment@morganlewis.com,vskliba@morganlewis.com,
From: PAIR_eOfficeAction@uspto.gov
Cc: PAIR_eOfficeAction@uspto.gov
Subject: Private PAIR Correspondence Notification for Customer Number 24341

Oct 23, 2020 04:35:38 AM

Dear PAIR Customer:

Morgan, Lewis & Bockius LLP (PA)
1400 Page Mill Road
Palo Alto, CA 94304-1124
UNITED STATES

The following USPTO patent application(s) associated with your Customer Number, 24341 , have new outgoing correspondence. This correspondence is now available for viewing in Private PAIR.

The official date of notification of the outgoing correspondence will be indicated on the form PTOL-90 accompanying the correspondence.

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Application	Document	Mailroom Date	Attorney Docket No.
15878352	NOA	10/23/2020	104402-5035-US
	892	10/23/2020	104402-5035-US
	1449	10/23/2020	104402-5035-US

To view your correspondence online or update your email addresses, please visit us anytime at <https://sportal.uspto.gov/secure/myportal/privatepair>.

If you have any questions, please email the Electronic Business Center (EBC) at EBC@uspto.gov with 'e-Office Action' on the subject line or call 1-866-217-9197 during the following hours:

Monday - Friday 6:00 a.m. to 12:00 a.m.

Thank you for prompt attention to this notice,

UNITED STATES PATENT AND TRADEMARK OFFICE
PATENT APPLICATION INFORMATION RETRIEVAL SYSTEM

PART B - FEE(S) TRANSMITTAL

Electronically filed December 4, 2020

Complete and send this form with applicable fee(s), to: MailMail Stop ISSUE FEE
Commissioner of Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
(571) 273-2885or Fax

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advanced orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS**MORGAN, LEWIS & BOCKIUS LLP**
1400 Page Mill Road
Palo Alto, CA 94304

Note: A certificate of mailing below can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing.

Certificate of Mailing

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)

(Signature)

(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTY'S DOCKET NO.	CONFIRMATION NO.
15/878,352	01/23/2018	Paresh K. Patel	104402-5035-US	1006

TITLE OF INVENTION METHOD AND SYSTEM FOR AN OFFLINE-PAYMENT OPERATED MACHINE TO ACCEPT ELECTRONIC PAYMENTS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$600	\$0	\$600	01/25/2021

EXAMINER	ART UNIT	CLASS-SUB CLASS
HOLLY, JOHN H	3696	705-044000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed

1. **Morgan, Lewis & Bockius LLP**

2. _____

3. _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE:

PAYRANGE INC.

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

PORTLAND, OR

Please check the appropriate assignee category or categories (will not be printed on the patent) ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

☒ Issue Fee☐ Advanced Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above.)

☒ Electronic Payment via Financial Manager☐ Non-electronic payment by credit card. Form PTO-2038 is attached.☒ The Director is hereby authorized to charge the required fee(s), or credit any overpayment, to Deposit Account Number 50-0310 (order no. 104402-5035-US).**5. Change in Small Entity Status** (from status indicated above)☐ a. Applicant certifying micro entity status. See 37 CFR 1.29.

NOTE: Absent a valid certification of Micro Entity (see form PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

☐ Applicant asserting small entity status. See 37 CFR 1.27.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

☐ Applicant changing to regular undiscounted fee status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be sign in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature: /Douglas J. Crisman/

Date: December 4, 2020

Printed Name: Douglas J. Crisman

Registration No. 39,951

Petitioner Exhibit 1002-0584

Electronic Patent Application Fee Transmittal

Application Number:	15878352			
Filing Date:	23-Jan-2018			
Title of Invention:	METHOD AND SYSTEM FOR AN OFFLINE-PAYMENT OPERATED MACHINE TO ACCEPT ELECTRONIC PAYMENTS			
First Named Inventor/Applicant Name:	Paresh K. Patel			
Filer:	Douglas James Crisman/Linda Quintana			
Attorney Docket Number:	104402-5035-US			
Filed as Small Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
UTILITY APPL ISSUE FEE	2501	1	600	600

Petitioner Exhibit 1002-0585

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				600

Electronic Acknowledgement Receipt

EFS ID:	41303484
Application Number:	15878352
International Application Number:	
Confirmation Number:	1006
Title of Invention:	METHOD AND SYSTEM FOR AN OFFLINE-PAYMENT OPERATED MACHINE TO ACCEPT ELECTRONIC PAYMENTS
First Named Inventor/Applicant Name:	Paresh K. Patel
Customer Number:	24341
Filer:	Douglas James Crisman/Linda Quintana
Filer Authorized By:	Douglas James Crisman
Attorney Docket Number:	104402-5035-US
Receipt Date:	04-DEC-2020
Filing Date:	23-JAN-2018
Time Stamp:	18:37:43
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$ 600
RAM confirmation Number	E2020B4I38190136
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Petitioner Exhibit 1002-0587

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	104402-5035-US_IssueFee_04-DEC-2020.pdf	126675	no	1
			b4f8d0f145b02c1a671c4d5302f9dc5cc23c71ee		
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30332	no	2
			6219aed7b95c9b2f9a585a45d3c773004fcf3b59		
Warnings:					
Information:					
Total Files Size (in bytes):			157007		
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					



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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/878,352	01/12/2021	10891608	104402-5035-US	1006

24341 7590 12/22/2020
Morgan, Lewis & Bockius LLP (PA)
1400 Page Mill Road
Palo Alto, CA 94304-1124

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment is 216 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

Payrange Inc., Portland, OR;
Paresh K. Patel, Portland, OR;

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To: padocketingdepartment@morganlewis.com,vskliba@morganlewis.com,
From: PAIR_eOfficeAction@uspto.gov
Cc: PAIR_eOfficeAction@uspto.gov
Subject: Private PAIR Correspondence Notification for Customer Number 24341

Dec 24, 2020 04:04:21 AM

Dear PAIR Customer:

Morgan, Lewis & Bockius LLP (PA)
1400 Page Mill Road
Palo Alto, CA 94304-1124
UNITED STATES

The following USPTO patent application(s) associated with your Customer Number, 24341 , have new outgoing correspondence. This correspondence is now available for viewing in Private PAIR.

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Application	Document	Mailroom Date	Attorney Docket No.
15878352	ISSUE.NTF	12/22/2020	104402-5035-US

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Monday - Friday 6:00 a.m. to 12:00 a.m.

Thank you for prompt attention to this notice,

UNITED STATES PATENT AND TRADEMARK OFFICE
PATENT APPLICATION INFORMATION RETRIEVAL SYSTEM

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent:	PATEL	Confirmation No.:	1006
Patent No.:	10,891,608	Serial No.:	15/878,352
Issued:	January 12, 2021	Filed:	January 23, 2018
For:	METHOD AND SYSTEM FOR AN OFFLINE-PAYMENT OPERATED MACHINE TO ACCEPT ELECTRONIC PAYMENTS	Attorney Docket No:	104402-5035-US

REQUEST FOR CERTIFICATE OF CORRECTION

Certificate of Corrections Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Upon review of the subject patent, Patentee's attorney discovered 1 error on the part of the Applicant. Patentee's attorney requests correction of the issued patent. A Form PTO 1050 Certificate of Correction is enclosed.

The Commissioner is authorized to charge required fees to our Deposit Account No. 50-0310 (order no. 104402-5035-US).

Respectfully submitted,

Date:	<u>February 19, 2021</u>	<u>/Douglas J. Crisman/</u>	<u>39,951</u>
		Douglas J. Crisman	(Reg. No.)
		MORGAN, LEWIS & BOCKIUS LLP	
		1400 Page Mill Road	
		Palo Alto, California 94304	
		(650) 843-4000	

**UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION**

Page 1 of 1

PATENT NO. : 10,891,608
APPLICATION NO. : 15/878,352
ISSUE DATE : January 12, 2021
INVENTOR(S) : PATEL

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the Bibliography, (71) Applicant: please delete "**Payrange Inc.,**" and insert **--PayRange Inc.,--**.

MAILING ADDRESS OF SENDER:
MORGAN, LEWIS & BOCKIUS LLP
1400 Page Mill Road
Palo Alto, CA 94304
(650) 843-4000

Petitioner Exhibit 1002-0592

Electronic Patent Application Fee Transmittal

Application Number:	15878352			
Filing Date:	23-Jan-2018			
Title of Invention:	METHOD AND SYSTEM FOR AN OFFLINE-PAYMENT OPERATED MACHINE TO ACCEPT ELECTRONIC PAYMENTS			
First Named Inventor/Applicant Name:	Paresh K. Patel			
Filer:	Douglas James Crisman/Deborah Carney			
Attorney Docket Number:	104402-5035-US			
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
CERTIFICATE OF CORRECTION	1811	1	160	160

Petitioner Exhibit 1002-0593

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				160

Electronic Acknowledgement Receipt

EFS ID:	41965394
Application Number:	15878352
International Application Number:	
Confirmation Number:	1006
Title of Invention:	METHOD AND SYSTEM FOR AN OFFLINE-PAYMENT OPERATED MACHINE TO ACCEPT ELECTRONIC PAYMENTS
First Named Inventor/Applicant Name:	Paresh K. Patel
Customer Number:	24341
Filer:	Douglas James Crisman/Deborah Carney
Filer Authorized By:	Douglas James Crisman
Attorney Docket Number:	104402-5035-US
Receipt Date:	19-FEB-2021
Filing Date:	23-JAN-2018
Time Stamp:	10:36:55
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$ 160
RAM confirmation Number	E20212IA37453469
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Petitioner Exhibit 1002-0595

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Certificate of Correction	104402-5035US_COC.pdf	287948	no	2
			9d9365624d879832e0a5e414f5a9fdd6c364a16c		
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30354	no	2
			3d47468ac728e424a21600525edcf1d220ac9147		
Warnings:					
Information:					
Total Files Size (in bytes):			318302		
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					



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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/878,352	01/23/2018	Paresh K. Patel	104402-5035-US	1006
24341	7590	03/01/2021		
Morgan, Lewis & Bockius LLP (PA)			EXAMINER	
1400 Page Mill Road			HOLLY, JOHN H	
Palo Alto, CA 94304-1124				
			ART UNIT	PAPER NUMBER
			3696	
			NOTIFICATION DATE	DELIVERY MODE
			03/01/2021	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

padocketingdepartment@morganlewis.com
vskliba@morganlewis.com

Response to the Request for Certificate of Correction

Patent No.

10891608

Applicant(s)

Patel, Paresh K.

Issue Date

01/12/2021

Docket No.

104402-5035-US

This is in response to the request for a Certificate of Correction filed 19 February 2021

☒ **Request Denied** - Consideration has been given to your request for the issuance of a Certificate of Correction under the provisions of 37 CFR 1.322 and/or 37 CFR 1.323. The Request is improper and denied for the reason(s) below:

1. ☐ Assignees' names and addresses (assignment data) printed in a patent, are based solely on information supplied in the appropriate space for identifying the assignment data on the Issue Fee Transmittal Form (PTOL-85b). Any request for a patent to be corrected to state the name of the assignee, must state that the assignment was submitted for recordation as set forth in 37 CFR 3.11 before issuance of the patent. Petition under 3.81 is to be filed for consideration of correction to assignee. The petition fee set forth in 37 CFR 1.17(i)(1) (currently \$140, \$70, \$35 for large, small and micro entities, respectively).
2. ☐ The alleged error in _____, is in fact an Amendment and/or Change made by the examiner and considered to be in accordance with the permissible amendments enumerated in the Manual of Patent Examining Procedure (MPEP) Section 1302.04. Applicant did not file objection or amendment under 37 CFR 1.312 prior to payment of the issue fee.
3. ☐ A petition under CFR 1.182 is required to correct the alleged errors in spelling or order of inventor's names, since inventor's names are printed solely in accordance with the type-written names, and in the order of the type-written names on the Application Data Sheet (ADS). The required fee currently under rule 1.17(f) (small entity \$200, large entity \$400, micro entity fee \$100).
4. ☐ With respect to the alleged error in changing the inventor name on the patent due to clerical error in ADS/OATH of related patents. The inventors name is printed in accordance with the OATH/ADS submitted at the time of filing the application. However, your attention is directed to C.F.R. 1.324, wherein a request is being made to change, add or delete inventor(s), after issuance of the patent.
5. ☐ With respect to the alleged error in _____, comparison of the printed patent with the corresponding location in the application file reveals that there is no discrepancy.
6. ☐ With respect to 37 CFR 1.72, the title should be brief but technically accurate and descriptive and should contain fewer than 500 characters. Inasmuch as the words "new," "improved," "improvement of," and "improvement in" are not considered as part of the title of an invention, these words should not be included at the beginning of the title of the invention and will be deleted when the Office enters the title into the Offices computer records, and when any patent issues.
7. ☐ The fee for correction under 37 CFR 1.323 is set forth in 37 CFR 1.20(a). ☐ Partial fee ☐ No fee was received with your request. Full fee payment is required before further action is taken on this request.
8. ☐ With respect to the request for corrected Letters Patent (Grant), corrections to the original Letters Patent are made under the provisions of Rule 1.322(b), not Rule 1.323, unless a petition is granted.
9. ☒ Other Comments: See Continuation Sheet

Further correspondence concerning this matter should be filed and directed to the Certificates of Correction Branch.

Legal Instrument Examiner: VALERIE JACKSON/
LIE, ODM

Phone: (571)272-3423

Certificates of Correction Branch email: CustomerServiceCoC@uspto.gov

CoC Central Phone Number: (703)756-1814

If applicable, information regarding a petition under 37 CFR 1.183 should be directed to the attention of the Commissioner for Patents using the FAX number (571) 273-8300

Continuation of Other Comments: The Applicant name on front page of patent was taken from the Applicant section of the Application Data Sheet (ADS), or the applicant was the inventor(s) if no applicant was specified in the ADS. No request to change the applicant in compliance with 37 CFR 1.46 (c) was filed during the pendency of the application. Since what is listed on the patent is correct relative to the patent application file record from which the patent issued, no correction is in order under 37 CFR 1.322 or 1.323.

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

PATENT WITHDRAWAL NOTICE

DATE WITHDRAWN

02/25/2021

WITHDRAWAL NUMBER

The following application has been **WITHDRAWN** from the
_____ issue.

SERIAL NO.

15/878,352

PATENT NUMBER

10891608

TITLE

METHOD AND SYSTEM FOR AN OFFLINE-PAYMENT OPERATED MACHINE TO ACCEPT
ELECTRONIC PAYMENTS

NAME AND ADDRESS

Paresh K. Patel
Portland, OR

REASON FOR WITHDRAWAL

Auto-petition to withdraw - Granted

APPROVED

/Kimberly House/ , Manager
Patent Publication Branch
Office of Data Management

Petitioner Exhibit 1002-0600

To: padocketingdepartment@morganlewis.com,vskliba@morganlewis.com,
From: PAIR_eOfficeAction@uspto.gov
Cc: PAIR_eOfficeAction@uspto.gov
Subject: Private PAIR Correspondence Notification for Customer Number 24341

Mar 01, 2021 03:55:11 AM

Dear PAIR Customer:

Morgan, Lewis & Bockius LLP (PA)
1400 Page Mill Road
Palo Alto, CA 94304-1124
UNITED STATES

The following USPTO patent application(s) associated with your Customer Number, 24341 , have new outgoing correspondence. This correspondence is now available for viewing in Private PAIR.

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Application	Document	Mailroom Date	Attorney Docket No.
15878352	CDEN	03/01/2021	104402-5035-US

To view your correspondence online or update your email addresses, please visit us anytime at <https://portal.uspto.gov/secure/myportal/privatepair>.

If you have any questions, please email the Electronic Business Center (EBC) at EBC@uspto.gov with 'e-Office Action' on the subject line or call 1-866-217-9197 during the following hours:

Monday - Friday 6:00 a.m. to 12:00 a.m.

Thank you for prompt attention to this notice,

UNITED STATES PATENT AND TRADEMARK OFFICE
PATENT APPLICATION INFORMATION RETRIEVAL SYSTEM

**The United States Patent and Trademark Office
PATENT TRIAL AND APPEAL BOARD**



A petition has been filed in Patent Number 10/891,608, Application Number 15/...352
on 5/27/2021 (Date).

The Case Number is PGR2021-0084.
(IPR, CBM, PGR, DER #)

To view the documents filed in this petition, go to <https://ptab.uspto.gov>.

Use the Search PTAB tab and enter the Patent Number or the Trial or Case Number and select the Search button.

Questions regarding this notice should be directed to the Patent Trial and Appeal Board at 571-272-7822.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

KIOSOFT TECHNOLOGIES, LLC and TECHTREX, INC.,
Petitioner,

v.

PAYRANGE INC.,
Patent Owner.

PGR2021-00084
Patent 10,891,608 B2

Before MEREDITH C. PETRAVICK, STACEY G. WHITE, and
GEORGE R. HOSKINS, *Administrative Patent Judges*.

PETRAVICK, *Administrative Patent Judge*.

DECISION
Denying Institution of Post-Grant Review
35 U.S.C. § 324(a)

I. INTRODUCTION

A. *Background and Summary*

KioSoft Technologies, LLC and TechTrex, Inc. (collectively, “Petitioner”) filed a Petition requesting post-grant review of claims 1–20 of U.S. Patent No. 10,891,608 B2 (Ex. 1002, “’608 patent”). Paper 2 (“Pet.”). PayRange Inc. (“Patent Owner”) filed a Preliminary Response. Paper 6

(“Prelim. Resp.”). With our authorization, Petitioner filed a Reply (Paper 8, “Reply”) and Patent Owner filed a Sur-reply (Paper 9, “Sur-reply”).

As set forth in 35 U.S.C. § 324(a), a post-grant review may not be instituted unless “the information presented in the petition filed under section 321, if such information is not rebutted, would demonstrate that it is more likely than not that at least 1 of the claims challenged in the petition is unpatentable.”¹

After considering the Petition, the Preliminary Response, Reply, Sur-reply and the evidence of record, we determine that Petitioner fails to demonstrate that it is more likely than not that at least one of the claims challenged in the Petition is unpatentable. Accordingly, we do not institute a post-grant review.

B. Related Matters

The '608 patent is the subject of *PayRange Inc. v. KioSoft Technologies, LLC et al.*, Case No. 1:20-cv-24342, in the U.S. District Court for the Southern District of Florida (“the district court litigation”). Pet. 11; Paper 3, 2. Related U.S. Patent Nos. 10,719, 833 and 10,891,614 are also the subject of the district court litigation. U.S. Patent No. 10,719,833 is challenged in PGR2021-00077 and U.S. Patent No. 10,891,614 is challenged in PGR2021-00093.

The '608 patent is related to U.S. Patent No. 9,659,296 and U.S. Patent No. 9,134,994, which are the subject of *PayRange Inc. v. Kiosoft Technologies, LLC et al.*, Case No. 1:20-cv-20970-RS in the U.S. District Court for the Southern District of Florida (“the '20970 district court

¹ Petitioner incorrectly states the standard for post-grant review as whether the Petition “shows a reasonable likelihood that the Petitioners will prevail on at least one of the challenged claims.” Pet. 10.

litigation”). Pet. 11; Paper 3, 2. U.S. Patent No. 9,659,296 was challenged in CBM2020-00026 and IPR2021-00086, in which we exercised discretion respectively under 35 U.S.C. § 324(a) and § 314(a) to deny institution. Pet. 11; Paper 3, 2.

C. The '608 Patent

The '608 patent is titled “Method and System for an Offline-Payment Operated Machine to Accept Electronic Payments” and issued on January 12, 2021. Ex. 1002, codes (45), (54). The '608 patent claims priority, through a chain of patent applications, to a provisional patent application filed on December 18, 2013. *Id.* at code (63).

The '608 patent describes retrofitting an offline-payment operated machine, such as a coin-operated vending machine, to accept electronic payments. *See generally id.* at 39:38–46:5; Figs. 28A–B, 29A–B, 30. Figure 28A of the '608 patent is reproduced below.

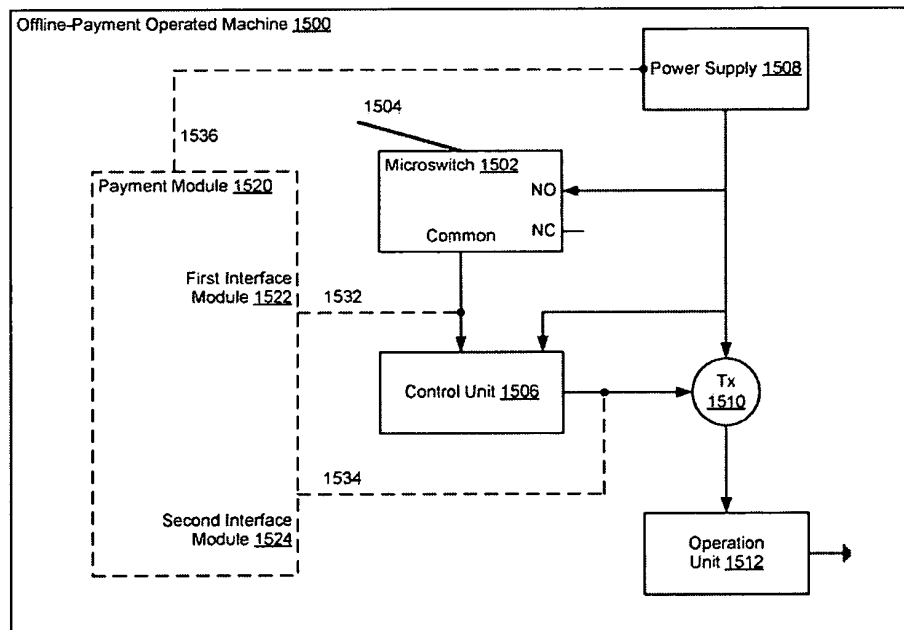


Figure 28A

Figure 28A depicts a block diagram of offline-payment operated machine 1500. *Id.* at 39:38–40. “[O]ffline-payment operated machine 1500 . . . is an electro-mechanical machine capable of accepting currency (e.g., coins), which is not connected to any networks (e.g., telephone, cellular, or Wi-Fi).” *Id.* at 39:40–44. Offline-payment operated machine 1500 has microswitch 1502, control unit 1506, and operation unit 1512. *Id.* at 39:49–51. Microswitch 1502 has a lever 1504 in offline-payment operated machine 1500’s coin slot. *Id.* at 39:57–65. When a coin slides down the coin slot, lever 1504 is depressed, closing microswitch 1502 and sending a pulse to control unit 1506. *Id.* at 39:61–40:6. “[W]hen the control unit 1506 receives a preset sequence of payment acceptance signals indicative of a preset number of coins being received by the microswitch 1502, the control unit 1506 initiates the operation of the offline-payment operated machine 1500.” *Id.* at 40:7–11.

Offline-payment operated machine 1500 is retrofitted to accept electronic payments by installing payment module 1520. *Id.* at 40:22–26. Payment module 1520 has first interface module 1522 and second interface module 1524, which sample payment acceptance signals from microswitch 1520 and control signals from control unit 1506 to initiate operation of machine 1500, respectively. *Id.* at 40:35–49. “By sampling and storing these signals, the payment module 1520 is able to simulate operation of a respective coin receiving switch in response to receiving the correct/preset number of coins so as to trigger operation of the offline-payment operated machine in response to completion of an electronic payment.” *Id.* at 41:43–48, 42:55–65.

D. Illustrative Claim

Claims 1, 7, 13, and 19 are independent. Claims 2–6 depend from claim 1. Claims 8–12 depend from claim 7. Claims 14–18 depend from claim 13. Claim 20 depends from claim 19. Claim 1 is illustrative of the claimed subject matter and is reproduced below with bracketed material added.

1. [1.0]² A payment module for an offline payment-operated machine including a coin receiving switch, the payment module comprising:

[1.1] a short-range wireless transceiver configured to communicate with one or more mobile devices;

[1.2] one or more processors;

[1.3] a first interface module configured to output to a control unit of the offline payment-operated machine one or more electrical pulses, each of the one or more electrical pulses emulating an analog signal generated by the coin receiving switch of the offline payment-operated machine in response to insertion of a single coin of a predetermined type in the offline payment-operated machine; and

[1.4a] memory with one or more programs for execution by the one or more processors, the one or more programs including instructions for:

[1.4b] storing, in the memory of the payment module, a number of the electrical pulses that must be received by the control unit to initiate an operation of the offline payment operating machine;

[1.4c] receiving a wireless request via the short-range wireless transceiver from a respective mobile device of the one or more mobile devices to initiate a cashless operation of the offline-payment operated machine; and

² Petitioner's designations to reference the elements of claim 1 are set forth in brackets. Herein we refer to the elements of claim 1 using Petitioner's designations. *See* Pet. 54–64.

- [1.4d1] in response to the wireless request:
determining a first number of electrical pulses to output via the first interface module to the control unit of the offline payment-operated machine in order to initiate the requested cashless operation of the offline payment-operated machine;
- [1.4d2] causing the offline payment-operated machine to initiate the requested cashless operation by issuing the first number of electrical pulses to the control unit via the first interface module; and
- [1.4d3] sending operation information corresponding to the initiated operation of the offline payment-operated machine to the respective mobile device via the short-range wireless transceiver.

Ex. 1002, 46:62–47:34.

E. *Prior Art and Asserted Grounds*

Petitioner asserts that claims 1–20 are unpatentable on the following grounds:

Claims Challenged	35 U.S.C. §	Basis/ Reference(s)
19–20	112(a)	Lack of Written Description
1–20	112(b)	Indefiniteness
5, 11, 17	112(d)	Failure to Further Limit
1–20	102	Breitenbach ³
1–20	103	Breitenbach, Yung ⁴
1–20	103	Breitenbach, Cole ⁵

Pet. 14–15. Petitioner relies on the Declaration of Gerald Smith (Ex. 1005).

³ U.S. Patent No. 9,092,768 B2 (issued July 28, 2015) (Ex. 1007) (“Breitenbach”).

⁴ U.S. Patent No. 7,110,954 B2 (issued Sept. 19, 2006) (Ex. 1011) (“Yung”).

⁵ U.S. Patent No. 6,743,095 B2 (issued June 1, 2004) (Ex. 1014) (“Cole”).

II. ANALYSIS

A. *Discretionary Denial under 35 U.S.C. § 324(a)*

Patent Owner contends we should exercise our discretion under 35 U.S.C. § 324(a) to deny institution of post-grant review. Prelim. Resp. 10–18 (citing, *e.g.*, *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”).

Because we determine that Petitioner fails to demonstrate that, if unrebutted, it is more likely than not that at least one of the claims challenged in the Petition is unpatentable, we need not address Patent Owner’s contentions concerning discretionary denial.

Accordingly, we do not exercise our discretion to deny institution under 35 U.S.C. § 324(a).

B. *Level of Ordinary Skill*

Petitioner contends:

A [person having ordinary skill in the art (“POSITA”)], as of the date of the alleged invention, would have had an education background of, or practical experience providing an equivalent to, a Bachelor of Science in Electrical Engineering, Computer Science, Information Technology, or a related/equivalent field and at least three years of work experience in electronic payment systems, vending machine technologies, or telecommunication solutions.

Pet. 29 (citing Ex. 1005 ¶ 52). Patent Owner does not dispute Petitioner’s contention in its Preliminary Response. *See generally* Prelim. Resp.

Based on the record before us, we adopt Petitioner’s asserted level of ordinary skill to determine whether it is more likely than not that at least one of the claims challenged in the Petition is unpatentable. This level of skill in the art is consistent with the disclosure of the ’608 patent and the prior art of record. *See In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995).

C. *Claim Construction*

We interpret a claim “using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b).” 37 C.F.R. § 42.200(b) (2020). This standard requires that we construe claims “in accordance with the ordinary and customary meaning of such claim[s] as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” *Id.*; *see also Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005). Only those terms that are in controversy need be construed, and only to the extent necessary to resolve the controversy. *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999); *see also Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (applying *Vivid Techs.* in the context of an AIA trial proceeding).

Petitioner proposes constructions of the following claim limitations:

- 1) “offline payment-operated machine”;
- 2) “interface”;
- 3) “storing, in the memory of the payment module, a number of the electrical pulses that must be received by the control unit to initiate an operation of the offline payment operating machine”;
- 4) “initiate a cashless operation of the offline-payment operated machine”; and
- 5) “sending operation information corresponding to the initiated operation of the offline payment-operated machine to the respective mobile device via the short-range wireless transceiver.”

Pet. 16–18. For each proposed construction, the Petition merely cites to the Declaration of Gerald Smith and does not provide any substantive

explanation as to why we should adopt Petitioner's proposed constructions. *See id.* (citing Ex. 1005 ¶¶ 73–104).

Patent Owner contends that the Petition is deficient in the manner that it construes claims because it does not evaluate the claim language, specification, and prosecution history. Prelim. Resp. 7. Patent Owner states that "Petitioners merely cite their expert's conclusory language, which simply adopts Petitioners' own constructions using substantially-similar language as the [P]etition." *Id.* (citing Ex. 1005 ¶¶ 73–104). Patent Owner argues that "[f]or the purposes of this preliminary response, no construction of the claims is required to deny institution." *Id.* at 8.

On this record, we determine that only the term "offline payment-operated machine" requires construction to the extent discussed below and that no other claim term requires explicit construction. *See Vivid Techs.*, 200 F.3d at 803 (construing explicitly only those claim terms in controversy and only to the extent necessary to resolve the controversy).

"offline payment-operated machine"

Petitioner proposes that "offline payment-operated machine" should be construed to mean

a machine that is not connected to any network and that accepts cash to perform an operation, wherein the machine includes a coin receiving switch that generates an analog signal in response to insertion of a single coin of a predetermined type in the machine.

Pet. 17. As support for its construction, Petitioner cites to the Declaration of Gerald Smith and does not provide any other substantive explanation as to why we should adopt Petitioner's proposed construction in the Petition. *See id.* (citing Ex. 1005 ¶¶ 82–84). Mr. Smith testifies that the term "offline payment-operated machine" would not have a plain and customary meaning

to a POSITA, but that a POSITA would have understood the term “offline” to mean not connected to any network. Ex. 1005 ¶¶ 82–83. Mr. Smith also testifies:

Based on my review of the entirety of the '608 patent, I found col. 39, lines 39–45 of the specification to be informative regarding the meaning of the term, “offline payment-operated machine.” Specifically, EX1002, 39:39–45 describe[s] the “offline-payment operated machine” to be “an electro-mechanical machine capable of accepting currency (e.g., coins), which is not connected to any networks (e.g., telephone, cellular, or Wi-Fi).”

Id. ¶ 84.

Patent Owner disagrees with Petitioner’s construction and argues that “Petitioners fail to explain why the machine’s ‘offline’ payment operability necessarily precludes the machines from also having, at least in some circumstances, a network connection.” Prelim. Resp. 8. According to Patent Owner, the '608 patent discloses some embodiments in which “the offline payment-operated machine also can have ‘online’ payment operability” (*id.* at 9 (citing Ex. 1002, 6:41–63, 9:23–27, 9:42–50)) and other embodiments in which the “offline payment-operated machine is not connected to any persistent networks” (*id.* (citing Ex. 1002, 9:46–48, 9:64–67, 22:8–12, 39:38–48)). Patent Owner further argues, under the doctrine of claim differentiation, that dependent claims 5, 11, and 17 “specify that the machine is not connected to any networks indicates that the machine as recited in claim[] 1 is not so limited.” *Id.* at 8–9.

We are not persuaded by Petitioner’s arguments because Petitioner’s proposed construction improperly attempts to read a particular embodiment described in the '608 patent into the claims. It is not proper to read limitations from the '608 patent into the claims:

Though understanding the claim language may be aided by the explanations contained in the written description, it is important not to import into a claim limitations that are not a part of the claim. For example, a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment.

SuperGuide Corp. v. DirecTV Enters., Inc., 358 F.3d 870, 875 (Fed. Cir. 2004). “[A]lthough the specification often describes very specific embodiments of the invention, [the Federal Circuit has] repeatedly warned against confining the claims to those embodiments.” *Phillips*, 415 F.3d at 1323.

As Mr. Smith points out, the ’608 patent does describe offline-payment operated machine 1500 as an electro-mechanical machine capable of accepting currency (e.g., coins), which is not connected to any networks (e.g., telephone, cellular, or Wi-Fi). Ex. 1005 ¶ 84 (citing Ex. 1002, 39:39–45). But, the ’608 patent describes offline-payment operated machine 1500 as merely one *example* of an offline-payment operated machine in *some implementations*. The ’608 patent states:

FIG. 28A illustrates a block diagram of an offline-payment operated machine 1500 *in accordance with some implementations*. For example, the offline-payment operated machine 1500 (e.g., a form of the machine 120) is an electro-mechanical machine capable of accepting currency (e.g., coins), which is not connected to any networks (e.g., telephone, cellular, or Wi-Fi). For example, the offline-payment operated machine 1500 is a washer or dryer at a laundromat, a parking meter, a car wash payment kiosk, or other offline-payment operated machine that dispenses goods and/or services.

Ex. 1002, 39:38–48 (emphases added). The ’608 patent emphasizes that offline-payment operated machine 1500 is merely an example. *Id.* at 39:52–56 (“The components of the offline-payment operated machine 1500 in FIG. 28A are examples and one of skill in the art will appreciate that various

other components may be included in or excluded from the offline-payment operated machine 1500.”). Petitioner provides no sufficient explanation as to why the language of the claims restricts the claims to this embodiment.

We are not persuaded by Mr. Smith’s testimony that a POSITA would have understood the term “offline” to mean not connected to any network (Ex. 1005 ¶ 82) because Mr. Smith’s testimony is inconsistent with the ’608 patent’s disclosure. The ’608 patent describes that offline-payment operated machine 1500 is a form of payment accepting unit or machine 120. *Id.* at 39:40–41. As Patent Owner points out (Prelim. Resp. 9), the ’608 patent discloses payment accepting units or machines 120 that are machines connected to a network connection, but may be temporarily offline.

For example, the ’608 patent discloses:

Although payment accepting units (or “machines”) that accept only cash (e.g., paper currency and coins) may not require a connection (persistent or non-persistent) to a network, traditional payment accepting units that accept cashless payments (e.g., credit cards, debit cards, and alternative mobile device payment methods, using, for example, smart phones) require a persistent connection to a network (wired or wireless) to facilitate the cashless payments. In other words, without a persistent (ongoing or accessible on demand) network connection, traditional payment accepting units cannot accept cashless payments. *Most traditional payment accepting units that accept cashless payments include the technology to accomplish this persistent network connection that allows them to connect to a remote server. If the network connection to a traditional machine is temporarily interrupted, cashless payments will be temporarily unavailable. If the machine is located in a location where no network connection is available, cashless payments is not possible.*

Ex. 1002, 6:30–48 (emphasis added); *see also id.* at 9:42–46 (“Traditionally, machines that accept payment other than cash require a persistent (ongoing

or accessible on demand) connection to a network to facilitate payment. This is true for machines that accept, for example, credit cards and debit cards”).

Further, we are persuaded by Patent Owner that the doctrine of claim differentiation indicates that the term *offline payment-operated machine* as recited in the independent claims is not so limited because dependent claims, such as claims 5, 11, and 17, recite that the offline payment-operated machine is not connected to any networks. *See, e.g.,* Ex. 1002, 47:60–62; *Alcon Research, LTD. v. Apotex Inc.*, 687 F.3d 1362, 1367 (Fed. Cir. 2012) (“Under the doctrine of claim differentiation, dependent claims are presumed to be of narrower scope than the independent claims from which they depend.”); *Intamin, Ltd. v. Magnetar Techs., Corp.*, 483 F.3d 1328, 1335 (Fed. Cir. 2007) (“An independent claim impliedly embraces more subject matter than its narrower dependent claim.”); *SRI Int’l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1122 (Fed. Cir. 1985) (“It is settled law that when a patent claim does not contain a certain limitation and another claim does, that limitation cannot be read into the former claim in determining either validity or infringement.”).

Accordingly, we do not adopt Petitioner’s proposed construction of “offline payment-operated machine” and, in particular, do not construe “offline payment-operated machine” to require a machine that is not connected to any network.

D. *Principles of Law*

To prevail on its challenges, Petitioner must demonstrate by a preponderance of the evidence that the claims are unpatentable. 35 U. S.C. § 326(e); 37 C.F.R. § 42.1(d). “[T]he petitioner has the burden from the onset to show with particularity why the patent it challenges is

unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016). This burden never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

E. § 112 Lack of Written Description – Claims 19 and 20

Claim 19 recites a payment module comprising:

[(a)] a first interface module configured to communicate with a control unit of the offline payment-operated machine using a serial interface to send one or more commands to the control unit;
[and]

[(b)] a *second* interface module configured to count one or more electrical pulses generated by the coin receiving switch of the offline payment-operated machine in response to the insertion of a single coin of a predetermined type in the offline payment-operated machine.

Ex. 1002, 50:7–21 (labeling and emphasis added).

Petitioner asserts that the specification of the ’608 patent lacks written description for limitation (b) because “it is only the ‘first interface module’ [1522] that is mentioned as counting one or more electrical pulses generated by the coin receiving switch” and the specification “does not hint, much less describe, the second interface module 1524 being capable of counting the electrical pulses from the coin receiving switch.” Pet. 32–33. In other words, claim 19 labels as the *second* interface module what the specification of the ’608 patent labels as the *first* interface module, and vice versa.

Patent Owner responds that claim 19 as originally filed and the remainder of the specification provides adequate written description support. Prelim. Resp. 19–22. Patent Owner argues: “Petitioners never explain why the as-filed claim, in view of the additional disclosure in the specification regarding the claimed components and the claimed configuration, is

insufficient to reasonably convey to a POSA that the inventors were in possession of claims 19–20.” *Id.* at 21.

Under 35 U.S.C. § 112(a), “[t]he specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same” To satisfy the written description requirement, the disclosure must reasonably convey to skilled artisans that the patentee possessed the claimed invention as of the filing date. *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (*en banc*). The requirement under § 112 does not demand that the specification recite the claimed invention *verbatim*. *Id.* at 1352 (citations omitted). The “claimed subject matter need not be described *in haec verba* in the specification in order for that specification to satisfy the description requirement.” *In re Smith*, 481 F.2d 910, 914 (CCPA 1973). “Original claims are part of the original specification and in many cases will satisfy the written description requirement.” *Mentor Graphics Corp. v. EVE-USA, Inc.*, 851 F.3d 1275, 1297 (Fed. Cir. 2017).

We agree with Patent Owner. Petitioner, itself, indicates that the specification of the ’608 patent discloses an interface module counting the electrical pulses generated by a coin receiving switch. The Petition states: “Specifically, the objective inquiry reveals that it is only the ‘first interface module’ that is mentioned as counting one or more electrical pulses generated by the coin receiving switch.” Pet. 32; *see also* Ex. 1005 ¶ 125 (corresponding testimony of Mr. Smith).

In this regard, the '608 patent states:

In FIG. 28A, the first interface module 1522 is configured to sample payment acceptance signals from the microswitch 1502 (e.g., a coin receiving switch) via lead 1532 of the offline-payment operated machine 1500. For example, the payment acceptance signals are indicative of a coin being received by the microswitch 1502 which depress lever 1504.

Ex. 1002, 40:35–40. The '608 patent also describes FIG. 28B as illustrating signals sampled by the first interface module 1522, “[f]or example, the preset sequence of payment acceptance signals indicative of the preset number of coins include pulses (i.e., payment acceptance signals) 1552, 1554, 1556, and 1558.” *Id.* at 40:50–58; *see also id.* at 41:59–42:4 (“payment acceptance signals are indicative of a preset number of coins received by the coin receiving switch”); 42:49–55 (describing identifying a count of pulses). The '608 patent further states: “[T]he terms used for labels (e.g., ‘first,’ ‘second,’ and ‘third’) are meant solely for purposes of designation and not for order or limitation.” *Id.* at 46:11–14. Claim 19, as originally filed, recited limitation (b), with the coin counting interface module being labeled as the second interface module. Ex. 1003, 283.

Given the originally filed claim 19 and the above disclosures of the '608 patent, Petitioner does not persuade us that the '608 patent does not reasonably convey to skilled artisans that the patentee did not possess the claimed invention as of the filing date. Petitioner does not show sufficiently that claims 19–20 are more likely than not unpatentable under 35 U.S.C. § 112(a) for lack of written description.

F. *§ 112 Indefiniteness – Claims 1–20*

Petitioner asserts that claims 1–20 are unpatentable under 35 U.S.C. § 112(b) for indefiniteness. Pet. 34. In particular, Petitioner argues that the

following limitations fail to inform a POSITA about the scope of the claimed invention with reasonable certainty:

“a first interface module configured to output to a control unit . . . one or more electrical pulses” (claims 1, 7, and 13);

“a first interface module configured to communicate with a control unit . . . using a serial interface . . .” (claim 19);

“a second interface module configured to store [or sample] control signals from the control unit” (claims 4, 10, and 16);

“a second interface module configured to count one or more electrical pulses . . . and to store an output of the control unit” (claim 19); and

“the offline payment-operated machine is not connected to any networks” (claims 5, 11, and 17).

Pet. 34–35, 40.

Patent claims must “particularly point[] out and distinctly claim[] the subject matter which the inventor or a joint inventor regards as the invention.” 35 U.S.C. § 112(b). “[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014); see USPTO Memorandum on the Approach to Indefiniteness Under 35 U.S.C. § 112 in AIA Post-Grant Proceedings (Jan. 6, 2021).⁶

⁶ Available at <https://www.uspto.gov/sites/default/files/documents/IndefinitenessMemo.pdf>.

1. Interface Module Terms – Claims 1–20

Petitioner asserts that 35 U.S.C. § 112(f) applies to each of these limitations:

“a first interface module configured to output to a control unit . . . one or more electrical pulses” (claims 1, 7, and 13);

“a first interface module configured to communicate with a control unit . . . using a serial interface . . . ” (claim 19);

“a second interface module configured to store [or sample] control signals from the control unit” (claims 4, 10, and 16); and

“a second interface module configured to count one or more electrical pulses . . . and to store an output of the control unit” (claim 19).

Pet. 35–45. In particular, Petitioner argues that “interface module” does not connote sufficiently definite structure and that a POSITA would understand this to be a nonce term. *See, e.g., id.* at 37–39 (citing Ex. 1005 ¶¶ 130–131).⁷

Patent Owner disagrees and argues that “interface module” “connotes sufficient structure to avoid means-plus-function construction because it [] denotes a type of device with a generally understood meaning in the mechanical arts.” Prelim. Resp. 24.

Means-plus-function claiming occurs when a claim term is drafted in a manner that invokes 35 U.S.C. § 112(f), which states:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such

⁷ As Petitioner’s analysis for these terms is substantially similar, we cite to Petitioner’s analysis concerning “a first interface module” as recited by claims 1, 7, and 13 as representative. *See* Pet. 40–45.

claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

The failure to use the term “means” in a claim element creates a rebuttable presumption that § 112(f) does not apply, but does not automatically prevent that element from being construed as a means-plus-function element. *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015) (en banc). In such a case, § 112(f) will apply if the claim term fails to recite sufficiently definite structure, or else recites a function without reciting sufficient structure for performing that function. *Williamson*, 792 F.3d at 1349. “The standard is whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure.” *Williamson*, 792 F.3d at 1349. Claim language does not invoke a § 112(f) construction if persons of ordinary skill in the art reading the specification would understand the term to be the name for a structure that performs the function, even when the term covers a broad class of structures or identifies the structures by their function. *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583 (Fed. Cir. 1996) (“Many devices take their names from the functions they perform.”).

We agree with Patent Owner that Petitioner has not sufficiently rebutted the presumption that § 112(f) does not apply. Petitioner relies upon Mr. Smith’s testimony to support its assertion that “interface module” is a nonce word. *See* Pet. 37–39 (citing Ex. 1005 ¶¶ 130–131). However, Mr. Smith’s testimony that “interface module” does not connote sufficiently definite structure and that a POSITA would understand this to be a nonce

term is conclusory and unsupported. *See* Ex. 1005 ¶¶ 130–131. This testimony is also inconsistent with other testimony.

Specifically, Mr. Smith also testifies that “a POSITA would understand the term ‘interface’ to mean: a place at which two or more systems connect to facilitate communication” (Ex. 1005 ¶ 73 (emphasis omitted) and that

[t]he plain and customary definition of “interface,” in my opinion, would be understood by a POSITA to be consistent with that provided by the Meriam-Webster online dictionary, namely *“the place at which independent and often unrelated systems meet and act on or communicate with each other.”*

Id. ¶ 75 (citing Ex. 1021, 2); *see also* Prelim. Resp. 24 (citing, *e.g.*, *High Point Sarl v. Sprint Nextel Corp.*, No. 09-02269-CM, 2012 U.S. Dist. LEXIS 108485, at *15 (D. Kan. Aug. 3, 2012) (“‘module’ and ‘interface’ . . . have a well-known meaning to those of skill in the art.” (citing IEEE Dictionary (“interface”) (5th ed. 1993) (defining “interface” as “a hardware or software component that connects two or more components for the purpose of passing from one to the other))). This definition of “interface” is consistent with the ’608 patent’s description of an industry standard multi-drop bus (MDB) which connects two or more systems to facilitate communications.

Ex. 1002, 6:1–29, 15:56–16:22. The Petition, itself, explains that the MDB “was developed as an interface to handle communications between electronic components in automated vending machines” and that the “MDB protocol served as an interface between various electronic components.” Pet. 22; *see also* Ex. 1005 ¶¶ 44, 48.

Given the above, we are not persuaded by Petitioner that “interface module” does not connote sufficiently definite structure and that a POSITA would understand this to be a nonce term. Thus, we are not persuaded that

Petitioner has sufficiently rebutted the presumption that §112(f) does not apply. Accordingly, we determine that Petitioner does not show sufficiently that claims 1–20 are more likely than not unpatentable under 35 U.S.C. § 112(b) for being indefinite with respect to the “interface module.”

2. *“the offline payment-operated machine is not connected to any networks”– Claims 5, 11, and 17*

Claims 5, 11, and 17 are dependent from claims 1, 7, and 13, respectively, and each recites “wherein the offline payment-operated machine is not connected to any networks.” Ex. 1002, 47:60–62, 48:58–59, 50:1–3. Applying its proposed construction of “offline payment-operated machine,” Petitioner asserts that “a POSITA would not be able to ascertain, with any degree of reasonable certainty, the scope of the alleged invention of claims 5, 11, or 17” because

the requirement that the machine not be connected to any networks, as specified in these dependent claims, suggests to a POSITA that “the offline payment-operated machine” recited in the independent claims 1, 7, and 13 can be connected to a network, which is contrary to the plain and customary meaning of “offline,” as understood by a POSITA.

Pet. 45–46.

Patent Owner responds, “[b]ecause Petitioners’ indefiniteness challenge to claims 5, 11, and 17 is premised on [its] misconstruction of the claim, Petitioners have failed to satisfy their burden to demonstrate indefiniteness of these claims.” Prelim. Resp. 30.

We agree with Patent Owner. Petitioner’s contention is based upon its proposed construction of “offline payment-operated machine,” which above we do not adopt. Petitioner does not show sufficiently that claims 5, 11, and 17 are more likely than not unpatentable under 35 U.S.C. § 112(b) for being indefinite.

G. Failure to Further Limit

Under 35 U.S.C. § 112(d), “a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed.” Claims 5, 11, and 17 are dependent from claims 1, 7, and 13, respectively, and each recites “wherein the offline payment-operated machine is not connected to any networks.” Ex. 1002, 47:60–62, 48:58–59, 50:1–3.

Petitioner contends that dependent claims 5, 11, and 17 fail to narrow the claims from which they depend because “[e]ach of independent claims 1, 7, and 13 specifies the ‘payment-operated machine’ is offline” when payment-operated machine is given Petitioner’s proposed construction. Pet. 46–47 (emphasis omitted). Petitioner’s proposed construction requires that the offline payment-operated machine is not connected to any networks. *Id.* at 17, 46–47. Patent Owner responds that Petitioner’s proposed construction is incorrect and “that the machine has an offline payment capability does not exclude the machine from also having a connection to a network.” Prelim. Resp. 30–31. We agree with Patent Owner. Petitioner’s contention is based upon its proposed construction of “offline payment-operated machine,” which above we do not adopt. Petitioner does not show sufficiently that claims 5, 11, and 17 are more likely than not unpatentable under 35 U.S.C. § 112(d) for failing to further limit the claim from which they depend.

H. Breitenbach Grounds

1. Overview of Breitenbach

Breitenbach is titled “Machine Retrofits and Interactive Soda Fountains” and published on July 18, 2015, from an application filed on January 11, 2011. Ex. 1007, codes (22), (45), (54).

Breitenbach describes coupling a conventional vending machine to a retrofit device to enhance services. *Id.* at 2:15–24. Figure 1 of Breitenbach is reproduced below.

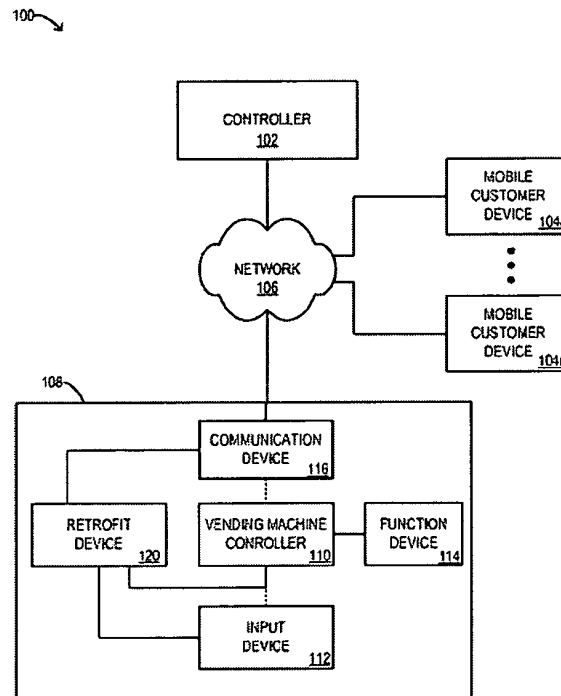


FIG. 1

Figure 1 depicts a block diagram of an embodiment of Breitenbach's system. *Id.* at 1:58–59; 4:11–12. The system includes controller 102 communicating with mobile customer devices 104a–n via network 106 and machine 108. *Id.* at 4:11–16. Machine 108 may be a vending machine having input device 112, function device 114, communication device 116, and vending machine controller 110. *Id.* at 4:16–19. Machine 108 may include retrofit device 120. *Id.* at 4:26–27.

Figure 2 of Breitenbach is reproduced below.

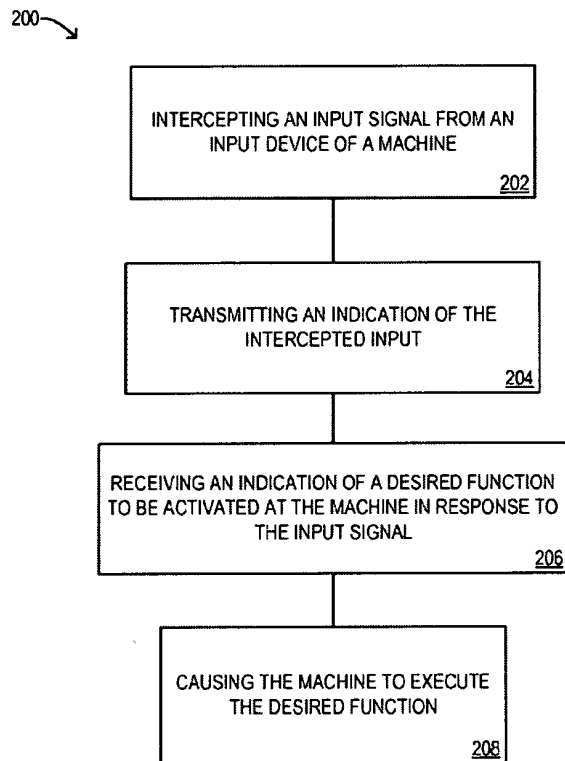


Figure 2 depicts a flow diagram of method 200. *Id.* at 7:37–38. For step 204 (“transmitting an indication of the intercepted input”), Breitenbach describes retrofit device 120 sending a signal indicative of a customer’s input device or system, such as controller 102. *Id.* at 8:14–21. Breitenbach describes in conjunction with step 206 (“receiving an indication of a desired function to be activated at the machine in response to the input signal”), that “[s]pecially-programmed instructions stored and/or executed by the controller [102] may, for example, be executed to determine an appropriate action to be taken at the machine [108] in response to the customer’s input.” *Id.* at 8:30–32, 8:35–38. With respect to step 208 (“causing the machine to execute the desired function”), Breitenbach states:

The retrofit device may, based on the received indication of the desired function for example, send a signal to the machine (e.g.,

to the VMC 110 and/or the function device 114 of FIG. 1) that causes the machine to undertake the desired function. In the case that the desired function is the dispensing and/or providing of a unit of product, for example, the retrofit device may transmit a signal that causes the machine to dispense the desired unit of product—such as by sending a signal indicative of payment to a payment acceptance device of the machine. The retrofit device may, in some embodiments, “fool” the machine by replicating a “coin-in” signal indicative of the proper payment amount for the desired unit of product, causing the machine to dispense the unit of product.

Id. at 8:49–62.

2. Anticipation by Breitenbach — Claims 1–20

A claim is anticipated under § 102 “only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987). “Inherent anticipation requires that the missing descriptive material is ‘necessarily present,’ not merely probably or possibly present, in the prior art.” *Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1295 (Fed. Cir. 2002) (quoting *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999)); *see also Allergan, Inc. v. Apotex Inc.*, 754 F.3d 952, 958 (Fed. Cir. 2014).

a) Independent Claim 1

Petitioner contends that Breitenbach anticipates claim 1. Pet. 47–65. In particular, Petitioner contends that Breitenbach inherently describes claim limitation 1.4b, which requires a program including instructions for “storing, in the memory of the payment module, a number of the electrical pulses that must be received by the control unit to initiate an operation of the offline payment operating machine.” Pet. 60; Ex. 1002, 47:9–15. For claim limitation 1.4b, the Petition states:

Breitenbach inherently stores in the memory of the retrofit device (120/320/420/520/720) the number of electrical pulses needed to “fool” the VMC (110/410/510/910) into determining the coin-acceptance mechanism received the appropriate number of coins for operation. EX1005, ¶¶184-185. The retrofit device does this “by replicating a ‘coin-in’ signal indicative of the proper payment amount for the desired unit of product, causing the machine to dispense the unit of product.” *Id.*, 8:47-62; EX1005, ¶¶ 185-186. In order to replicate the “coin-in” signal, the retrofit device inherently stores and determines the number of electrical pulses needed by the VMC to initiate an operation of the coin-operated machine (108/708). *Id.*

Pet. 60; *see also* Pet. 51–52; Ex. 1005 ¶¶ 110–111, 184–186 (substantively similar testimony of Mr. Smith).

Patent Owner disagrees and argues that “the retrofit device that Breitenbach discloses does not *necessarily* store, in the memory *of the retrofit device*, a number of electrical pulses that must be received by a control unit to initiate an operation of the machine.” Prelim. Resp. 32. Patent Owner contends that Petitioner ignores that Breitenbach describes that machine 108 is connected to controller 102 through network 106 and storing operation instructions remote from the machine at controller 102. *Id.* at 32–33 (citing Ex. 1007, 4:11–54, 5:9–46, 6:51–61, 17:48–18:46, Fig. 1, Fig. 7).

We agree with Patent Owner. As acknowledged by Petitioner, Breitenbach does not explicitly describe “the particular structure included in the retrofit device to generate and output the ‘coin-in’ signals to the VMC to ‘fool’ the machine into detecting proper payment for a machine operation.” Pet. 99; *see generally* Ex. 1007. Breitenbach does state that

[t]he retrofit device may, in some embodiments, “fool” the machine by replicating a “coin-in” signal indicative of the proper payment amount for the desired unit of product, causing the

machine to dispense the unit of product.

Ex. 1007, 8:58–62. But, Petitioner does not sufficiently explain why this necessarily means that “[i]n order to replicate the ‘coin-in’ signal, the retrofit device inherently stores and determines the number of electrical pulses” (Pet. 60). Mr. Smith’s testimony is similarly conclusory and does not sufficiently support Petitioner’s theory of inherency. Ex. 1005 ¶¶ 110–111, 185–186. Further as Patent Owner points out (Prelim. Resp. 32–33), Petitioner’s analysis does not sufficiently account for Breitenbach’s descriptions of storing operation instructions remote from machine 108 at controller 102. *See, e.g.*, Ex. 1007, 6:51–61, 8:35–38 (“Specially-programmed instructions stored and/or executed by the controller [102] may, for example, be executed to determine an appropriate action to be taken at the machine [108] in response to the customer’s input.”),

Accordingly, we determine that Petitioner does not show sufficiently that claim 1 is more likely than not unpatentable under 35 U.S.C. § 102 as being anticipated by Breitenbach.

b) Independent Claims 7, 13, and 19

Independent claims 7, 13, and 19 recite limitations similar to limitation 1.4b. Ex. 1002, 48:12–15, 49:17–20, 50:28–31. Petitioner merely references its analysis of claim 1 to show that Breitenbach anticipates claims 7, 13, and 19 and does not provide any additional explanation. Pet. 74–75 (claim 7), 83 (claim 13), 92 (claim 19). For the same reasons as discussed above with respect to limitation 1.4b, Petitioner does not show sufficiently that claims 7, 13, and 19 are more likely than not anticipated by Breitenbach.

c) Dependent Claims

Claims 2–6 depend from claim 1. Claims 8–12 depend from claim 7. Claims 14–18 depend from claim 13. Claim 20 depends from claim 19.

For the same reasons as discussed above with respect to limitation 1.4b, Petitioner does not sufficiently show that claims 2–6, 8–12, 14–18, and 20 are more likely than not anticipated by Breitenbach.

3. Obviousness over Breitenbach and Yung — Claims 1–20

Petitioner does not rely upon Yung to cure the above deficiency of Breitenbach. *See* Pet. 104 (mapping limitation 1.4b by reference to the Petition’s anticipation ground). Accordingly, we determine that Petitioner does not sufficiently show that claims 1–20 are more likely than not unpatentable under 35 U.S.C. § 103 over Breitenbach and Yung.

4. Obviousness over Breitenbach and Cole — Claims 1–20

Petitioner does not rely upon Cole to cure the above deficiency of Breitenbach. Pet. 112 (mapping limitation 1.4b by reference to the Petition’s anticipation ground). Accordingly, we determine that Petitioner does not sufficiently show that claims 1–20 are more likely than not unpatentable under 35 U.S.C. § 103 over Breitenbach and Cole.

III. CONCLUSION

For the foregoing reasons, we conclude that the information presented in the Petition fails to establish that it is more likely than not that at least one claim of the ’608 patent is unpatentable. Accordingly, we do not institute post-grant review of the ’608 patent.

IV. ORDER

It is ORDERED that the Petition is denied, and we do not institute post-grant review of any claim of the ’608 patent based on the grounds asserted in this Petition.

PGR2021-00084
Patent 10,891,608 B2

For PETITIONER:

Holiday Banta
Safet Metjahic
ICE MILLER LLP
H.Banta@icemiller.com
Safet.Metjahic@icemiller.com

For PATENT OWNER:

Michael Rosato
Matthew Argenti
Jad Mills
WILSON SONSINI GOODRICH & ROSATI
mrosato@wsgr.com
margenti@wsgr.com
jmills@wsgr.com

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TO: Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been
filed in the U.S. District Court District of Delaware on the following

☐ Trademarks or ☒ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED 4/19/2022	U.S. DISTRICT COURT District of Delaware
PLAINTIFF PAYRANGE INC.		DEFENDANT CSC SERVICEWORKS, INC., and CSC SERVICEWORKS HOLDINGS, INC.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 8,856,045	10/7/2014	PAYRANGE INC.
2 10,438,208	10/8/2019	PAYRANGE INC.
3 10,891,608	1/21/2021	PAYRANGE INC.
4		
5		

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE
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Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case Petitioner Exhibit 1002-0632

AO 126 (Rev. 09/10)

TO: Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court District of Delaware on the following

☐ Trademarks or ☒ Patents. (☐ the patent action involves 35 U.S.C. § 292.);

DOCKET NO. 22-502-VAC	DATE FILED 4/19/2022	U.S. DISTRICT COURT District of Delaware
PLAINTIFF PAYRANGE INC.		DEFENDANT CSC SERVICEWORKS, INC., and CSC SERVICEWORKS HOLDINGS, INC.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 8,856,045	10/7/2014	PAYRANGE INC.
2 10,438,208	10/8/2019	PAYRANGE INC.
3 10,891,608	1/21/2021	PAYRANGE INC.
4		
5		

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT <i>See attached</i>

CLERK John A. Cerino	(BY) DEPUTY CLERK	DATE 8-23-2022
--------------------------------	-------------------	--------------------------

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
 Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

Petitioner Exhibit 1002-0633

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

PAYRANGE INC.,

Plaintiff

v.

CSC SERVICEWORKS, INC., and
CSC SERVICEWORKS HOLDINGS, INC.,

Defendant.

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C.A. No. 22-502 (VAC)

NOTICE OF VOLUNTARY DISMISSAL WITHOUT PREJUDICE

Pursuant to Fed. R. Civ. P. 41(a)(1)(A)(i), Plaintiff PayRange Inc. hereby dismisses this action without prejudice, with each party bearing their own costs and fees. Defendants CSC ServiceWorks, Inc. and CSC ServiceWorks Holdings, Inc. have not served an answer or a motion for summary judgment.

WILSON SONSINI GOODRICH & ROSATI, P.C.

OF COUNSEL:

James C. Yoon
Ryan R. Smith
Jamie Y. Otto
WILSON SONSINI GOODRICH & ROSATI, P.C.
650 Page Mill Road
Palo Alto, CA 94304

/s/ Ian R. Liston

Ian R. Liston (#5507)
Jennifer A. Ward (#6476)
222 Delaware Avenue, Suite 800
Wilmington, DE 19801
(302) 304-7600
iliston@wsgr.com
jward@wsgr.com

Counsel for Plaintiff

August 23, 2022

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CSC SERVICEWORKS, INC.,
Petitioner,

v.

PAYRANGE, INC.,
Patent Owner.

Case IPR2023-01188
Patent 10,891,608

Mailed: July 26, 2023

Before Cathy Underwood, *Trial Paralegal*

NOTICE OF FILING DATE ACCORDED TO PETITION
AND
TIME FOR FILING PATENT OWNER PRELIMINARY RESPONSE

The petition for *inter partes* review, filed in the above proceeding has been accorded the filing date of July 17, 2023.

Patent Owner may file a preliminary response to the petition no later than three months from the date of this notice. The preliminary response is limited to setting forth the reasons why the requested review should not be instituted. Patent Owner may also file an election to waive the preliminary response to expedite the proceeding. For more information, please consult

the Office Patent Trial Practice Guide, 77 Fed. Reg. 48756 (Aug. 14, 2012), which is available on the Board Web site at <http://www.uspto.gov/PTAB>.

Patent Owner is advised of the requirement to submit mandatory notice information under 37 C.F.R. § 42.8(a)(2) within 21 days of service of the petition. Mandatory notices include identifying any other judicial or administrative matter that would affect, or be affected by, a decision in the proceeding. 37 C.F.R. § 42.8(b)(2). Such administrative matters include requests for certificates of correction.

The parties are encouraged to use the heading on the first page of this Notice for all future filings in the proceeding.

The parties are advised that under 37 C.F.R. § 42.10(c), recognition of counsel *pro hac vice* requires a showing of good cause. The parties are authorized to file motions for *pro hac vice* admission under 37 C.F.R. § 42.10(c). Such motions shall be filed in accordance with the “Order -- Authorizing Motion *for Pro Hac Vice* Admission” in Case IPR2013-00639, Paper 7, a copy of which is available on the Board Web site under “Representative Orders, Decisions, and Notices.”

The parties are reminded that unless otherwise permitted by 37 C.F.R. § 42.6(b)(2), all filings in this proceeding must be made electronically in the Patent Trial Appeal Case Tracking System (P-TACTS), accessible from the Board Web site at <http://www.uspto.gov/PTAB>.

To file documents, users must first obtain a user ID by registering with MyUSPTO. Information regarding how to register with MyUSPTO and use P-TACTS is available at the Board Web site at <https://www.uspto.gov/patents/ptab/patent-trial-and-appeal-case-tracking-system-p-tacts>.

The parties are directed to contact the Board within a month of this Order if there is a need to discuss proposed changes to this Scheduling Order or proposed motions that have not been authorized in this Order or other prior Order or Notice. *See* Consolidated Trial Practice Guide (“Trial Practice Guide”)^[1] at 9–10, 65 (guidance in preparing for a conference call); *see also* 84 Fed. Reg. 64,280 (Nov. 21, 2019). A request for an initial conference call shall include a list of proposed motions, if any.

The parties may request additional conference calls as needed. Any email requesting a conference call with the Board should: (a) copy all parties, (b) indicate generally the relief being requested or the subject matter of the conference call, (c) include multiple times when all parties are available, (d) state whether the opposing party opposes any relief requested, and (e) if opposed, either certify that the parties have met and conferred telephonically or in person in an attempt to reach agreement, or explain why such meet and confer did not occur. The email may not contain substantive argument and, unless otherwise authorized, may not include attachments. *See* Trial Practice Guide at 9–10. If practicable, in order to ensure emails are consistent with the above, the panel recommends that the parties send a single, joint email that includes items (a)–(e).

If there are any questions pertaining to this notice, please contact Cathy Underwood at 571-272-8358 or the Patent Trial and Appeal Board at 571-272-7822.

^[1] Available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

IPR2023-01188
Patent 10,891,608

PETITIONER:

Jason R. Mudd
Mark Schafer
Kyle Friesen
Shook, Hardy & Bacon
jmudd@shb.com
mschafer@shb.com
kfriesen@shb.com

PATENT OWNER:

Morgan, Lewis & Bockius LLP
1400 Page Mill Road
Palo Alto, CA 94304

NOTICE CONCERNING ALTERNATIVE DISPUTE RESOLUTION (ADR)

The Patent Trial and Appeal Board (PTAB) strongly encourages parties who are considering settlement to consider alternative dispute resolution as a means of settling the issues that may be raised in an AIA trial proceeding. Many AIA trials are settled prior to a Final Written Decision. Those considering settlement may wish to consider alternative dispute resolution techniques early in a proceeding to produce a quicker, mutually agreeable resolution of a dispute or to at least narrow the scope of matters in dispute. Alternative dispute resolution has the potential to save parties time and money.

Many non-profit organizations, both inside and outside the intellectual property field, offer alternative dispute resolution services. Listed below are the names and addresses of several such organizations. The listings are provided for the convenience of parties involved in cases before the PTAB; the PTAB does not sponsor or endorse any particular organization's alternative dispute resolution services. In addition, consideration may be given to utilizing independent alternative dispute resolution firms. Such firms may be located through a standard keyword Internet search.

CPR INSTITUTE FOR DISPUTE RESOLUTION	AMERICAN INTELLECTUAL PROPERTY LAW ASSOCIATION (AIPLA)	AMERICAN ARBITRATION ASSOCIATION (AAA)	WORLD INTELLECTUAL PROPERTY ORGANIZATION (WIPO)	AMERICAN BAR ASSOCIATION (ABA)
Telephone: (212) 949-6490	Telephone: (703) 415-0780	Telephone: (212) 484-3266	Telephone: 41 22 338 9111	Telephone : (202) 662-1000
Fax: (212) 949-8859	Fax: (703) 415-0786	Fax: (212) 307-4387	Fax: 41 22 733 5428	N/A
575 Lexington Ave New York, NY 10022	241 18th Street, South, Suite 700 Arlington, VA 22202	140 West 51st Street New York, NY 10020	34, chemin des Colombettes CH-1211 Geneva 20, Switzerland	1050 Connecticut Ave, NW Washington D.C. 20036
www.cpradr.org	www.aipla.org	www.adr.org	www.wipo.int	www.americanbar.org

If parties to an AIA trial proceeding consider using alternative dispute resolution, the PTAB would like to know whether the parties ultimately decided to engage in alternative dispute resolution and the reasons why or why not. If the parties actually engage in alternative dispute resolution, the PTAB would be interested to learn what mechanism (e.g., arbitration,

IPR2023-01188
Patent 10,891,608

mediation, etc.) was used and the general result. Such a statement from the parties is not required but would be helpful to the PTAB in assessing the value of alternative dispute resolution to parties involved in AIA trial proceedings. To report an experience with ADR, please forward a summary of the particulars to the following email address:
PTAB_ADR_Comments@uspto.gov

The United States Patent and Trademark Office
PATENT TRIAL AND APPEAL BOARD



A petition has been filed in Patent Number 10,891,608, Application Number 15/878,352
on 7/17/23 (Date).

The Case Number is IPR2023-01188.
(IPR, CBM, PGR, DER #)

To view the documents filed in this petition, go to <https://ptab.uspto.gov>.

Use the Search PTAB tab and enter the Patent Number or the Trial or Case Number and select the Search button.

Questions regarding this notice should be directed to the Patent Trial and Appeal Board at 571-272-7822.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CSC SERVICEWORKS, INC.,
Petitioner,

v.

PAYRANGE INC.,
Patent Owner.

IPR2023-01188
Patent 10,891,608 B2

Before MEREDITH C. PETRAVICK, STACEY G. WHITE, and
GEORGE R. HOSKINS, *Administrative Patent Judges*.

PETRAVICK, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

A. *Background and Summary*

CSC ServiceWorks, Inc. (“Petitioner”) filed a Petition requesting *inter partes* review of claims 1, 2, 4–8, 10–14, and 16–20 (“the challenged claims”) of U.S. Patent No. 10,891,608 B2 (Ex. 1001, “the ’608 patent”). Paper 2 (“Pet.”). PayRange Inc. (“Patent Owner”) filed a Preliminary Response. Paper 6 (“Prelim. Resp.”). We authorized the parties to submit additional briefing to address an argument concerning 35 U.S.C. § 315 raised by Patent Owner. Ex. 3002. Petitioner filed a Reply (Paper 7) and Patent Owner filed a Sur-reply (Paper 8).

Under 35 U.S.C. § 314(a), an *inter partes* review may not be instituted unless the information presented in the petition “shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.”

After considering the Petition, the Preliminary Response, and the evidence of record, we determine the information presented fails to show a reasonable likelihood that Petitioner would prevail in establishing the unpatentability of at least one of the challenged claims of the ’608 patent. Accordingly, we do not institute an *inter partes* review of claims 1, 2, 4–8, 10–14, and 16–20 of the ’608 patent on the grounds asserted in the Petition.

B. *Real Parties-In-Interest*

Petitioner identifies itself, CSC ServiceWorks, Inc., as the real party-in-interest. Pet. 6, 80. Patent Owner identifies itself, PayRange Inc., as the real party-in-interest. Paper 4, 1.

Because we determine that the information presented in the Petition fails to show reasonable likelihood that Petitioner would prevail in

establishing the unpatentability of any of the claims of the '608 patent, we do not need to reach Patent Owner's argument concerning an alleged time-bar under 35 U.S.C. § 315 due to unidentified real parties-in-interest. *See* Prelim. Resp. 6–12.

C. Related Matters

Petitioner and Patent Owner identify the following related court proceedings:

PayRange Inc. v. CSC ServiceWorks, Inc., Case No. 1:23-cv-00278 (D. Del.)

PayRange Inc. v. CSC ServiceWorks, Inc., Case No. 1:22-cv-00502 (D. Del.)

PayRange Inc. v. KioSoft Techs., LLC, Case No. 1-20-cv-24342 (S.D. Fla.)

Pet. 80; Paper 4, 1.

Patent Owner identifies additionally the following related court proceeding:

PayRange Inc. v. Kiosoft Techs., LLC, Case No. 1-20-cv-20970 (S.D. Fla.)

Paper 4, 1.

Patent Owner also identifies the following related Board proceedings:

KioSoft Techs., LLC v. PayRange Inc., CBM2020-00026 (U.S. Patent No. 9,659,296)

KioSoft Techs., LLC v. PayRange Inc., IPR2021-00086 (U.S. Patent No. 9,659,296)

CSC ServiceWorks, Inc. v. PayRange Inc., IPR2023-01186 (U.S. Patent No. 8,856,045)

CSC ServiceWorks, Inc. v. PayRange Inc., IPR2023-01187 (U.S. Patent No. 10,438,208)

Kiosoft Techs., LLC v. PayRange Inc., PGR2021-00077 (U.S. Patent No. 10,719,833)

Kiosoft Techs., LLC v. PayRange Inc., PGR2021-00084 (U.S. Patent No. 10,891,608)

Kiosoft Techs., LLC v. PayRange Inc., PGR2021-00093 (U.S. Patent No. 10,891,614)

Kiosoft Techs., LLC v. PayRange Inc., PGR2022-00035 (U.S. Patent No. 11,074,580)

KioSoft Techs., LLC v. PayRange Inc., PGR2023-00042 (U.S. Patent No. 11,481,772)

Paper 4, 1–2.

D. The '608 Patent (Ex. 1001)

The '608 patent, titled “Method and System for an Offline-Payment Operated Machine to Accept Electronic Payments,” describes retrofitting an offline-payment operated machine, such as a vending machine, laundromat machine, parking meter, kiosk, etc., to accept electronic payments.

Ex. 1001, code (54), 1:41–52, 2:34–44. Figure 28A, reproduced below, is a block diagram of a retrofitted offline-payment operated machine. *Id.* at 39:38–40, 40:22–26.

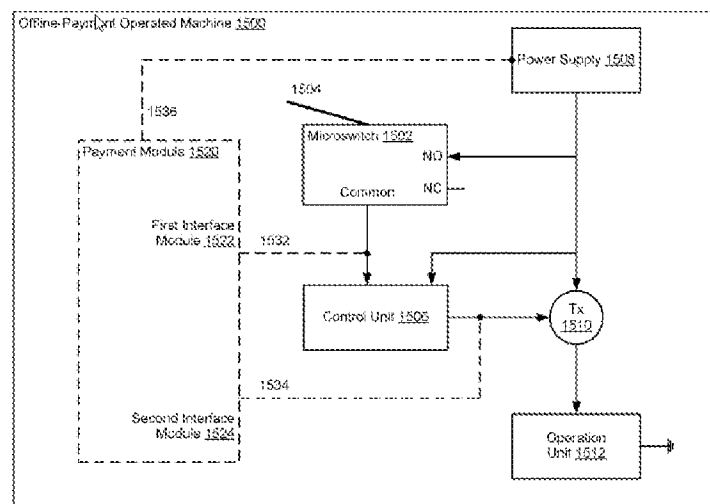


Figure 28A

Figure 28A shows offline-payment operated machine 1500, which is an electro-mechanical machine capable of accepting currency (e.g., coins) and

is not connected to any networks (e.g., telephone, cellular, or Wi-Fi). *Id.* at 39:40–44. Machine 1500 includes leveraged microswitch 1502 with lever 1504 which is incorporated into a coin slot of machine 1500 and is depressed whenever a coin slides down the coin slot into a coin reservoir of machine 1500. *Id.* at 39:57–65. Depression of lever 1504 closes microswitch 1502, and control unit 1506 receives a pulse (i.e., a payment acceptance signal) from microswitch 1502 indicating depression of lever 1504 from the reception of a US quarter or coin of another value. *Id.* at 39:65–40:6. When control unit 1506 receives a preset sequence of payment acceptance signals indicative of a preset number of coins being received by microswitch 1502, control unit 1506 initiates the operation of machine 1500. *Id.* at 40:7–19.

Machine 1500 is retrofitted with payment module 1520 to be able to accept electronic payments. *Id.* at 40:22–26. Payment module 1520 includes a short-range communication capability to communicate with mobile devices. *Id.* at 41:9–15. Payment module 1520 further includes first interface module 1522 which samples payment acceptance signals from microswitch 1502 via lead 1532, and second interface module 1524 which samples control signals from control unit 1506 via lead 1534 that initiate operation of machine 1500. *Id.* at 40:35–49. By sampling and storing these signals, payment module 1520 is able to utilize first interface module 1522 to simulate operation of microswitch 1502 in response to receiving the correct/preset number of coins so as to trigger operation of machine 1500 in response to completion of an electronic payment. *Id.* at 41:43–48.

E. Illustrative Claim

Petitioner challenges claims 1, 2, 4–8, 10–14, and 16–20 of the '608 patent. Claims 1, 7, 13, and 19 are independent. Independent claim 1 is illustrative and reproduced below, with Petitioner's labeling added.

1. [1(pre)] A payment module for an offline payment-operated machine including a coin receiving switch, the payment module comprising:

[1(a)] a short-range wireless transceiver configured to communicate with one or more mobile devices;

[1(b)] one or more processors;

[1(c)] a first interface module configured to output to a control unit of the offline payment-operated machine one or more electrical pulses, each of the one or more electrical pulses emulating an analog signal generated by the coin receiving switch of the offline payment-operated machine in response to insertion of a single coin of a predetermined type in the offline payment-operated machine; and

[1(d)] memory with one or more programs for execution by the one or more processors, the one or more programs including instructions for:

[1(e)] storing, in the memory of the payment module, a number of the electrical pulses that must be received by the control unit to initiate an operation of the offline payment operating machine;

[1(f)] receiving a wireless request via the short-range wireless transceiver from a respective mobile device of the one or more mobile devices to initiate a cashless operation of the offline-payment operated machine; and

in response to the wireless request:

[1(g)(i)] determining a first number of electrical pulses to output via the first interface module to the control unit of the offline payment-operated machine in

order to initiate the requested cashless operation of the offline payment-operated machine;

[1(g)(ii)] causing the offline payment-operated machine to initiate the requested cashless operation by issuing the first number of electrical pulses to the control unit via the first interface module; and

[1(g)(iii)] sending operation information corresponding to the initiated operation of the offline payment-operated machine to the respective mobile device via the short-range wireless transceiver.

Ex. 1001, 46:62–47:34.

F. Evidence

Name	Reference	Date	Exhibit
Laaroussi	U.S. Patent App. Pub. No. 2010/0227671 A1	Published Sept. 9, 2010	1004
Sugimoto	U.S. Patent No. 4,374,557	Issued Feb. 22, 1983	1005
LeMay	U.S. Patent No. 10,121,318 B2	Issued Nov. 6, 2018	1006
Okuniewicz	U.S. Patent No. 6,840,860 B1	Issued Jan. 11, 2005	1007

Petitioner also relies on the Declaration of Dr. B. Clifford Neuman (Ex. 1003).

G. Asserted Grounds

Petitioner asserts that claims 1, 2, 4–8, 10–14, and 16–20 would have been unpatentable on the following grounds:

Ground	Claim(s) Challenged	35 U.S.C. §	Basis
1	1, 2, 5, 7, 8, 11, 13, 14, 17, 19, 20	103	Laaroussi, LeMay, and Sugimoto
2	4, 6, 10, 12, 16, 18	103	Laaroussi, LeMay, Sugimoto, and Okuniewicz

II. ANALYSIS

A. Legal Standards

Petitioner bears the burden of persuasion to prove unpatentability of the claims challenged in the Petition, and that burden never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

A patent claim is unpatentable under 35 U.S.C. § 103 if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4), if present, any objective evidence of obviousness or non-obviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). There is no objective evidence of obviousness or non-obviousness in the record here.

Petitioner cannot satisfy its burden of proving obviousness by employing “mere conclusory statements,” but “must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.” *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

B. Level of Ordinary Skill in the Art

Petitioner asserts that a person of ordinary skill in the art “would have had a bachelor’s degree in electrical engineering, computer engineering, computer science, or equivalent training, and approximately three years of experience with electronic payment systems, vending machine technologies, or distributed network systems,” and that “[l]ack of work experience can be remedied by additional education, and vice versa.” Pet. 9–10 (citing Ex. 1003 ¶¶ 18–20).

Patent Owner does not address the level of ordinary skill in the art.

Petitioner’s definition is consistent with the level of ordinary skill reflected in the prior art references of record. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (recognizing that the prior art itself may reflect an appropriate level of skill in the art). For purposes of this decision, we apply Petitioner’s definition of the person of ordinary skill in the art.

C. Claim Construction

In this *inter partes* review, we apply the same claim construction standard that would be used in a civil action under 35 U.S.C. § 282(b). 37 C.F.R. § 42.100(b). In applying this standard, we generally give claim terms their ordinary and customary meaning as would be understood by a person of ordinary skill in the art at the time of the invention and in the context of the entire patent disclosure. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc).

Petitioner asserts that “the terms of the challenged claims should be given their plain and ordinary meaning, and no terms require specific construction.” Pet. 10.

Patent Owner asserts that

[n]o constructions are necessary to deny institution because the petition facially fails to show that the references satisfy the plain language of the claims . . . and because denial is warranted for numerous other reasons that do not depend on claim construction.

Prelim. Resp. 6.

Thus, neither party contends that any claim construction is necessary. On this record and for purposes of this decision, we determine that no claim terms require express construction. *See Realtime Data LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

D. Ground 1

Petitioner contends that claims 1, 2, 5, 7, 8, 11, 13, 14, 17, 19, and 20 are obvious over Laaroussi, LeMay, and Sugimoto. *See* Pet. 14–69. Of these, claims 1, 7, 13, and 19 are independent.

1. Overview of Laaroussi (Ex. 1004)

Laaroussi is titled “Apparatus for Gathering, Transferring, and Auditing Payment Information” and relates to “a currency media reader adapted to connect a network to remotely manage payment information” and “be retrofitted in a gaming machine and to interconnect various existing components thereof.” Ex. 1004, code (54), ¶ 2.

Figure 3 of Laaroussi, reproduced below, illustrates a gaming machine connected to peripheral components via a currency media reader hub (“CMRH”). *Id.* ¶ 37.

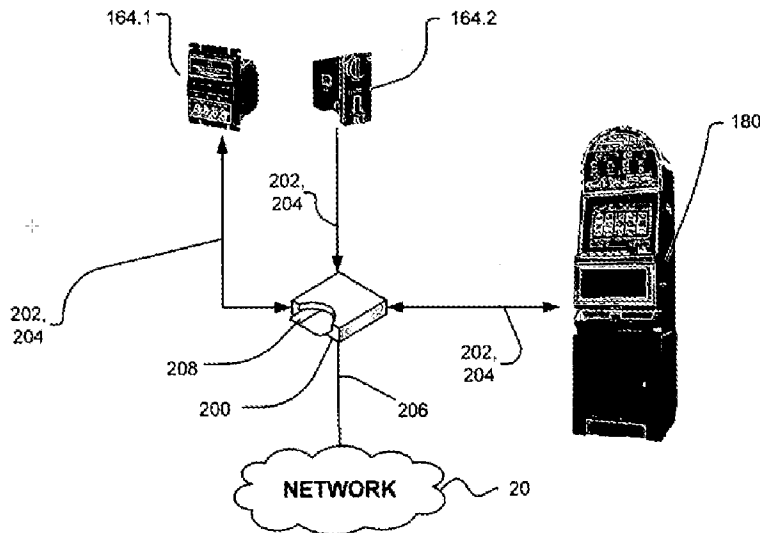


Fig. 3

Figure 3 shows gaming machine 180, which is adapted to receive bills and coins respectively with bill receiving module 164.1 and coins receiving module 164.2. *Id.* ¶ 58. CMRH 200, which may be retrofitted on gaming machine 180, is connected in series between receiving modules 164.1, 164.2 and the electronic system of gaming machine 180. *Id.* ¶ 59.

Receiving modules 164.1, 164.2 transfer data and instructions to gaming machine 180 using a communication language, such as a pulse string communication mode. *Id.* ¶ 60. Once connected, CMRH 200 automatically selects the proper communication mode for each module and gaming machine. *Id.* “In other words, the currency media reader hub 200 emulates a receiving module 164 on one side and emulates a gaming machine 180 on the other side.” *Id.*

CMRH 200 also allows a player to prove that s/he is the holder of a determined amount of money that can be used in gaming machine 180. *Id.*

¶ 61. The player's money can be virtually secured in a virtual currency holding media (e.g., card 208) suitable to carry virtual money, such as an RFID device. *Id.* CMRH 200 “will account for any currency transferred in or out of the gaming machine 180 and link it to the card 208” (e.g., a payment transaction). *Id.* ¶ 66. “All transactions are sent to the database 22 for safekeeping and reporting” via network 20. *Id.* at Fig. 1, ¶ 66. If network 20 is down, the transactions between card 208 and gaming machine 180 are stored in CMRH 200's memory module 220. *Id.* ¶ 67.

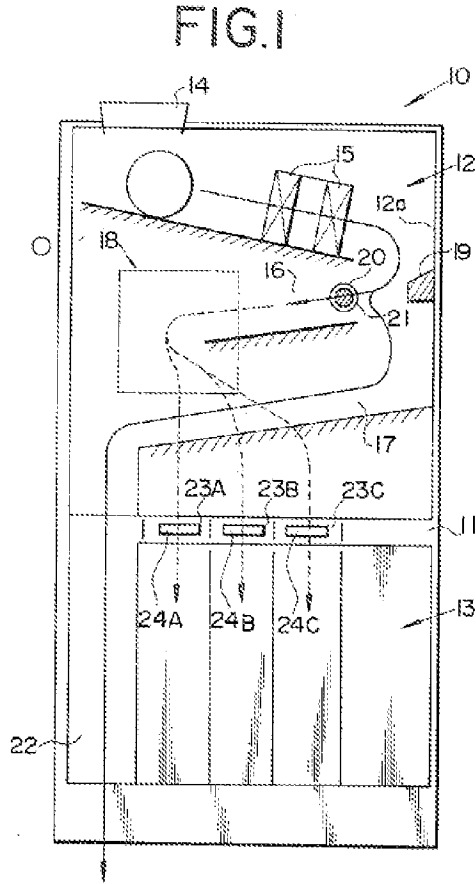
2. *Overview of LeMay (Ex. 1006)*

LeMay is titled “Bill Acceptors and Printers for Providing Virtual Ticket-In and Ticket-Out on a Gaming Machine.” Ex. 1006, code (54). Lemay discloses a “gaming system compatible with patron-controlled portable electronic devices, such as smart phones or tablet computers.” *Id.* at code (57). An electronic gaming machine is retrofitted with one or more devices to receive both virtual ticket vouchers and printed ticket vouchers that are redeemable for credits on electronic gaming machines. *Id.* at code (57), 5:10–13. Information associated with a virtual ticket voucher can be stored on a patron-controlled portable electronic device and then can be wirelessly transmitted to the electronic gaming machines. *Id.* at code (57).

3. *Overview of Sugimoto (Ex. 1005)*

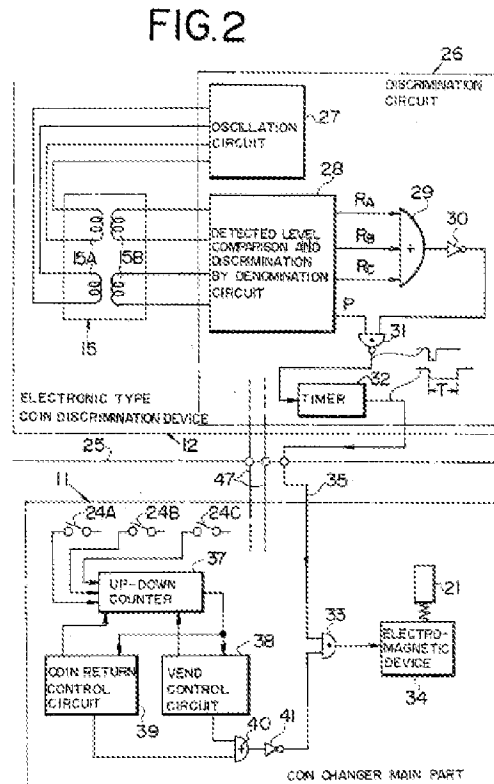
Sugimoto is titled “Coin Changer for a Vending Machine.” Ex. 1005, code (54). Sugimoto's coin changer includes “coin switches for detecting coins of respective dominations.” *Id.* at code (57).

Sugimoto's Figure 1 is reproduced below.



Sugimoto's Figure 1 schematically depicts an embodiment of the coin changer. *Id.* at 3:23–25. Coin changer main part 11 has upper electronic type coin discrimination device 12 and lower coin receiving device 13. *Id.* at 3:44–48. After coin discrimination device 12 determines a coin to be a true coin, the coin is mechanically sorted by denomination. *Id.* at 3:53–4:16. Sort-device 18 sorts the coins and sends the coins to coin receiving device 13 through passages 23A, 23B, and 23B, by respective denomination. *Id.* at 4:23–27. “Each of the coin switches 24A, 24B and 24C is actuated in response to passing of each coin and produces a coin detection pulse corresponding to weight of the coin of each denomination (i.e., amount of the coin).” *Id.* at 4:29–33.

Sugimoto's Figure 2 is reproduced below.



Sugimoto's Figure 2 shows a block diagram of the electrical construction of the embodiment. *Id.* at 3:26–27. Sugimoto discloses:

Principal functions of the control circuit provided on the side of the coin changer main part 11 are known control functions such as cumulatively counting deposited coins for judging whether a selected article is vendible or not and paying out change. For example, the coin detection pulses provided by the coin switches 24A, 24B and 24C (FIG. 1) are applied to an up-down counter 37 in which an amount of deposited coins is counted by cumulatively adding amounts of the deposited coins. A vend control circuit 38 compares contents of the counter 37 (the amount of the deposited coins) with a preset vend price of the article to be [v]ended and thereupon supplies a vend possible signal to a vend unit (not shown) and also subtracts the price of the vended article from the contents of the counter 37. The vender unit dispenses the selected article in response to this vend possible signal.

Id. at 4:29–47.

4. *Analysis of Independent Claims 1, 7, 13, and 19*

Patent Owner argues that the Petition’s analysis is deficient because it does not sufficiently explain how Petitioner’s proposed combination of Laaroussi and Sugimoto meet limitations 1(c) and 1(e). *See generally* Prelim. Resp. 27–38. We agree with Patent Owner.

Claim 1, limitation 1(c), recites:

a first interface module configured to output to a control unit of the offline payment-operated machine one or more electrical pulses, each of the one or more *electrical pulses emulating an analog signal generated by the coin receiving switch of the offline payment-operated machine in response to insertion of a single coin of a predetermined type in the offline payment-operated machine.*

Ex. 1001, 47:1–8 (emphasis added).

To meet limitation 1(c), the Petition proposes modifying Laaroussi to make the signal transmitted between CRMH 200 and gaming machine 180 emulate the pulses sent by Sugimoto’s coin switches 24A, 24B, and 24C to up-down counter 37. Pet. 36–43. Petitioner, however, does not adequately account for the difference between Laaroussi’s signal, Sugimoto’s pulses, and the particular pulses recited by limitation 1(c).

Although Laaroussi teaches that CMRH 200 may emulate coins receiving module 164.2 to transfer data and instructions to gaming machine 180 using a pulse string communication mode language, Laaroussi is otherwise silent as to what data and instructions are transferred. *See* Ex. 1004 ¶¶ 58–60. For example, Laaroussi does not disclose whether its data and instructions are the particular pulses required by limitation 1(c) (“in response to insertion of a single coin”) or whether its data and instructions indicate the cumulative amount of received coins. *See generally id.*

Petitioner turns to Sugimoto's teaching of coin switches 24A, 24B, and 24C producing coin detection pulses corresponding to the weight of received coins to cure the deficiency of Laaroussi. Pet. 40–43 (citing Ex. 1005, Abstract, 4:13–33, 5:31–66, 7:30–51, Fig. 2.). Sugimoto, however, does not teach sending coin switches 24A, 24B, and 24C's pulses to vend control circuit 38 or a vender unit. *See* Ex. 1005, 5:31–47. Sugimoto teaches sending the pulses from coin switches 24A, 24B, and 24C to up-down counter 37, which adds up the amount of the deposited coins, and then sends that amount to vender control circuit 38. *Id.*

Neither Larroussi nor Sugimoto, thus, teaches a coin receiving module sending the particular pulses recited by limitation 1(c) (“in response to insertion of a single coin”) to a gaming machine or other type of vending unit. Given this, Petitioner does not sufficiently explain why a POSITA would modify Laaroussi to make *the signal transmitted between CRMH 200 and gaming machine 180* emulate the single coin pulses sent by Sugimoto's coin switches 24A, 24B, and 24C to up-down counter 37. *See* Pet. 24–26 (arguing that a POSITA would have been motivated to modify Laaroussi in view of Sugimoto because Sugimoto provides additional detail about a known component (e.g., a coin receiving module)). And, Dr. Neuman's testimony does not provide any additional adequate explanation. *See* Ex. 1003 ¶¶ 93–103 (substantially parroting the Petition).

Claim 1, limitations 1(d),(e) recite a payment module having a memory storing a program that includes instructions for “storing, in the memory of the payment module, a number of the electrical pulses that must be received by the control unit to initiate an operation of the offline payment operating machine.” Ex. 1001, 46:62, 47:9–15.

To meet limitations 1(d),(e), Petitioner proposes to modify Laaroussi's CMRH 200 to store the number of electrical pulses produced by coin switches 24A, 24B, and 24C of Sugimoto necessary to initiate operation of an offline-payment operated machine (i.e., gaming machine 180). Pet. 46–47. Petitioner points to Laaroussi's teaching of storing transaction data in CMRH 200's memory and asserts that “[a] POSITA would thus understand that the CMRH may store in its memory module all communications from peripheral components like the coins receiving module.” *Id.* at 45–46 (citing Ex. 1004 ¶ 67; Ex. 1003 ¶ 112).

Petitioner, however, again does not adequately account for the difference between Laaroussi's stored data, Sugimoto's pulses from coin switches 24A, 24B, and 24C, and the particular pulses recited by limitation 1(d). Nor does Petitioner or Dr. Neuman adequately explain why a POSITA would understand that CMRH 200 to store all communications from the peripheral components. *See* Pet. 45–46; Ex. 1003 ¶ 112.

Laaroussi discloses that CMRH 200 accounts for any currency transferred in or out of gaming machine 180, links it to the player's card 208, and sends the transactions to database 22 for safekeeping. Ex. 1004 ¶ 66. “If, for any reasons, the network 20 is down, all transactions between card 208 and the gaming machine 180 are stored in the memory module 220 of the [CMRH 200].” *Id.* ¶ 67. Laaroussi is silent as to what transaction data is stored in CMRH 200 and does not disclose storing pulses from coins receiving module 164.2.

As explained in connection with limitation 1(c), Sugimoto does not teach sending the pulses from coin switches 24A, 24B, and 24C to vend control circuit 38 or a vender unit. *See id.* at 5:31–47. Sugimoto teaches sending those pulses to up-down counter 37, which adds up the amount of

the deposited coins, and then sends that amount to vender control circuit 38.
Id.

Given these teachings of Laaroussi and Sugimoto, Petitioner does not sufficiently explain why a POSITA would modify Laaroussi's CMRH 200 to additionally store the pulses sent by Sugimoto's coin switches 24A, 24B, and 24C. *See* Pet. 24–26 (arguing that a POSITA would have been motivated to modify Laaroussi in view of Sugimoto because Sugimoto provides additional detail about a known component (e.g., a coin receiving module)). And, Dr. Neuman's testimony does not provide any additional explanation. *See* Ex. 1003 ¶¶ 111–116.

Additionally, we note that for limitation 1(d), Petitioner asserts:

A POSITA would have been motivated to modify the payment module memory of Laaroussi to include the up-down electrical pulse counter of Sugimoto such that the memory module of Laaroussi's CMRH stores the electrical pulses generated by Sugimoto's coin switches.

Pet. 47. Petitioner's assertion appears to acknowledge that merely substituting Laaroussi's coins receiving module 164.2 with Sugimoto's coin changer, as proposed by Petitioner (Pet. 24–26), would not meet limitation 1(d) and that further modification of Laaroussi's system (i.e., including part of Sugimoto's coin changer in CMRH 200) would be needed.

Petitioner's assertion is conclusory and does not adequately explain why a POSITA would be motivated to further modify the proposed combination of Laaroussi and Sugimoto to place Sugimoto's up-down counter 37 into Laaroussi's CMRH in order to store Sugimoto's pulses.

Independent claims 7, 13, and 19 each recite limitations similar to limitations 1(c) and 1(d),(e). Ex. 1001, 48:1–15 (claim 7), 49:5–20 (claim 13), 50:17–31 (claim 19). We determine that Petitioner has not sufficiently

shown that the combination of Laaroussi, LeMay, and Sugimoto teaches limitations 1(c) and 1(d),(e) or the similar limitations of independent claims 7, 13, and 19.

5. Conclusion as to Ground 1

For the reasons discussed above, Petitioner has not met its burden regarding the obviousness challenge to the independent claims. Petitioner's challenges to the dependent claims in Ground 1 do not overcome the deficiencies discussed above with respect to independent claims. *See* Pet. 53–68. Accordingly, Petitioner has not demonstrated a reasonable likelihood of prevailing on its challenge to claims 1, 2, 5, 7, 8, 11, 13, 14, 17, 19, and 20 as being obvious over Laaroussi, LeMay, and Sugimoto.

E. Ground 2

Petitioner alleges that dependent claims 4, 6, 10, 12, 16, and 18 of the '608 patent would have been obvious over Laaroussi in view of LeMay, Sugimoto, and Okuniewicz. *See* Pet. 69–79. But Petitioner's challenges to the dependent claims in Ground 2 do not overcome the deficiencies discussed above with respect to the independent claims.

F. Discretionary Denial

Because we determine that the information presented in the Petition fails to show a reasonable likelihood that Petitioner would prevail in establishing unpatentability of any of the claims of the '608 patent, we do not reach Patent Owner's request for discretionary denial under 35 U.S.C. § 314. *See* Prelim. Resp. 12–18.

III. CONCLUSION

We determine that the information presented in the Petition fails to show a reasonable likelihood that Petitioner would prevail in establishing that any of claims 1, 2, 4–8, 10–14, and 16–20 of the '608 patent are unpatentable.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that the Petition is *denied* and no trial is instituted.

IPR2023-01188
Patent 10,891,608 B2

FOR PETITIONER:

Jason R. Mudd
Mark Schafer
Kyle Friesen
SHOOK, HARDY & BACON
jmudd@shb.com
mschafer@shb.com
kfriesen@shb.com

FOR PATENT OWNER:

Matthew A. Argenti
Michael T. Rosato
Jad A. Mills
WILSON SONSINI GOODRICH & ROSATI
margenti@wsgr.com
mrosato@wsgr.com
jmills@wsgr.com

AO 120 (Rev. 08/10)

TO: Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been
filed in the U.S. District Court District of Delaware on the following

☐ Trademarks or ☒ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED 3/14/2023	U.S. DISTRICT COURT District of Delaware
PLAINTIFF PAYRANGE INC.		DEFENDANT CSC SERVICEWORKS, INC.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 8,856,045	10/7/2014	PAYRANGE INC.
2 10,438,208	10/8/2019	PAYRANGE INC.
3 10,891,608	1/12/2021	PAYRANGE INC.
4 11,481,772	10/25/2022	PAYRANGE INC.
5		

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE
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Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case Petitioner Exhibit 1002-0663